UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended **December 31, 2021**
or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from ___________ to ___________

Commission file number **001-35561**

IDEANOMICS, INC.

(Exact name of registrant as specified in its charter)

Nevada	**20-1778374**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

1441 Broadway, Suite 5116, New York, NY 10018
(Address of principal executive offices)
(212) 206-1216
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, $0.001 par value per share	IDEX	The Nasdaq Capital Market

Securities registered pursuant to Section 12(g) of Act: **None.**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.
Yes ☐ No ☒

Auditor PCAOB ID Number: 606 Auditor Name: Grassi & Co., CPAs, P.C. Auditor Location: Jericho, NY

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes ☐ No ☒

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).
Yes ☐ No ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer	☒	Accelerated Filer	☐
Non-Accelerated Filer	☐	Smaller Reporting Company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the common stock held by non-affiliates as of June 30, 2021, the last business day of the registrant's most recently completed second fiscal quarter, was $1.2 billion based upon the per share closing price as of such dated reported on the Nasdaq Capital Market for the registrant's common stock, which was $2.84.

There were a total of 491,849,892 shares of the registrant's common stock outstanding as of August 31, 2022.

DOCUMENTS INCORPORATED BY REFERENCE

None.

EXPLANATORY NOTE

Based on the value of the non-affiliate float for our common stock as of June 30, 2021, we have transitioned from a “Non-Accelerated Filer” and “Smaller Reporting Company” for 2021 to a “Large Accelerated Filer” for 2022. As this Annual Report on Form 10-K is our first filing following our transition from being a Smaller Reporting Company to a Large Accelerated Filer, we are permitted to continue to provide scaled disclosures under Regulations S-K and S-X for this Annual Report on Form 10-K and in our definitive proxy statement on Schedule 14A for our 2022 Annual Meeting of Stockholders. We have elected to make such scaled disclosures in this report, where we are permitted to do so. Commencing with our Quarterly Report on Form 10-Q for the quarter ending March 31, 2022, we will no longer be permitted to report under the Smaller Reporting Company scaled disclosure regime for our periodic reports.

IDEANOMICS, INC.
Annual Report on FORM 10-K
For the Fiscal Year Ended December 31, 2021

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Special Note Regarding Forward Looking Statements

In addition to historical information, this report contains forward-looking statements within the meaning of Section 27A of the Securities Act (as defined below), and Section 21E of the Exchange Act (as defined below). We use words such as “believe,” “expect,” “anticipate,” “project,” “target,” “plan,” “optimistic,” “intend,” “aim,” “will” or similar expressions which are intended to identify forward-looking statements. Such statements include, among others, those concerning our transition to become a next-generation Fintech company; our expectations regarding the market for our new and existing products and industry segment growth; our expectations regarding demand for and acceptance of our new and existing products or services; our expectations regarding our partnerships and joint ventures, acquisitions, investments; our business strategies and goals; any projections of sales, earnings, revenue, margins or other financial items; any statements regarding the plans, strategies and objectives of management for future operations; any statements regarding future economic conditions or performance; uncertainties related to conducting business in the PRC; and all assumptions, expectations, predictions, intentions or beliefs about future events. You are cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, including, and without limitation, those identified in Item 1A—“Risk Factors” included herein, as well as assumptions, which, if they were to ever materialize or prove incorrect, could cause the results of the Company to differ materially from those expressed or implied by such forward-looking statements.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, level of activity, performance, or achievements. Moreover, neither we nor any other person assumes responsibility for the accuracy or completeness of any of these forward-looking statements. You should not rely upon forward-looking statements as predictions of future events. The forward-looking statements included herein are made as of the date of this report. We undertake no obligation to update any of these forward-looking statements, whether written or oral, that may be made, from time to time, after the date of this report to conform our prior statements to actual results or revised expectations.

Use of Terms

Except as otherwise indicated by the context, references in this report to “we,” “us,” “our,” “our Company,” “the Company,” “IDEX,” or “Ideanomics,” are to the business of Ideanomics, Inc. (formerly known as “Seven Star Cloud Group, Inc.,” “SSC” and “Wecast Network, Inc.,”) a Nevada corporation.

The following is a glossary of certain terms used in this report:

$	refers to the legal currency of the United States.
2020 Financial Subsidies Circular	refers to the Circular on Improving Subsidy Policies on Promotion and Application of New Energy Vehicles.
2021 Financial Subsidies Circular	refers to the Circular on Further Improving the Financial Subsidy Policy for the Wider Application of New-energy Vehicles.
2022 Financial Subsidies Circular	refers to the Circular on Financial Subsidy Policy for Application and Promotion of New-energy Vehicles in the year of 2022.
401(k) Plan	refers to 401(k) defined contribution plan.
AHFCA Act	refers to the Accelerating Holding Foreign Companies Accountable Act, passed by the U.S. Senate.
AI	refers to artificial intelligence.
Amer	refers to Amer Global Technology Limited.
ASC 205	refers to Accounting Standards Codification Topic 205, *Presentation of Financial Statements.*
ASC 260	refers to Accounting Standards Codification Topic 260, *Earnings Per Share.*
ASC 350	refers to Accounting Standards Codification Topic 350, *Intangibles-Goodwill and Other.*
ASC 410	refers to Accounting Standards Codification Topic 410, *Asset Retirement and Environmental Obligations.*
ASC 470	refers to Accounting Standards Codification Topic 470, *Debt.*
ASC 606	refers to Accounting Standards Codification Topic 606, *Revenue From Contracts With Customers.*
ASC 718	refers to Accounting Standards Codification Topic 718, *Stock Compensation.*
ASC 810	refers to Accounting Standards Codification Topic 810, *Consolidation.*
ASC 842	refers to Accounting Standards Codification Topic 842, *Leases.*
ASC 845	refers to Accounting Standards Codification Topic 845, *Non Monetary Transactions.*

ASC 950	refers to Accounting Standards Codification Topic 950, *Financial Services - Title Plant.*
ASC 958	refers to Accounting Standards Codification Topic 958, *Not-for-Profit Entities.*
ASEAN	refers to the Association of Southeast Asian Nations.
Assistance Agreement	refers to the Assistance Agreement by and between the State of Connecticut, acting by the Department of Economic and Community Development.
ASU 2015-02	refers to Accounting Standards Update 2015-02 *Consolidation* (Topic 810).
ASU 2016-02	refers to Accounting Standards Update 2016-02, *Leases* (Topic 842) .
ASU 2016-13	refers to Accounting Standards Update 2016-13, *Financial Instruments-Credit Losses* (Topic 326).
ASU 2017-11	refers to Accounting Standards Update 2017-11, *Earning Per Share* (Topic 260).
ASU 2018-07	refers to Accounting Standards Update 2018-07, *Stock Compensation* (Topic 718).
ASU 2019-12	refers to Accounting Standards Update 2019-12, *Income Taxes* (Topic 740).
ASU 2020-06	refers to Accounting Standards Update 2020-06, *Debt* (Topic 470).
ASU 2021-04	refers to Accounting Standards Update 2021-04, *Earning Per Share.*
ASU 2021-08	refers to Accounting Standards Update 2021-08, *Business Combinations* (Topic 805).
ATS	refers to Alternative Trading System.
BCC	refers to BCC Technology Company Limited.
BCF	refers to beneficial conversion feature.
BDCG	refers to BBD Digital Capital Group Ltd.
BEAT	refers to the Base Erosion and Anti-Abuse Tax.
BEV	refers to battery electric vehicles.
Bigfair	refers to Bigfair Holdings Limited.
Board	refers to the Company's Board of Directors.
BSSGCD	refers to Beijing Seven Stars Global Culture Development Inc.
CAA	refers to State Certification and Accreditation Administration Committee.
CaaS	refers to Charging as a Service.
CAC	refers to the Cyberspace Administration of China.
Cantor	refers to Cantor Fitzgerald & Co.
CapEx	refers to funds used by a company to acquire, upgrade, and maintain physical assets.
Catalogue	refers to Catalogue of Industries for Encouraged Foreign Investment ("Encouraged Foreign Investment Catalogue,") together with the Negative List.
CB Cayman	refers to our wholly-owned subsidiary Mobile Energy Global Limited (formerly China Broadband, Ltd.).
CCPA	refers to the new California Consumer Protection Act.
CFPB	refers to Consumer Financial Protection Bureau.
China	refers to the People’s Republic of China.
Chinese	refers to the People’s Republic of China.
CIT	refers to Corporate Income Tax.
CIT Law	refers to Corporate Income Tax Law of the PRC.
Commitment Shares	refers to Ideanomics issuing 1.0 million shares of the Company's common stock as a commitment fee to YA II PN.
COVID-19	refers to Novel Coronavirus 2019.
DBOT	refers to the Delaware Board of Trade Holdings, Inc. which is holding company for the Company’s FINRA Registered Broker Dealer. The Company owns 99% of the share capital Delaware Board of Trade Holdings, Inc. On September 20, 2021 the name was changed to Justly Holdings Inc. (JUSTLY).
Dodd-Frank	refers to Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010.
Draft PBOC Law	refers to the revised Law of the People’s Republic of China on the People’s Bank of China (draft), published by the People’s Bank of China.
Dr. Wu	refers to Dr. Bruno Wu., the former Chairman of the Company as of December 31, 2020.

Exchange Act	refers to Securities Exchange Act of 1934, as amended.
EIT	refers to earned income tax.
EIT Law	refers to Enterprise Income Tax law.
Energica	refers to Energica Motor Company, S.P.A., manufacturer of high-performance electric motorcycles.
Energy Sales	refers to Qingdao Chengyang Medici Zhixing New Energy Vehicle Co., Ltd. (formerly Qingdao Chenyang Ainengju New Energy Sales and Service Company Limited).
EPA	refers to Environmental Protection Agency
EQUITABLE	refers to Ensuring Quality Information and Transparency for Abroad-Based Listings on our Exchanges.
ESG	refers to Environmental, Social and Governance.
EV	refers to electric vehicles, particularly battery operated electric vehicles.
Exchange Act	refers to the Securities Exchange Act of 1934, as amended.
FASB	refers to the Financial Accounting Standards Board.
FCEV	refers to fuel cell electric vehicles.
FCPA	refers to the Foreign Corrupt Practice Act.
FIE	refers to foreign invested enterprise.
FINRA	refers to the Financial Industry Regulatory Authority.
Fintech	refers to financial technology.
Fintech Village	refers to the Global Headquarters for Technology and Innovation in Connecticut.
FMVSS	refers to Federal Motor Vehicle Safety Standards
FNL	refers to FNL Technologies, Inc., the owner and operator of the social media platform Hoo.be
Founder Space	refers to Seven Stars Founder Space Industrial Pte. Ltd.
GAAP	refers to generally accepted accounting principles in the United States of America.
GDPR	refers to General Data Protection Regulation.
GILTI	refers to the Global Intangible Low-Taxed Income.
Glory	refers to Glory Connection Sdn. Bhd.
Grapevine	refers to Grapevine Logic, Inc. a previously wholly-owned subsidiary of Ideanomics focused on influencer marketing.
GTB	refers to GTDollar Coins, Bitcoin, Ethereum and/or other types of digital currency.
GTD	refers to GT Dollar Ptd. Ltd.
HFCA Act	refers to the Holding Foreign Companies Accountable Act.
HK SAR	refers to the Hong Kong Special Administrative Region of the People’s Republic of China.
HKD	refers to Hong Kong dollars.
Ideanomics China	refers to Mobile Energy Global (MEG) the subsidiary that holds all of the Company’s EV.
ICE	refers to internal combustion engine.
Ideanomics	refers to Ideanomics Inc.
Intelligenta	refers to the BDCG investment which was rebranded as Intelligenta.
IP	refers to intellectual property.
JUSTLY	refers to the company formerly known as DBOT - Delaware Board of Trade Holdings, Inc. which is holding company for the Company’s FINRA Registered Broker Dealer. The Company owns 99% of the share capital Delaware Board of Trade Holdings, Inc. On September 20, 2021 the name was changed to Justly Holdings Inc. (JUSTLY).
KYC	refers to Know Your Customer requirements.
MaaS	refers to Mobility as a Service.
MDI Fund	refers to the Minority Depository Institution Keepers Fund.
Medici	refers to Medici Motor Works.
MHTL	refers to Merry Heart Technology Limited.

MIIT	refers to Ministry of Industry and Information Technology.
Mr. McMahon	refers to Mr. Shane McMahon.
Mr. Zhu	refers to Mr. Jianya Zhu.
NASDAQ	refers to the Nasdaq Stock Market.
NDRC	refers to National Development and Reform Commission.
Negative List	refers to the Special Administrative Measures for Access of Foreign Investment.
New Energy	refers to Qingdao Chengyang Medici New Energy Vehicle Co., Ltd., formerly known as Qingdao Chengyang Mobo New Energy Vehicle Sales Service Company Limited.
NHTSA	refers to National Highway Traffic Safety Administration.
NOLs	refers to net operating losses.
Notice 112	refers to the Notice of the State Administration of Taxation on Negotiated Reduction of Dividends and Interest Rates.
OEM	refers to original equipment manufacturer.
Ocasia	refers to Ocasia Group Holding Ltd.
OpEx	refers to the day-to-day operating expenses of a business.
Orangegrid	refers to Orangegrid LLC.
PEA	refers to Prettl Electronics Automotive.
Qianxi	refers to Guizhou Qianxi Green Environmentally Friendly Taxi Service Co.
Qingdao Medici	refers to Qingdao Medici New Energy Vehicle Co., Ltd.
Qingdao Xingyang Investment	refers to Qingdao Chengyang Xinyang Investment Company Limited.
QSIQ	refers to General Administration of Quality Supervision, Inspection and Quarantine.
PBOC	refers to the People’s Bank of China.
PCAOB	refers to the Public Company Accounting Oversight Board.
PRC	refers to the People’s Republic of China.
PSE	refers to Pt Pasifik Sakti Eniniring, a company incorporated in in Indonesia and party to a Agent Agreement to distribute Tree Technologies motorcycles in Indonesia.
Red Rock	refers to Red Rock Global Capital LTD.
Renminbi	refers to the legal currency of the PRC.
REO	refers to real-estate-owned.
RESPA	refers to Real Estate Settlement Procedures Act.
RMB	refers to the legal currency of the PRC.
SAFE	refers to Simple Agreement for Future Equity.
SAFE PRC	refers to the State Administration of Foreign Exchange (the PRC regulator that oversees matters regarding foreign exchange).
Sarbanes-Oxley Act	refers to Section 404 of the Sarbanes-Oxley Act of 2002, as amended.
SCNPC	refers to Standing Committee of the National People’s Congress.
Seasail	refers to Seasail Ventures Limited.
SEC	refers to the United States Securities and Exchange Commission.
SEDA	refers to standby equity distribution agreement.
Securities Act	refers to the Securities Act of 1933, as amended.
SEPA	refers to Standby Equity Purchase Agreement.
Shenma	refers to Sichuan Shenma Zhixing Technology Co.
Silk	refers to Silk EV Cayman LP, is an Italian engineering and design services company.
Silk-FAW	refers to Silk, an Italian engineering and design services company that has recently partnered with FAW to form a new company (Silk-FAW) to produce fully electric, luxury vehicles for the Chinese and Global auto markets.
Silk EV Note	refers to the convertible promissory note Ideanomics entered into with Silk EV Cayman LP.
Sinotop Beijing	refers to Beijing Sino Top Scope Technology Co., Ltd., a PRC company which was controlled by YOD Hong Kong through contractual arrangements before December 31, 2019.

Solectrac	refers to Solectrac, Inc., which was acquired on June 11, 2021.
SSE	refers to Seven Stars Energy PTD LTD.
SSF	refers to Tianjin Sevenstarflix Network Technology Limited, a PRC company controlled by YOD Hong Kong through contractual arrangements.
SSSIG	refers to Sun Seven Stars Investment Group Limited, a British Virgin Islands corporation, an affiliate of Dr. Wu, the former Chairman of the Company.
TCJA	refers to the Tax Cuts and Jobs Act, enacted by the United States of America on December 22, 2017.
Tekang	refers to Tekang Holdings Technology Co., Ltd.
The 2010 Plan	refers to the 2010 Stock Incentive Plan.
The Company	refers to Ideanomics Inc.
TILA	refers to Truth-in-Lending Act.
Timios	refers to Timios Holdings Corp. and its affiliates which was acquired on January 8, 2021.
TM2	refers to Technology Metals Market Limited, a London based digital commodities issuance and trading platform for technology metals.
Tree Technologies	refers to Tree Technologies Sdn. Bhd., headquartered in Kuala Lumpur, Malaysia and through its Treeletrik brand sells EV bikes, scooters, and batteries throughout the ASEAN region.
Topsgame	refers to Nanjing Shengyi Network Technology Co., Ltd.
U.S. dollars	refers to the legal currency of the United States.
U.S. GAAP	refers to accounting principles generally accepted in the United States of America.
US Hybrid	refers to US Hybrid Corporation, which was acquired on June 20, 2021.
USD	refers to the legal currency of the United States.
VaaS	refers to Vehicle as a Service.
Vehicle Data Security Provisions	refers to the Several Provisions on Vehicle Data Security Management, issued jointly by CAC, NDRC, MIIT and other PRC government authorities.
VIA	refers to VIA Motors International, Inc. a business that produces commercial battery electric vehicles using a skateboard architecture.
VIEs	refers to variable interest entities.
VWAP	refers to volume weighted average price.
WAVE	refers to Wireless Advanced Vehicle Electrification, Inc. which was acquired on January 15, 2021.
WAVE Agreement	refers to the agreement and plan of merger the Company entered into to acquire 100.0% of Wireless Advanced Vehicle Electrification, Inc.
YA II PN	refers to YA II PN, Ltd.
YOD	refers to You-on-Demand, this business was closed during 2019.
YOD Hong Kong	refers to Medici Operation Limited (formerly YOU On Demand (Asia) Limited and Sinotop Group Limited), a Hong Kong company, which is wholly- owned by CB Cayman.
Zhengtong	refers to Fuzhou Zhengtong Hongxin Investment Management Company Limited.

PART I

ITEM 1. BUSINESS

Overview

Ideanomics is an operating company incorporated in 2004 under the laws of the State of Nevada. Our evolution has been driven by technological innovation and numerous strategic acquisitions of businesses to act as our operating subsidiaries that expanded our product offerings and complemented our existing solutions. Currently, Ideanomics conducts its operations globally in one segment with two business units – Ideanomics Mobility and Ideanomics Capital. Ideanomics Mobility has as its mission the acceleration of commercial adoption of electric vehicles. Ideanomics Capital is the Company's fintech business unit, which focuses on leveraging technology and innovation to improve efficiency, transparency, and profitability for the financial services industry.

Principal Products or Services and Their Markets

Ideanomics Mobility

Description

The Ideanomics Mobility business unit is seeking to accelerate the commercial adoption of electric vehicles. The Company's EV and technology acquisitions during 2021 completed the foundation for the development of four product-focused verticals comprised of off-highway, two-wheeler, on-highway, and associated energy and charging services. This integrated offering helps support business progress toward its mission of offering fleet operators the convenience of a range of vehicles and associated charging systems through a single procurement partner.

By combining leading EV technologies, products, knowledge, and capabilities across the Company's four product verticals, Ideanomics anticipates that it will be able to rapidly develop unique zero emission mobility solutions in both the off-highway and on-highway commercial vehicle markets. These include the provision of commercial electric vans, trucks, and buses, electric tractors, and two-wheeled transportation, supported by the provision of energy services and infrastructure for the EV market consisting of charging systems, energy storage, energy generation, including hydrogen and solar, and associated data and management applications. These will be supported by financing programs that have been developed to enable commercial fleet operators to migrate away from gasoline and diesel-powered vehicles with minimal disruption to their business models and balance sheet. Together, these products and services will provide the Company with the capability to assist commercial fleet operators to transition with confidence to BEV and FCEV and meet their zero-emission objectives.

By choosing the integrated platform approach from Ideanomics Mobility, the commercial fleet operator will benefit from a single source solution that supports all aspects of the transition to EV, from early-stage requirements analysis, charging infrastructure specification and installation, vehicle procurement and deployment, training, vehicle- and charging-derived data management, operationalization management services, and financing.

To support the cost of transition from fossil fuels to BEV and FCEV, Ideanomics will offer fleet operators the complete financial and management support to confidently migrate from traditional CapEx models to an OpEx model, releasing capital to support traditional business growth and have the simplicity, predictability, and certainty of a monthly subscription which covers all aspects of EV fleet operations. These programs will also have the added advantage of providing Ideanomics with predictable recurring revenues. These MaaS solutions are comprised of financing programs we refer to as VaaS and CaaS.

To support the Company's operations, in late 2021 Ideanomics entered a lease agreement for a 48,500 square foot facility in New Jersey, which will serve as a center of excellence for Ideanomics Mobility and for promoting education and advocacy of electric and hydrogen powered vehicles to commercial fleet operators. Anticipated to come online in late 2022, the facility will showcase the Ideanomics Mobility products and services and serve as a regional support center on the East Coast of the United States for Ideanomics Mobility's operating businesses' activities in North America.

Operating Companies

There are six operating companies within the Ideanomics Mobility business unit" (i) WAVE, (ii) Solectrac, (iii) US Hybrid, (iv) Tree Technologies, (v) Ideanomics China (formerly known as Mobile Energy Global and (vi) Energica.

1. ***WAVE***

In 2021, the Company acquired 100% of privately held WAVE.

Founded in 2011, and headquartered in Salt Lake City, Utah, WAVE is a leading provider of high-power inductive (wireless) charging solutions for medium and heavy-duty EVs. Embedded in roadways and depot facilities, the WAVE system automatically charges vehicles during scheduled stops. The hands-free WAVE system mitigates battery range limitations and enables fleets to achieve duty cycles which are comparable to that of ICEs.

Deployed since 2012, WAVE has demonstrated the capability to develop and integrate high-power charging systems into heavy-duty EVs from leading commercial EV manufacturers. WAVE provides custom fleet solutions for mass transit, logistics, airport and campus shuttles, drayage fleets, and off-road vehicles at ports and industrial sites.

Since the acquisition of WAVE in January 2021, the Company has continued investment in engineering, facilities and production resources, including continuous development programs improving technology, reducing cost and scaling manufacturing. These investments and programs are necessary to meet current and anticipated demand for WAVE’s high power inductive wireless charging products. WAVE has continued to develop its high-powered induction capabilities beyond 250kW, successfully delivering systems at 125kW and 500kW, and is working on a 1-Megawatt system for heavy trucking applications. To support widespread adoption, WAVE is developing relationships with additional OEM partners to facilitate the integration of its vehicle-side hardware.

To support its expansion plans, WAVE is adapting its products to meet the varying power requirements and standards for Europe and Asia.

2. ***Solectrac***

In 2021, the Company completed the acquisition of Solectrac, a California-based manufacturer and distributor of electric powered tractors. Since the acquisition the Company has invested in developing the business and has made investments in engineering, supply chain management, and operational leadership to scale the business.

The next stage of product development has been initiated, focused on ergonomic and application improvements, system upgrades, the introduction of a range of Solectrac-compatible farming implements, and a re-styling exercise to strengthen Solectrac’s physical branding. To that end, Solectrac recently launched its E70N tractor, which is focused on vineyards and hobby farms.

A lease on a new facility, in proximity to the current facility, has been recently executed to facilitate expanding its manufacturing and assembly capacity to meet anticipated market demand. While currently being utilized for assembly and testing, Solectrac has engaged the services of a leading, global, automotive consultancy to design and implement a scalable and compliant manufacturing operation at this new facility which is expected to come online during the second half of 2022.

To support its growth objectives, Solectrac has commenced the development of a North American dealer and distribution network, which will help it in the marketing, distribution, sales, and servicing of its products and services.

3. ***US Hybrid***

In 2021, the Company completed the acquisition of US Hybrid, a California-based low- and zero-emission engineering and vehicle integration business which also manufactures hydrogen fuel cells and power electronics for electric, hydrogen, and hybrid powered vehicles. Since the acquisition, the Company has invested in developing the business and has made investments in people and operations to help scale the business, which includes a lease on a new facility in Torrance, California to expand its engineering and assembly capacity to meet the anticipated market demand for specialist vehicle applications.

Additionally, the Company is working with US Hybrid to further develop the resources required to expand its hydrogen fuel cell manufacturing operations to meet the anticipated demand for hydrogen powered vehicles.

US Hybrid will continue to provide engineering services, fuel cells, power electronics, systems, and components, and associated vehicle integration services to both external customers and to internal companies within Ideanomics Mobility. US Hybrid will serve as a research and development resource across Ideanomics Mobility for BEV and FCEV.

4. ***Tree Technologies***

Tree Technologies is headquartered in Kuala Lumpur, Malaysia and through its Treeletrik brand sells EV bikes, scooters, and batteries throughout the ASEAN region. Tree Technologies is collaborating with Energica on the potential development of a new range of low power commercially focused electric motorcycles which are anticipated for introduction to market in 2022 and 2023. The development of the next generation of Treeletrik-branded motorbikes will enable Tree Technologies to remain competitive and leverages Energica's technology and know-how; translated to the lower power commuter and delivery bike market segment to which Tree Technologies markets its products. This technical collaboration demonstrates the synergistic nature of the companies within Ideanomics Mobility, and the ability to leverage and apply IP, technology, and expertise to improve the Company's products.

The contract with PSE for the purchase of 200,000 motorcycles is not progressing on the originally anticipated time scale because of the pandemic restrictions and the progress and performance of PSE in areas including local homologation. The Company is evaluating alternatives to fulfilling the order, including but not limited to establishing dealerships in Indonesia, Philippines, and Thailand starting in 2022 to directly enter these markets and take advantage of the opportunity surrounding the dependence on two and three-wheeled low-cost transportation in the region.

Tree Technologies was subjected to continuous rolling lockdowns in 2021 due to the COVID-19 pandemic. This has restricted the supply chain and ability to export products within the ASEAN region. The Company anticipates this situation to continue until such time as vaccination rates increase in Malaysia and surrounding countries.

5. ***Ideanomics China (formerly known as Mobile Energy Global)***

The Company's operations in China continue to develop the business, selling ride hailing vehicles, electric vans, trucks, and buses, and EV batteries. A market has developed for used commercial EVs in China, and the Company has established operations to take advantage of this market. Additionally, Ideanomics China supports supply chain operations for the rest of the companies within Ideanomics Mobility.

6. ***Energica***

Energica is the world's leading manufacturer of high performance electric motorcycles and the sole manufacturer of the FIM Enel MotoE™ World Cup. Energica motorcycles are currently on sale through the official network of dealers and importers.

Status of Previously Announced Acquisitions

VIA

VIA Motors is a leading electric commercial vehicle company with proven advanced electric drive technology, delivering sustainable mobility solutions for a more livable world. VIA designs, manufactures, and markets electric commercial vehicles, with superior life-cycle economics, for use across a broad cross-section of the global fleet customer base.

We executed a definitive agreement to acquire VIA on August 30, 2021. We are currently in the process of obtaining the required stockholder approval to acquire 100% of VIA and registering the issuance of our common stock as consideration for the transaction. The total aggregate consideration payable in connection with this transaction is up to $630.0 million, consisting of an upfront payment comprised of both stock and cash consideration at the closing of the transaction of $450.0 million and an earnout payment of up to $180.0 million in our common stock. The majority of the $450.0 million is payable in Ideanomics common stock and the $450.0 million value is based on a calculation for a fixed number of shares priced at $2.3668. The cash component of the $450.0 million is documented in two forms, both of which shall be credited to closing consideration: (1) a SAFE issued to VIA on June 7, 2021, for $7.5 million and (2) secured convertible promissory notes issued to VIA periodically in advance of the closing of the transaction, the current outstanding aggregate principal balance of which is $55.4 million. Further details can be found in the Form S-4/A filed with the SEC on February 1, 2022 as well as the Form 8Ks likewise filed by the Company on May 23, 2022, June 16, 2022, July 18, 2022, and August 19, 2022. The Company currently anticipates that its agreement to purchase VIA will close in the fourth quarter of 2022.

With the acquisition of VIA Motors, Ideanomics will acquire a business which has developed a unique commercial battery electric skateboard architecture in the high-growth Class 2 to 5 local and last mile delivery market segment. The skateboard architecture provides an opportunity to customize the vehicle configuration in a van or cab/chassis to meet specific customer needs. VIA is well advanced in the development and validation of the product and with the support of Ideanomics will transition to volume manufacturing by 2023. The details of the transaction with VIA Motors are delineated in a Registration

Statement on Form S-4 filed by Ideanomics, Inc. with the Securities and Exchange Commission on November 5, 2021, as amended (File No. 333-260843).

Energica

On January 7, 2022, the Company entered into a loan agreement with Energica. Pursuant to this loan agreement, the Company may advance up to Euro 5.0 million, in installments of Euro 250,000, at an annual interest rate of Eurobar plus 2.0%. The purpose of the loan is to provide working capital during the motorcycle manufacturing and purchasing season. The loan is unsecured, with interest payable semi-annually, on June 30 and December 31 of each year. The outstanding principal is due and payable in two installments, on June 30, 2024 and December 31, 2024. On February 9, 2022, the Company wired €52.5 million ($60.3 million) to an escrow account in order to facilitate and fund the conditional tender offer. On March 7, 2022 the Company announced that it had achieved the 90% threshold for the conditional tender offer and the transaction closed on March 14, 2022.

Ideanomics Capital

Ideanomics Capital is the Company's fintech business unit, which focuses on leveraging technology and innovation to improve efficiency, transparency, and profitability for the financial services industry which could generate high rates of return through the deployment of technology and solutions to disrupt existing business models.

The Company’s Ideanomics Capital business unit provides capital market expertise to enable the sale of its subsidiaries’ products and services. It aligns financing resources and develops funding structures that enable growth and revenue generation for the Ideanomics Mobility business unit. Financing structures would include service and products for payment such as CaaS and VaaS. These options are part of the Ideanomics Mobility offering to commercial fleet operators. Additionally, in 2021 Ideanomics Capital began supporting Energica in the creation of a financing program to increase dealership and expand the eBike business. Over time, it is Ideanomics intention to focus Ideanomics Capital as the financial services arm of Ideanomics Mobility and to divest its other fintech assets accordingly.

Operating Companies

There are two operating companies within the Ideanomics Capital business unit: (i) Timios and (ii) Justly.

1. **Timios**

Founded in 2008 by real estate industry veteran Trevor Stoffer, Timios' vision is to bring transparency to real estate transactions. The company offers title and settlement, and REO title and closing services in 45 states and currently serves 285 national and regional clients.

In 2021, the Company acquired 100% of privately-held Timios. Timios, a nationwide title and escrow services provider, which has been expanding in recent years through offering innovative and freedom-of-choice-friendly solutions for real estate transactions. The products include residential and commercial title insurance, closing and settlement services, as well as specialized offerings for the mortgage process industry. Timios combines difficult to obtain local and state licenses, a knowledgeable and experienced team, and a scalable platform to deliver best-in-class services through both centralized processing and localized branch networks. Ideanomics will assist Timios in scaling its business in various ways, including referring client acquisitions and product innovation.

Timios experienced a cybersecurity incident on July 27, 2021, and, as a consequence of the incident, there was a material reduction in the number of daily orders and revenue. The number of daily orders was recovering, however the impact of rising interest rates during first half of 2022 has made the near-term market conditions more challenging as the mortgage origination and refinance markets are sensitive to rising interest rates. The company has seen an increase in the default sector, which utilizes title and closing services, and this is anticipated to provide some offset to the drop in mortgage origination and refinance revenues. In addition, Timios has entered into a strategic partnership with OrangeGrid making Timios the preferred provider of title, escrow, valuation and asset management services within OrangeGrid's GridReady default management ecosystem. Additionally, Timios and Orangegrid will collaborate on a number of co-marketing initiatives to accelerate market adoption of the solution. Mortgage servicers who are GridReady customers will be able to seamlessly order title, escrow and valuation products and track fulfillment by Timios through the GridSource vendor management component of the ecosystem.

2. **JUSTLY (formerly known as Delaware Board of Trade (DBOT))**)

In the latter half of 2021, the Company restructured and relaunched its DBOT business as JUSTLY, a FINRA-registered broker dealer destination for ESG and thematic investments. The Company has hired an entirely new management team of experienced capital markets and regulatory professionals, implementing new systems for JUSTLY to leverage its new business model as a destination for crowdfunding as well as other associated offerings.

JUSTLY, in its new form, is a broker dealer that operates a funding platform focused on Reg. CF, A+ and D private equity and debt. Recent regulatory easing and the increase in the maximum size of Reg. CF (now $5.0 million) and Reg. A+ (now $75.0 million) have increased investor interest and access to the private equity market. JUSTLY is also registered with FINRA to manage an ATS, which is currently not active, but is expected to be relaunched when market conditions are more favorable, offering a secondary market in private equities. The Company believes that growing demand for private placements and the need for a secondary market provide a favorable environment for JUSTLY's future growth.

Portfolio Optimization

The Company had previously identified two business units that it considered non-core. The non-core assets are Grapevine, a marketing and ecommerce platform focused on influencer marketing, and Fintech Village a 58-acre development site in West Hartford, Connecticut.

The Company completed the divestitures of Grapevine in April, 2021 and of Fintech Village in December, 2021.

In addition, we may also reorganize our business structure in 2022 to align our portfolio of products and solutions more closely with the markets we serve and bring better performance clarity with our competitive peer set. We are continuing to review our portfolio and will look for other ways to better manage and optimize our product offerings.

Competitive Business Conditions, Competitive Position in the Industry and Methods of Competition

The markets in which we participate are dynamic and highly competitive, requiring companies to react quickly to capitalize on opportunity. We retain skilled and experienced personnel and deploy substantial resources to meet the changing demands of the industry and to capitalize on change. The market for our products is highly competitive and subject to rapid technological change. We encounter significant domestic and international competition across all units of our business.

Ideanomics Mobility

The company’s EV business operates in the market for fleet commercial vehicles, which is still in the development stage. The company could face competition from other companies that develop and operate a similar integrated platform for the procurement, purchase, financing, charging, and energy management needs of fleet EV operators. The company could also face competition from companies that only operate in one part of the vehicle purchase and operation cycle, for example, an EV vehicle or battery manufacturer may sell directly to EV fleet operators while also participating in the platform operated by the Company’s Ideanomics China business.

Purchasers of commercial vehicles have the choice between traditional ICE vehicles and EVs and this is likely to continue for at least the next five years, and possibly longer. The most important drivers for the development of the commercial fleet EV market are federal and provincial regulations relating to clean air and electric vehicles including subsidies and incentives to help owners of fleets of commercial vehicles convert from combustion engines to EV. The speed at which fleet operators convert to EV is highly correlated with government regulations, targets and related subsidies and incentives. If the governments, or municipalities, change the regulations, targets, incentives or subsidies then the rate at which fleet operators convert their vehicles to EV could slow down which in turn may lead to lower revenues for the Company. Additionally, the rate and form in which the commercial fleet EV market develops is dependent upon technological developments in battery and charging systems; deployment of the charging infrastructure to support widespread commercial EV use and the development of new financing and lending structures that address the different collateral and resale values of the battery and vehicle versus ICE vehicles.

In addition to its directly owned operations, the Company operates through a network of investment arrangements, partnerships and formal and informal alliances; consequently, its competitive position could be adversely impacted if one of the members of the alliance was not able to meet the demand for its products, decides not to continue to cooperate with the Company, or goes out of business.

Ideanomics Capital

The Company's Ideanomics Capital business unit operates in sectors that are undergoing rapid change. The Company's fintech business operates in several markets, with Timios providing title and escrow services throughout the U.S, and JUSTLY is a FINRA registered broker-dealer, which intends to operate a financing funding platform focused on private equity and debt. Timios has many competitors, some of whom may have a broader geographic reach within this market, and may be more well-capitalized and therefore more able to weather a downturn in business volume resulting from an increase in interest rates.

JUSTLY, among other business endeavors, operates a curated crowdfunding equity platform of private impact investments to advisors, registered investment advisors, family offices, angels, and accredited and non-accredited investors from all income levels. JUSTLY is engaged in business in a highly competitive, constantly evolving marketplace, requiring continual advancing pricing sophistication and technological capabilities of the competitors and necessitating to differentiate their product offerings.

Sources and Availability of Raw Materials

The Company's businesses depend on a ready supply of components and parts that are sourced domestically and internationally and any interruption to the supply of these could have an adverse impact on the Company's results. The Company's suppliers that manufacture components and parts, which includes EV motors and batteries, depend on a ready supply of raw materials and components, consequently a shortage of raw materials or components could adversely impact their manufacturing process and, potentially, impact the Company's revenues as it may not be able to complete orders that it has received. The Company may also be adversely impacted if global logistics and supply chains are interrupted.

Our products are manufactured or assembled from both standard components and parts that are unique to our specifications. Our internal manufacturing operations are largely process oriented and we use significant quantities of various raw materials, including aluminum, copper, steel, bimetals, optical fiber and plastics and other polymers, among others. We use significant volumes of aluminum, copper, steel and polymers in manufacturing coaxial and twisted pair cables and antennas. Other parts are produced using processes such as stamping, machining, molding and pressing from metals or plastics. Portions of the requirements for these materials are purchased under supply arrangements where some portion of the unit pricing may be indexed to commodity market prices for these metals. We may occasionally enter forward purchase commitments or otherwise secure availability for specific commodities to mitigate our exposure to price changes for a portion of our anticipated purchases. Certain of the raw materials utilized in our products may only be available from a few suppliers, and we may enter into longer term agreements to secure access to certain key inputs. We may, therefore, encounter significant price increases and/or availability issues for the materials we obtain from these suppliers, such as those that we have seen in 2021. These supply chain constraints have limited our ability to manufacture and deliver products to our customers in 2021 and we expect this to continue into 2022.

Our profitability has been and may continue to be materially affected by changes in the market price of our raw materials and components, most of which are linked to the commodity markets. Prices for aluminum, copper, plastics, silicon and certain other polymers derived from oil and natural gas have fluctuated substantially during the past several years. We have adjusted our prices for certain products and may have to adjust prices again. Delays in implementing price increases, failure to achieve market acceptance of price increases, or price reductions in response to a rapid decline in raw material costs, could have a material adverse impact on the results of our operations.

In addition, some of our products are assembled from specialized components and subassemblies manufactured by third-party suppliers. We depend upon sole suppliers for certain of these components, including capacitors, memory devices and silicon chips. Our results of operations have been and may continue to be materially affected if these suppliers cannot provide these components in sufficient quantity and quality on a timely and cost-efficient basis. We believe that our supply contracts and our supplier contingency plans mitigate some of this risk. Our supply agreements include technology licensing and component purchase contracts, and several of our competitors have similar supply agreements for these components. There can be no guarantee that the Company will be able to extend or renew these supply agreements on similar terms, or at all. In addition, we license software for operating network and security systems or sub-systems and a variety of routing protocols from different suppliers.

Seasonality

The Company expects that orders and sales will be influenced by the amount and timing of budgeted expenditure by its customers. Typically, the Company would expect to see higher sales at the start of the year when companies start executing on their capital programs and at the end of the year when companies are spending any surplus or uncommitted budget before the new budget cycle commences. The Company's EV operating businesses are in the early stage of their development and consequently do not have sufficient trading histories to project seasonal buying patterns with any degree of confidence.

Revenues generated by the Company's Timios Title Agency business are impacted by the volume and timing of orders, typically the first quarter of the year shows a decline in revenues reflecting the lower orders in fourth quarter of the year due to the impact of holidays.

Working Capital Requirements

As the Company expands its business the need for working capital will continue to grow. The Company acquired several companies in 2021 and, along with its existing operations, are all considered growth companies at various stages of maturity. For these reasons, and the tight supply chain within automotive in general, will require working capital for both organic growth of those business plus for the purchase of components for the manufacture and assembly of the Company's respective EV and wired and wireless charging systems. The Company will continue to raise both debt and equity capital to support the working capital needs of these businesses and its U.S. headquarters functions.

Trademarks, Patents and Licenses

We hold various patents and trade names and rely on a combination of patent, copyright, trademark, service mark and trade secret laws to establish and protect our intellectual property rights. We have a number of pending patent applications relating to new products and technology. We will continue to file additional patent applications on new inventions, as appropriate, demonstrating our commitment to technology and innovation. For technology that is not owned by us, we have a program for obtaining appropriate licenses to help ensure that we have the necessary license coverage for our products. In addition, we have formed strategic relationships with leading technology companies to provide us with early access to technology that we believe will help keep us at the forefront of our industry. Although we believe our intellectual property rights play a role in maintaining our competitive position in a number of the markets that we serve, we do not believe we would be materially adversely affected by the expiration or termination of our trademarks or trade names or the loss of any of our other intellectual property rights.

Business and Customer Concentration

The Company is in the process of building out its Ideanomics Mobility unit and has not yet reached a stage of development where the loss of any single customer would have a material adverse effect on the Company.

Timios' title and escrow service depends upon a network of referring financial institutions. The loss of referrals from the larger referring financial institutions would have a material adverse effect on the Company.

Reliance on Government Contracts

In its international operations the Company does not typically contract directly with national governments, however it may contract with provincial, state and local municipalities.

The Company does not contract directly with the government of the PRC. Additionally, the rate at which commercial fleets convert to EV is heavily influenced by federal and provincial policies in the PRC as they relate to clean air and adoption of EV technology. Consequently, the Company's results may be adversely impacted by changes in regulations in the PRC.

Corporate Structure

Ideanomics is a Nevada corporation existing as an operating company that conducts a substantial majority of its operations through twenty-five (25) of its operating subsidiaries established in various jurisdictions including the United States, People's Republic of China, Hong Kong, Malaysia, and England and Wales, and nine (9) subsidiaries with no operations acting solely as holding companies. Currently, there are fifteen (15) operating subsidiaries of Ideanomics in the United States and five (5) PRC subsidiaries. In addition, twenty (20) of the subsidiaries of the Company are referred to as dormant subsidiaries that ceased their operations, remain not liquidated solely for the purpose of compliance with administrative formalities, and are expected to be liquidated within 6 months of the consummation of the merger.

The organizational structure of the Company is comprised of a total of fifty-four (62) subsidiaries. The following chart depicts our corporate structure as of June 1, 2022.

Our Unconsolidated Equity Investments

Our investments in Energica, PEA, the MDI Fund, TM2, and FNL, where we may exercise significant influence, but not control, are classified as a long-term equity investments and accounted for using the equity method. Under the equity method, the investment is initially recorded at cost and adjusted for our share of undistributed earnings or losses of the investee. Investment losses are recognized until the investment is written down to nil, provided that we do not guarantee the investee's obligations or we are committed to provide additional funding.

Refer to Note 12 of the Notes to Consolidated Financial Statements included in Part IV, Item 8 of this Annual Report on Form 10-K for further information.

Energica

On March 3, 2021, the Company entered into an investment agreement with Energica. The Company invested €10.1 million ($13.6 million) for 6.1 million ordinary shares of Energica at a subscription price of €1.78 ($2.21) for each ordinary share. Pursuant to the purchase of the shares the Company will hold 20.0% of Energica's share capital.

Energica is the world's leading manufacturer of high performance electric motorcycles and was the sole manufacturer of the FIM Enel MotoE™ World Cup.

Certain shareholders of Energica have rights such that they may convert their ordinary shares into ordinary shares with supervoting rights under certain conditions. If some or all of these ordinary shares were converted into ordinary shares with supervoting rights, the Company's ownership in Energica would be diluted, perhaps significantly.

PEA

On August 2, 2021, the Company announced a strategic investment in PEA, a business unit within the Prettl Group, a large German industrial company that manufactures and distributes components and systems for the automotive, energy, and electronics industries. The terms include a strategic investment of €7.5 million ($9.1 million) for 11,175 preferred shares. Ideanomics received exclusive sales and distribution rights for PEA charging infrastructure products and solutions in North America and CEO Alf Poor will join PEA's Board of Directors. The Company received legal ownership as of October 19, 2021, after payment of €7.5 million ($9.1 million).

MDI Fund

On July 26, 2021, the Company entered into a subscription agreement to invest $25.0 million in the MDI Fund. The MDI Fund sponsored by the National Bankers' Association, is an organization of minority-owned banks that aims to increase inclusivity in the financial services industry. The MDI Fund will provide capital resources primarily in low and moderate income areas to grow a more skilled workforce, increase employment opportunities, and support businesses' growth among minority and underserved communities.

The initial investment of $0.6 million was made on July 26, 2021.

TM2

On January 28, 2021, the Company entered into a SAFE with TM2. As of August 13, 2021, the SAFE was amended to which Ideanomics invested €5.0 million ($5.9 million), an increase in the investment of €3.5 million ($4.1 million), from the original contracted investment of €1.5 million ($1.8 million.)

TM2 is a London based digital commodities issuance and trading platform for technology metals. It connects institutional investors, proprietary traders and retail investors with metals suppliers – miners, refiners, recyclers and mints. The platform focuses specifically on new metals that currently don't have an active trading marketplace, such as rhodium, lithium, cobalt, rhenium, etc. The Company's ownership interest in TM2 provides valuable data and insight into the global technology metals market, which is critical to the future of the cleantech and EV industries. TM2 connects both pillars of cleantech and fintech. The types of metals and materials traded on the TM2 platform are critical to cleantech (for EV battery production, energy storage systems, solar cells, etc.,) while the fintech platform is innovative in representing these commodities which do not exist on traditional exchanges.

In the fourth quarter ending December 31, 2021, as the management and controlling shareholders of TM2 updated business plans and related capital requirements for the emerging trading platform in 2023, it was determined that incremental funding would be required to achieve critical objectives. TM2 has been unsuccessful to date in obtaining incremental funding and consequently has reduced headcount and curtailed other critical spending. The current outlook and management approach without any indication of likely incremental capital funding indicates a probable impairment. The Company recorded an impairment charge for the full value of the investment in the fourth quarter ended December 31, 2021.

FNL

On April 20, 2021, Ideanomics entered into a stock purchase agreement with FNL (developer of Hoo.be), pursuant to which Ideanomics made an investment into FNL, which included the investment of $2.9 million cash into FNL, the issuance of 0.1 million shares of Ideanomics common stock, and 100.0% of the common stock outstanding of Grapevine. Ideanomics received 0.6 million shares of common stock of FNL at a subscription price of $8.09 per share of common stock, and Ideanomics also converted a $250,000 SAFE into 30,902 shares of common stock. The Company determined that the basis in the FNL investment is the aggregate of the cash invested, including the SAFE, the fair value of the Ideanomics common stock issued, and the fair value of Grapevine. As a result of this transaction, Ideanomics owns 29.0% of the common stock outstanding of FNL, and FNL appointed Alfred Poor, Ideanomics' Chief Executive Officer, to be a member of its board of directors.

Government Regulations

Rules and Regulations Material to our Business

Vehicle Safety and Testing

In the U.S., some of our vehicles are subject to regulation by the NHTSA, including all applicable FMVSS and the NHTSA bumper standard. While our current vehicles fully comply with applicable regulations and we expect that our vehicles in the future will fully comply with all applicable FMVSS with limited or no exemptions, FMVSS are subject to change from time to time and while we anticipate being in compliance with the proposed changes, there is no assurance until final regulation changes are enacted. As a manufacturer, we must self-certify that our vehicles meet all applicable FMVSS and the NHTSA bumper standard, or otherwise are exempt, before the vehicles may be imported or sold in the U.S.

We are also required to comply with other federal laws administered by NHTSA including labeling requirements and other information provided to customers in writing, Early Warning Reporting requirements regarding warranty claims, field reports, death and injury reports and foreign recalls and additional requirements for cooperating with compliance and safety investigations and recall reporting. In addition, federal law requires inclusion of fuel economy ratings, as determined by the U.S. Department of Transportation and the EPA, and New Car Assessment Program ratings as determined by NHTSA, if available.

Our vehicles sold outside of the U.S. are subject to similar foreign compliance, safety, environmental and other regulations. Many of those regulations are different from those applicable in the U.S. and may require redesign and/or retesting. Some of those regulations impact or prevent the rollout of new vehicle features. Additionally, the European Union established new rules regarding additional compliance oversight that commenced in 2020. There is also regulatory uncertainty regarding how these rules will impact sales in the United Kingdom given its withdrawal from the E.U.

Automobile Manufacturer and Dealer Regulation

In the U.S., state laws regulate the manufacture, distribution, sale and service of motor vehicles, and generally require motor vehicle manufacturers and dealers to be licensed in order to sell vehicles directly to residents. Certain states have asserted that the laws in such states do not permit manufacturers to be licensed as dealers or to act in the capacity of a dealer, or that they otherwise restrict a manufacturer's ability to deliver or service vehicles.

Battery Safety and Testing

Our battery packs are subject to various U.S. and international regulations that govern transport of "dangerous goods," defined to include lithium-ion batteries, which may present a risk in transportation. The governing regulations, which are issued by the Pipeline and Hazardous Materials Safety Administration, are based on the UN Recommendations on the Safe Transport of Dangerous Goods Model Regulations and related UN Manual Tests and Criteria. The regulations vary by mode of shipping transportation, such as by ocean vessel, rail, truck or air. We conduct testing to demonstrate our compliance with such regulations.

As indicated above, we use lithium-ion cells in the high voltage battery packs in some of our vehicles and energy storage products. The use, storage and disposal of our battery packs are regulated under existing laws and are the subject of ongoing regulatory changes that may add additional requirements in the future.

Solar Energy—General

We are subject to certain state and federal regulations applicable to solar and battery storage providers and sellers of electricity. To operate our systems, we enter into standard interconnection agreements with applicable utilities. Sales of electricity and non-sale equipment leases by third parties, such as our leases and PPAs, are likely to face regulatory challenges in some states and jurisdictions.

Environmental Regulations

We operate in an industry that is subject to extensive environmental regulation, which has become more stringent over time. The laws and regulations to which we are subject govern, among others, vehicle emissions and the storage, handling, treatment, transportation and disposal of hazardous materials and the remediation of environmental contamination. Compliance with such laws and regulations at an international, regional, national, and local level is an important aspect of our ability to continue our operations.

Environmental standards applicable to us are established by the laws and regulations of the countries in which we operate, standards adopted by regulatory agencies and the permits and licenses issued to us. Each of these sources is subject to periodic modifications and what we anticipate will be increasingly stringent requirements. Violations of these laws, regulations or permits and licenses may result in substantial administrative, civil or even criminal fines, penalties and possibly orders to cease any violating operations or to conduct or pay for corrective works. In some instances, violations may also result in the suspension or revocation of permits or licenses.

EPA Emissions and Certificate of Conformity

The U.S. Clean Air Act requires that we obtain a Certificate of Conformity issued by the EPA and a California Executive Order issued by CARB certifying that certain of our vehicles comply with all applicable emissions and related certification requirements. A Certificate of Conformity is required for vehicles sold in states covered by the Clean Air Act’s standards and a CARB Executive Order is required for vehicles sold in California and states that have adopted California’s stricter standards for emissions controls related to new vehicles and engines sold in such states. States that have adopted the California standards as approved by EPA also recognize the CARB Executive Order for sales of vehicles.

In addition to California, there are 13 other states that have either adopted or are in the process of adopting the stricter California standards, including New York, Massachusetts, Vermont, Maine, Pennsylvania, Connecticut, Rhode Island, Washington, Oregon, New Jersey, Maryland, Delaware and Colorado.

We are required to seek an EPA Certificate of Conformity for certain of our vehicles sold in states covered by the Clean Air Act’s standards and a CARB Executive Order for vehicles sold in California or any of the other 13 states identified above that have adopted the stricter California standards.

Regulations Pertaining to Our Title Business

Our title companies and related subsidiaries are subject to extensive regulation under applicable state laws. The laws of most states in which we transact business establish supervisory agencies with broad administrative powers relating to issuing and revoking licenses to transact business, regulating trade practices, licensing agents, accounting practices, and financial practices.

In addition to state-level regulation, our title business is subject to regulation by federal agencies, including the CFPB. The CFPB was established under the Dodd-Frank which also included regulation over financial services and other lending related businesses. The CFPB has broad authority to regulate, among other areas, the mortgage and real estate markets in matters pertaining to consumers. This authority includes the enforcement of the TILA, the RESPA and the rules related to the TRID formerly placed with the Department of Housing and Urban Development. Our underwritten title companies, primarily those domiciled in California, are also subject to certain regulation by insurance regulatory or other governing authorities relating to their net worth and working capital.

From time to time, we receive inquiries and requests for information from attorneys general, insurance commissioners and other regulatory agencies about various matters relating to our business. Sometimes these take the form of civil investigative demands or subpoenas. We cooperate with all such inquiries. From time to time, we are assessed fines for violations of regulations or other matters or enter into settlements with such authorities which may require us to pay fines or claims or take other actions.

Regulations Regarding our Fintech Businesses

Securities and Commodities Laws

In order for a securities exchange to operate, it must register as a broker-dealer with the SEC and become a member of FINRA. Depending on a securities exchange's activities, it may be required to also register as a broker dealer on the state level. JUSTLY is a registered broker dealer with an ATS. Depending upon the jurisdiction, we may also be required to comply with laws applicable to securities exchanges.

Financial Crimes and Sanctions Compliance

The jurisdictions in which we operate and intend to operate generally have adopted laws to prevent money laundering, terrorist financing, fraud and other financial crime, as well as to ensure compliance with applicable sanctions regimes. Various aspects of our business require us to develop and implement policies and procedures that confirm the identity of customers, detect suspicious activities and ensure we do not do business with blocked persons.

Rules and Regulations of PRC Material to our Business

General Regulation of Businesses in the PRC

We are required to obtain government approval from or filing with the MOFCOM and/or other government agencies in the PRC for transactions, such as our acquisition or disposition of business entities in the PRC. Additionally, foreign ownership of certain business and assets in the PRC is not permitted without specific government approval.

Regulations Relating to Foreign Investment

Investment activities in the PRC by foreign investors are principally governed by the Negative List and the Encouraged Foreign Investment Catalogue, which was promulgated and is amended from time to time by the MOFCOM and the National Development and Reform Commission. The Catalogue sets forth the industries in which foreign investments are encouraged, restricted, or prohibited. Industries that are not listed in the restricted or prohibited categories are permitted areas for foreign investments and are generally open to foreign investment unless specifically restricted by other PRC regulations. Establishment of wholly foreign owned enterprises is generally allowed in encouraged and permitted industries. Foreign investors are not allowed to invest in industries in the prohibited category.

Under PRC law, the establishment of a wholly foreign owned enterprise is subject to the approval of or filing with the MOFCOM or its local counterparts and the wholly foreign owned enterprise must register with the competent administration for market regulation. Our significant PRC subsidiaries have duly obtained all material approvals required for their business operations.

In addition, the transportation sector is subject to regulation at the central and provincial level. The PRC government may issue from time to time new laws or new interpretations on existing laws, some of which are not published on a timely basis or may have retroactive effect. Administrative and court proceedings in the PRC may also be protracted, resulting in substantial costs and diversion of resources and management attention. Regulatory risk also encompasses the interpretation by the tax authorities of current tax laws, and our legal structure and scope of operations in the PRC, which could be subject to further restrictions resulting in limitations on our ability to conduct business in the PRC.

PRC Regulations on Automobile Sales

On April 5, 2017, the MOFCOM promulgated the Administrative Measures on Automobile Sales, which became effective on July 1, 2017, pursuant to which automobile suppliers and dealers are required to file with relevant authorities (via an information system for national automobile circulation operated by competent commerce departments) within 90 days after receiving a business license. Where there is any change to a party's underlying information, automobile suppliers and dealers must update such information within 30 days after such change. Failure to satisfy such filing requirement will be subject to a warning or a fine up to RMB 30,000.

PRC Regulations on the Recall of Defective Automobiles

On October 22, 2012, the State Council promulgated the Administrative Provisions on Defective Automotive Product Recalls, which became effective on January 1, 2013, and which were amended on March 3, 2019. According to this legislation, the product quality supervision department of the State Council is responsible for the supervision and administration of recalls of defective automotive products in China. Manufacturers of automobile products are required to take measures to eliminate defects in products they sell. A manufacturer must recall all defective automobile products. If any operator conducting sales, leasing, or repair of vehicles discovers any defect in automobile products, it must cease to sell, lease or use the defective products and must assist manufacturers in the recall of those products.

PRC Regulation Relating to Compulsory Product Certification

According to the Administrative Regulations on Compulsory Product Certification promulgated by the QSIQ (which was subsequently merged into the SAMR) on July 3, 2009 and which became effective on September 1, 2009, and the List of the First Batch of Products Subject to Compulsory Product Certification promulgated by the QSIQ in association with the CAA on December 3, 2001, which became effective on the same day, the QSIQ is responsible for the quality certification of automobiles. Automobiles and relevant accessories must not be sold, exported or used in operating activities until they are certified by relevant certification authorities designated by the CAA as qualified products and granted certification marks.

PRC Regulations on Consumer Rights Protection

The Consumer Rights and Interests Protection Law, as promulgated on October 31, 1993 and most recently amended in 2013 by the SCNPC, imposes stringent requirements and obligations on business operators in China. Failure to comply with consumer protection requirements under this legislation could subject business operators to administrative penalties including warnings, confiscation of unlawful income, imposition of fines, an order to cease business operations, revocation of business licenses, as well as potential civil or criminal liabilities.

PRC Regulation on Employment

The Labor Contract Law of the PRC, which was promulgated by the SCNPC on June 29, 2007 and most recently amended as of July 1, 2013, is primarily aimed at regulating rights and obligations of employer and employee relationships, including the establishment, performance and termination of labor contracts. Pursuant to the Labor Contract Law, labor contracts must be concluded in writing if labor relationships are to be or have been established between employers and their employees. Employee wages shall be no lower than local standards on minimum wages and must be paid to employees in a timely manner. Employers are prohibited from forcing employees to work above certain time limits and employers shall pay employees for overtime work in accordance with national regulations. The Labor Contract Law in effect prohibits employers from terminating employees without severance except in a few enumerated circumstances (e.g., serious violation of company rules and regulations). In some permitted circumstances of termination (such as where an employee is incompetent and remains incompetent after training or assignment to another post), a 30 days' prior notice (or pay in lieu) and severance payments are required.

The Social Insurance Law of the PRC, promulgated by the SCNPC on October 28, 2010 and most recently amended on December 29, 2018, provides that each employer within the PRC must register with the State's social insurance system upon its establishment and make contributions to the social insurance system for the benefit of each of its employees, including foreign nationals who are employed in the PRC. Specifically, an employer must make monthly deposits to a designated fund for its contribution to each of its employees' pension insurance, medical insurance, work injury insurance, unemployment insurance, and maternity insurance. Failure to make such deposits according to the amounts and times provided by law can lead to a court order for seizure, freezing, or an auction of the employer's property equivalent to the value of any unpaid social insurance payables.

In accordance with the Regulations on the Management of Housing Fund which was promulgated by the State Council on April 3, 1999 and revised on March 24, 2019, employers must register at designated administrative centers and open bank accounts in order to deposit mandatory employee housing fund contributions. Employers are required to pay and deposit housing fund contributions (in an amount no less than 5% of the monthly average salary of the employee in the preceding year) in full and on time.

PRC Regulation on Government Subsidies

On April 22, 2015, the MOF, the MOST, the MIIT and the NDRC jointly promulgated the Financial Support Circular, which took effect on the same day. The Financial Support Circular provides that those who purchase new energy vehicles specified in the Catalogue of Recommended New Energy Vehicle Models for Promotion and Application issued by the MIIT may enjoy government subsidies. A purchaser may purchase a new energy vehicle from a manufacturer by paying the price deducted by the subsidy amount, and the manufacturer may obtain the subsidy amount from the PRC central government after such new energy vehicle is sold to the purchaser.

On April 23, 2020, the MOF, the MOST, the MIIT and the NDRC jointly issued the 2020 Financial Subsidies Circular, which took effect on the same day, and which extended the implementation period of financial subsidies for new energy vehicles to the end of 2022. The 2020 Financial Subsidies Circular further specifies that the subsidy criteria for new energy vehicles during the period from year 2020 to 2022 will generally be reduced by 10%, 20% and 30% compared to the subsidy standard of the previous year respectively, and the number of vehicles eligible for the subsidies will not exceed approximately two million each year.

On December 31, 2020, the above mentioned authorities further promulgated the 2021 Financial Subsidies Circular, a Circular on Further Improving the Financial Subsidy Policy for the Wider Application of New-energy Vehicles, which became effective on January 1, 2021, and was another similar circular to reiterate the principles including among others, the subsidy criteria reduction rate as stipulated in the 2020 Financial Subsidies Circular. This 2021 Financial Subsidies Circular emphasizes that the effective period for financial subsidy policies applicable to new energy vehicles will be extended to the end of 2022, given levels of technical progress, scale effect and other factors. The reduction of these subsidy standards will be gradual. The 2021 subsidy standard reduces the base subsidy amount by 20% for each new energy vehicle on the basis of that for the previous year.

On December 31, 2021, the above mentioned authorities promulgated the 2022 Financial Subsidies Circular, a Circular on Financial Subsidy Policy for Application and Promotion of New-energy Vehicles in the year of 2022, which became effective on January 1, 2022. The 2022 Financial Subsidies Circular specifies that the subsidy standard of 2022 will be reduced by 30% compared to the subsidy standard of the previous year, and the financial subsidy policies applicable to new energy vehicles will expire on December 31, 2022.

Taxation

On March 16, 2007, the National People's Congress of the PRC originally passed the EIT Law, which was most recently amended on December 29, 2018, and on November 28, 2007, the State Council of China originally passed implementing rules to the EIT Law, which were most recently amended on April 23, 2019. The EIT Law and its implementing rules impose a unified EIT rate of 25.0% on all domestic-invested enterprises and FIE unless they qualify under certain limited exceptions. In addition, under the EIT Law, an enterprise established outside of the PRC with "de facto management bodies" within the PRC is considered a resident enterprise and will be subject to an EIT of 25% on its global income. The implementing rules define the term "de facto management bodies" as "an establishment that exercises, in substance, overall management and control over the production, business, personnel, accounting, etc., of a Chinese enterprise." If the PRC tax authorities subsequently determine that we should be classified as a resident enterprise, then our organization's global income will be subject to PRC income tax of 25%.

In April 2009, the State Administration of Taxation originally issued a circular, commonly known as "Circular 82," which was most recently amended on December 29, 2017. Circular 82 provides specific criteria for determining whether the "de facto management body" of a PRC-controlled enterprise that is incorporated offshore is actually located in China. Although this circular only applies to offshore enterprises controlled by PRC enterprises or PRC enterprise groups (not those controlled by PRC individuals or foreigners,) the criteria set forth in the circular may reflect the State Administration of Taxation's general position on how the "de facto management body" test should be applied in determining the tax resident status of all offshore enterprises. According to Circular 82, an enterprise incorporated offshore but controlled by a PRC enterprise or a PRC enterprise group will be regarded as a PRC tax resident by virtue of having its "de facto management body" in China if all of the following conditions are met: (i) the primary location of the day-to-day operational management is in the PRC; (ii) decisions relating to the enterprise's financial and human resource matters are made or are subject to approval by organizations or personnel in the PRC; (iii) the enterprise's primary assets, accounting books and records, company seals, and board and shareholder resolutions, are located or maintained in the PRC; and (iv) at least 50% of voting board members or senior executives habitually reside in the PRC.

For detailed discussion of PRC tax issues related to resident enterprise status, see Part I—Item 1A—"Risk Factors—Risks Related to Doing Business in the PRC- Under the EIT Law, we may be classified as a "resident enterprise" of China. Such classification will likely result in dividends payable to our foreign investor and gains on sale of our common stock by our foreign investors may become subject to PRC taxation."

Foreign Currency Exchange

Under the PRC foreign currency exchange regulations applicable to us, RMB is convertible for current account items, including the distribution of dividends, interest payments, trade and service-related foreign exchange transactions. Currently, our PRC operating entities may purchase foreign currencies for settlement of current account transactions, including payments of dividends to us, without the approval of the PRC State Administration of Foreign Exchange, by complying with certain procedural requirements. Conversion of RMB for capital account items, such as direct investment, loan, security investment and repatriation of investment, however, is still subject to the approval of the State Administration of Foreign Exchange. In particular, if our PRC operating entities borrow foreign currency through loans from us or other foreign lenders, these loans must be registered with the State Administration of Foreign Exchange, and if we finance the subsidiaries by means of additional capital contributions, these capital contributions must be registered or filed with by certain government authorities. These limitations could affect our PRC operating entities' ability to obtain foreign exchange through debt or equity financing.

Dividend Distributions

PRC regulations restrict the ability of our PRC entities to make dividends and other payments to their offshore parent company. PRC legal restrictions permit payments of dividends by our PRC entities only out of their accumulated after-tax profits, if any, determined in accordance with PRC accounting standards and regulations. Each of our PRC subsidiaries is also required under PRC laws and regulations to allocate at least 10% of our annual after-tax profits determined in accordance with generally accepted accounting principles in the PRC to a statutory general reserve fund until the amounts in such fund reaches 50% of its registered capital. These reserves are not distributable as cash dividends. Our PRC subsidiaries have the discretion to allocate a portion of their after-tax profits to staff welfare and bonus funds, which may not be distributed to equity owners except in the event of liquidation.

In addition, under the EIT Law, the Notice 112 which was originally issued on January 29, 2008 and most recently amended on February 29, 2008, any dividends from our PRC operating subsidiaries paid to us through our entities are (since January 1, 2008) subject to a withholding tax at a rate of 10%. Furthermore, the ultimate tax rate will be determined by treaty between the PRC and the tax residence nation of the holder of the PRC subsidiary. Dividends historically declared and paid before January 1, 2008 on distributable profits were grandfathered in under the EIT Law and were not subject to withholding tax.

We intend to reinvest profits, if any, and do not intend on making cash distributions of dividends in the near future.

The Company is subject to a variety of U.S. and international laws, rules, policies and other obligations regarding data protection.

We are subject to federal, state and international laws relating to the collection, use, retention, security and transfer of various types of personal information. In many cases, these laws apply not only to third-party transactions, but also restrict transfers of personal information among the Company and its international subsidiaries and vice versa. Many jurisdictions have passed laws regarding data privacy and personal data, and additional jurisdictions are considering imposing additional restrictions or have laws that are pending. These laws continue to develop and may be inconsistent from jurisdiction to jurisdiction. Complying with emerging and changing requirements causes the Company to incur substantial costs and has required and may in the future require the Company to change its business practices. Noncompliance could result in significant penalties or legal liability.

The Company makes statements about its use and disclosure of personal and business information through its privacy policy, information provided on its website, press statements and other privacy notices. Any failure by the Company to comply with these public statements or with other federal, state or international privacy or data protection laws and regulations could result in inquiries or proceedings against the Company by governmental entities or others. In addition to reputational impacts, penalties could include ongoing audit requirements and significant legal liability. In addition to the risks generally relating to the collection, use, retention, security and transfer of personal information, the Company is also subject to specific obligations relating to information considered sensitive under applicable laws, such as vehicle telematics data and financial data. Vehicle telematics are subject to specific regulation by the PRC, and if the Company fails to adequately comply with these rules and requirements, the Company can be subject to litigation or government investigations in the PRC or elsewhere, and can be liable for associated investigatory expenses, and can also incur significant fees or fines.

Human Capital Management

Human Capital Resources

Our experienced employees and management team are our most valuable resources. Attracting, training, and retaining key personnel has been and will remain critical to our success. We are committed to attracting, motivating, and retaining top professionals. To achieve our human capital goals, we intend to stay focused on providing our personnel with entrepreneurial opportunities to expand our business within their areas of expertise. We will also continue to provide our personnel with personal and professional growth opportunities, including additional training, performance-based incentives such as opportunities for stock ownership, and other competitive benefits.

We work to ensure that the Company provides a safe, inclusive, and positive employee environment for all its employees. As of December 31, 2021, we had a total of 559 employees, of which 476 were located in the United States, 40 located in Malaysia, 37 located in China and 6 located in the United Kingdom. None of our employees are represented by a union or covered by a collective bargaining agreement. We have not experienced any work stoppages, and we consider our relationship with our employees to be good.

Our success is directly related to the satisfaction, growth, and development of our employees. We strive to offer a work environment where employee opinions are valued and allow our employees to use and augment their professional skills. To achieve our human capital goals, we intend to remain focused on providing our personnel with entrepreneurial opportunities to expand our business within their areas of expertise and continue to provide our personnel with personal and professional growth. Ideanomics emphasizes several measures and objectives in managing our human capital assets, including, among others, employee safety and wellness, talent acquisition and retention, employee engagement, development and training, diversity and inclusion, and compensation and pay equity.

COVID-19 and Employee Safety and Wellness

In response to the COVID-19 pandemic, we implemented significant changes that we determined were in the best interest of our employees as well as the communities in which we operate. These measures include allowing most employees to work from home. We believe in supporting our employees’ health and well-being. Our goal is to help employees make informed decisions about their health by providing the tools and resources necessary to achieve a healthier lifestyle. We offer our employees a wide array of benefits such as life and health (medical, dental, and vision) insurance, paid time off and retirement benefits, as well as emotional well-being services through our health insurance program.

Diversity and Inclusion and Ethical Business Practices

We believe that a company culture focused on diversity and inclusion is a crucial driver of creativity and innovation. We also believe that diverse and inclusive teams make better business decisions, ultimately driving better business outcomes. We are committed to recruiting, retaining, and developing high-performing, innovative and engaged employees with diverse backgrounds and experiences. This commitment includes providing equal access to, and participation in, equal employment opportunities, programs, and services without regard to race, religion, color, national origin, disability, sex, sexual orientation, gender identity, stereotypes, or assumptions based thereon. We welcome and celebrate our teams’ differences, experiences, and beliefs, and we are investing in a more engaged, diverse, and inclusive workforce.

Ideanomics also fosters a strong corporate culture that promotes high standards of ethics and compliance for our business, including policies that set forth principles to guide employee, officer, director, and vendor conduct, such as our Code of Business Conduct and Ethics. We also maintain a whistleblower policy and anonymous hotline for the confidential reporting of any suspected policy violations or unethical business conduct on the part of our businesses, employees, officers, directors, or vendors.

To learn more about policies and practices and our continuing efforts related to human capital matters, please refer to our website at www.ideanomics.com for further information. You may also find our Code of Business Conduct and Ethics, and the charters of the committees of our Board of Directors on our website. The information contained on, or that may be accessed through, our website, is not part of, and not incorporated into, this Annual Report on Form 10-K.

Environmental, Social and Corporate Governance

Ideanomics published its first ESG Report in January 2021. The report serves as a step in fulfilling our commitment to our employees, our shareholders, our subsidiaries, and our partners. Our dynamic process of incorporating social and environmental challenges into our operations as well as creating actionable plans to improve areas of weakness will enable us to grow a stronger, cleaner, and more resilient business. Some ESG highlights this year include:

- Added ESG oversight at the Board level by expanding the Nominating and Corporate Governance Committee's responsibilities and created an ESG Task Force to oversee ESG programs and initiatives.
- Fortified our Code of Conduct by stating our position against discrimination and corruption, commitment to safe work ecosystems, and fair labor standards.
- Downsized our corporate offices, significantly reducing our carbon footprint and to making appropriate adjustments for our flexible remote workforce.
- The 3 "R's" have never been more important, and we strive to implement Reduce, Reuse, and Recycle wherever possible, including water filters and reusable cups and company supplied water bottles to all employees to encourage minimizing of our footprint.
- We maintained our optional remote work policy initiated in March 2020. We've also expanded our human resource function to expand programs and benefits to ensure our team's continued well-being, diversity, and professional growth.
- Began partnership with One Tree Planted, a non-profit organization that works with reforestation partners across 43 countries to get trees in the ground. These projects restore forests after fires and floods, create jobs, build communities, and protect habitat for wildlife. As part of our commitment to One Tree Planted, Ideanomics donated more than 2,000 trees in 2021.

As Ideanomics grows and we implement our ESG platform across our subsidiaries, we will apply best practices to ensure that our partners and suppliers meet both environmental and human rights standards.

To learn more about policies and practices and our continuing efforts related to ESG, refer to our website at www.ideanomics.com for further information. You may also find our 2021 ESG Report on our website. The information contained on, or that may be accessed through, our website, is not part of, and not incorporated into, this Annual Report on Form 10-K.

ITEM 1A. RISK FACTORS

The business, financial condition and operating results of the Company may be affected by a number of factors, whether currently known or unknown, including but not limited to those described below. Any one or more of such factors could directly or indirectly cause the Company's actual results of operations and financial condition to vary materially from past or anticipated future results of operations and financial condition. Any of these factors, in whole or in part, could materially and adversely affect the Company's business, financial condition, results of operations and stock price. The following information should be read in conjunction with Part II—Item 7—"Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and related notes in Part II—Item 8—"Financial Statements and Supplementary Data" of this Annual Report. For risks relating to VIA Motors International, Inc. ("VIA") and the anticipated acquisition thereof, see our Registration Statement on Form S-4 initially filed on November 5, 2021, as amended from time to time.

Risk Factors Summary

We are an operating company that conducts a substantial majority of our operations through our operating subsidiaries established in various jurisdictions. Accordingly, we are subject to the risk factors affecting particular industries, businesses, and geographical locations of our subsidiaries. Further, our structure involves certain risks with regard to our international operations. Additionally, we are subject to risk factors concomitant to our anticipated acquisition of VIA and filed with SEC in the Registration Statement which is not effective as of the filing date of this Annual Report on Form 10-K.

As a result of the foregoing, our business is subject to numerous risks and uncertainties, including those described in "Part I, Item 1A, Risk Factors" of this Annual Report. These risks are arranged by groups and include, but are not limited to, the following:

Risks Related to Industries in Which We Operate

In connection with the operations of Ideanomics Mobility, the Company:

- faces extreme competitive pressure associated with its lack of experience in participation in the relatively new global commercial EV market;
- is challenged by a wide array of intellectual property-related risks;
- may become subject to the product liability risks that are particularly high in the automotive industry;
- in collaboration with financial institutions, needs to introduce and promote new financial models allowing the market participants to cost effectively transition their commercial vehicle fleets to EVs;
- relies on the current governmental initiatives promoting and prioritizing fuel efficiency and alternative energy in various jurisdictions; and
- may experience the consequences of the supply-chain crisis and chip shortage.

In connection with the operations of Ideanomics Capital, the Company:

- is sensitive to numerous economic factors influencing the real estate market of the U.S. in general and the real estate market of the State of California in particular;
- is dependent on the reliability of the financial institutions it uses in connection with its services;
- is subject to severe competition; and
- can be negatively affected by regulatory changes.

Risks Related to Our Business and Strategy

In connection with its strategy and development risks, the Company:

- requires additional financing necessary for its development;
- faces significant financial, managerial, and administrative burdens in connection with its strategic approach of acquiring new businesses and business segments;
- is dependent on its ability to hire and retain key employees with the specialists' skills in various areas;
- may be negatively affected by current and potential litigation, or regulatory proceedings; and
- presents a doubt about its financial viability and as to whether it will be able to continue as a going concern.

In connection with its information technology systems and cyber-security the Company:

- must keep pace with the latest technological changes in order to remain competitive;
- may have defect or disruptions in its technological products;
- was and will remain subject to malicious cyber-attacks and other security incidents; and
- is subject to complex and evolving U.S. and foreign privacy, data use and data protection content, consumer competition and other similar laws and regulations.

In connection with its internal controls and compliance with applicable securities laws, the Company:

- faces the consequences of restatements of its Quarterly Reports for the periods ended March 31, 2021, June 30, 2021 and September 30, 2021;

- identified material weaknesses in its internal control over financial reporting and concluded that its disclosure controls and procedures were not effective;
- lost its Form S-3 eligibility; and
- may have inadvertently violated Section 402 of the Sarbanes-Oxley Act and Section 13(k) of the Exchange Act.

Risks Related to Ownership of our Securities

In connection with ownership of securities risks:

- certain provisions of our charter documents and applicable law may have an anti-takeover effect;
- we do not intend to pay dividends for the foreseeable future; and
- our common stock may be delisted.

Financial Market and Economic Risks

- A disruption in our funding sources and access to the capital markets would have an adverse effect on our liquidity.

Risks Related to all of our International Operations

The Company is subject to general geopolitical and economic risks in connection with our global operations.

Specifically in connection with our business in the PRC, it is subject to numerous risks that are severely exacerbated by the recent actions and statements of the Chinese government including but not limited to:

- the ability of the Chinese government to exercise its discretionary powers with regard to any business on its territory at any time;
- uncertainties in connection with the tensions between the United States and China;
- the inability of the U.S.-triggered investigations on the territory of China and limited law-enforcement opportunities against our Chinese subsidiaries;
- restrictions on currency exchange and limitations in transferring money from our subsidiaries domiciled in China in the form of dividends;
- restrictions under PRC law on our PRC subsidiaries' ability to make dividends;
- no guarantee that future audit reports in connection with Chinese operations will be prepared by auditors that are subject to inspections by the PCAOB; and
- China-specific economic and regulatory processes transforming the Chinese labor market and renewable energy sectors.

Risks Related to Anticipated Acquisition of VIA

- Our planned acquisition of VIA presents considerable uncertainties and risks including requirements for additional capitalization.

Risks Related to Industries in Which We Operate

Risks Related to the Industries of Ideanomics Mobility

We experience significant competitive pressure in the Ideanomics Mobility business unit, which may negatively impact our business, financial condition, and results of operations.

The Company's Ideanomics Mobility business unit is operating in the commercial EV market globally. The commercial EV market is still in its development stage and the rate at which the operators of fleets of commercial vehicles replace their ICE vehicles with EV is very dependent upon (i) environmental and clean air regulations that mandate conversion to EV, (ii) the subsidies that government bodies make available to cover the cost of conversion, (iii) the availability of financing to cover some or all of the cost of conversion, (iv) regulations governing the amount of locally manufactured content required in vehicles sold in a particular market, (v) the availability of charging and battery swap infrastructure, and (vi) the rate at which EV technologies evolve.

Environmental and clean air regulations drive the timing and rate at which fleet operators convert to EV and by extension the size of the market and the type of vehicles that are in demand at any time. The Company's revenues and profits may be adversely impacted if demand for EVs is lower than expected due to a change in regulation or regulations favor the conversion of vehicle types that have lower profit margins.

Converting fleets to EV is very capital intensive and most operators require substantial amounts of funding in the form of government and municipal subsidies and bank financing. The amount and form of subsidies are subject to change from time to time as government bodies adjust subsidies to influence consumer behavior. The mechanisms for financing of EVs are still being developed and large-scale conversion from ICE engines to EV is highly dependent upon the amount and terms of financing available for the conversion to EV.

We currently have limited intellectual property rights related to our Ideanomics Mobility business unit, and primarily rely on third parties through agreements with them to conduct research and development activities and protect proprietary information.

Although we believe our success will depend in part on our ability to acquire, invest in or develop proprietary technology to effectively compete with our competitors, we currently have, and for the foreseeable future will have, limited direct intellectual property rights related to our new Ideanomics Mobility business unit. The intellectual property relevant to the products and services we plan to provide is held primarily by third parties, including our strategic partners. Accordingly, we will rely on these third parties for research and development activities, which will present certain risks. For example, we will have limited control over the research and development activities of the business of our partners, and may require licenses from these third parties if we wish to develop products directly. If these businesses are unable to effectively maintain a competitive edge relative to the market with their technologies and intellectual property, it may adversely affect our business and financial position.

Our reliance on third parties also presents risks related to ownership, use, and protection of proprietary information. We are required to rely on the terms of the related agreements, including the partnership agreements to protect our interests, as well as our investments and partners' trade secret protections, non-disclosure agreements, and invention assignment agreements to protect confidential and proprietary information. If the intellectual property and other confidential information of our investments and strategic partners are not adequately protected, competitors may be able to use their proprietary technologies and information, thereby eroding any competitive advantages that intellectual property provides to us.

We may become subject to product liability claims, which could harm our financial condition and liquidity if we are not able to successfully defend against such claims.

If we become liable for product liability claims, our business, operating results, and financial condition may be harmed. The automotive industry experiences significant product liability claims, and we face an inherent risk of exposure to claims in the event the electric vehicles that we sell do not meet applicable standards or requirements, resulting in property damage, personal injury, or death. Our risks in this area are particularly pronounced given we have limited experience of selling electric vehicles. Although we ensured that we have thorough quality protection and testing measures, we cannot assure you that our quality protection and testing measures will be as effective as we expect. Any failure in any of our quality assurance steps or contractual clauses with our partners would cause a defect in electric vehicles sold by us, and in turn, could harm our customers. A successful product liability claim against us could require us to pay a substantial monetary award as we may undertake joint and several liability with the manufacturer. Moreover, a product liability claim could generate substantial negative publicity about our business, which would have a material adverse effect on our brand, business, prospects, financial condition, and results of operations.

The success of the Company's efforts to develop its Ideanomics Mobility business unit is highly dependent upon suitable financing structures being developed.

The market for commercial fleets of EVs is in the early stage of development and provides unique challenges to fleet owners trying to finance the purchase of fleets of EVs and the related charging, storage, and battery infrastructure. Unlike vehicles powered by ICEs, the power source in an EV, the battery, can be separated from the vehicle which creates unique challenges for lenders in valuing the collateral for any loan. Additionally, the market for commercial EVs is very new and consequently, there is no reliable history of resale values to support lending decisions. Large-scale adoption of EVs will require a range of borrowing options and loan types to be available to fund purchases and leasing of EVs similar to those that currently exist to finance the purchasing and leasing of traditional ICE vehicles. Additionally, in some of the Company's target markets, there is no well-developed market for lending to private enterprises and this may further slow down the adoption of EVs. The Company is working with banks and insurance companies to create lending structures and pools of capital that can be used to finance fleet purchases of commercial EVs. Even if the Company can create the necessary pools of capital and lending structures there is no guarantee that any regulatory approvals required for these new structures will be obtained. If the Company is not able to develop a solution for the funding of fleet purchases of EVs and related charging and battery infrastructure, then the Company's Ideanomics Mobility business may not be successful and generate minimal revenues, and incur substantial losses.

We may be affected by the supply chain issues of the automotive industry.

We are aware that some domestic and foreign EV manufacturers have their operations negatively affected as a result of general economic conditions. Recently, as a result of the COVID-19 pandemic, many car manufacturers including EV manufacturers were required to temporarily shut down their manufacturing facilities or operate at a reduced capacity, and supply chain issues in sourcing computer chips necessary for manufacturing new vehicles and certain automotive products have resulted in a global chip shortage, which could further delay or stall new vehicle production. There is no guarantee that our business will not face the same problems in the future, which could have a material adverse effect on our EV business.

The success of our business depends in large part on our ability to protect our proprietary information and technology and enforce our intellectual property rights against third parties.

We rely on a combination of patent, copyright, service mark, trademark, and trade secret laws, as well as confidentiality procedures and contractual restrictions, to establish and protect our proprietary rights, all of which provide only limited protection. We cannot assure you that any patents will be issued with respect to our currently pending patent applications, in a manner that gives us the protection that we seek, if at all, or that any future patents issued to us will not be challenged, invalidated, or circumvented. Our currently issued patents and any patents that may be issued in the future with respect to pending or future patent applications may not provide sufficiently broad protection, or they may not prove to be enforceable in actions against alleged infringers. Also, we cannot assure you that any future service mark registrations will be issued with respect to pending or future applications or that any registered service marks will be enforceable or provide adequate protection of our proprietary rights.

We endeavor to enter into agreements with our employees and contractors and agreements with parties with whom we do business to limit access to and disclosure of our proprietary information. We cannot be certain that the steps we have taken will prevent unauthorized use of our technology or the reverse engineering of our technology. Moreover, others may independently develop technologies that are competitive to ours or infringe our intellectual property. The enforcement of our intellectual property also depends on our legal actions against these infringers being successful, but we cannot be sure these actions will be successful, even when our rights have been infringed.

Further, effective patent, trademark, service mark, copyright, and trade secret protection may not be available in every country in which our services are available over the internet. In addition, the legal standards relating to the validity, enforceability, and scope of protection of intellectual property rights in EV-related industries are uncertain and still evolving.

Changes to existing federal, state, or international laws or regulations applicable to us could cause an erosion of our current competitive strengths.

Our business is subject to a variety of federal, state, and international laws and regulations, including those with respect to government incentives promoting fuel efficiency and alternate forms of energy, electric vehicles, and others. These laws and regulations, and the interpretation or application of these laws and regulations, could change. Any reduction, elimination, or discriminatory application of government subsidies and economic incentives because of policy changes, fiscal tightening, or other reasons may result in diminished revenues from government sources and diminished demand for our products. In addition, new laws or regulations affecting our business could be enacted. These laws and regulations are frequently costly to comply with and may divert a significant portion of management's attention. If we fail to comply with these applicable laws or regulations, we could be subject to significant liabilities which could adversely affect our business.

There are many federal, state, and international laws that may affect our business, including measures to regulate EVs and charging systems. If we fail to comply with these applicable laws or regulations, we could be subject to significant liabilities which could adversely affect our business.

There are a number of significant matters under review and discussion with respect to government regulations that may affect business and/or harm our customers, and thereby adversely affect our business, financial condition, and results of operations.

Risks Related to the Industries of Ideanomics Capital

If adverse changes in the levels of real estate market activity occur, the revenues of our Timios subsidiaries may decline.

Title insurance, settlement services, and appraisal revenue are closely related to the level of real estate activity, which includes, among other things, sales, mortgage financing, and mortgage refinancing. The levels of real estate activity are primarily affected by the average price of real estate sales, the availability of funds to finance purchases, and mortgage interest rates. Both the volume and the average price of residential real estate transactions have increased substantially in many parts of the country over the past year. Due to the unprecedented nature of activity, these trends are unlikely to continue at the same level in the long- term.

We have found that residential real estate activity generally decreases in the following situations:

- Mortgage interest rates are high or increasing;
- Mortgage funding supply is limited; and
- The United States economy is weak, including high unemployment levels.

If there is a decline in the level of real estate market activity or the average price of real estate sales, such decline may adversely affect our title insurance, settlement services, and appraisal management revenues. In 2021, the mortgage interest rate has increased, which may negatively impact the amount of mortgage refinancing activity in comparison to 2020. In addition, uncertain or fluctuating real estate valuations and the inability for third-party purchasers to obtain capital, inflation, and concomitant economic consequences thereof are among the factors that may significantly decrease the number of real estate operations. Our revenues in future periods will continue to be subject to these and other factors which are beyond our control and, as a result, are likely to fluctuate.

If financial institutions at which we hold escrow funds fail, it could have a material adverse impact on our Timios subsidiary.

We hold customers' assets in escrow at various financial institutions, pending completion of real estate transactions. These assets are maintained in segregated bank accounts. Failure of one or more of these financial institutions may lead us to become liable for the funds owed to third parties and there is no guarantee that we would recover all of the funds deposited, whether through Federal Deposit Insurance Corporation coverage or otherwise.

If we experience changes in the rate or severity of title insurance claims, it may adversely impact our ability to conduct business through our Timios subsidiary.

By their nature, claims are often complex, vary greatly in dollar amounts, and are affected by economic and market conditions and the legal environment existing at the time of settlement of the claims. Some of our subsidiaries are underwritten title companies, and if the title claims exceed the threshold established by the title companies that underwrite the insurance our subsidiaries offer, it may cause our subsidiaries' appointments to be revoked and negatively impact our subsidiaries' ability to conduct business.

Because our Timios subsidiary is dependent upon California for a substantial portion of our title insurance premiums, our business may be adversely affected by regulatory conditions in California.

California is the largest source of revenue for the title insurance industry and, in 2021, California-based premiums accounted for a substantial portion of the premiums earned by our Timios subsidiary. A significant part of our revenues and profitability are therefore subject to our operations in California and to the prevailing regulatory conditions in California. Adverse regulatory developments in California, which could include reductions in the maximum rates permitted to be charged, cost of employment regulations, inadequate rate increases, or more fundamental changes in the design or implementation of the California title insurance regulatory framework, could have a material adverse effect on our results of operations and financial condition.

The title insurance business is highly competitive.

Competition in the title insurance and appraisal management industry is intense, particularly with respect to price, service, and expertise. Business comes primarily by referral from real estate agents, lenders, developers, and other settlement providers. The sources of business lead to a great deal of competition among title agents and appraisal management companies. There are numerous national companies and smaller companies at the regional and local levels. The smaller companies are an ever-present competitive risk in the regional and local markets where their business connections can give them a competitive edge. Although we are not aware of any current initiatives to reduce regulatory barriers to entering our industry, any such reduction could result in new competitors, including financial institutions, entering the title insurance business. From time to time, new entrants enter the marketplace with alternative products to traditional title insurance, although many of these alternative products have been disallowed by title insurance regulators. These alternative products, if permitted by regulators, could adversely affect our revenues and earnings. Competition among the major title insurance companies and any new entrants could lower our premium and fee revenues.

Industry regulatory changes and scrutiny could adversely affect our ability to compete for or retain business or increase our cost of doing business.

The title insurance industry has recently been, and continues to be, under regulatory scrutiny in a number of states with respect to pricing practices, alleged Real Estate Settlement Procedures Act violations, and unlawful rebating practices. The regulatory environment could lead to industry-wide reductions in premium rates and escrow fees, the inability to get rate increases when necessary, as well as to changes that could adversely affect the Company’s ability to compete for or retain business or raise the costs of additional regulatory compliance. Further, if regulatory decrees delaying foreclosures are extended, it will continue to impact our ability to recognize revenue and profitability from our default title and settlement services department.

Rapid technological changes in our industry require timely and cost-effective responses. Our earnings may be adversely affected if we are unable to effectively use technology to increase productivity.

Technological advances occur rapidly in the title insurance industry as industry standards evolve and title insurers introduce new products and services. We believe that our future success depends on our ability to anticipate technological changes and to offer products and services that meet evolving standards on a timely and cost-effective basis. Successful implementation and customer acceptance of our technology-based services will be crucial to our future profitability. There is a risk that the introduction of new products and services, or advances in technology, could reduce the usefulness of our products and render them obsolete.

Risks Related to Our Business and Strategy

Strategy and Development Risks

We expect to require additional financing in the future to meet our business requirements. Such capital raising may be costly, difficult, or not possible to obtain and, if obtained, could significantly dilute current stockholders’ equity interests.

We must continue to rely on proceeds from debt and equity issuances to pay for ongoing operating expenses and repay existing debt in order to execute our business plan. Although we may attempt to raise funds by issuing debt or equity instruments, additional financing may not be available to us on terms acceptable to us or at all, or such resources may not be received in a timely manner. If we are unable to raise additional capital when required or on acceptable terms, we may be required to scale back or to discontinue certain operations, scale back or discontinue the development of new business lines, reduce headcount, sell assets, file for bankruptcy, reorganize, merge with another entity, or cease operations.

As we acquire, dispose of, or restructure our businesses, product lines, and technologies, we may encounter unforeseen costs and difficulties that could impair our financial performance.

An important element of our management strategy is to review acquisition prospects that would complement our existing products, augment our market coverage and distribution ability, or enhance our capabilities. As a result, we may seek to make acquisitions of companies, products, or technologies, or we may reduce or dispose of certain product lines or technologies that no longer fit our business strategies. For regulatory or other reasons, we may not be successful in our attempts to acquire or dispose of businesses, products, or technologies, resulting in significant financial costs, reduced or lost opportunities, and diversion of management's attention. Managing an acquired business, disposing of product technologies, or reducing personnel entails numerous operational and financial risks, including, among other things, (i) difficulties in assimilating acquired operations and new personnel or separating existing business or product groups, (ii) diversion of management's attention away from other business concerns, (iii) amortization of acquired intangible assets, (iv) adverse customer reaction to our decision to cease support for a product, and (v) potential loss of key employees or customers of acquired or disposed operations. There can be no assurance that we will be able to achieve and manage successfully any such integration of potential acquisitions, disposition of product lines or technologies, or reduction in personnel or that our management, personnel, or systems will be adequate to support continued operations. Any such inabilities or inadequacies could have a material adverse effect on our business, operating results, financial condition, and/or cash flows.

In addition, any acquisition could result in changes, such as potentially dilutive issuances of equity securities, the incurrence of debt and contingent liabilities, the amortization of related intangible assets, and goodwill impairment charges, any of which could materially adversely affect our business, financial condition, results of operations, cash flows, and/or the price of our common stock.

The success of our business is dependent on our ability to hire and retain key employees with the specialists' skills that we need for our business.

We depend on the services of our key employees. Our success will largely depend on our ability to hire and retain these key employees and to attract and retain qualified senior and middle-level managers to our management team.

We have recruited executives and management both in the United States and in our operations outside of the United States to assist in our ability to manage the business and to recruit and oversee employees. While we believe we offer compensation packages that are consistent with market practice, we cannot be certain that we will be able to hire and retain sufficient personnel to support our business. The loss of any of our key employees, or failure to find a suitable successor, would significantly harm our business. Our future success will also depend on our ability to identify, hire, develop and retain skilled key employees. We do not maintain key person life insurance on any of our employees. Future sales or acquisitions by us may also cause uncertainty among our current employees and employees of an acquired entity, which could lead to the departure of key employees. Such departures could have an adverse impact on our business and the anticipated benefits of a sale or acquisition.

Intellectual-property litigation could cause us to spend substantial resources and could distract our personnel from their normal responsibilities.

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions, or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development, sales, marketing, or distribution activities. We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of intellectual property litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

We are currently, and may in the future be, subject to substantial litigation, investigations, and proceedings that could cause us to incur significant legal expenses and result in harm to our business.

We are actively involved in a variety of litigations and other legal matters and may be subject to additional litigations, investigations, arbitration proceedings, audits, regulatory inquiries, and similar actions, including matters related to commercial disputes, intellectual property, employment, securities laws, disclosures, environmental, tax, accounting, class action, and product liability, as well as trade, regulatory and other claims related to our business and our industry, which we refer to collectively as legal proceedings. For example, we are subject to an ongoing securities class action and shareholder derivative actions as well as an SEC investigation. Refer to Note 21 to our Consolidated Financial Statements of this Annual Report for additional information regarding these specific matters.

As reported previously, the Company is subject to an investigation by the SEC and has responded to various information requests and subpoenas from the SEC. The Company is fully cooperating with the SEC's requests, and cannot predict the outcome of this investigation.

We are unable to predict the outcome, duration, scope, result, or related costs of the investigations and related litigation and, therefore, any of these risks could impact us significantly beyond expectations. Moreover, we are unable to predict the potential for any additional investigations or litigation, any of which could exacerbate these risks or expose us to potential criminal or civil liabilities, sanctions, or other remedial measures, and could have a material adverse effect on our reputation, business, financial condition, results of operations, liquidity or cash flows. Regardless of the merits of the claims and the outcome, legal proceedings have resulted in, and may continue to result in, significant legal fees and expenses, diversion of management's time and other resources, and adverse publicity. Such proceedings could also adversely affect our business, results of operations, and financial condition.

We may have inadvertently violated Section 13(k) of the Exchange Act (implementing Section 402 of the Sarbanes-Oxley Act of 2002) and may be subject to sanctions as a result.

Section 13(k) of the Exchange Act provides that it is unlawful for a company that has a class of securities registered under Section 12 of the Exchange Act to, directly or indirectly, including through any subsidiary, extend or maintain credit in the form of a personal loan to or for any director or executive officer of the Company. As of July 31, 2021, there was a loan (in the form of a personal travel expense paid by the Company) from the Company to Shane McMahon, the Company's Executive Chairman of the Board, which could be considered to be a personal loan made by the Company to a director or officer of the Company and may have violated Section 13(k) of the Exchange Act. The amount was repaid to us in December 2021. Issuers that are found to have violated Section 13(k) of the Exchange Act may be subject to civil sanctions, including injunctive remedies and monetary penalties, as well as criminal sanctions. The imposition of any of such sanctions on us could have a material adverse effect on our business, financial position, results of operations or cash flows.

We have incurred significant losses since our inception and anticipate that we will continue to incur losses for the foreseeable future, which together with our limited working capital raises substantial doubt about our financial viability and as to whether we will be able to continue as a going concern.

Our auditor's report on our financial statements for the year ended December 31, 2021, includes an explanatory paragraph related to the existence of substantial doubt about our ability to continue as a going concern. We are an operating company with a limited operating history that encompasses a large number of industries and businesses.

We are not profitable and have incurred losses in each year since our inception in October 2004. For the years ended December 31, 2021, 2020, and 2019, we had net losses of approximately $256.7 million, $111.6 million, and $96.8 million, respectively. As of December 31, 2021, we had an accumulated deficit of $605.8 million.

The industries of Ideanomics Mobility and Ideanomics Capital are highly speculative, involve a high degree of risk, and require substantial capital investment. We continue to incur significant research and development and other expenses related to our ongoing operations. We have limited working capital and cannot guarantee that we will achieve market acceptance and be commercially successful in the long term.

Although we generate revenues from product sales, these revenues have not been sufficient, and may never be sufficient, to support our operations. We expect to continue to incur losses and negative cash flows for the foreseeable future. We require significant cash resources to execute our business plans and we will need to raise additional cash to continue to fund our operating plan. We expect to finance our operating plan through a combination of public or private equity or debt offerings, collaborations, strategic alliances, and other similar licensing arrangements in both the short term and the long term. We cannot be certain that additional funding will be available on acceptable terms, or at all, for a number of reasons, including market conditions, our ability to generate positive data from our clinical studies, and the need for our stockholders to approve an amendment to our certificate of incorporation to increase the number of shares of common stock that we are authorized to issue.

The aforementioned factors, which are largely outside of our control, raise substantial doubt about our ability to continue as a going concern within one year from the date of filing of this Annual Report. The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. The financial statements do not include any adjustments relating to the recoverability and classification of asset amounts or the classification of liabilities that might be necessary should we be unable to continue as a going concern within one year after the date of filing of this annual report. If we are forced to scale down, restructure, limit or cease operations, our stockholders could lose all of their investment in our Company.

Risks Related to Our Information Technology Systems and Cyber-Security

Our business depends upon our ability to keep pace with the latest technological changes, and our failure to do so could make us less competitive in our industry.

The market for our products and services is characterized by rapid change and technological change, frequent new product innovations, changes in customer requirements and expectations, and evolving industry standards. Products using new technologies or emerging industry standards could make our products and services less attractive. Failure to respond in a timely and cost-effective way to these technological developments may result in serious harm to our business and operating results. As a result, our success will depend, in part, on our ability to develop and market product and service offerings that respond in a timely manner to the technological advances available to our customers, evolving industry standards, and changing preferences.

Defects or disruptions in our technology or services could diminish demand for our products and services and subject us to liability.

Because our technology, products, and services are complex and use or incorporate a variety of computer hardware, software, and databases, both developed in-house and acquired from third-party vendors, our technology, products, and services may have errors or defects. Errors and defects could result in unanticipated downtime or failure and could cause financial loss and harm to our reputation and our business. We have from time to time found defects and errors in our technology, products, and services, and defects and errors in our technology, products, or services may be detected in the future. In addition, our customers may use our technology, products, and services in unanticipated ways that may cause a disruption for other customers. As we acquire companies, we may encounter difficulty in incorporating the acquired technologies, products, and services, and maintaining the quality standards that are consistent with our technology, products, and services. Since our customers use our technology, products, and services for important aspects of their businesses and for financial transactions, any errors, defects, or disruptions in such technology, products, and services or other performance problems with our technology, products, and services could subject our customers to financial loss and hurt our reputation. As we deploy more product lines and provide a wider array of services, such risks will exponentially increase.

Our internally developed platform for Timios' business functions on software that is highly technical and complex and may now or in the future contain undetected errors, bugs, or vulnerabilities. Some errors in our software code may only be discovered after the code has been deployed. Any errors, bugs, or vulnerabilities discovered in our code after deployment, inability to identify the cause or causes of performance problems within an acceptable period of time, or difficulty maintaining and improving the performance of our platform, particularly during peak usage times, could result in damage to our reputation or brand, loss of revenues, or liability for damages, any of which could adversely affect our business and financial results.

We expect to continue to make significant investments to maintain and improve the availability of our existing software platform and new platforms as needed, and to enable rapid releases of new features and products. To the extent that we do not effectively address capacity constraints, upgrade our systems as needed, and continually develop our technology and network architecture to accommodate actual and anticipated changes in technology, our business, and operating results may be harmed.

We have previously experienced, and may in the future experience, service disruptions, outages, and other performance problems due to a variety of factors, including infrastructure changes, third-party service providers, human or software errors, and capacity constraints. If our application is unavailable when customers attempt to access it or it does not load as quickly as they expect, customers may seek other services.

Malicious cyber-attacks and other adverse events affecting our operational systems or infrastructure, or those of third parties, could disrupt our businesses, result in the disclosure of confidential information, damage our reputation, and cause losses or regulatory penalties.

Developing and maintaining our operational systems and infrastructure are challenging, particularly as a result of us and our clients entering into new businesses, jurisdictions, and regulatory regimes, rapidly evolving legal and regulatory requirements, and technological shifts. Our financial, accounting, data processing, or other operating and compliance systems and facilities may fail to operate properly or become disabled as a result of events that are wholly or partially beyond our control, including malicious cyber-attack or other adverse events, which may adversely affect our ability to process these transactions or provide services or products.

In addition, our operations rely on the secure processing, storage, and transmission of confidential and other information on our computer systems and networks. Although we take protective measures, such as software programs, firewalls, and similar technology, to maintain the confidentiality, integrity, and availability of our and our customers’ information, and endeavor to modify these protective measures as circumstances warrant, the nature of cyber threats continues to evolve. As a result, our computer systems, software, and networks may be vulnerable to unauthorized access, loss, or destruction of data (including confidential customer information), account takeovers, unavailability or disruption of service, computer viruses, acts of vandalism, or other malicious code, ransomware, hacking, phishing, and other cyber-attacks and other adverse events that could have an adverse security impact. Despite the defensive measures we have taken, these threats may come from external forces, such as governments, nation-state actors, organized crime, hackers, and other third parties, including outsource or infrastructure-support providers and application developers, or may originate internally from within us. Given the high volume of transactions, certain errors may be repeated or compounded before they are discovered and rectified.

We also face the risk of operational disruption, failure, termination, or capacity constraints of any of the third parties that facilitate our business activities, including vendors, customers, counterparties, exchanges, clearing agents, clearinghouses, or other financial intermediaries. Such parties could also be the source of a cyber-attack on our breach of our operational systems, network, data, or infrastructure.

There have been an increasing number of ransomware, hacking, phishing, and other cyber-attacks in recent years in various industries, including ours, and cyber-security risk management has been the subject of increasing focus by our regulators. Like other companies, we have on occasion experienced, and may continue to experience, threats to our systems, including viruses, phishing, and other cyber-attacks. The number and complexity of these threats continue to increase over time. The techniques used in these attacks are increasingly sophisticated, change frequently, and are often not recognized until launched. If one or more cyber-attacks occur, it could potentially jeopardize the confidential, proprietary, and other information processed and stored in, and transmitted through, our computer systems and networks, or otherwise cause interruptions or malfunctions in our, as well as our customers' or other third parties' operations, which could result in reputational damage, financial losses, customer dissatisfaction and/or regulatory penalties, which may not in all cases by covered by insurance. If an actual, threatened, or perceived cyber-attack or breach of our security occurs, our clients could lose confidence in our platforms and solutions, security measures, and reliability, which would materially harm our ability to retain existing clients and gain new clients. As a result of any such attack or breach, we may be required to expend significant resources to repair system, network, or infrastructure damage and to protect against the threat of future cyber-attacks or security breaches. We could also face litigation or other claims from impacted individuals as well as substantial regulatory sanctions or fines. Our Timios business previously experienced such cyber-attacks and may face other security incidents of varying degrees from time to time. We incur significant costs in protecting against or remediating such incidents.

The extent of a particular cyber-attack and the steps that we may need to take to investigate the attack may not be immediately clear, and it may take a significant amount of time before such an investigation can be completed and full and reliable information about the attack is known. While such an investigation is ongoing, we may not necessarily know the full extent of the harm caused by the cyber-attack, and any resulting damage may continue to spread. Furthermore, it may not be clear how best to contain and remediate the harm caused by the cyber-attack, and certain errors or actions could be repeated or compounded before they are discovered and remediated. Any or all of these factors could further increase the costs and consequences of a cyber-attack.

Our regulators in recent years have increased their examination and enforcement focus on all matters of our businesses, especially matters relating to cyber-security threats, including the assessment of firms' vulnerability to cyber-attacks. In particular, regulatory concerns have been raised about firms establishing effective cyber-security governance and risk management policies, practices, and procedures that enable the identification of risks, testing and monitoring of the effectiveness of such procedures and adaptation to address any weaknesses; protecting firm networks and information; data loss prevention, identifying and addressing the risk associated with remote access to client information and fund transfer requests; identifying and addressing risks associated with customers business partners, counterparties, vendors, and other third parties, including exchanges and clearing organizations; preventing and detecting unauthorized access or activities; adopting effective mitigation and business continuity plans to timely and effectively address the impact of cyber-security breaches; and establishing protocols for reporting cyber-security incidents. As we enter new jurisdictions or different product area verticals, we may be subject to new areas of risk or to cyber-attacks in areas in which we have less familiarity and tools. A technological breakdown could also interfere with our ability to comply with financial reporting requirements. The SEC has issued guidance stating that, as a public company, we are expected to have controls and procedures that relate to cybersecurity disclosure, and are required to disclose information relating to certain cyber-attacks or other information security breaches in disclosures required to be made under the federal securities laws. While any insurance that we may have that covers a specific cyber-security incident may help to prevent our realizing a significant loss from the incident, it would not protect us from the effects of adverse regulatory actions that may result from the incident or a finding that we had inadequate cyber-security controls, including the reputational harm that could result from such regulatory actions.

We may face particular privacy, data security, and data protection risks.

Legislators and/or regulators in countries in which we operate are increasingly adopting or revising privacy, information security, and data protection laws. In particular, the European Union's GDPR, which became effective on May 25, 2018, imposes additional obligations and risk upon our business and which increases substantially the penalties to which we could be subject in the event of any non-compliance. The GDPR and other similar laws and regulations, including the CCPA and other similar state laws recently or soon to be enacted, as well as any associated inquiries or investigations or any other government actions, may be costly to comply with, result in negative publicity, increase our operating costs, require significant management time and attention, and subject us to remedies that may harm our business, including fines or demands or orders that we modify or cease existing business practices. Furthermore, the CCPA went into effect on January 1, 2020, and many of its requirements have not yet been interpreted by courts, and best practices are still being developed by the industry, all of which increase the risk of compliance failure and related adverse impacts.

Risks Related to the Internal Controls and Compliance with Applicable Securities Laws.

We have restated our consolidated financial statements for several prior periods, which has affected and may continue to affect investor confidence, our stock price, our ability to raise capital in the future, and our reputation with our customers, which may result in stockholder litigation and may reduce customer confidence in our ability to complete new opportunities.

The Company filed amended Quarterly Reports on Form 10-Q for the periods ended March 31, 2021, June 30, 2021 and September 30,2021 to restate the unaudited quarterly financial data for said periods. The restatement of our prior consolidated financial statements primarily reflects the correction of certain errors, which resulted from an incorrect application of U.S. GAAP, as described in more detail in the Quarterly Reports on Form 10-Q/A for the periods ended March 31, 2021 and June 30, 2021 filed with the SEC on November 22, 2021. Such restatement may have the effect of eroding investor confidence in the Company and our financial reporting and accounting practices and processes and may negatively impact the trading price of our common stock, may result in stockholder litigation, may make it more difficult for us to raise capital on acceptable terms, if at all, and may negatively impact our reputation with our customers and cause customers to place new orders with other companies.

We have identified material weaknesses in our internal control over financial reporting, which, did and could continue to, if not remediated, adversely affect our ability to report our financial condition and results of operations in a timely and accurate manner.

We have concluded that our internal control over financial reporting was not effective as of December 31, 2021, due to the existence of material weaknesses in such controls. We have also concluded that our disclosure controls and procedures were not effective as of December 31, 2021, due to material weaknesses in our internal control over financial reporting, all as described in Part II, Item 9A of this Annual Report. Although we have initiated remediation measures to address the identified weaknesses, we cannot provide assurance that our remediation efforts will be adequate to allow us to conclude that such controls will be effective in the future. Moreover, we project that the aforesaid material weakness may exist over years before being remediated. We also cannot assure you that additional material weaknesses in our internal control over financial reporting will not arise or be identified in the future.

We intend to continue our remediation activities and to continue to improve our overall control environment and our operational and financial systems and infrastructure, as well as to continue to train, retain and manage our personnel who are essential to effective internal control. In doing so, we will continue to incur expenses and expend management's time on compliance-related issues. However, we cannot ensure that the steps that we have taken or will take will successfully remediate the errors. If we are unable to successfully complete our remediation efforts or favorably assess the effectiveness of our internal control over financial reporting, our operating results, financial position, ability to accurately report our financial results and timely file our SEC reports, and our stock price could be adversely affected.

Moreover, because of the inherent limitations of any control system, material misstatements due to error or fraud may not be prevented or detected and corrected on a timely basis, or at all. If we are unable to provide reliable and timely financial reports in the future, our business and reputation may be further harmed. Restated financial statements and failures in internal control may also cause us to fail to meet reporting obligations, negatively affect investor and customer confidence in our management and the accuracy of our financial statements and disclosures, result in events of default under our banking agreements, or result in adverse publicity and concerns from investors and customers, any of which could have a negative effect on the price of our common stock, subject us to regulatory investigations and penalties or additional stockholder litigation, and have a material adverse impact on our business and financial condition.

We may have inadvertently violated Section 402 of the Sarbanes-Oxley Act, codified as Section 13(k) of the Exchange Act in connection with a certain one-time advance we made to our director; as a result, we may be subject to civil and criminal sanctions which, if imposed, could have a material adverse effect upon us.

During the fiscal year ended December 31, 2021, we paid the personal private jet expense in the amount of approximately $60,000 for one of our directors due to a personal emergency reported by the director and no availability of commercial flights at the time. Subsequently, we concluded that such expense, being inconsistent with our customary directors' reimbursement practice, had to be repaid by the director. Accordingly, such repayment was completed by means of an offset against the compensation owed to the director, to which the director did not object. Hence, the aforementioned arrangement may be interpreted as a "personal loan" to our director, although the intent of the Company and the director was to avoid granting a perquisite inconsistent with the Company's practice.

Section 13(k) of the Exchange Act provides that it is unlawful for a company, which has a class of securities registered under Section 12(g) of the Exchange Act, to directly or indirectly, including through any subsidiary, extend or maintain credit in the form of a personal loan to or for any director or executive officer of the company. Issuers violating Section 13(k) of the Exchange Act may be subject to civil sanctions, including injunctive remedies and monetary penalties, as well as criminal sanctions. The imposition of any of such sanctions on us may have a material adverse effect on our financial position, results of operations or cash flows.

We have not concluded that the advance made to our director under the above-described arrangement was a "personal loan" within the meaning of Section 13(k) of the Exchange Act or that any violations of the Exchange Act have occurred relating to such matter. Although we submitted a form to the SEC Staff on a no-name basis to inquire whether the aforementioned arrangement with our director should be prohibited by Section 13(k) of the Exchange Act, we have not received interpretive guidance from the SEC Staff. Further, we have not received any notice that the matters discussed herein are under investigation by any governmental authority or that any proceeding relating to such matters has been initiated by any person.

Based on our current strategies, we need to raise additional capital to execute on those strategies, and such capital may not be available to us or may only be available on unfavorable terms due to the fact that the Company lost its S-3 eligibility.

To allow us to timely respond to opportunities to raise capital, we may need to file various registration statements and not rely on exemptions from registration. Use of a shelf registration statement on Form S-3, which would be the optimal form of the registration statement under most circumstances, requires, among other things, that an issuer has timely filed all of its reports under the Exchange Act for at least twelve months, subject only to exceptions for certain Form 8-K filings. We had untimely filed our Quarterly Report on Form 10-Q for the period ended September 30, 2021. In addition, this Annual Report on Form 10-K for the fiscal year ended December 31, 2022, and the Quarterly Reports on Form 10-Q for the first and second fiscal quarter of the year 2022 are not filed. If we timely file all reports required under the Exchange Act in the future, we will regain eligibility for use of Form S-3 not earlier than August 9, 2023. While the Company continues to have access to capital markets, our ineligibility to use Form S-3 means that it may be more difficult for us to effect public offering transactions and our range of available financing alternatives could be narrowed.

Risks Related to Ownership of our Securities

Provisions in our articles of incorporation, as amended, and bylaws, as amended, or Nevada law might discourage, delay, or prevent a change of control of us or changes in our management and, therefore, depress the trading price of our common stock.

Our articles of incorporation, as amended, authorize our Board to issue up to 50,000,000 shares of preferred stock. The preferred stock may be issued in one or more series, the terms of which may be determined at the time of issuance by our Board without further action by our stockholders. These terms may include preferences as to dividends and liquidation, conversion rights, redemption rights, and sinking fund provisions. The issuance of any preferred stock could diminish the rights of holders of our common stock, and therefore could reduce the value of such common stock. In addition, specific rights granted to future holders of preferred stock could be used to restrict our ability to merge with, or sell assets to, a third party. The ability of our Board to issue preferred stock could make it more difficult, delay, discourage, prevent, or make it costlier to acquire or effect a change-in-control, which in turn could prevent our stockholders from recognizing a gain in the event that a favorable offer is extended and could materially and negatively affect the market price of our common stock.

Furthermore, Section 78.438 of the Nevada Revised Statutes prohibits a publicly-held Nevada corporation from engaging in a business combination with an interested stockholder (generally defined as a person which together with its affiliates owns, or within the last three years has owned, 10% of our voting stock, for a period of three years after the date of the transaction in which the person became an interested stockholder) unless the business combination is approved in a prescribed manner. The existence of the foregoing provisions and other potential anti-takeover measures could limit the price that investors might be willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our Company, thereby reducing the likelihood that you could receive a premium for your common stock in an acquisition.

We do not intend to pay dividends for the foreseeable future.

For the foreseeable future, we intend to retain any earnings to finance the development and expansion of our business, and we do not anticipate paying any cash dividends on our common stock or Series A preferred stock. Accordingly, investors must be prepared to rely on sales of their common stock after price appreciation to earn an investment return, which may never occur. Investors seeking cash dividends should not purchase our common stock. Any determination to pay dividends in the future will be made at the discretion of our Board and will depend on our results of operations, financial condition, contractual restrictions, restrictions imposed by applicable law and other factors our Board deems relevant. In addition, our ability to declare and pay dividends is dependent on our ability to declare dividends and profits in our subsidiaries domiciled outside of the United States. Rules in other jurisdictions may greatly restrict and limit the ability of our subsidiaries to declare dividends to us which, in addition to restricting our cash flow, limits our ability to pay dividends to our stockholders.

We previously received notices of failure to satisfy continued listing rules from the Nasdaq which may ultimately result in delisting of our common stock.

Our common stock is listed on the Nasdaq Capital Market. If we fail to satisfy the continued listing requirements of Nasdaq, our common stock may be delisted.

On May 17, 2022, we received a notice (the “Periodic Filings Notice”) from Nasdaq stating that because of the Company’s failure to file its quarterly report timely, the Company was no longer in compliance with Nasdaq Listing Rule 5250(c)(1). In accordance with Nasdaq Listing Rules, we submitted a plan to regain compliance and on or about May 17, 2022, Nasdaq has granted the Company’s request for the extension, subject to certain conditions.

On May 20, 2022, the Company received a deficiency notice (the “Bid Price Notice”) from Nasdaq indicating that the bid price for the Company’s common stock for the preceding 30 consecutive business days had closed below the minimum $1.00 per share required for continued listing under Nasdaq Listing Rule 5550(a)(2). The Company has been granted a 180 calendar day grace period, to regain compliance with the minimum bid price requirement. The continued listing standard will be met if the Company evidences a closing bid price of at least $1.00 per share for a minimum of 10 consecutive business days during the 180 calendar day grace period. In order for Nasdaq to consider granting the Company additional time, the Company would be required, among other things, to meet the continued listing requirement for market value of publicly held shares as well as all other standards for initial listing on Nasdaq, with the exception of the minimum bid price requirement.

There can be no assurance that the Company cures the Periodic Filing Notice and the Bid Price Notice. Delisting could adversely affect our ability to raise additional capital through the public or private sale of equity securities, would significantly affect the ability of investors to trade our securities, and would negatively affect the value and liquidity of our common stock. Delisting could also have other negative results, including the potential loss of confidence by employees, the loss of institutional investor interest, and fewer business development opportunities.

Financial Market and Economic Risks

A disruption in our funding sources and access to the capital markets would have an adverse effect on our liquidity.

Liquidity risk is the risk arising from our ability to meet obligations in a timely manner when they come due. Our liquidity strategy is to maintain the capacity to fund assets and repay liabilities in a timely and cost-effective manner even in adverse market conditions. A disruption in our funding sources may adversely affect our ability to meet our obligations as they become due. An inability to meet obligations in a timely manner would have a negative impact on our ability to refinance maturing debt and fund new asset growth and would have an adverse effect on our results of operations and financial condition. We currently do not have adequate cash to meet our short or long-term anticipated needs. In the event additional capital is raised, it may have a dilutive effect on our existing stockholders.

Risks Related to our International Operations including Operations in the PRC

Risks Related to all of our International Operations

Our international operations expose us to a number of risks.

Our international activities are significant to our revenues and profits, and we plan to further expand our operations internationally. In certain international market segments, we have relatively little operating experience and may not benefit from any first-to-market advantages or otherwise succeed. It is costly to establish, develop, and maintain international operations and platforms, and promote our brand internationally.

Our international sales and operations are subject to a number of risks, including:

- local economic and political conditions, including sanctions and other regulatory actions that prohibit sales to, or purchases from, countries and legal entities that are within the scope of the sanction. Government regulations, both federal and municipal, that may restrict the available market for our products and services through the requirement for a minimum value of local produced content, or restrict the availability of subsidies for products that do not meet designated value for local produced content, *e.g*., the Buy America program;

- uncertain economic, legal, and political conditions in China, Europe and other regions where we do business, including, for example, changes in China-Taiwan relations, the military conflict between Russia and Ukraine and the related sanctions and other penalties imposed on Russia by the United States, the European Union, the United Kingdom and other countries as well as retaliatory actions of Russia against the companies that comply with the aforementioned sanctions;

- government regulation and restrictive governmental actions (such as trade protection measures, including export duties and quotas and customs duties and tariffs), nationalization, and restrictions on foreign ownership;

- restrictions on sales or distribution of certain products or services and uncertainty regarding liability for products, services, and content, including uncertainty as a result of less Internet-friendly legal systems, local laws, lack of legal precedent, and varying rules, regulations, and practices regarding the physical and digital distribution of media products and enforcement of intellectual property rights;

- limitations on the repatriation and investment of funds and foreign currency exchange restrictions;

- limited technology infrastructure;

- environmental and health and safety liabilities and expenditures relating to the disposal and remediation of hazardous substances into the air, water, and ground;

- shorter payable and longer receivable cycles and the resultant negative impact on cash flow;

- increased risk over the ability to collect accounts receivable and other amounts owed to the Company due to the limited credit checking information available in some of the countries we operate in and possible difficulties to pursue legal action to collect amounts owed to us;

- laws and regulations regarding consumer and data protection, privacy, network security, encryption, payments, and restrictions on pricing or discounts; and

- geopolitical events and instability, including international conflicts, war and terrorism.

We may face challenges in expanding our international and cross-border businesses and operations.

As we expand our international and cross-border businesses into an increasing number of international markets, we will face risks associated with expanding into markets in which we have limited or no experience and in which we may be less well-known. We may be unable to attract a sufficient number of customers and other participants, fail to anticipate competitive conditions, or face difficulties in operating effectively in these new markets. The expansion of our international and cross-border businesses will also expose us to risks inherent in operating businesses globally, including:

- inability to recruit international and local talent and challenges in replicating or adapting our Company policies and procedures to different local and regional operating environments;

- lack of acceptance of our product and service offerings;

- challenges and increased expenses associated with staffing and managing international and cross-border operations and managing an organization spread over multiple jurisdictions;
- trade barriers, such as import and export restrictions, customs duties and other taxes, competition law regimes and other trade restrictions, as well as other protectionist policies;
- differing and potentially adverse tax consequences;
- increased and conflicting regulatory compliance requirements;
- challenges caused by distance, language, and cultural differences;
- increased costs to protect the security and stability of our information technology systems, intellectual property, and personal data, including compliance costs related to data localization laws;
- availability and reliability of international and cross-border payment systems and logistics infrastructure;
- exchange rate fluctuations; and
- political instability and general economic or political conditions in particular countries or regions.

Risks Related to Doing Business in the PRC

U.S. financial regulatory and law enforcement agencies, including without limitation the SEC, U.S. Department of Justice, and U.S. national securities exchanges have limited ability, and in fact may have no ability, to conduct investigations within the PRC concerning our Company, our PRC-based officers, directors, market research services or other professional services or experts.

A material part of our assets and our current operations are conducted in the PRC, and some professional service providers are nationals and residents of the PRC. U.S. financial regulatory and law enforcement agencies, including without limitation the SEC, U.S. Department of Justice, and U.S. national securities exchanges have limited ability, and in fact may have no ability, to conduct investigations within the PRC concerning our Company, and the PRC may have limited or no agreements in place to facilitate cooperation with the SEC's Division of Enforcement for investigations within its jurisdiction.

Adverse changes in political, economic, and other policies of the Chinese government could have a material adverse effect on the overall economic growth of the PRC, which could materially and adversely affect the growth of our business and our competitive position.

Our business operations have a material dependency on the PRC for both revenues generated with the PRC and as a source of finished products and components for our global operations. Accordingly, our business, financial condition, results of operations, and prospects are affected significantly by economic, political, and legal developments in the PRC. The Chinese economy differs from the economies of most developed countries in many respects, including:

- the degree of government involvement;
- the level of development;
- the growth rate;
- the control of foreign exchange;
- the allocation of resources;
- an evolving and rapidly changing regulatory system; and
- a lack of sufficient transparency in the regulatory process.

While the Chinese economy has experienced significant growth in the past 30 years, growth has been uneven, both geographically and across various sectors of the economy. The Chinese economy has also experienced certain adverse effects due to the global financial crisis. In addition, the growth rate of the PRC's gross domestic product has materially slowed in recent years, according to the National Bureau of Statistics of China. The Chinese government has implemented various measures to encourage economic growth and guide the allocation of resources. Some of these measures benefit the overall Chinese economy, but may also have a negative effect on us. For example, our financial condition and results of operations may be adversely affected by government control over capital investments, foreign currency exchange restrictions, or changes in tax regulations that are applicable to us.

The continued control of these assets and other aspects of the national economy by the Chinese government could materially and adversely affect our business. The Chinese government also exercises significant control over Chinese economic growth through the allocation of resources, controlling payment of foreign currency-denominated obligations, setting monetary policy, and providing preferential treatment to particular industries or companies.

Any adverse change in the economic conditions or government policies in the PRC could have a material adverse effect on overall economic growth, which in turn could lead to a reduction in demand for our products and consequently have a material adverse effect on our businesses.

Several PRC regulatory authorities, such as the CAC and the MOFCOM, oversee different aspects of our operations, and we are required to obtain governmental approvals, licenses, permits, and registrations in connection with our operations. For example, certain filings must be made by automobile dealers in China through an information system used for purposes of the national automobile circulation, which is operated by relevant commerce departments, within 90 days after receiving a business license. Furthermore, if our subsidiaries in China were to engage in any activities that could be deemed as providing blockchain information services, we would need to complete certain filing procedures with the CAC and obtain relevant filing numbers. In addition, the PRC government may enact new laws and regulations that require additional licenses, permits, approvals and/or registrations for the operation of any of our existing or future business. As a result, we cannot assure you that we have all the permits, licenses, registrations, approvals and/or business license items covering the sufficient scope of business required for our business, or that we will be able to obtain, maintain or renew any permits, licenses, registrations, approvals and/or business license items covering the sufficient scope of our business in a timely manner or at all.

Uncertainties with respect to the PRC legal system could limit the legal protections available to you and to us, which could cause material adverse effects to our business operations.

We conduct part of our business through our subsidiaries in the PRC. Our subsidiaries are generally subject to laws and regulations applicable to foreign investments in the PRC and, in particular, laws applicable to FIEs. The PRC legal system is based on written statutes, and prior court decisions may be cited for reference but have limited precedential value. Since 1979, a series of new PRC laws and regulations have significantly enhanced the protections afforded to various forms of foreign investments in the PRC. However, there could be a change of law and it is uncertain whether business industries in which our China subsidiaries operate will be subject to the foreign investment restrictions or prohibitions.

Since the PRC legal system continues to evolve rapidly, the interpretations of many laws, regulations, and rules are not always uniform, and enforcement of these laws, regulations, and rules involve uncertainties, which may limit legal protections available to you and to us. In addition, the PRC legal system is based in part on government policies and internal rules, some of which are not published on a timely basis or at all, and which may have a retroactive effect. As a result, we may not be aware of our violation of these policies and rules until after the occurrence of the violation.

In addition, any litigation in the PRC may be protracted and result in substantial costs and diversion of resources and management's attention. It could be difficult for investors to affect service of process in the United States or to enforce a judgment obtained in the United States against our Chinese operations and entities.

You may have difficulty enforcing judgments against us.

A significant part of our operations is outside of the United States including the operations in PRC. As a result, it may be difficult for you to effect service of process within the United States upon these persons. It may also be difficult for you to enforce in U.S. courts judgments on the civil liability provisions of the U.S. federal securities laws against us and our officers and directors, that are not residents in the United States and the substantial majority of whose assets are located outside of the United States. In addition, there is uncertainty as to whether the courts of the PRC would recognize or enforce judgments of U.S. courts. Courts in the PRC may recognize and enforce foreign judgments in accordance with the requirements of the PRC Civil Procedures Law based on treaties between the PRC and the country where the judgment is made or on reciprocity between jurisdictions. The PRC does not have any treaties or other arrangements that provide for the reciprocal recognition and enforcement of foreign judgments with the United States. In addition, according to the PRC Civil Procedures Law, courts in the

PRC will not enforce a foreign judgment against us or our directors and officers if they decide that the judgment violates basic principles of PRC law or national sovereignty, security, or the public interest.

Our results could be adversely affected by the trade tensions between the United States and the PRC.

With the increasing interconnectedness of global economic and financial systems and our business related to the PRC, trade tensions between the United States and the PRC can have an immediate and material adverse impact on our business. Changes to trade policies, treaties, and tariffs in the jurisdictions in which we operate, or the perception that these changes could occur, could adversely affect our international and cross-border operations, our financial condition, and results of operations. For example, the U.S. administration has advocated greater restrictions on trade generally and significant increases on tariffs on goods imported into the United States, particularly from the PRC. Such trade restrictions or tariffs could cause U.S. companies to respond by minimizing their use of Chinese suppliers, thereby moving the supply chain away from China and limiting our competitive advantage in developing our logistics management and financing business. Further, the U.S. or the PRC could impose additional sanctions that could restrict us from doing business directly or indirectly in either country. Such actions could have material adverse impact on our profitability and operations. Government regulations, both federal and municipal, that may restrict the available market for our products and services through the requirement for a minimum value of locally produced content, or restrict the availability of subsidies for products that do not meet designated value for locally produced content, e.g., the Buy America program.

Restrictions on currency exchange may limit our ability to use cash generated from sales in the PRC to fund our business activities outside of the PRC.

For our sales in the PRC, At present, a substantial part of our sales are settled in RMB, and any future restrictions on currency exchanges may limit our ability to use revenue generated in RMB to fund any future business activities outside the PRC or to make dividends or other payments in the U.S. dollars. Although the Chinese government introduced regulations in 1996 to allow greater convertibility of the RMB for current account transactions, significant restrictions still remain, including primarily the restriction that FIEs may only buy, sell, or remit foreign currencies after providing valid commercial documents, at those banks in the PRC authorized to conduct foreign exchange business. In addition, foreign exchange transactions under the capital account remain subject to limitations and require approvals from, or registration with, SAFE PRC and other relevant PRC governmental authorities and companies are required to open and maintain separate foreign exchange accounts for capital account items. This could affect our ability to obtain foreign currency through debt or equity financing for our subsidiaries. Recent volatility in the RMB foreign exchange rate as well as capital flight out of the PRC may lead to further foreign exchange restrictions and policies or practices which adversely affect our operations and ability to convert RMB. We cannot be certain that the Chinese regulatory authorities will not impose more stringent restrictions on the convertibility of the RMB.

Restrictions under PRC law on our PRC subsidiaries' ability to make dividends and other distributions could materially and adversely affect our ability to grow, make investments or acquisitions that could benefit our business, pay dividends to you, and otherwise fund and conduct our business.

At present, part of our sales is earned by our PRC operating entities. However, PRC regulations restrict the ability of our PRC subsidiaries to make dividends and other payments to their offshore parent companies. PRC legal restrictions permit payments of dividends by our PRC subsidiaries only out of their accumulated after-tax profits, if any, determined in accordance with PRC accounting standards and regulations. Our PRC subsidiaries are also required under PRC laws and regulations to allocate at least 10% of their annual after-tax profits determined in accordance with PRC GAAP to a statutory general reserve fund until the amounts in said fund reach 50% of their registered capital. Allocations to these statutory reserve funds can only be used for specific purposes and are not transferable to us in the form of loans, advances, or cash dividends. Any limitations on the ability of our PRC subsidiaries to transfer funds to us could materially and adversely limit our ability to grow, make investments or acquisitions that could be beneficial to our business, pay dividends and otherwise fund and conduct our business.

We may be exposed to liabilities under the Foreign Corrupt Practices Act and Chinese anti-corruption laws, and any determination that we violated these laws could have a material adverse effect on our business.

We are subject to the FCPA and other laws that prohibit improper payments or offers of payments to foreign governments and their officials and political parties by U.S. persons and issuers as defined by the statute, for the purpose of obtaining or retaining business. We have operations and agreements with third parties and make most of our sales in the PRC. The PRC also strictly prohibits bribery of government officials. Our activities in the PRC create the risk of unauthorized payments or offers of payments by the employees, consultants, sales agents, or distributors of our Company, which may not always be subject to our control. It is our policy to implement safeguards to discourage these practices by our employees. However, our existing safeguards and any future improvements may prove to be less than effective, and the employees, consultants, sales agents, or distributors of our company may engage in conduct for which we might be held responsible. Violations of the FCPA or Chinese anti-corruption laws may result in severe criminal or civil sanctions, and we may be subject to other liabilities, which could negatively affect our business, operating results, and financial condition. In addition, the U.S. government may seek to hold our Company liable for successor liability FCPA violations committed by companies in which we invest or that we acquire.

Our operations in foreign countries are subject to risks that could adversely impact our financial results, such as economic or political volatility, foreign legal and regulatory requirements, international trade factors (export controls, trade sanctions, duties, tariff barriers, and other restrictions), protection of our proprietary technology in certain countries, potentially burdensome taxes, crime, employee turnover, staffing, managing personnel in diverse culture, labor instability, transportation delays, and foreign currency fluctuations.

If we become directly subject to the recent scrutiny, criticism, and negative publicity involving U.S.-listed Chinese companies, we may have to expend significant resources to investigate and resolve the matter which could harm our business operations, stock price, and reputation and could result in a loss of your investment in our stock, especially if such matter cannot be addressed and resolved favorably.

Over the past several years, U.S. public companies that have substantially all of their operations in the PRC, particularly companies like ours which have completed so-called reverse merger transactions, have been the subject of intense scrutiny, criticism, and negative publicity by investors, financial commentators, and regulatory agencies, such as the SEC. Much of the scrutiny, criticism, and negative publicity is in connection with financial and accounting irregularities and mistakes, a lack of effective internal controls over financial accounting, inadequate corporate governance policies, or a lack of adherence thereto and, in many cases, allegations of fraud. As a result of the scrutiny, criticism, and negative publicity, the publicly traded stock of many U.S.-listed Chinese companies has sharply decreased in value and, in some cases, has become virtually worthless. Many of these companies are now subject to shareholder lawsuits and SEC enforcement actions and are conducting internal and external investigations into the allegations. It is not clear what effect this sector-wide scrutiny, criticism, and negative publicity will have on our Company, our business, and our stock price. If we become the subject of any unfavorable allegations, whether such allegations are proven to be true or not, we will have to expend significant resources to investigate such allegations and/or defend our Company. This situation will be costly and time-consuming and distract our management from growing our Company.

The disclosures in our reports and other filings with the SEC and our other public announcements are not subject to the scrutiny of any regulatory bodies in the PRC. Accordingly, our public disclosure should be reviewed in light of the fact that no governmental agency that is located in the PRC, where part of our operations and business are located, has conducted any due diligence on our operations or reviewed or cleared any of our disclosure.

We are regulated by the SEC and our reports and other filings with the SEC are subject to SEC review in accordance with the rules and regulations promulgated by the SEC under the Securities Act and the Exchange Act. A material portion of our operations is located in the PRC. Since such operations and business take place outside of the United States, it may be more difficult for the staff of the SEC to overcome the geographic and cultural obstacles that are present when reviewing our disclosure. Furthermore, our SEC reports and other disclosure and public announcements are not subject to the review or scrutiny of any PRC regulatory authority. For example, the disclosure in our SEC reports and other filings is not subject to the review of the CSRC. Accordingly, you should review our SEC reports, filings, and our other public announcements with the understanding that no local regulator has done any due diligence on our Company and with the understanding that none of our SEC reports, other filings, or any of our other public announcements has been reviewed or otherwise been scrutinized by any local regulator.

The unavailability, reduction, or elimination of government and economic incentives or government policies that are favorable for new energy vehicles could materially and adversely affect our business, financial condition, and results of operations.

Our business has benefited from the PRC government subsidies, economic incentives, and government policies that support the growth of new EVs. For example, each qualified purchaser of our new energy vehicles enjoys subsidies from China's central government and certain local governments. Furthermore, in certain cities, quotas that limit the purchase of ICE vehicles do not apply to EVs, thereby incentivizing customers to purchase EVs. In April 2020, the MOF, together with several other PRC government departments, issued the Announcement on Exemption of Vehicle Purchase Tax, and the 2020 Financial Subsidies Circular, which extended certain subsidies and tax exemptions on EV purchases to the end of 2022. On December 31, 2021, the above mentioned authorities promulgated the 2022 Financial Subsidies Circular, which became effective on January 1, 2022.

These policies are subject to certain limits as well as changes that are beyond our control, and we cannot assure you that future changes, if any, would be favorable to our business. For instance, according to the 2020 Financial Subsidies Circular, in principle, the subsidies for new energy vehicles purchases from 2020 to 2022 will generally be lowered by 10%, 20%, and 30%, respectively, based on the level of the previous year with limited exceptions in the area of public transport, and the total number of new energy vehicles in China that will be entitled to such subsidies should be no more than two million each year. The 2022 Financial Subsidies Circular specifies that the subsidy standard of 2022 will be reduced by 30% compared to the subsidy standard of the previous year, and the financial subsidy policies applicable to new energy vehicles will be expired on December 31, 2022.

Any reduction or elimination of government subsidies and economic incentives because of policy changes, fiscal tightening, or other factors may result in the diminished competitiveness of the EV industry generally or our Ideanomics China business unit in particular. In addition, as we seek to increase our revenues from vehicle sales, we may also experience an increase in accounts receivable relating to government subsidies. Any uncertainty or delay in collection of the government subsidies may also have an adverse impact on our financial condition. Any of the foregoing could materially and adversely affect our business, financial condition, and results of operations.

We might be subject to the National Security Law in the future, in light of the PRC government's current and rapidly changing policies regarding PRC and Hong Kong businesses operations.

On June 30, 2020, the PRC government's National People's Congress Standing Committee passed the National Security Law for the Hong Kong Special Administrative Region. The National Security Law criminalizes, and otherwise gives the PRC government broad powers to find unlawful, a broad variety of political crimes, including separatism and collusion with a foreign country or with external elements to endanger national security in relation to Hong Kong. Under the National Security Law, the PRC government can, at its own discretion or the Hong Kong government's discretion, exercise jurisdiction over alleged violations of the law and prosecute and adjudicate cases in mainland China. The law can apply to alleged violations committed by anyone, anywhere in the world, including in the United States.

In light of the PRC government's current and rapidly changing policies regarding PRC and Hong Kong businesses operations, Ideanomics' business operations could be subject to the National Security Law in the future, if the PRC or Hong Kong government desires this outcome.

Increases in labor costs and enforcement of stricter labor laws and regulations in the PRC may adversely affect our business and our profitability.

China's overall economy and the average wage in China have increased in recent years and are expected to continue to grow. The average wage level for our employees has also increased in recent years. We expect that our labor costs, including wages and employee benefits, will increase. Unless we are able to pass on these increased labor costs to those who pay for our services, our profitability and results of operations may be materially and adversely affected.

In addition, we have been subject to stricter regulatory requirements in terms of entering into labor contracts with our employees, the utilization of labor dispatching, applying for foreigner work permits, labor protection and labor condition requirements, and the payment of various statutory employee benefits, including pensions, housing fund contributions, medical insurance, work-related injury insurance, unemployment insurance, and maternity insurance to designated government agencies for the benefit of our employees. Pursuant to the Labor Contract Law and its implementation rules, employers are also now generally subject to stricter requirements in terms of signing labor contracts, minimum wages, paying remuneration, determining the term of employee's probation, and unilaterally terminating labor contracts. In the event that we decide to terminate some of our employees or otherwise change our employment or labor practices, the Labor Contract Law and its implementation rules may limit our ability to effect those changes in a desirable or cost-effective manner, which could adversely affect our business and results of operations.

As the interpretation and implementation of labor-related laws and regulations are still evolving, our employment practices may violate labor-related laws and regulations in China, which may subject us to labor disputes or government investigations. We cannot assure you that we have complied or will be able to comply with all labor-related laws and regulations including those relating to obligations to make social insurance payments and contribute to the housing provident funds. If we are deemed to have violated relevant labor laws and regulations, we could be required to provide additional compensation to our employees, and our business, financial condition, and results of operations will be adversely affected.

Although our audited financial statements are prepared by auditors that are currently subject to inspections by the PCAOB, there is no guarantee that future audit reports will be prepared by auditors that are subject to inspections by the PCAOB

and, as such, future investors may be deprived of such inspections, which could result in limitations or restrictions to our access of the U.S. capital markets. Furthermore, trading in our securities may be prohibited under the Holding Foreign Companies Accountable Act or the Accelerating Holding Foreign Companies Accountable Act if the SEC subsequently determines our audit work is performed by auditors that the PCAOB is unable to inspect or investigate completely, and as a result, U.S. national securities exchanges, such as the Nasdaq, may determine to delist our securities.

As an auditor of companies that are registered with the SEC and publicly traded in the United States and a firm registered with the PCAOB, our auditor is required under the laws of the United States to undergo regular inspections by the PCAOB to assess their compliance with the laws of the United States and professional standards. Although we have substantial operations within China, a jurisdiction where the PCAOB is currently unable to conduct inspections without the approval of the Chinese government authorities, our auditor is currently inspected fully by the PCAOB.

Inspections of other auditors conducted by the PCAOB outside China have at times identified deficiencies in those auditors' audit procedures and quality control procedures, which may be addressed as part of the inspection process to improve future audit quality. The lack of PCAOB inspections of audit work undertaken in China prevents the PCAOB from regularly evaluating auditors' audits and their quality control procedures. As a result, to the extent that any component of our auditor's work papers is or becomes located in China, such work papers will not be subject to inspection by the PCAOB. As a result, investors would be deprived of such PCAOB inspections, which could result in limitations or restrictions to our access to the U.S. capital markets.

As part of a continued regulatory focus in the United States on access to audit and other information currently protected by national law, in particular, China's, in June 2019, a bipartisan group of lawmakers introduced bills in both houses of the U.S. Congress which, if passed, would require the SEC to maintain a list of issuers for which PCAOB is not able to inspect or investigate the audit work performed by a foreign public accounting firm completely. The proposed EQUITABLE Act prescribes increased disclosure requirements for these issuers and, beginning in 2025, the delisting from U.S. national securities exchanges such as the Nasdaq of issuers included on the SEC's list for three consecutive years. It is unclear if this proposed legislation will be enacted. On May 20, 2020, the U.S. Senate passed the HFCA Act, which includes requirements for the SEC to identify issuers whose audit work is performed by auditors that the PCAOB is unable to inspect or investigate completely because of a restriction imposed by a non-U.S. authority in the auditor's local jurisdiction. The U.S. House of Representatives passed the HFCA Act on December 2, 2020, and the HFCA Act was signed into law on December 18, 2020. Furthermore, on June 22, 2021, the U.S. Senate passed the AHFCA Act, which, if enacted, would amend the HFCA Act and require the SEC to prohibit an issuer's securities from trading on any U.S. stock exchanges if its auditor is not subject to PCAOB inspections for two consecutive years instead of three. On September 22, 2021, the PCAOB adopted a final rule implementing the HFCA Act, which provides a framework for the PCAOB to use when determining, as contemplated under the HFCA Act, whether the PCAOB is unable to inspect or investigate completely registered public accounting firms located in a foreign jurisdiction because of a position taken by one or more authorities in that jurisdiction. The SEC adopted rules to implement the AHFCA Act and, pursuant to the AHFCA Act, the PCAOB has issued its report notifying the SEC of its determination that it is unable to inspect or investigate completely accounting firms headquartered in mainland China or Hong Kong.

Under the HFCA Act, our securities may be prohibited from trading on the Nasdaq or other U.S. stock exchanges if our auditor is not inspected by the PCAOB for three consecutive years, and this ultimately could result in our shares of common stock being delisted. While we understand that there has been dialogue among the CSRC, the SEC, and the PCAOB regarding the inspection of PCAOB-registered accounting firms in China, there can be no assurance that we will be able to comply with the requirements imposed by U.S. regulators. Delisting of our common stock would force holders of our shares of common stock to sell their shares. The market price of our shares of common stock could be adversely affected as a result of anticipated negative impacts of these executive or legislative actions upon, as well as negative investor sentiment towards, companies with operations in China that are listed in the United States, regardless of whether these executive or legislative actions are implemented and regardless of our actual operating performance.

Uncertainties with respect to the PRC legal system could adversely affect our liquidity.

The PRC legal system is based on statutes. Prior court decisions may be cited for reference but have limited precedential value. Since 1979, PRC legislation and regulations have significantly enhanced the protections afforded to various forms of foreign investments in China. However, China has not developed a fully integrated legal system, and recently enacted laws and regulations may not sufficiently cover all aspects of economic activities in China. Because these laws and regulations are relatively new, and because of the limited volume of published decisions and their nonbinding nature, the interpretation and enforcement of these laws and regulations involve uncertainties. In addition, the PRC legal system is based in part on government policies and internal rules (some of which are not published on a timely basis or at all) that may have a retroactive effect. As a result, we may not be aware of our violation of these policies and rules until sometime after the violation. In addition, any litigation in China may be protracted and result in substantial costs and diversion of resources and management attention.

PRC regulation of loans and direct investment by offshore holding companies to PRC entities may delay or prevent us from using the proceeds of this offering to make loans or additional capital contributions to our PRC subsidiaries, which could materially and adversely affect our liquidity and our ability to fund and expand our business.

Governmental control of currency conversion may limit the Company's ability to utilize its cash balance effectively and affect the results of operations of our PRC subsidiaries.

The PRC government imposes controls on the convertibility of the Renminbi into foreign currencies and, in certain cases, the remittance of currency out of China. Ideanomics receives a substantial amount of their revenues in Renminbi or, alternatively, to finance their PRC subsidiaries in Renminbi. Under existing PRC foreign exchange regulations, payments of current account items, including profit distributions, interest payments, and trade and service-related foreign exchange transactions, can be made in foreign currencies without prior approval of SAFE PRC by complying with certain procedural requirements. Specifically, under the existing exchange restrictions, without prior approval of SAFE PRC, cash generated from the operations of its PRC subsidiaries in China may be used to pay dividends to its company. However, approval from or registration with appropriate government authorities is required where Renminbi is to be converted into foreign currency and remitted out of China to pay capital expenses such as the repayment of loans denominated in foreign currencies. As a result, Ideanomics will need to obtain SAFE PRC approval to use the cash generated from the operations of their PRC subsidiaries to pay off their respective debt in a currency other than Renminbi owed to entities outside China, or to make other capital expenditure payments outside China in a currency other than Renminbi. The PRC government may at its discretion restrict access to foreign currencies for current account transactions in the future. If the foreign exchange control system prevents Ideanomics from obtaining such approval or otherwise hinders efficient financial management of the PRC subsidiaries, it may substantially curtail our operations and cause the value of our securities significantly decline or become worthless.

The Chinese government may intervene or influence the operations of Ideanomics' business or the business of the combined company in the territory of PRC at any time, which could result in a material change in our operations and/or the value of our securities.

More than twenty percent (20%) of our revenues result from our operations in the PRC. The Chinese government may intervene or influence the operations of Ideanomics' business or the business of the combined company in the territory of PRC at any time, which could result in a material change in our operations and/or the value of our securities. Also, recent statements by the Chinese government have indicated an intent to exert more oversight and control over offerings that are conducted overseas and/or over foreign investment in China-based and Hong Kong-based issuers. Any such action could significantly limit or completely hinder our ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or be worthless.

Risks Related to Anticipated Acquisition of VIA

Our planned acquisition of VIA in accordance with the terms and conditions of the pertinent merger agreement as well as the merger agreement itself presents considerable uncertainties and risks including:

- our ability to obtain stockholder approval for the issuance of shares of common stock under the merger agreement and related proposals necessary to effect the merger;
- our ability to have the Registration Statement declared effective;
- the ability of the combined company to successfully maintain a Nasdaq Capital Market listing;
- the ability of the combined company to successfully access the capital markets and operate profitably;
- conditions to the closing of the merger may not be satisfied or the arrangement may involve unexpected costs, liabilities, or delays;
- the occurrence of any other risks to the consummation of the merger, including the risk that the merger will not be consummated within the expected time period or any event, change, or other circumstances that could give rise to the termination of the merger agreement;

- risks that the anticipated merger disrupts our current plans and operations or that our business or stock price may suffer as a result of uncertainty surrounding the merger agreement and the Registration Statement; and

- we and/or the combined company may be adversely affected by other economic, business, or competitive factors.

For additional information on the risks associated with our proposed acquisition with VIA please review the risks beginning on page 23 of the Registration Statement which risks are incorporated by reference herein and included as Exhibit 99.1 to this Annual Report.

ITEM 1B. UNRESOLVED STAFF COMMENTS

The Company has no unresolved Staff Comments.

ITEM 2. PROPERTIES

We lease an office space in Beijing, China, which is used by our Ideanomics China business unit for our PRC-based operations.

The Company has entered into a short-term lease for a very limited amount of office space at 1441 Broadway, New York, NY 10018. The Company's Tree Technologies subsidiary has office space in Kuala Lumpur in Malaysia and a long-term lease on 250 acres of vacant land zoned for industrial development on the Gebeng Industrial Estate, Kuantan, Pahang Darul Makmur, Malaysia which is near the port of Kuantan.

The Company executed a lease in late 2021 on a showroom facility in New Jersey, which will serve as the center for Ideanomics Mobility. It is anticipated to be operational in late 2022, the facility will showcase the Ideanomics Mobility products and services.

The other properties occupied by the Company and its subsidiaries include offices, warehouses, manufacturing facilities and retail space. We believe our facilities are sufficient for our current needs.

ITEM 3. LEGAL PROCEEDINGS

Refer to Note 21 of the Notes to Consolidated Financial Statements included in Part 4, Item 8 of this Annual Report on Form 10-K, which is incorporated herein by reference.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Price Information

The Company's common stock is traded on the Nasdaq Capital Market under the symbol "IDEX." The following table sets forth, for the periods indicated, the high and low closing bid prices of the Company's common stock.

	Closing Bid Prices	
	High	**Low**
Year Ended December 31, 2021		
1st Quarter	$ 5.43	$ 2.06
2nd Quarter	$ 3.38	$ 2.35
3rd Quarter	$ 2.78	$ 1.91
4th Quarter	$ 2.11	$ 1.16
Year Ended December 31, 2020		
1st Quarter	$ 1.34	$ 0.30
2nd Quarter	$ 3.29	$ 0.38
3rd Quarter	$ 1.78	$ 0.81
4th Quarter	$ 3.15	$ 0.82

Approximate Number of Holders of Our Common Stock

As of August 31, 2022, there were approximately 385 holders of record of the Company's common stock. This number excludes the shares of the Company's common stock beneficially owned by shareholders holding stock in securities trading accounts through DTC, or under nominee security position listings.

Dividend Policy

The Company has never declared or paid a cash dividend. Any future decisions regarding dividends will be made by the Company's Board. The Company currently intends to retain and use any future earnings for the development and expansion of the business and does not anticipate paying any cash dividends in the foreseeable future. The Company's Board has complete discretion on whether to pay dividends, subject to the approval of the Company's shareholders. Even if the Company's Board decides to pay dividends, the form, frequency and amount will depend upon future operations and earnings, capital requirements and surplus, general financial condition, contractual restrictions and other factors that the Board may deem relevant. In addition, the Company's ability to declare and pay dividends is dependent on the Company's ability to declare dividends and profits in the PRC subsidiaries. PRC rules may greatly restrict and limit the ability of the Company's subsidiaries to declare dividends which, in addition to restricting the Company's cash flow, limits its ability to pay dividends to its shareholders.

Securities Authorized for Issuance Under Equity Compensation Plans

See Part III—Item 12—Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters—"Securities Authorized for Issuance Under Equity Compensation Plans."

Recent Sales of Unregistered Securities

The Company did not sell any equity securities during the fiscal year ended December 31, 2021 that were not previously disclosed in a quarterly report on Form 10-Q or a current report on Form 8-K that was filed during the 2021 fiscal year.

Purchases of Equity Securities

No repurchases of the Company's common stock were made in the year ended December 31, 2021.

ITEM 6. [RESERVED]

PART II

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following management's discussion and analysis is presented in five sections as below and should be read in conjunction with our consolidated financial statements and the notes thereto and the other financial information appearing elsewhere in this report on Form 10-K. In addition to historical information, the following discussion contains certain forward-looking information. See "Special Note Regarding Forward Looking Statements" above for certain information concerning those forward-looking statements.

- *Overview*
- *Results of Operations*
- *Liquidity and Capital Resources*
- *Outlook*
- *Critical Accounting Policies and Estimates*

OVERVIEW

Ideanomics was incorporated in the State of Nevada on October 19, 2004.

Through December 31, 2021, the Company operates in one segment with two business units, Ideanomics Mobility and Ideanomics Capital. Ideanomics Mobility is driving EV adoption by assembling a synergistic ecosystem of subsidiaries and investments across the three key pillars of EV: Vehicles, Charging, and Energy. These three pillars provide the foundation for Ideanomics Mobility's planned offering of unique business solutions such as CaaS and VaaS.

Ideanomics Capital is the Company's fintech business unit, which focuses on leveraging technology and innovation to improve efficiency, transparency, and profitability for the financial services industry.

Immaterial Corrections of Prior Period Financial Statements

The Company has determined that there were immaterial errors in the consolidated financial statements as of and for the year ended December 31, 2020 related to its accounting of the acquisition of 51% of the ownership interests of Tree Technologies, a Malaysian company engaged in the EV market, in December 2019. The Company determined that it did not recognize a deferred tax liability and consequently, additional goodwill, in the initial purchase price allocation of Tree Technologies as of December 31, 2019, which also resulted in certain income tax benefits not being recognized during the year ended December 31, 2020. In addition, the Company determined that it did not recognize certain measurement period adjustments for the Tree Technologies acquisition as of December 31, 2020 and income tax benefits associated with the impairment of the marketing and distribution agreement acquired in the acquisition during the year ended December 31, 2020.

The Company also determined that a legal agreement the Company entered into whereby the Company took possession of a property in Qingdao, China for no consideration was incorrectly accounted for as a lease in accordance with ASC 842.

Additionally, the Company changed the accounting model for one investment from that of a cost method investment to an equity method investment.

The Company assessed the materiality of these errors in accordance with Staff Accounting Bulletin No. 99, Materiality, and the Company determined that, qualitatively, the amounts, individually and in the aggregate, would have no bearing on the decision-making process of a reasonable investor. Accordingly, the Company is correcting the relevant consolidated financial statements and related footnotes as of and for the year ended December 31, 2020 within these consolidated financial statements.

The Company intends to revise its condensed consolidated financial statements for the periods ended March 31, 2021, June 30, 2021, and September 30, 2021 through subsequent periodic filings.

The following table reflects the impact of the immaterial corrections discussed above on the Company's previously reported consolidated balance sheet as of December 31, 2020 (in thousands):

	Previously Reported	Adjustments	As Revised
Assets			
Goodwill	$ 1,165	$ (460)	$ 705
Operating lease right of use assets	7,117	(6,962)	155
Long-term investments	8,570	(83)	8,487
Other non-current assets	517	6,961	7,478
Total assets	234,412	(543)	233,869
Liabilities			
Other current liabilities	1,920	315	2,235
Current portion of operating lease liabilities	430	(315)	115
Operating lease liability – long term	6,759	(6,740)	19
Deferred tax liabilities	—	5,045	5,045
Other long-term liabilities	535	6,740	7,275
Total liabilities	32,643	5,045	37,688
Stockholders' Equity			
Accumulated deficit	(346,883)	(2,864)	(349,747)
Accumulated other comprehensive income	1,256	(25)	1,231
Total Ideanomics, Inc. shareholders' equity	186,584	(2,889)	183,695
Non-controlling interest	6,438	(2,699)	3,739
Total equity	193,022	(5,588)	187,434
Total liabilities, convertible redeemable preferred stock. redeemable non-controlling interest and stockholders' equity	$ 234,412	$ (543)	$ 233,869

The following table reflects the impact of the immaterial corrections discussed above on the Company's previously reported consolidated statement of operations for the year ended December 31, 2020 (in thousands:)

	Previously Reported	Adjustment	As Revised
Goodwill impairment	$ 9,323	$ 8,766	$ 18,089
Loss from operations	(86,879)	(8,765)	(95,644)
Income tax benefit	—	3,308	3,308
Impairment of and equity in loss of equity method investees	(16,698)	(82)	(16,780)
Net loss	(106,043)	(5,538)	(111,581)
Net loss attributable to Ideanomics, Inc. common shareholders	$ (98,400)	$ (2,864)	$ (101,264)
Basic and diluted loss per share	$ (0.46)	(0.01)	$ (0.47)

The following table reflects the impact of the immaterial corrections discussed above on the Company's previously reported consolidated statement of cash flows for the year ended December 31, 2020 (in thousands):

	Previously Reported	Adjustment	As Revised
Cash flows from operating activities			
Net loss	$ (106,043)	$ (5,538)	$ (111,581)
Income tax benefit	—	(3,308)	(3,308)
Impairment of and equity in loss of equity method investees	16,698	82	16,780
Impairment losses	42,554	8,765	51,319
Net cash used in operating activities	$ 41,468	$ —	$ 41,468

Liquidity and Going Concern

The accompanying consolidated financial statements of the Company have been prepared assuming the Company will continue as a going concern and in accordance with generally accepted accounting principles in the United States of America. The going concern basis of presentation assumes that the Company will continue in operation one year after the date these financial statements are issued and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business. Pursuant to the requirements of the ASC 205, management must evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for one year from the date these financial statements are issued.

This evaluation does not take into consideration the potential mitigating effect of management's plans that have not been fully implemented or are not within control of the Company as of the date the financial statements are issued. When substantial doubt exists under this methodology, management evaluates whether the mitigating effect of its plans sufficiently alleviates substantial doubt about the Company's ability to continue as a going concern. The mitigating effect of management's plans, however, is only considered if both (1) it is probable that the plans will be effectively implemented within one year after the date that the financial statements are issued, and (2) it is probable that the plans, when implemented, will mitigate the relevant conditions or events that raise substantial doubt about the entity's ability to continue as a going concern within one year after the date that the financial statements are issued.

The Company operates in one segment with two business units, Ideanomics Mobility and Ideanomics Capital. Ideanomics Mobility has as its mission the acceleration of commercial adoption of electric vehicles. Ideanomics Capital is the Company's fintech business unit, which focuses on leveraging technology and innovation to improve efficiency, transparency, and profitability for the financial services industry. The Company has two pending acquisitions to add to its Mobility business unit: Energica, an Italian manufacturer of high-performing electric motorcycles, and VIA, a U.S. manufacturer of electric commercial vehicles including Class 2 through Class 5 cargo vans, trucks, and buses.

On September 15, 2021, the Company announced it had entered into an agreement to launch a voluntary conditional tender offer in concert with the founders of Energica for shares of Energica, pursuant to which Ideanomics plans to increase its investment from 20.0% in Energica to approximately 70.0%. The Energica founders shall continue to own 29.0% of Energica.

On February 9, 2022, the Company wired €52.5 million ($60.3 million) to an escrow account in order to facilitate and fund the conditional tender offer. On March 4, 2022, the Company received sufficient tendered shares to reach the 90.0% threshold for the tender to become irrevocable. The transaction received final approval from Italian regulatory authorities and closed on March 14, 2022.

The Company is in the in the process of obtaining required shareholder approval to acquire 100% of VIA. The total aggregate consideration payable in connection with this transaction is equal to $630.0 million, consisting of an upfront payment at the closing of the transaction of $450.0 million, more than $62.9 million of which has been paid to date (prior to closing) in cash as documented in the form of convertible notes, as well as an earnout payment of up to $180.0 million. The remaining consideration for the acquisition of VIA is to be consummated with Ideanomics common stock, rather than cash. However, transaction fees are material and estimated to be $45.0 million, and it is anticipated that VIA will require operational and capital funding of $260.0 million. The Company has filed a registration statement on Form S-4 regarding shareholder approval for the transaction. As of the date of these financial statements, the registration statement had not been declared effective, and the financial statements contained therein must be updated to December 31, 2021. An amended S-4 statement with the required updated financial statements is anticipated to be filed with the SEC in the fourth quarter of 2022. The terms of the agreement stated that either party may terminate the agreement under specified conditions as of August 31, 2022, however the Company has exercised its option to extend that date to September 30, 2022..

As of December 31, 2021, the Company had cash and cash equivalents of approximately $269.9 million, of which $11.8 million is held in China and is subject to local foreign exchange regulations in that country, $0.4 million is held at a consolidated entity which requires the minority interest's permission to withdraw, and additionally two subsidiaries have required capital or liquidity requirements of $2.2 million. The Company also had accounts payable and accrued expenses of $15.6 million, other current liabilities of $7.1 million, current contingent consideration of $0.6 million, lease payments due within the next twelve months of $3.1 million, and payments of short-term and long-term debt due within the next twelve months of $58.1 million. Additionally, the Company has committed to invest in the MDI Fund a total of $25.0 million, of which $20.4 million remains and may be called at any time. The Company had a net loss of $256.7 million for the year ended December 31, 2021, and an accumulated deficit of $605.8 million.

As of June 30, 2022, the Company's principal source of liquidity is its unrestricted cash balance in the amount of $85.5 million of which $12.2 million is held by the Company's subsidiaries located and China and is subject to foreign exchange control regulations and $2.2 million is minimum regulatory capital required to be held by US operating companies – we do not consider cash balances held in China or required minimum regulatory capital to be part of the Company's liquid cash balances. The Company had negative cash flow from operating activities of $81.8 million for the six months ended June 30, 2022. The Company has experienced greater net losses and negative cash flows from operating and investing activities in the third quarter consistent with its business plan for ongoing activities and planned acquisitions. As of the date of the filing of this Form 10-K, securing additional financing is in progress, and as such management has limited the extent to which it is taking actions to delay, scale back, or abandon future expenditures. As such, management's actions to preserve an adequate level of liquidity for a period extending twelve months from the date of the filing of this Form 10-K are no longer sufficient on their own without additional financing, to mitigate the conditions raising substantial doubt about the Company's ability to continue as a going concern. We currently do not have adequate cash to meet our short or long-term needs. In the event additional capital is raised, it may have a dilutive effect on our existing stockholders.

The Company's ability to raise capital is critical. On September 1, 2022, the company entered into a SEPA with YA II PN. The Company will be able to sell up to sixty million of the Company's shares of common stock, par value $0.001 per share (the at the Company's request any time during the P36M months following the date of the SEPA's entrance into force. The shares would be purchased at 95.0% of the Market Price (as defined below) and would be subject to certain limitations, including that YA could not purchase any shares that would result in it owning more than 5.0% of the Company's common stock. Market Price is the lowest daily VWAP of the Common Shares during the three consecutive trading days commencing on the advance notice date, other than the daily VWAP on any excluded days. VWAP means, for any trading day, the daily volume weighted average price of the Common Shares for such trading day on the principal market during regular trading hours as reported by Bloomberg L.P. Pursuant to the SEPA, the Company is required to register all shares which YA may acquire. The Company agreed to file with the SEC a Registration Statement (as defined in the SEPA) registering all of the shares of common stock that are to be offered and sold to YA pursuant to the SEPA. The Company is required to have a Registration Statement declared effective by the SEC before it can raise any funds using the SEPA. Unless earlier terminated as provided under the SEPA, the SEPA shall terminate automatically on the earliest of (i) the first day of the month next following the 36-month anniversary of the Effective Date or (ii) the date on which the YA shall have made payment of Advances (as defined in the SEPA) pursuant to the SEPA for the Common Shares equal to the Commitment Amount (as defined in the SEPA).

The Company believes that its current level of cash and cash equivalents are not sufficient to fund continuing operations and the addition of the one planned acquisition in various stages of completion. The Company will need to bring in new capital to support its growth and, as evidenced from its successful capital raising activities in 2020 and 2021, believes it has the ability to continue to do so. However, there can be no assurance that this will occur. As described in Note 15(a), on October 25, 2021 the Company executed a security purchase agreement with YA II PN, whereby the Company issued a convertible note of $75.0 million, and received aggregate gross proceeds of $75.0 million. The note is scheduled to mature on October 24, 2022 and bears interest at an annual rate of 4.0%, which would increase to 18.0% in the event of default. The note has a fixed conversion price of $1.88. The conversion price is not subject to adjustment except for subdivisions or combinations of common stock. Commencing April 1, 2022, the Company has the obligation to redeem $8.3 million per month, against the unpaid principal. This amount may be reduced by any conversions by YA II or optional redemptions made by the Company. As of December 31, 2021, after the conversion of principal in the amount of $17.5 million, $57.5 million remained outstanding.

The Company has various vehicles through which it could raise a limited amount of equity funding, however, these are subject to market conditions which are not within management's control. As our Quarterly Report on Form 10-Q was not filed timely, we will not be Form S-3 eligible until August 9, 2023, which could make fund raising more difficult or more expensive. Management continues to seek to raise additional funds through the issuance of equity, mezzanine or debt securities. As we seek additional sources of financing, there can be no assurance that such financing would be available to us on favorable terms or at all. Our ability to obtain additional financing in the debt and equity capital markets is subject to several factors, including market and economic conditions, our performance and investor sentiment with respect to us and our business and industry. These factors individually and collectively raise doubt about the Company's ability to continue as a going concern. We currently do not have adequate cash to meet our short or long-term needs. In the event additional capital is raised, it may have a dilutive effect on our existing stockholders.

Principal Factors Affecting Our Financial Performance

Our business is expected to be impacted by both macroeconomic and Ideanomics-specific factors. The following factors have been part of the transformation of the Company which affected the results of our operations in the years ended December 31, 2021, 2020, and 2019:

- ***Our ability to transform our business and to meet internal or external expectations of future performance.*** In connection with this transformation, we are in the process of considerable changes, which include assembling a new management team in the United States and overseas, reconfiguring our business structure, continuing to further enhance our controls, procedures, and oversight during this transformation, and expanding our mission and business lines for continued growth. It is uncertain whether these efforts will prove beneficial or whether we will be able to develop the necessary business models, infrastructure and systems to support our businesses. To succeed, among other things, we will need to have or hire the right talent to execute our business strategy. Market acceptance of new product and service offerings will be dependent in part on our ability to include functionality and usability that address customer requirements, and optimally price our products and services to meet customer demand and cover our costs.

- ***Our ability to remain competitive.*** We will continue to face intense competition: these new technologies are constantly evolving, and our competitors may introduce new platforms and solutions that are superior to ours. In addition, our competitors may be able to adapt more quickly to new technologies or may be able to devote greater resources to the development, marketing and sale of their products than we can. We may never establish and maintain a competitive position in the hybrid financing and logistics management businesses.

- ***The fluctuation in earnings resulting from acquisitions, strategic equity investments, the formation of joint ventures, and in-licenses of technology***. Our results of operations may fluctuate from period to period based on our entry into new transactions to expand our business. In addition, while we intend to contribute cash and other assets to our investments, we do not intend for our holding company to conduct significant research and development activities. In general, we intend research and development activities to be conducted by our technology partners and licensors. These fluctuations in growth or costs and in our investments and partnerships may contribute to significant fluctuations in the results of our operations.

Effects of COVID-19

COVID-19 is an infectious disease cause by severe acute respiratory syndrome coronavirus. The disease was first identified in December 2019 in Wuhan, the capital of China's Hubei province, and has since spread globally, resulting in the ongoing COVID-19 pandemic. As of August 31, 2022, over 607.6 million cases had been reported across the globe, resulting in 6.5 million deaths.

The spread of COVID-19 has caused significant disruption to society as a whole, including the workplace. The resulting impact on the global supply chain has disrupted most aspects of national and international commerce, with government-mandated social distancing measures imposing stay-at-home and work-from-home orders in almost every country. The effects of social distancing have shut down significant parts of the local, regional, national, and international economies, for limited or extended periods of time, with the exception of government designated essential services.

In many parts of the world, stay-at-home and work-from-home orders were relaxed during the summer of 2020 as the effects of the Coronavirus appeared to lessen, and economic activity began to recover. However, commencing in the autumn and fall of 2020, the U.S. as well as countries in Europe, South America and Asia began to experience an increase in new COVID-19 cases, and in some cases local, state, and national governments began to reinstate restrictive measures to stem the spread of the virus. The U.S. and other countries also experienced an increase in new COVID-19 cases after the fall and winter holiday season, with new, more infectious variants of COVID-19 identified. Various vaccines have been developed, with vaccination programs in effect worldwide, though reaching acceptable levels for worldwide immunization against COVID-19 remains challenging at the local, regional and global level.

The future effects of the virus are difficult to predict, due to uncertainty about the course of the virus, different variants that may evolve, and the supply of the vaccine on a local, regional, and global basis, as well as the ability to implement vaccination programs in a short time frame.

The Company does not anticipate significant adverse effects on its operations' revenue as compared to its business plan in the near- or mid-term, although the future effects of COVID-19 may result in regional restrictive measures which may constrain the Company's operations, and supply chain shortages of various materials may have a negative effect on our EV sales or production capacity in the longer-term. The Company's Tree Technologies business, which focuses on the sale of motorbikes in the ASEAN region, is experiencing disruption in its operations as a result the continued lockdowns in the region, which have adversely impacted its ability to fulfill committed orders.

The Company continues to monitor the overall situation with COVID-19 and its effects on local, regional and global economies.

Information about segments

The Company's chief operating decision maker has been identified as the chief executive officer, who reviews consolidated results when making decisions about allocating resources and assessing performance of the Company. Therefore, the Company operates in one segment with two business units: Ideanomics Mobility and Ideanomics Capital.

Our Unconsolidated Equity Investments

The investments where the Company exercises significant influence, but not control, are classified as long-term equity investments and accounted for using the equity method. Under the equity method, the investment is initially recorded at cost and adjusted for our share of undistributed earnings or losses of the investee. Investment losses are recognized until the investment is written down to nil, provided that we do not guarantee the investee's obligations or we are not committed to provide additional funding. Refer to Note 12 of the Notes to Consolidated Financial Statements included in Part IV, Item 8 of this Annual Report on Form 10-K for further information.

Taxation

United States

Ideanomics, Inc. and its US subsidiaries are subject to the provisions of the Internal Revenue Code. Prior to 2021, no provision for income taxes has been provided as none of the companies then part of the company had taxable profit since inception. At the acquisition of Grapevine in 2018, deferred tax liabilities were recorded relating to intangible assets recorded for financial reporting purposes but not recognized for income tax purposes. The intangible assets consequently could not provide deductible amortization expense for income tax purposes. The deferred tax liabilities were recorded on the acquisition date to the extent that they could not be offset by usable NOL carryforwards acquired in the acquisition. These deferred tax liabilities were reduced, providing an income tax benefit, to the extent that the intangible assets were reduced by amortization expense and additional NOL carryforwards were created to offset the liabilities. These benefits include $0.1 million in 2019. The 2019 amount related to activities in the first two quarters of 2019. Ideanomics increased its ownership in Grapevine such that beginning with the third quarter of 2019, the result of which was that Grapevine activities would be included in the consolidated tax return of Ideanomics, Inc. As a result, the valuation allowance provided against Ideanomics' deferred tax assets were reduced by $0.4million, the amount of Grapevine's remaining deferred tax liabilities as that portion of Ideanomics' NOL carryovers could then be utilized to offset these liabilities.

At the acquisition of each of Timios, WAVE, US Hybrid and Solectrac in 2021, the companies immediately became includable in the consolidated federal tax return of Ideanomics. WAVE will be included in the state tax returns of Ideanomics. In the case of each acquisition, intangible assets were recognized for financial reporting purposes that were not recognized for income tax purposes. This, in combination with some smaller temporary differences of the four acquired businesses, resulted in the recognition of $12.2 million deferred tax liabilities. The federal deferred tax liabilities, and the WAVE state deferred tax liabilities created, resulted in the valuation allowance on Ideanomics' deferred tax assets being reduced by a similar amount. Ideanomics' net deferred tax assets had previously been judged to be more likely than not to be unable to reduce the Company's income tax liability and consequently were completely offset by a valuation allowance. Once the acquisitions of four acquired businesses occurred, a portion of Ideanomics' deferred tax assets could be utilized in offsetting most of the newly acquired deferred tax liabilities, this resulted in a one-time income tax benefit of $10.1 million.

During the year ended December 31, 2021, there was an income tax benefit of $11.8 million, of which $11.4 million was from operations in the US. This consisted principally of the $10.1 million one-time benefit. In addition, Timios, US Hybrid and Solectrac have taxable income or loss reported on certain separate state tax returns and consequently have related state income tax expense or benefit. For the year ended December 31, 2021 the three companies have losses, which results in state income tax benefits consisting of those losses being used to reduce the state deferred tax liabilities recognized in the acquisitions. The net state income tax (benefit) for Timios, US Hybrid and Solectrac was $1.2 million for the year ended December 31, 2021.There was an additional $0.1 million federal income tax benefit, principally consisting of the reduction, through amortization or impairment of intangible assets, of federal deferred tax liabilities recognized in acquisitions that had not allowed for the release of Ideanomics' valuation allowances.

TCJA includes provision for GILTI under which taxes on foreign income are imposed on the excess of a deemed return on tangible assets of certain foreign subsidiaries. TCJA also enacted the BEAT under which taxes are imposed on certain base eroding payments to related foreign companies, subject to certain requirements.

Based on 2021, 2020 and 2019 financial results, the company has determined that there is no GILTI or BEAT tax liability.

In addition, the TCJA now entitles U.S. companies that owns 10.0% or more of a foreign corporation a 100% dividends-received deduction for the foreign-source portion of dividends paid by such foreign corporation. Also, NOLs arising after December 31, 2017 are deductible only to the extent of 80.0% of the taxpayer's taxable income, and may be carried forward indefinitely but generally not allowed to be carried back.

Cayman Islands and the British Virgin Islands

Under current laws of the Cayman Islands and the British Virgin Islands, the Company is not subject to tax on its income or capital gains. In addition, dividend payments are not subject to withholding tax in the Cayman Islands or British Virgin Islands.

Hong Kong

The Company's subsidiaries incorporated in Hong Kong are subject to Profits Tax of 16.5%. Tax expense of $0.1 million was recorded in the year ended December 31, 2019 relating to the income on one Hong Kong subsidiary, subsequently disposed of, relating to a gain recorded on the sale of VIE related assets. All other Hong Kong subsidiaries' activities relate to support and ownership of businesses outside of Hong Kong, and consequently their expenses do not create operating loss carryovers.

The PRC

Under the PRC's EIT Law, the company's Chinese subsidiaries are subject to an EIT of 25.0%.

The Company's future effective income tax rate depends on various factors, such as tax legislation, geographic composition of its pre-tax income and non-tax deductible expenses incurred. The Company's management regularly monitors these legislative developments to determine if there are changes in the statutory income tax rate.

During the year ended December 31, 2019, one of the Company's PRC subsidiaries incurred a tax obligation of $0.6 million relating to its EV sales. The entity did not have operating loss carryovers and is not able to utilize the loss carryovers of other subsidiaries. The transactions under which the VIE agreements were terminated resulted in gains to one VIE entity, prior to deconsolidation, which triggered a tax expense of $0.2 million. Other PRC entities either had losses that created additional operating loss carryovers, where the related deferred tax assets were offset by a valuation allowance, or had income that would have resulted in a current tax liability, except that they were able to offset those liabilities with operating loss carryovers from prior years. The use of prior year carryovers, in all cases for which the related deferred tax assets all had previously been offset by a valuation allowance, avoided $0.2 million of income tax expense.

During the years ended December 31, 2021 and 2020, all of the Company's PRC subsidiaries incurred losses that created operating loss carryovers. Certain of the subsidiaries had previously established operating loss carryovers expired as PRC loss carryovers are generally allowed to be carried over five years. The deferred tax assets related to the operating loss carryovers have been fully offset by valuation allowances meaning that there was no income tax expense or benefit for the Company's PRC subsidiaries these years.

Malaysia

At the acquisition of Tree Technologies at the end of 2019, the Company recognized approximately $8.2 million of deferred tax liabilities related to land-use rights and a distribution and marketing agreement with carrying values well in excess of their tax basis. During the year ended December 31, 2020, Tree Technologies recorded a $3.3 million income tax benefit. This resulted principally from a $3.1 million benefit from amortization and eventual impairment, of the distribution and marketing agreement which resulted in the reversal of the deferred tax liabilities related to the agreement. The remaining $0.2 million benefit resulted from the operating losses creating carryovers that could offset part of the remaining deferred tax liabilities.

During the year ended December 31, 2021 Tree Technologies recorded a $0.4 million deferred tax benefit. This benefit resulted from operating loss carryovers part of which were able to offset previously recorded deferred tax liabilities and part of which were offset by a valuation allowance.

RESULTS OF OPERATIONS

Comparison of Years Ended December 31, 2021 and 2020 (USD in thousands, except per share amounts)

For the years ended December 31,	2021	2020	Amount Change	% Change
Revenue	$ 114,080	$ 26,759	$ 87,321	n/m
Cost of revenue	90,852	24,702	66,150	n/m
Gross profit	**23,228**	**2,057**	21,171	n/m
Operating expenses:				
Selling, general and administrative expenses	72,825	32,399	40,426	n/m
Research and development expense	760	1,635	(875)	(53.5) %
Professional fees	34,710	12,541	22,169	n/m
Asset impairments	71,070	33,230	37,840	113.9 %
Goodwill impairments	101,470	18,089	83,381	n/m
Change in fair value of contingent consideration, net	(9,600)	(5,503)	(4,097)	74.5 %
Litigation settlements	5,432	—	5,432	n/m
Depreciation and amortization	6,118	5,310	808	15.2 %
Total operating expenses	**282,785**	**97,701**	**185,084**	**n/m**
Loss from operations	**(259,557)**	**(95,644)**	**(163,913)**	**n/m**
Interest and other income (expense):				
Interest income	1,502	108	1,394	n/m
Interest expense	(2,139)	(16,078)	13,939	(86.7) %
Expense due to conversion of notes	—	(2,266)	2,266	n/m
Gain (loss) on extinguishment of debt	300	8,891	(8,591)	(96.6) %
(Loss) gain on disposal of subsidiaries, net	(1,264)	276	(1,540)	n/m
Gain (loss) on remeasurement of investment	2,915	—	2,915	n/m
Other income (expense), net	1,261	6,604	(5,343)	(80.9) %
Loss before income taxes and non-controlling interest	**(256,982)**	**(98,109)**	**(158,873)**	**n/m**
Income tax benefit	11,786	3,308	8,478	n/m
Impairment of and equity in loss of equity method investees	(11,529)	(16,780)	5,251	(31.3) %
Net loss	**(256,725)**	**(111,581)**	**(145,144)**	**130.1 %**
Deemed dividend related to warrant repricing	—	(184)	184	n/m
Net loss attributable to common shareholders	**(256,725)**	**(111,765)**	**(144,960)**	129.7 %
Net (income) loss attributable to non-controlling interest	714	10,501	(9,787)	(93.2) %
Net loss attributable to Ideanomics, Inc. common shareholders	**$ (256,011)**	**$ (101,264)**	**$ (154,747)**	**n/m**

n/m = Not Meaningful - represents percentage changes, in terms of absolute value over 100%.

Comparison of Years Ended December 31, 2020 and 2019 (USD in thousands, except per share amounts)

For the years ended December 31,	2020	2019	Amount Change	% Change
Revenue	$ 26,759	$ 44,566	$ (17,807)	(40.0) %
Cost of revenue	24,702	1,458	23,244	n/m
Gross profit	**2,057**	**43,108**	(41,051)	(95.2) %
Operating expenses:				
Selling, general and administrative expenses	32,399	24,862	7,537	30.3 %
Research and development expense	1,635	—	1,635	n/m
Professional fees	12,541	5,828	6,713	n/m
Asset impairment	33,230	73,669	(40,439)	(54.9) %
Goodwill impairment	18,089	—	18,089	n/m
Change in fair value of contingent consideration, net	(5,503)	5,094	(10,597)	n/m
Depreciation and amortization	5,310	2,229	3,081	n/m
Total operating expenses	**97,701**	**111,682**	**(13,981)**	**(12.5)%**
Loss from operations	**(95,644)**	**(68,574)**	**(27,070)**	**39.5 %**
Interest and other income (expense):				
Interest income	108	68	40	58.8 %
Interest expense	(16,078)	(5,684)	(10,394)	n/m
Expense due to conversion of notes	(2,266)	—	(2,266)	n/m
Gain (loss) on extinguishment of debt	8,891	(3,940)	12,831	n/m
Gain (loss) on disposal of subsidiaries, net	276	(952)	1,228	n/m
(Loss) gain on remeasurement of investment	—	(3,179)	3,179	n/m
Other income (expense), net	6,604	(433)	7,037	n/m
Loss before income taxes and non-controlling interest	**(98,109)**	**(82,694)**	**(15,415)**	**18.6 %**
Income tax expense	3,308	(417)	3,725	n/m
Impairment of and equity in loss of equity method investees	(16,780)	(13,718)	(3,062)	22.3 %
Net loss	**(111,581)**	**(96,829)**	**(14,752)**	**15.2 %**
Deemed dividend related to warrant repricing	(184)	(827)	643	(77.8) %
Net loss attributable to common shareholders	**(111,765)**	**(97,656)**	**(14,109)**	14.4 %
Net (income) loss attributable to non-controlling interest	10,501	(852)	11,353	n/m
Net loss attributable to Ideanomics, Inc. common shareholders	**$ (101,264)**	**$ (98,508)**	**$ (2,756)**	**2.8 %**

n/m = Not Meaningful - represents percentage changes, in terms of absolute value over 100%.

Revenues (USD in thousands)

For the years ended December 31,	2021	2020	Amount Change	% Change
Title and escrow services	$ 72,686	$ —	$ 72,686	n/m
Electric vehicles products	31,123	19,462	11,661	59.9 %
Electric vehicles services	204	—	204	n/m
Combustion engine vehicles	—	5,160	(5,160)	n/m
Charging, battery and powertrain products	5,886	506	5,380	n/m
Charging, battery and powertrain services	2,645	—	2,645	n/m
Digital advertising services	231	1,631	(1,400)	(85.8)%
Other revenue	1,305	—	1,305	n/m
Total	$ 114,080	$ 26,759	$ 87,321	n/m

n/m = Not Meaningful - represents percentage changes, in terms of absolute value over 100%.

Revenue for the year ended December 31, 2021 was $114.1 million as compared to $26.8 million for the year ended December 31, 2020, an increase of $87.3 million. The increase was mainly due to the Company’s acquisition of Timios, which generated revenue of $72.7 million from the acquisition closing date through December 31, 2021. No revenue was generated related to title and escrow services for the year ended December 31, 2020. During the year ended December 31, 2021 the Company earned revenues of $31.1 million from sales of EV products as compared to $19.5 million for the year ended December 31, 2020, an increase of $11.7 million. The increase was primarily due to an increase in EV product sales in China and incremental revenue from acquisitions made in the year ended December 31, 2021. Revenues from the Charging, battery and powertrain products and services product lines were generated almost exclusively from revenues generated by the acquisitions made in the year ended December 31, 2021. No revenue was generated from the sale of Combustion engine vehicles for the year ended December 31, 2021.

For the years ended December 31,	2020	2019	Amount Change	% Change
Digital asset management services	$ —	$ 40,700	$ (40,700)	n/m
Electric vehicles products	19,462	—	19,462	n/m
Electric vehicles services	—	2,693	(2,693)	n/m
Combustion engine vehicles	5,160	—	5,160	n/m
Charging, battery and powertrain products	506	—	506	n/m
Digital advertising services	1,631	1,173	458	39.0 %
Total	$ 26,759	$ 44,566	$ (17,807)	(40.0)%

n/m = Not Meaningful - represents percentage changes, in terms of absolute value over 100%.

Revenue for the year ended December 31, 2020 was $26.8 million as compared to $44.6 million for the year ended December 31, 2019, a decrease of $17.8 million, or 40%. The decrease was due to there being no revenue generated from Digital asset management services in the year ended December 31, 2020 as compared to $40.7 million in the prior year. The Company generated $19.5 million from the sale of EV products as compared to $2.7 million from the sale of EV services in the prior year, a shift of category and an increase of $16.8 million. For the year ended December 31, 2020, the Company earned revenues of $5.2 million from the sale of combustion engine vehicles; the sale of combustion engine vehicles is not the Company's primary focus, however, from time to time, the Company will sell combustion engine vehicles if a client places an order. During 2020, the Company made its first sales of charging and battery equipment. Revenues from the digital advertising services provided by Grapevine were $1.6 million as compared to $1.2 million in the prior year, an increase of $0.5 million or 39%. Grapevine was considered a non-core asset for Ideanomics.

Cost of revenue (USD in thousands)

For the years ended December 31,	2021	2020	Amount Change	% Change
Title and escrow services	$ 48,684	$ —	$ 48,684	n/m
Electric vehicles products	29,884	18,035	11,849	65.7 %
Electric vehicles services	183	—	183	n/m
Combustion engine vehicles	—	5,121	(5,121)	n/m
Charging, battery and powertrain products	7,961	488	7,473	n/m
Charging, battery and powertrain services	2,503	—	2,503	n/m
Digital advertising services	192	1,058	(866)	(81.9)%
Other revenue	1,445	—	1,445	n/m
Total	$ 90,852	$ 24,702	$ 66,150	n/m

n/m = Not Meaningful - represents percentage changes, in terms of absolute value over 100%.

Cost of revenues was $90.9 million for the year ended December 31, 2021, as compared to $24.7 million for the year ended December 31, 2020. The cost of revenues increased by $66.2 million. The increase was mainly due to the Company’s acquisition of Timios, which had recorded cost of revenues of $48.7 million related to title and escrow service from the acquisition closing date through December 31, 2021. No cost related to title and escrow services were incurred for the year ended December 31, 2020. The increase was due to an increase in EV product sales in China and incremental revenue from acquisitions made in the year ended December 31, 2021. Revenues from the Charging, battery and powertrain products and services product lines were generated almost exclusively from revenues generated by the acquisitions made in the year ended December 31, 2021. No revenue and associated cost was generated related Combustion engine vehicles for the year ended December 31, 2021.

For the years ended December 31,	2020	2019	Amount Change	% Change
Digital asset management services	$ —	$ 467	$ (467)	n/m
Electric vehicles products	18,035	—	18,035	n/m
Combustion engine vehicles	5,121	—	5,121	n/m
Charging, battery and powertrain products	488	—	488	n/m
Digital advertising services	1,058	991	67	6.8 %
Total	$ 24,702	$ 1,458	$ 23,244	n/m

n/m = Not Meaningful - represents percentage changes, in terms of absolute value over 100%.

Cost of revenues was $24.7 million for the year ended December 31, 2020, as compared to $1.5 million for the year ended December 31, 2019. The cost of revenues increased by $23.2 million. From a comparability perspective, the cost of revenue during 2019 is not indicative of the business in 2020. The cost of revenue during 2019 was primarily associated with the digital asset management services and creator payments from the Grapevine business. The cost of revenue from the sale of EVs was $18.0 million; there was no cost of revenue recorded for the sale of EV services during 2019 as the company acted as agent in the sale of EVs in 2019 and consequently revenues were recorded on “net” basis without any corresponding cost of revenues. Cost of revenues from the sale of combustion engine vehicles was $5.1 million; there were no sales of combustion engine vehicles in the prior year. Cost of revenues for charging and batteries was $0.5 million; there were no sales of charging and batteries in the prior year. The cost of revenues for the digital advertising services provided by Grapevine were $1.1 million as compared to $1.0 million in the prior year, an increase of $0.1 million or 6.8%.

Gross profit (USD in thousands)

For the years ended December 31,	2021	2020	Amount Change	% Change
Title and escrow services	$ 24,002	$ —	$ 24,002	n/m
Electric vehicles products	1,239	1,427	(188)	(13.2)%
Electric vehicles services	21	—	21	n/m
Combustion engine vehicles	—	39	(39)	n/m
Charging, battery and powertrain products	(2,075)	18	(2,093)	n/m
Charging, battery and powertrain services	142	—	142	n/m
Digital advertising services	39	573	(534)	(93.2)%
Other revenue	(140)	—	(140)	n/m
Total	$ 23,228	$ 2,057	$ 21,171	n/m

n/m = Not Meaningful - represents percentage changes, in terms of absolute value over 100%.

For the years ended December 31,	2020	2019	Amount Change	% Change
Digital asset management services	$ —	$ 40,233	$ (40,233)	n/m
Electric vehicles products	1,427	—	1,427	n/m
Electric vehicles services	—	2,693	(2,693)	n/m
Combustion engine vehicles	39	—	39	n/m
Charging, battery and powertrain products	18	—	18	n/m
Digital advertising services	573	182	391	n/m
Total	$ 2,057	$ 43,108	$ (41,051)	(95.2)%

Gross profit ratio

For the years ended December 31,	2021	2020
Title and escrow services	33.0 %	— %
Electric vehicles products	4.0	7.0
Electric vehicles services	10.3	—
Combustion engine vehicles	—	1.0
Charging, battery and powertrain products	(35.3)	4.0
Charging, battery and powertrain services	5.4	—
Digital advertising services	16.9	35.0
Other revenue	(10.7)	—
Total	20.4 %	8.0 %

Gross profit for the year ended December 31, 2021 was $23.2 million, as compared to gross profit of $2.1 million for the year ended December 31, 2020. The gross profit ratio for the year ended December 31, 2021 was 20.4%, while in 2020, it was 8.0%. The increase was mainly due to the high gross margin from sales of title and escrow services for the year ended December 31, 2021.

For the years ended December 31,	2020	2019
Digital asset management services	— %	99.0 %
Electric vehicles products	7.0	—
Electric vehicles services	—	100.0
Combustion engine vehicles	1.0	—
Charging and batteries	4.0	—
Digital advertising services	35.0	16.0
Total	8.0 %	97.0 %

The gross profit for the year ended December 31, 2020 was $2.1 million, as compared to $43.1 million during the same period in 2019, a decrease of $41.1 million. The decrease was primarily due to revenue from digital asset management services in 2019 which was not repeated in 2020 and had a low cost of revenue. The gross profit earned from the sale of EV products was $1.4 million as compared to $2.7 million from the sale of EV Services in the prior year, a decrease of $1.3 million. The Company acted in an agent capacity in the sale of EVs in 2019 and consequentially the revenue was recorded as a service on a "net" basis without any cost of revenue which resulted in a higher gross profit and gross margin.

Selling, general and administrative expenses

Our selling, general and administrative expense for the year ended December 31, 2021 was $72.8 million as compared to $32.4 million for the year ended December 31, 2020, an increase of $40.4 million. The increase was principally due to costs related to the operations of the Timios, WAVE, Solectrac and US Hybrid acquisitions completed in the current year, stock based compensation expense related to RSU grants, increased compensation, payroll tax and benefit expense arising from the hiring undertaken to expand the business and built out the corporate infrastructure and associated recruitment expense, partially offset by lower operating expenses in China and lower rent expense due to the termination of the company’s lease on its headquarters property in New York City due to Covid 19.

Our selling, general and administrative expense for the year ended December 31, 2020 was $32.4 million as compared to
$24.9 million for the year ended December 31, 2019, an increase of $7.5 million. The majority of the increase was due to increased stock based compensation expense, bonuses and sales commissions and salaries resulting from the increase in employee numbers and sales activity, and bad debt expense which was partially offset by lower spending on travel and entertainment due to the restrictions on travel and entertaining arising from COVID-19 and lower severance expense.

Research and development expense

Research and development expense for the year ended December 31, 2021 was $0.8 million as compared to $1.6 million for the year ended December 31, 2020 a decrease of $0.9 million. The expense for the prior year included costs related to technical development and design into EV trucks, there was no expense research related to EV trucks in the current year. Expense in the current period was primarily incurred in connection with EV motorbikes in Malaysia, and research and development activities in WAVE , Solectrac and US Hybrid. No research and development expense was incurred in 2019.

Professional fees

Professional fees for the year ended December 31, 2021 were $34.7 million as compared to $12.5 million for the year ended December 31, 2020, an increase of $22.2 million. The increase in professional fees was principally related to the merger and acquisition activity undertaken during 2021 including fees related to due diligence, post-merger integration activities, regulatory filings and fund raising activity, expenses incurred by affiliates acquired during 2021 which did not exist in the prior year, increased fees incurred in the general operation of the business reflecting the heightened level of business activity, costs incurred for audit and other regulatory filings and advice on patent and intellectual property matters.

Professional fees for the year ended December 31, 2020 were $12.5 million as compared to $5.8 million for the year ended December 31, 2019, an increase of $6.7 million. The majority of this increase was due to increased expense for investor relations programs, legal fee expense related to regulatory inquires, fund raising and merger and acquisition activities, and class action lawsuits. Expenses for consultants and contractors increased as a result of the Company's continued expansion.

Asset Impairments and Goodwill Impairments

The following table summarizes the impairment losses recorded in the years ended December 31, 2021, 2020 and 2019, (in thousands):

Asset Impaired	Note	Caption	Amount 2021	Amount 2020	Amount 2019
GTB – digital currency	Note 11 – Goodwill and Intangible Assets	Asset impairment	$ —	$ —	$ 61,124
Equity method investments	Note 12 - Long-term Investments	Impairment of and equity in loss of equity method investees	7,864	16,650	13,062
Intangible assets	Note 11 – Goodwill and Intangible Assets	Asset Impairment	50,619	20,331	5,715
Goodwill	Note 11 – Goodwill and Intangible Assets	Goodwill impairment	101,470	18,089	—
Right of use assets	Note 13 - Leases	Asset impairment	99	6,424	—
Fintech buildings, land and capitalized fees	Note 10 - Property and Equipment, net	Asset impairment	—	3,315	2,299
Fintech buildings asset retirement cost	Note 10 - Property and Equipment, net	Asset Impairment	—	1,996	1,504
Available for sale securities	Note 5 - Available for sale securities	Asset Impairment	15,833	—	—
Fixed assets and other		Asset impairment	—	923	—
Cost method investments	Note 12 - Long-term Investments	Asset Impairment	4,519	241	3,026
Total			$ 180,404	$ 67,969	$ 86,730

Additional information related to the impairment losses recorded in the years ended December 31, 2021, 2020 and 2019 is as follows:

Year Ended December 31, 2021

- The Company recorded impairment loss of $13.7 million related to Timios lender relationship and trade name and $5.8 million related to Timios goodwill.
- The Company recorded impairment loss of $23.9 million related to WAVE patents and trademarks and $35.7million related to WAVE goodwill.
- The Company recorded impairment loss of $7.0 million related to US Hybrid patents and trademarks and $42.2 million related to US Hybrid goodwill.
- The Company recorded impairment loss of $6.0 million related to Solectrac patents and trademarks and $17.7million related to Solectrac goodwill.
- The Company recorded impairment loss of $4.5 million as the Company fully impaired the cost method investments in two entities.
- The Company recorded an impairment loss of $0.1 million related to ROU assets due to the closure of one Timios office and one China office.
- The Company recorded an impairment loss of $15.8 million related to an available for sale securities.
- The Company recorded an impairment loss of $7.9 million related to an equity investment.

Year Ended December 31, 2020

- The Company recorded impairment losses of $16.7 million related to its equity method investments, Glory and Intelligenta. In the fourth quarter of 2020, Tree Technologies obtained its own domestic manufacturing license, and determined that it would not purchase vehicles from Tree Manufacturing, Glory's subsidiary, and that the investment in Glory was therefore impaired. The Company evaluated the business prospects of Intelligenta in light of the continued political tensions between China and the U.S., and determined that its business prospects had diminished.

- The Company recorded impairment losses of $20.3 million related to intangible assets:

  - An impairment loss of $12.5 million related to Tree Technologies marketing and distribution agreement with Tree Manufacturing after Tree manufacturing obtained its own domestic manufacturing license, and determined that it would not purchase vehicles from Tree Manufacturing.

  - Impairment losses of $7.1 million related to DBOT's intangible assets, its continuing membership agreement and customer list.

  - An impairment loss of $0.8 million related to Grapevine's influencer network, after determining that the attrition rate of the influencer network was higher than expected.

- The Company recorded an impairment loss of $9.3 million related to the goodwill of its consolidated subsidiary, DBOT, and recorded an impairment loss of $8.8 million for Tree Technologies, after evaluating its business prospects.

- The Company recorded impairment losses of $6.4 million related to right of use assets after ceasing to use the related real estate premises.

- The Company recorded impairment losses of $3.3 million related to its investment in Fintech Village, and recorded an impairment loss of $2.0 million for the related asset retirement cost.

- The Company recorded an impairment loss of $0.2 million related to a cost method investment after its price per share declined in the fourth quarter of 2020.

Year Ended December 31, 2019

- The Company recorded an impairment loss of $61.1 million in the fourth quarter of 2019 related to GTB which the Company had received in connections with a services agreement and an asset purchase agreement with GT Dollar Pte, a minority shareholder at the time of the transaction. On October 29, 2019, GTB had an unexpected significant decline in quoted price, from $17.00 to $1.84. This decline continued through the fourth quarter of 2019, and on December 31, 2019 the quoted price was $0.23. As a result of this decline in quoted price, and its inability to convert GTB into other digital currencies which were more liquid, or fiat currency, the Company performed an impairment analysis and recorded an impairment loss.

- The Company recorded a $13.1 million impairment loss in Glory, an equity method investment, in the fourth quarter of 2019, when it became apparent that Glory's subsidiary, Tree Manufacturing, would not receive the land use rights to 250 acres of vacant land and other assets.

- The Company recorded a $5.7 million impairment loss related to a secure mobile financial information, social, and messaging platform that has been designed for streamlining financial-based communication for professional and retail users. Management determined these assets had no future use and recorded an impairment loss.

- The Company recorded impairment losses of $3.0 million in two non-marketable equity investments after management evaluated their performance.

- The Company recorded an impairment loss of $2.3 million in the third quarter of 2019 in connection with four buildings in Fintech Village, which were later demolished, and recorded an impairment loss of $1.5 million for the related asset retirement cost.

Change in fair value of contingent consideration, net

For the year ended December 31, 2021, change in fair value of contingent consideration, net of $(9.6) million represents the remeasurement gain of $1.6 million of the contingent consideration payable to the former Solectrac shareholder and remeasurement gain of $8.0 million of the contingent consideration payable to the Tree Technology shareholders.

For the year ended December 31, 2020, change in fair value of contingent consideration, net of $(5.5) million represents the remeasurement loss of $1.5 million of the contingent consideration payable to the former DBOT shareholder and remeasurement gain of $7.0 million of the contingent consideration payable to the Tree Technology shareholders.

For the year ended December 31, 2019, change in fair value of contingent consideration, net of $5.1 million represents the remeasurement of the contingent consideration payable to the former DBOT shareholders due to the decline in Ideanomics' stock price.

Litigation settlements

For the year ended December 31, 2021, the Company recorded an expense of $5.4 million related to settlement of litigation. The Rudani shareholder class action lawsuit was settled for $5.0 million. There were no such litigation settlements in the years ended December 31, 2020 and 2019.

Depreciation and amortization

Depreciation and amortization for the year ended December 31, 2021 was $6.1 million as compared to $5.3 million for the year ended December 31, 2020, an increase of $0.8 million. The increase was mainly due to the increase in amortization expense recorded by Timios, WAVE, Solectrac and US Hybrid, which were acquired in 2021.

Depreciation and amortization for the year ended December 31, 2020 was $5.3 million as compared to $2.2 million for 2019, an increase of $3.1 million. The increase was mainly due to the increase in amortization expense arising from the shortening of the useful life on an IP intangible asset.

Loss from operations

Loss from operations for the year ended December 31, 2021 was $259.6 million as compared to loss of $95.6 million for the year ended December 31, 2020 an increase of $163.9 million. The increased loss from operations included the operating loss from Timios, WAVE, Solectrac and US Hybrid, which were acquired in 2021 partially offset by the gain resulting from a change in the fair value of contingent consideration.

Loss from operations for the year ended December 31, 2020 was $95.6 million as compared to loss of $68.6 million for the year ended December 31, 2019 an increase of $27.1 million. The increased Loss from Operations is due to number of factors, the gross profit for 2019 included revenues from digital asset services which had a gross profit margin of almost 100% which was not repeated in 2020, increased expenses for selling, general and administrative, research and development, professional fees, and depreciation and amortization expense partially offset by lower impairment charges and a gain resulting from a change in the fair value of contingent consideration.

Interest income

Interest income for the year ended December 31, 2021 was $1.5 million as compared to $0.1 million for the year ended December 31, 2020, an increase of $1.4 million. The increase was mainly due to the income recognized from the investment in notes receivables, while earlier years interest income was generated primarily on deposits held in banks.

Interest income for the year ended December 31, 2020 was $0.1 million as compared to $0.1 million for the year ended December 31, 2019. The interest income for the year ended December 31, 2020 and December 31, 2019 mainly represents the income generated from deposit in banks.

Interest expense

Interest expense for the year ended December 31, 2021 was $2.1 million as compared to $16.1 million for the year ended December 31, 2020, a decrease of $13.9 million. The decrease was mainly due to the amortization of BCFs of $14.5 million associated with the convertible notes in the year ended December 31, 2020 which did not arise in the year ended December 31, 2021.

Interest expense for the year ended December 31, 2020 was $16.1 million as compared to $5.7 million for the year ended December 31, 2019, an increase of $10.4 million. The increase was primarily due to increased expense related to amortization of BCFs arising from the modification of convertible notes. The following table summarizes the breakdown of the interest expense (in thousands):

	Year ended December 31, 2021	Year ended December 31, 2020	Year ended December 31, 2019
Interest	$ 2,139	$ 1,593	$ 1,449
Amortization of discount	—	14,485	4,235
Total	$ 2,139	$ 16,078	$ 5,684

Expense due to conversion of notes

There were no such conversions for the year ended December 31, 2021.

Conversion expense of $2.3 million for the year ended December 31, 2020 represents the expense recognized as a result of the reduction of conversion price to induce the conversion of the convertible notes from related parties.

There were no such conversions for the year ended December 31, 2019.

Gain (loss) on extinguishment of debt

In the year ended December 31, 2021, the Company recorded a gain of $0.3 million on WAVE Paycheck Protection Program loan forgiveness.

In the year ended December 31, 2020, the Company recorded a gain on the extinguishment of debt of $8.9 million, as it paid a promissory note prior to its scheduled maturity. The Company also settled several outstanding balances with vendors and recorded a gain of $0.5 million.

In the year ended December 31, 2019, the Company recorded a loss on extinguishment of debt of $3.9 million which resulted from modifications made to various convertible notes.

(Loss) gain on disposal of subsidiaries, net

The following table summarizes gains and (losses) recorded in “(Loss) gain on disposal of subsidiaries, net” in the years ended December 31, 2021, 2020 and 2019 (in thousands):

Subsidiary	Year ended December 31, 2021	Year ended December 31, 2020	Year ended December 31, 2019
Guang Min	$ —	$ 276	$ —
Red Rock	—	—	552
Amer Global Technology Limited	—	—	505
Deconsolidation of VIEs	—	—	(2,009)
Grapevine	(1,234)	—	—
Other	(30)	—	—
Total	$ (1,264)	$ 276	$ (952)

Gain (loss) on disposal of subsidiaries was a loss of $1.3 million for year ended December 31, 2021 as compared to a gain of $0.3 million in the year ended December 31, 2020. Gain (loss) on disposal of subsidiaries was a gain of $0.3 million for year ended December 31, 2020 as compared to a loss of $1.0 million in the year ended December 31, 2019.

Gain on remeasurement of investment

Gain on remeasurement of investment was $2.9 million for the year ended December 31, 2021 which resulted from the remeasurement of the Company's investment in Solectrac to its fair value as of the date the Company obtained the remainder of the Solectrac shares outstanding and commenced consolidating Solectrac.

There were no such remeasurements for the year ended December 31, 2020.

In the year ended December 31, 2019, the Company increased its ownership in DBOT and consolidated DBOT in July 2019. Immediately prior to the consummation of the acquisition, the Company's investment in DBOT had a fair value of $3.1 million, and the Company recorded a loss of $3.2 million to record the investment in DBOT to its fair value.

Other income (expense), net

Other income (expense), net was $1.3 million for the year ended December 31, 2021 as compared to $6.6 million for year ended December 31, 2020, a decrease of $5.3 million. The decrease was mainly due to 2020 income being unusually high from lease early termination settlements, which includes a gain of $4.9 million recognized from the settlement agreements to terminate leases early for the New York City headquarters at 55 Broadway and a gain of $0.8 million from the DBOT lease settlement with the landlord

Other income (expense), net was an income of $6.6 million for the year ended December 31, 2020 as compared to a loss of $0.4 million for the year ended, an increase of $7.0 million. The increase was mainly due to a gain of $4.9 million recognized from the settlement agreements to terminate leases early for the New York City headquarters at 55 Broadway a gain of $0.8 million from the DBOT lease settlement with the landlord in addition to sublease income $0.1 million in year ended December 31, 2020.

Income tax (expense) benefit

In the year ended December 31, 2021, the income tax benefit of $11.8 million is mainly due to $10.1 million of one-time benefits relating to acquisitions, net state income benefit of $1.2 million for recently acquired entities, and a $0.1 million of other U.S. federal income tax benefit and a $0.4 million deferred tax benefit from our Tree Technologies, our Malaysian subsidiary.

In the year ended December 31, 2020, the income tax benefit of $3.3 million income tax benefit is from Tree Technologies. It consist of $3.1 million benefit from amortization and eventual impairment, of a distribution and marketing agreement which resulted in the reversal of the deferred tax liabilities related to the agreement, and $0.2 million benefit resulted from the operating losses creating carryovers that could offset part of Tree Technologies' remaining deferred tax liabilities. For the year ended December 31, 2020, other than the $3.3 million Tree Technologies benefit, income tax expense is nil because of NOL and deferred tax assets related to the NOLs had been offset by a valuation allowance. The Company had established a 100.0% valuation allowance against its net deferred tax assets due to its history of pre-tax losses and the likelihood that the deferred tax assets will not be realized.

In the year ended December 31, 2019, one PRC subsidiary, generated income related to EV sales that resulted in $0.6 million income tax expense, two Ideanomics China entities, that have since been disposed of, generated a one-time gain the required triggering a tax expense of $0.3 million while the company had a one-time deferred tax benefit of $0.5 million related to the acquisition of Grapevine. Other than these matters, resulting in a net income tax expense of $0.4 million, there were no other income tax expense because of NOL and deferred tax assets related to the NOL had been offset by a valuation allowance. The Company had established a 100.0% valuation allowance against its net deferred tax assets due to its history of pre-tax losses and the likelihood that the deferred tax assets will not be realized.

Impairment of and equity in loss of equity method investees

Impairment of and equity in loss of equity method investees was $11.5 million for the year ended December 31, 2021 as compared to $16.8 million in the year ended December 31, 2020, a decrease of $5.3 million. The decrease was mainly due to impairments losses of $16.7 million recorded in the year ended December 31, 2020, as compared to an impairment loss of $7.9 million recorded in the year ended December 31, 2021.

Impairment of and equity in loss of equity method investments for the year ended December 31, 2020 was $16.8 million as compared to $13.7 million for the year ended December 31, 2019, an increase of $3.1 million. The increase was mainly due to impairments losses of $16.7 million recorded in the year ended December 31, 2020, as compared to an impairment loss of $13.1 million recorded in the year ended December 31, 2019.

Net (income)/loss attributable to non-controlling interest

Net (income)/loss attributable to non-controlling interests was a $0.7 million loss in the year ended December 31, 2021 as compared to a $10.5 million loss for the year ended December 31, 2020. The decrease is mainly due to there is significant loss in the year ended December 31, 2020 from Tree Technology.

Net (income)/loss attributable to non-controlling interests was a $10.5 million loss in the year ended December 31, 2020 as compared to a net income of $0.9 million in the year ended December 31, 2019. The loss in 2020 is primarily due to net loss from Tree Technology. The gain in 2019 is primarily due to the taxis commission revenue recognized in an entity in which we have a 50.1% ownership.

LIQUIDITY AND CAPITAL RESOURCES

As of December 31, 2021, the Company had cash and cash equivalents of $269.9 million. Approximately $27.9 million was held in accounts outside of the United States, primarily in Hong Kong and the PRC.

Due to the strict regulations governing the transfer of funds held in the PRC to other jurisdictions, the Company does not consider funds held in its PRC entities to be available to fund operations and investment outside of the PRC and consequently does not include them when evaluating the liquidity needs of its businesses operating outside of the PRC.

Timios holds various regulatory licenses related to its business as a title insurance agency and is required to hold a minimum cash balance of $2.0 million. As a broker-dealer, JUSTLY has minimum capital requirements. JUSTLY had cash of $0.2 million as of December 31, 2021, which was necessary for JUSTLY to meet its minimum capital requirements. The Company consolidates a 51.0% owned investment in an entity which is based in Singapore. This entity had cash of $0.4 million as of December 31, 2021. The agreement of the Company’s partner in this entity is required prior to disbursement of this entity’s funds for certain defined expenditures.

As of June 30, 2022, the Company’s principal source of liquidity is its unrestricted cash balance in the amount of $85.5 million of which $12.2 million is held by the Company’s subsidiaries located and China and is subject to foreign exchange control regulations and $2.2 million is minimum regulatory capital required to be held by US operating companies – we do not consider cash balances held in China or required minimum regulatory capital to be part of the Company’s liquid cash balances. The Company had negative cash flow from operating activities of $81.8 million for the six months ended June 30, 2022. The Company has experienced greater net losses and negative cash flows from operating and investing activities in the third quarter consistent with its business plan for ongoing activities and planned acquisitions. As of the date of the filing of this Form 10-K, securing additional financing is in progress, and as such management has limited the extent to which it is taking actions to delay, scale back, or abandon future expenditures. As such, management’s actions to preserve an adequate level of liquidity for a period extending twelve months from the date of the filing of this Form 10-K are no longer sufficient on their own without additional financing, to mitigate the conditions raising substantial doubt about the Company’s ability to continue as a going concern. We currently do not have adequate cash to meet our short or long-term needs. In the event additional capital is raised, it may have a dilutive effect on our existing stockholders.

We have short-term debt obligations of $58.1 million and lease obligations of $3.1 million which come due in the year ending December 31, 2021. We currently have no long-term debt obligations, and have lease obligations of $9.6 million which come due from the years ending December 31, 2022 through 2030.

The following table provides a summary of net cash flows from operating, investing and financing activities (in thousands):

	Year Ended		
	December 31, 2021	December 31, 2020	December 31, 2019
Net cash used in operating activities	$ (75,530)	$ (41,468)	$ (13,784)
Net cash used in investing activities	(220,089)	(3,500)	(1,794)
Net cash provided by financing activities	399,295	208,049	15,114
Effect of exchange rate changes on cash	423	50	(9)
Net increase/(decrease) in cash and cash equivalents	104,099	163,131	(473)
Total cash, cash equivalents and restricted cash at beginning of period	165,764	2,633	3,106
Cash and cash equivalents at end of period	$ 269,863	$ 165,764	$ 2,633

Operating Activities

Cash used in operating activities was $75.5 million for the year ended December 31, 2021 as compared to cash used in operating activities of $41.5 million in the year ended December 31, 2020. This was primarily due to (1) an increase in net loss from $111.6 million in the year ended December 31, 2020 to $256.7 million in the year ended December 31, 2021, (2) total non-cash adjustments to net loss were $190.8 million and $81.4 million for the years ended December 31, 2021 and 2020, respectively; and (3) total changes in operating assets and liabilities, net of acquisitions resulted in a decrease of $9.6 million and $11.3 million in cash used in operating activities for the years ended December 31, 2021 and 2020, respectively.

Cash used in operating activities increased by $27.7 million for the year ended December 31, 2020 compared to the year ended December 31, 2019, primarily due to (1) an increase in net loss from $96.8 million in the year ended December 31, 2019 to $111.6 million in the year ended December 31, 2020, (2) total non-cash adjustments to net loss was $81.4 million and $77.0 million for the years ended December 31, 2020 and 2019, respectively; and (3) total changes in operating assets and liabilities, net of acquisitions resulted in a decrease of $11.3 million and an increase of $6.1 million in cash used in operating activities for the years ended December 31, 2020 and 2019, respectively.

Investing Activities

Cash used in investing activities was $220.1 million for the year ended December 31, 2021, which was primarily due to expenditures incurred for the acquisitions of Timios, WAVE, Solectrac and US Hybrid, the investments in Energica, TM2, VIA, the MDI Fund and FNL, the acquisition of the convertible notes with Silk EV, VIA and InoBat, and partially offset by the proceeds from the disposal of Fintech Village. Cash used in investing activities was $3.5 million for the year ended December 31, 2020 primarily due to the investment to Solectrac. Cash used in investing activities was $1.8 million for the year ended December 31, 2019 primarily due to the payment of $1.8 million for Fintech Village.

Financing Activities

In the year ended December 31, 2021, the Company received $399.3 million from financing activities versus $208.0 million in the year ended December 31, 2020. For the year ended December 31, 2021, the Company received $196.8 million from the issuance of common stock and the exercise of stock options, $295.0 million from the issuance of convertible notes and made repayments of $88.8 million, including a $80.0 million convertible note and a $8.8 million redeemable non-controlling interest. For the year ended December 31, 2020, the Company received $191.4 million from the issuance of common stock and the exercise of warrants and options, $27.0 million from the issuance of convertible notes, $7.1 million from noncontrolling shareholders contribution and made repayments of $17.5 million, primarily of a $12.0 million convertible note and other borrowings. For the year ended December 31, 2019, the Company received $9.1 million from the issuance of convertible notes, and $2.8 million from the issuance of common stock.

The Company expects to continue to raise both equity and debt finance to support the Company’s investment plans and operations.

Off-Balance Sheet Arrangements

Off-balance sheet arrangements are obligations the Company has with nonconsolidated entities related to transactions, agreements or other contractual arrangements. The Company holds interests in investments accounted for under the equity method of accounting. The Company does not control these investments and therefore does not consolidate them.

We do not have other off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity or capital expenditures or capital resources that is material to an investor in our securities.

Seasonality

The Company expects that EV orders and sales will be influenced by the amount and timing of budgeted expenditure by its customers. Typically, the Company would expect to see higher sales at the start of the year when companies start executing on their capital programs and at the end of the year when companies are spending any surplus or uncommitted budget before the new budget cycle commences. The Company's EV businesses are in the early stage of their development and consequently do not have sufficient trading histories to project seasonal buying patterns with any degree of confidence. Revenues generated by the Company's Timios Title Agency business are impacted by the volume and timing of orders, typically the first quarter of the year shows a decline in revenues reflecting the lower orders in fourth quarter of the year due to the impact of holidays.

OUTLOOK

The Company has two distinct business units, Ideanomics Mobility and Ideanomics Capital. Each is focused on the growth opportunity, fueled by technological and legislative disruption, taking place in the automotive, energy, and financial services industries. Ideanomics Mobility has as its mission the acceleration of commercial adoption of electric vehicles. Ideanomics Capital focuses on providing a range of financing programs in support of the sale of EVs and associated charging and energy storage systems by Ideanomics Mobility. The Company believes these two business units provide an opportunity for the Company to benefit from the value creation that can be achieved in the short, medium, and long-term through establishing competitive products and services which can enable the capture of market share sufficient to sustain profitable operations.

IDEANOMICS MOBILITY

The Ideanomics Mobility business unit seeks to accelerate the commercial adoption of electric vehicles. The Company's EV and technology acquisitions during 2021completed the foundation for the development of four product-focused verticals comprised of off-highway, two-wheeler, on-highway, and energy and charging services. This integrated offering helps support business progress toward its mission of offering fleet operators a range of vehicles and associated charging systems through a single procurement partner.

By combining leading EV technologies, products, knowledge, and capabilities across the Company's four product verticals, Ideanomics anticipates that it will be able to rapidly develop unique zero emission mobility solutions in both the off-highway and on-highway commercial vehicle markets. These are anticipated to include the provision of commercial electric vans, trucks, and buses, electric tractors, and two-wheeled transportation, supported by the provision of energy services and infrastructure for the EV market consisting of charging systems, energy storage, energy generation, including hydrogen and solar, and associated data and management applications. These will be supported by financing programs which have been developed to enable commercial fleet operators to migrate away from gasoline and diesel-powered vehicles with minimal disruption to their business models and balance sheet. Together, these products and services will provide the Company with the capability to assist commercial fleet operators to transition with confidence to BEV and FCEV and meet their zero-emission objectives.

By choosing the integrated platform approach from Ideanomics Mobility, the commercial fleet operator will benefit from a single source solution that supports all aspects of the transition to EV, from early-stage requirements analysis, charging infrastructure specification and installation, vehicle procurement and deployment, training, vehicle- and charging-derived data management, operationalization management services, and financing.

To support the cost of transition from fossil fuels to BEV and FCEV, Ideanomics will offer fleet operators the complete financial and management support to confidently migrate from traditional CapEx models to an OpEx model, releasing capital to support traditional business growth and have the simplicity, predictability, and certainty of a monthly subscription which covers all aspects of EV fleet operations. These programs will also have the added advantage of providing Ideanomics with predictable recurring revenues. These Mobility-as-a-Service solutions are comprised of financing programs we refer to as VaaS and CaaS.

The Company anticipates that the shift from combustion engine vehicles to zero-emission vehicles is a complex process that most fleet operators do not have the expertise to manage. The Company anticipates that vendors selling a single product will be at a disadvantage compared to the Company's integrated offering. The Company believes this will create a unique opportunity for the Company to become a trusted partner, providing services to analyze and define a customer's needs, specifying and installing charging infrastructure, procuring and deploying vehicles, administering training, and operationalizing management services. In addition, the Company anticipates that its as-a-Service financing models will make it possible for more customers to transition to zero-emission vehicles as an operating expense rather than a large upfront capital expenditure.

At the operating business level, further investment is planned to support continuous technology and product development and the associated manufacturing and assembly expansion to support increasing demand and revenue achievement.

Global supply chain slowdowns and shipping constraints continue to present challenges at each of the operating companies within the Ideanomics Mobility business unit.

IDEANOMICS CAPITAL

Fintech continues to provide opportunities which could generate high rates of return through the deployment of technology to disrupt existing business models.

Ideanomics Capital provides a range of financing programs in support of the sale of EVs and associated charging and energy storage systems by Ideanomics Mobility. Some of these finance programs are disruptive, subscription-based, models which are new-to-market offerings designed to help commercial fleet operators absorb the cost of transitioning to EV by removing CapEx costs as a barrier to entry. The company anticipates continuing the provision of resources and expertise for the development of these financing programs, which will underpin sales and revenues of Ideanomics Mobility. We call these financing programs CaaS and VaaS, and MaaS when combined, and they form part of our Ideanomics Mobility offering to commercial fleet operators. Over time, it is Ideanomics intention to focus Ideanomics Capital as the financial services arm of Ideanomics Mobility and to divest its other fintech assets accordingly.

Environmental Matters

We are subject to various federal, state and local laws and regulations governing, among other things, hazardous materials, environmental contamination and the protection of the environment. We have made, and expect to make in the future, expenditures to comply with such laws and regulations, but cannot predict the full amount of such future expenditures. We may also incur fines and penalties from time to time associated with noncompliance with such laws and regulations.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires the Company’s management to make assumptions, estimates, and judgments that affect the amounts reported, including the notes thereto, and related disclosures of commitments and contingencies, if any. Company management has identified certain accounting policies that are significant to the preparation of its financial statements. These accounting policies are important for an understanding of the Company’s financial condition and results of operations. Critical accounting policies are those that are most important to the portrayal of its financial condition and results of operations and require management’s difficult, subjective, or complex judgment, often as a result of the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods. Certain accounting estimates are particularly sensitive because of their significance to financial statements and because of the possibility that future events affecting the estimate may differ significantly from management’s current judgments. Company management believes the following critical accounting policies involve the most significant estimates and judgments used in the preparation of its financial statements. Company management has reviewed the critical accounting policies and estimates with the Audit Committee of our Board of Directors.

Revenue Recognition

The Company recognizes revenue when its customer obtains control of the promised goods or services in an amount that reflects the consideration which the Company expects to receive in exchange for those goods or services. To determine the amount and timing of revenue recognition for the arrangements that the Company determines are within the scope of ASC 606, the Company performs the following five steps: (1) identify the contract(s) with the customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations in the contract, and (5) recognize revenue when (or as) the Company satisfies the respective performance obligations.

A performance obligation may be satisfied over time or at a point in time. Revenue from a performance obligation satisfied over time is generally evaluated by measuring our progress in satisfying the performance obligation as evidenced by the transfer of the goods or services to the customer. Revenue from a performance obligation satisfied at a point in time is recognized at the point in time when the customer obtains control over the promised good.

The amount of revenue recognized reflects the consideration we expect to be entitled to in exchange for the promised goods or services, or the transaction price. In determining the transaction price, we evaluate consideration promised in a contract that includes a variable amount, or variable consideration, and estimate the amount of consideration that is due to us. Variable consideration is included in the transaction price only to the extent that we believe it is probable that a significant reversal in the amount of revenue recognized will not occur.

Additionally, an analysis is performed in order to evaluate whether the Company is acting as a principal, in which case revenue is reported on a gross basis, or as an agent, in which case revenue is reported on a net basis. This analysis considers whether or not the Company obtains control of the specified goods or services before they are transferred to the customer, as well as other indicators such as the party primarily responsible for fulfillment, inventory risk, and discretion in establishing price.

EV and Related Revenue

The Company's EV contracts are typically with large enterprises and consequently are heavily negotiated as to the product(s) or service(s) to be provided; consequently, the accounting treatment for the reporting of revenues may vary materially between contracts including whether the revenue is reported on a gross or net basis.

For certain EV contracts recognized over time, the Company uses the cost-to-total cost method to recognize the revenue over the life of the contract. For EV contracts with revenue recognized over time, the revenue recognized is determined based upon the costs incurred as compared to the estimate of the total costs incurred.

For EV contracts recognized at a point in time, the Company recognizes revenue when control passes to the customer, which is generally based on shipping terms that address when title and risk and rewards pass to the customer. However, the Company also considers certain customer acceptance provisions as certain contracts with customers include installation, testing, certification or other acceptance provisions. In instances where contractual terms include a provision for customer acceptance, the Company considers whether it has previously demonstrated that the product meets objective criteria specified by either the seller or customer in assessing whether control has passed to the customer.

Contracts entered into with governmental agencies for services and products are analyzed in order to determine if they should be accounted for under a revenue recognition model pursuant to ASC 606 or a grant model under ASC 958. If accounted for pursuant to a grant model, the Company must determine if the grant is conditional or unconditional, and if conditional any barriers exist which must be overcome. If unconditional, the grant is recognized as revenue immediately, and if conditional, the grant is recognized as revenue as and when the barriers are overcome. The significant barrier to the current conditional grants are that the expenses incurred must meet the qualifications as established by the respective governmental agencies, so that the grant revenue is recognized as the qualified expenses are incurred.

Long-lived Assets

Long-lived assets, including property and equipment and intangible assets, excluding goodwill, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The evaluation is performed at the lowest level of identifiable cash flows independent of other assets. An impairment loss would be recognized when estimated undiscounted future cash flows generated from the assets are less than their carrying amount.

Factors which could result in the Company performing an impairment review include significant underperformance relative to historical or projected future operating results, significant changes in the manner of use of the assets or the strategy for our business, and significant negative industry or economic trends.

The assumptions and estimates used to determine future values and remaining useful lives of our intangible and other long-lived assets are complex and subjective. They can be affected by various factors, including external factors such as industry and economic trends, and internal factors such as changes in our business strategy and our forecasts for future expansion development.

As a result of the impairment analyses performed in the year ended December 31, 2021, the Company recorded impairment losses related to intangible assets of $21.6 million.

As a result of the impairment analyses performed in the year ended December 31, 2020, the Company recorded impairment losses related to land, asset retirement costs, influencer networks, a membership agreement, and a marketing and distribution agreement of $22.5 million.

As part of the impairment analyses discussed above in the year ended December 31, 2020, the Company also evaluated the remaining useful life of intangible assets, and determined that one intangible asset, IP, no longer had a useful life and recorded amortization expense of $2.1 million.

As a result of the impairment analyses performed in the year ended December 31, 2019, the Company recorded an impairment loss related to a secure mobile financial information, social and messaging platform of $5.7 million and recorded an impairment loss related to digital currency, GTB, of $61.1 million.

Accounting for Business Combinations

Our consolidated financial statements include the operations of acquired businesses subsequent to the closing of the transaction. We account for acquired businesses using the acquisition method of accounting, which requires, among other things, that assets acquired and liabilities assumed be recognized at their estimated fair values as of the acquisition date. Transaction costs are expensed as incurred.

Accounting for business combinations requires our management to make significant estimates and assumptions, especially at the acquisition date including the identification of and our estimates for intangible assets, contractual obligations assumed, restructuring liabilities, pre-acquisition contingencies and contingent consideration, where applicable. Although we believe the assumptions and estimates we have made have been reasonable and appropriate, they are based in part on historical experience and information obtained from our management of the acquired companies and are inherently uncertain.

When estimating fair value, depending on the nature and complexity of the asset or liability, we may use one or all of the following techniques:

- Income approach, which is based on the present value of a future stream of net cash flows;

- Market approach, which is based on market prices and other information from market transactions involving identical or comparable assets or liabilities; and

- Cost approach, which is based on the cost to acquire or construct comparable assets, less an allowance for functional and/or economic obsolescence.

Fair value methodologies depend on the following types of inputs:

- Quoted prices for identical assets or liabilities in active markets (Level 1 inputs);

- Quoted prices for similar assets or liabilities in active markets, or quoted prices for identical or similar assets or liabilities in markets that are not active, or inputs other than quoted prices that are directly or indirectly observable, or inputs that are derived principally from, or corroborated by, observable market data by correlation or other means (Level 2 inputs); and

- Unobservable inputs that reflect estimates and assumptions (Level 3 inputs).

The determination of fair value is extremely subjective and complex, and requires judgements concerning future events, including future cash flows, the appropriate discount factors and weighted average cost of capital, and market comparability, among other factors. Unanticipated events and circumstances may occur that may affect the accuracy or validity of such assumptions, estimates or actual results.

Goodwill

Goodwill represents the excess of cost over fair value of identifiable net assets acquired and liabilities assumed in a business combination. Application of goodwill impairment tests requires significant management judgment, including the identification of reporting units, assigning assets, liabilities and goodwill to reporting units and determination of fair value of each reporting unit. The Company performs goodwill impairment testing at the reporting unit level which is defined as the operating segment or one level below the operating segment. One level below the operating segment, or component, is a business for which discrete financial information is available and regularly reviewed by segment management. The Company tests goodwill for impairment annually, on October 1, or more frequently when events or changes in circumstances indicate it is more-likely-than-not that the fair value of a reporting unit has declined below its carrying amount. Goodwill is evaluated for impairment using qualitative and/or quantitative testing procedures.

The Company has the option to first perform qualitative testing to determine whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount. Judgment applied when performing the qualitative analysis includes consideration of macroeconomic, industry and market conditions, overall financial performance of the reporting unit, composition, personnel or strategy changes affecting the reporting unit and recoverability of asset groups within a reporting unit. If, after assessing the totality of events and circumstances, the Company determines it is not more-likely-than-not that the fair value of a reporting unit is greater than its carrying amount, then performing the quantitative impairment test is unnecessary. However, if the Company concludes otherwise, then it is required to perform the quantitative impairment test by calculating the fair value of the reporting unit and comparing the fair value of the reporting unit to its carrying amount.

The fair value of a reporting unit may be determined using externally quoted prices (if available), a discounted cash flow model, or a market approach. Judgments applied when performing the quantitative analysis includes estimating future cash flows, determining appropriate discount rates and making other assumptions. Changes in these judgments, estimates and assumptions could materially affect the determination of fair value for each reporting unit.

An impairment loss, if any, is recorded when the fair value of a reporting unit has declined below its carrying amount.

As a result of its goodwill impairment analyses performed in the year ended December 31, 2021 and 2020, the Company recorded goodwill impairment losses of $101.5 million and $18.1 million, respectively. The Company recorded no goodwill impairment losses in the year ended December 31, 2019.

Long-term Investments

The Company accounts for equity investments through which management exercises significant influence but does not have control over the investee under the equity method. Under the equity method, the investment is initially recorded at cost and adjusted for the Company’s share of undistributed earnings or losses of the investee. The Company’s share of losses is not recognized when the investment is reduced to zero unless the Company guarantees the investees’ obligations or the Company has committed to providing additional funding.

The equity investments which are not consolidated or accounted for under the equity method are either carried at fair value or under the measurement alternative upon the adoption of the ASU No. 2016-01.

The Company utilizes the measurement alternative for equity investments that do not have readily determinable fair values and measures these investments at cost less impairment plus or minus observable price changes in orderly transactions for an identical or similar investment of the same issuer.

Management periodically reviews long-term investments for impairment whenever events or changes in business circumstances indicate that the carrying amount of the investment may not be fully recoverable. Management considers impairment indicators such as negative changes in industry and market conditions, financial performance, business prospects, and other relevant events and factors. If indicators exist, further analysis must be performed in order to determine if the impairment, if any, is other-than-temporary. If the impairment is deemed to be other-than-temporary, the fair value of the investment must be determined. In the absence of quoted market prices, management must use judgement to determine the fair value of the investment, considering such factors as current economic and market conditions, the operating performance of the entities, including current earnings trends and forecasted cash flows, and other company and industry specific information. If the fair value of the investment is below the carrying amount, an impairment loss is recorded to record the investment at fair value.

The Company recorded impairment losses of $4.5 million, $0.2 million and $3.0 million in the years ended December 31, 2021, 2020 and 2019, respectively, for equity investments accounted for under the measurement alternative, and recorded impairment losses of $7.9, $16.6 million and $13.1 million in the years ended December 31, 2021, 2020 and 2019, respectively, for investments accounted for as equity method investments.

Inventory

The valuation of inventory requires us to estimate obsolete or excess inventory. as well as inventory that is not of saleable quality. The determination of obsolete or excess inventory requires us to estimate the future demand for our products. The estimate of future demand is compared to work-in-process and finished goods inventory levels to determine the amount, if any, of obsolete or excess inventory. As of December 31, 2021, we had total work-in-process inventory of $0.1 million, raw materials inventory of $0.2 million and total finished goods inventory of $5.8 million. The demand forecast is included in the development of our short-term manufacturing plans to enable consistency between inventory valuation and inventory decisions. Product-specific facts and circumstances reviewed in the inventory valuation process include a review of the customer base, the stage of the product life cycle of our products, consumer confidence, and customer acceptance of our products, as well as an assessment of the selling price in relation to the product cost. If our demand forecast for specific products is greater than actual demand and we fail to reduce manufacturing output accordingly, we could be required to write off inventory, which would negatively impact our gross margin.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance on deferred tax assets is established when management considers it is more likely than not that some portion or all of the deferred tax assets will not be realized.

Tax benefits from an uncertain tax position are only recognized if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate resolution. Interest and penalties related to unrecognized tax benefits are recorded as incurred as a component of income tax expense. The Company has not recognized any tax benefits from uncertain tax positions for any of the reporting periods presented.

Taxes based on gross revenue rather than on net income are not considered CIT and are instead included in selling, general and administrative expense in the statement of operations.

The Company files federal and state income tax returns. These returns remain subject to examination by taxing authorities for all years after December 31, 2018.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

The Company had $57.8 million of fixed rate 4.0% convertible debt outstanding as of December 31, 2021. These debt obligations are not currently subject to fluctuations in interest rates, although in the event of issuance of new debt, such debt could be subject to changes in interest rates.

Market Risk

We have had investments in debt securities classified as available-for-sale securities, and which were recorded at fair value. The fair value of the debt securities was $0 as of December 31, 2021. There were no such investments as of December 31, 2020. In the year ended December 31, 2021, we recorded impairment losses of $15.8 million related to these investments.

We also have investments in equity securities, certain of which are publicly-traded, and which had carrying amounts of $35.6 million and $8.5 million as of December 31, 2021 and 2020, respectively. These include shares of common stock of Energica, which are publicly traded in Italy, and at December 31, 2021 had a carrying amount of $12.3 million and a fair value of $21.8 million. The remainder of the equity investments are not publicly traded.

We have recorded impairment losses related to cost method equity investments of $1.5 million, $0.2 million, and $3.0 million in the years ended December 31, 2021, 2020, and 2019, respectively. We have recorded impairment losses related to equity method investments of $7.9 million, $16.7 million, and $13.1 million in the years ended December 31, 2021, 2020, and 2019, respectively.

Our investments in debt and equity securities are generally not in companies which are publicly traded, and the market for these securities may be illiquid. Furthermore, many of the companies in which we invest may have a business model which is embryonic or developmental in nature and may not come to fruition.

Investments in debt and equity securities carry a degree of risk, as there can be no assurance that the securities will be collectible or otherwise recoverable, will not lose value and, in general, securities markets can be volatile and unpredictable. As a result of these different market risks, our holdings of these securities could be materially and adversely affected.

Foreign Currency Risk

We are exposed to risks associated with changes in foreign exchange rates. Changes in foreign exchange rates create volatility in the U.S. Dollar equivalent of our revenues and expenses. While results of our China operations, as measured in U.S. Dollars, are subject to foreign exchange fluctuations, we do not consider the related risk to be material to our results of operations. While our exposure to foreign exchange risk is not currently material to us, we expect to grow our international revenues in the future, and any future potential exposure to foreign exchange fluctuations may present a material risk to our business. We recorded foreign currency exchange (gains) losses of $0.2 million, $(0.1) million, and $0.1 million in the years ended December 31, 2021, 2020 and 2019, respectively.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

IDEANOMICS, INC.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the shareholders and the board of directors of Ideanomics, Inc.

Opinions on the Financial Statements

We have audited the accompanying consolidated balance sheet of Ideanomics, Inc. and Subsidiaries (the “Company”), as of December 31, 2021, the related consolidated statements of operations, comprehensive loss, changes in stockholders’ equity and cash flows for the year then ended, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and the results of its operations and its cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2021, based on the criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 2013 and our report dated September 2, 2022, expressed an adverse opinion on the effectiveness of the Company’s internal control over financial reporting because of the existence of material weaknesses.

Substantial Doubt Regarding the Company’s Ability to Continue as a Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has suffered recurring losses from operations, has an accumulated deficit and does not believe that its current level of cash and cash equivalents is sufficient to fund continuing operations or the addition of the two planned acquisitions in various stages of completion. These factors raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Business Combinations

Critical Audit Matter Description

As described in Note 8 to the consolidated financial statements, the Company acquired Timios, WAVE, US Hybrid and Solectrac during 2021. Each of these acquisitions was accounted for as a business combination. We identified the evaluation of the acquisition date fair value of intangible assets acquired and goodwill as a critical audit matter.

The principal consideration for our determination that the evaluation of the acquisition date fair values of the intangible assets acquired and goodwill was a critical audit matter is the high degree of subjective auditor judgment associated with evaluating management's determination of the fair values of the acquired intangible assets and goodwill, which is primarily due to the complexity of the valuation models used and the sensitivity of the underlying significant assumptions. The key assumptions used within the valuation models included prospective financial information, including future revenue growth and an applied discount rate. The calculated fair values are sensitive to changes in these key assumptions.

How the Critical Audit Matter was addressed in the Audit

Our audit procedures related to the evaluation of acquisition date fair values of the intangible assets acquired and goodwill included the following, among others:

a. We evaluated the design and operating effectiveness of certain controls over the acquisition-date valuation process, including controls over the development of the key assumptions such as the revenue growth and the applied discount rate.

b. We read and reviewed the executed stock purchase or merger agreements to assess the reasonableness and completeness of assets identified in the purchase price allocation.

c. We vouched cash amounts paid and stock tendered to source documentation to validate purchase price. We also evaluated valuation of contingent consideration in evaluating purchase price.

d. We obtained the purchase price allocation analyses from management and the third-party specialists engaged by management.

e. We assessed the qualifications and competence of management and the qualifications, competence and objectivity of third-party specialist.

f. We evaluated the methodologies used to determine the fair values of the intangible assets and goodwill.

g. We tested the assumptions used within the discounted cash flow models to estimate the fair values of the intangible assets, which included key assumptions such as the future revenue growth and the applied discount rate.

h. We assessed the reasonableness of management's forecast by inquiring with management to understand how the forecasts were developed and comparing the projections to historical results and economic conditions.

i. We involved an internal valuation specialist who assisted in the evaluation and testing performed of the reasonableness of significant methods and assumptions to the models, including the applied discount rate.

j. We assessed the sufficiency of Company's disclosure of its accounting for these acquisitions included in Note 8 .

<u>Impairment assessment of intangible assets and goodwill</u>

Critical Audit Matter Description

As described in Notes 3 and 11 to the consolidated financial statements, the Company performs an annual impairment assessment of its indefinite-lived intangible assets and goodwill, or more frequently if events or circumstances indicate that the carrying values exceeds its fair value. The Company reviews other intangible assets with estimable lives for impairment whenever indicators are present that the carrying value may not be recoverable. During 2021, the Company recorded impairments of $101.5 million and $50.6 million of goodwill and intangible assets, respectively. The carrying value, after impairment, of goodwill and intangibles was $16.2 million and $42.5 million, respectively, as of December 31, 2021.

Auditing the valuation of intangible assets and goodwill involved complex judgment due to subjective evaluation of indicators and significant estimation required in determining the recoverability or fair value of the intangible assets and goodwill. Specifically, the cash flow forecasts were sensitive to significant assumptions about future market and economic conditions. Significant assumptions used in the Company's estimates included sales volume, growth rates, gross profits, operating expenditures, tax rates, and discount rate, as applicable.

How the Critical Audit Matter was addressed in the Audit

Our audit procedures related to the evaluation of the intangible assets and goodwill for impairment included the following, among others:

a. We evaluated the design and operating effectiveness of certain controls over the Company's annual impairment assessments of intangible assets and goodwill.

b. We evaluated management's assessment in qualitive factors relating to the intangible assets and goodwill valuation, by searching online for information including economic growth forecast, industry outlook, and business environment, as well as accumulating our understanding of the Company's reporting units' performance.

c. With respect to the Company's valuation of intangible assets and goodwill as a result of impairment indicators identified:

   i. We tested the estimated future cash flows, including but not limited to, comparing significant inputs to observable third party and industrial sources, comparing to the historical performance of the Company, and evaluating the reasonableness of management's projected financial information by comparing to observable economic conditions and other internal and external data.

   ii. We performed sensitivity analyses of significant assumptions to evaluate the reasonableness of the Company's cash flow forecasts.

   iii. We assessed the qualifications and competence of management and the qualifications, competence and objectivity of third-party specialist whom prepared the valuation analyses.

   iv. We evaluated the methodologies used to determine the fair values of the impaired intangible assets and goodwill.

   v. We assessed the reasonableness of management's forecast by inquiring with management to understand how the forecasts were developed and comparing the projections to historical results and external sources including industry trends and peer companies' historical data.

   vi. We involved an internal valuation specialist who assisted in the evaluation and testing performed of the reasonableness of significant methods and assumptions to the models, including the applied discount rate.

d. We assessed the Company's disclosure of its impairment assessments included in Note 3 as well as the sufficiency of footnote disclosure of impairment assessment of intangible assets and goodwill in Note 11.

Grassi & Co., CPAs, P.C.

We have served as the Company's auditor since 2022.

Jericho, NY

September 2, 2022

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM
ON INTERNAL CONTROL OVER FINANCIAL REPORTING

To the Shareholders and Board of Directors of Ideanomics, Inc.

Adverse Opinion on Internal Control over Financial Reporting

We have audited Ideanomics, Inc. and Subsidiaries (the "Company") internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, because of the effect of the material weaknesses described in the following paragraph on the achievement of the objectives of the control criteria, the Company has not maintained effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

A material weakness is a control deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis. The following material weaknesses have been identified and included in “Management's Annual Report on Internal Control Over Financial Reporting”:

a. The design and implementation of internal controls over the review of management’s inputs into valuation models and associated valuation outputs from third party valuation specialists.
b. The design and implementation of internal controls over the revenue recognition process, specifically the failure to properly evaluate whether the Company was to be considered the principal or the agent in contracts with customers.
c. There is a lack of sufficient personnel in accounting and financial reporting functions with sufficient experience and expertise with respect to the application of U.S. GAAP and SEC disclosure requirements.
d. Operating effectiveness of internal controls to identify and evaluate the accounting implications of non-routine transactions.
e. There is a lack of controls designed to address risk of material misstatement for various financial statement areas and related assertions.
f. There is a lack of validation of completeness and accuracy of internally prepared data, including key reports generated from systems, utilized in the operations of controls.
g. There is a lack of evidence to support the effective review in the operations of controls.
h. There is a lack of controls at the entity level, particularly over the review of subsidiary financial information, including analysis of balance sheet data, operating results, non-routine transactions, litigation accruals and income tax matters.
i. Controls are not designed with a sufficient level of precision to prevent or detect a material misstatement.
j. An inventory of service organizations utilized to process transactions was not maintained throughout the reporting period. There is a lack of review over service organization reports. In instances in which service organization reports are not available, the Company does not have adequate complementary controls.

k. There is a lack of segregation of duties that exists in the information technology environments and payroll and procure to pay cycles at the Company.
l. There is a lack of documented compliance related to controls to evaluate potential risk of dealing with inappropriate vendors and/or customers.
m. The Company’s information technology general controls over certain information technology systems were not designed properly and therefore did not operate effectively.
n. There is lack of document compliance -related controls to evaluate transactions in accordance with the Foreign Corrupt Practices Act (“FCPA”)
o. There is ineffective oversight from the Company’s Audit Committee.

These material weaknesses were considered in determining the nature, timing and extent of audit tests applied in our audit of the 2021 consolidated financial statements, and this report does not affect our report dated September 2, 2022 on those financial statements.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the consolidated balance sheet as of December 31, 2021 and the related consolidated statements of operations, comprehensive loss, changes in shareholders’ equity, and cash flows for the year then ended of the Company and our report dated September 2, 2022 expressed an unqualified opinion on those financial statements**.**

Explanatory Paragraph – Excluded Subsidiaries

As described in “Management Annual Report on Internal Control Over Financial Reporting,” management has excluded its wholly-owned subsidiaries, Timios, Wave, US Hybrid and Solectrac, from its assessment of internal control over financial reporting as of December 31, 2021 because these entities were acquired by the Company in a purchase business combinations during 2021. We have also excluded Timios, WAVE, US Hybrid and Solectrac from our audit of internal control over financial reporting. As of and for the year ended December 31, 2021, Timios represented 8.6% of total assets and 63.7% of revenue, WAVE represented 2.1% of total assets and 6.1% of revenue, US Hybrid represented 2.2% of total assets and 2.3% of revenue, and Solectrac represented 2.3% of total assets and 1.5% of revenue.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying "Management Annual Report on Internal Control Over Financial Reporting." Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that degree of compliance with the policies or procedures may deteriorate.

Grassi & Co., CPAs, P.C.

Jericho, NY

September 2, 2022

Report of Independent Registered Public Accounting Firm

That To the shareholders and the board of directors of Ideanomics, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Ideanomics Inc. (the "Company") as of December 31, 2020 and 2019, and the related consolidated statements of operations, comprehensive loss, equity, and cash flows for each of the two years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019 and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

We also have audited the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control – Integrated Framework (2013) issued by COSO.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

The Company’s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting as of December 31, 2020. As part of our audit, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion as of December 31, 2020.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit of internal control over financial reporting also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Valuation of Accounts Receivable

As described in Note 2 to the financial statements, the Company reviews its allowance for doubtful accounts receivable on an ongoing basis. In establishing the required allowance, management considers any historical losses, the customer's financial condition, the accounts receivable aging, and the customer's payment patterns. The Company has $7.4 million of accounts receivable carrying value as of December 31, 2020.

The principal considerations for our determination that auditing management's assessment of allowance for doubtful accounts is a critical audit matter are there was significant judgment made by management when considering factors in management's assessment on collectability of the accounts receivables as described above, as well as the likelihood of the occurrence of these factors impacting the collectability. In turn, such management's assessment led to challenging and subjective auditor judgment in performing our audit procedures.

Our audit procedures included, among others, understanding of controls relating to management assessment of accounts receivable allowance, interviewing client account managers, examining transaction-related documents, testing historical collections for estimation accuracy, and reviewing collections subsequent to the balance sheet date. Our procedures also included confirming balances with clients, searching public information for the operating and financial conditions of the clients, and interviewing the business contacts of the Company. Our audit procedures also included testing their adequacy of footnote disclosures.

Impairment assessment of intangible assets and goodwill

As described in Note 2 to the financial statements, the Company performs an annual impairment assessment of its indefinite-lived intangible assets and goodwill, or more frequently if events or circumstances indicate that the carrying values exceeds its fair value. The Company reviews other intangible assets with estimable lives for impairment whenever indicators are present that the carrying value may not recoverable. These intangible assets and goodwill have carrying value of $29.7 million and $1.2 million as of December 31, 2020, respectively.

Auditing the valuation of intangible assets and goodwill involved complex judgment due to subjective evaluation of indicators and significant estimation required in determining the recoverability or fair value of the intangible assets and goodwill. Specifically, the cash flow forecasts were sensitive to significant assumptions about future market and economic conditions. Significant assumptions used in the Company's estimates included sales volume, growth rates, gross profits, operating expenditures, tax rates, and discount rate, as applicable.

We obtained an understanding of the controls over the Company's annual impairment assessments of intangible assets and goodwill. We compared, by searching online information, management's assessment in qualitative factors, to public information including economic growth forecast, industry outlook, and business environment, relating to the intangible assets and goodwill. We also tested the estimated future cash flows, including but not limited to, comparing significant inputs to observable third party and industrial sources, comparing to the historical performance of the Company, and evaluating the reasonableness of management's projected financial information by comparing to observable average industry historical trends and projections, and other internal and external data. For certain intangible asset with comparable current market value such of land use rights, we looked for nearby areas for their market value and price trending of similar lands. We performed sensitivity analyses of significant assumptions to evaluate the reasonableness of the Company's cash flow forecasts. We assessed the Company's disclosure of its impairment assessments included in Note 2 as well as the sufficiency of footnote disclosure of impairment assessment of intangible assets and goodwill in Note 9.

Fair value measurement of acquisition contingent consideration

As described in the Note 2 to the financial statements, accounting for business combinations requires management to make significant estimates and assumptions, especially at the acquisition date including the identification of and estimates for intangible assets, contractual obligations assumed, restructuring liabilities, pre-acquisition contingencies and contingent consideration, where applicable. The Company recognized $5.5 million of remeasurement gain for the year ended December 31, 2020.

Auditing the fair value of contingent liabilities, or earn-out liabilities, relating to business combination involved complex judgment due to subjective evaluation of indicators and significant estimation required in determining the fair value of the liabilities. Specifically, the discounted cash flow forecasts commonly used in the valuation were sensitive to significant assumptions about future market and economic conditions. Significant assumptions used in the Company's estimates included sales volume, growth rates, gross profits, operating expenditures, tax rates, and discount rate, as applicable.

We obtained an understanding of the controls over the Company's financial reporting process for business acquisitions. We tested the estimated future cash flows, including but not limited to, comparing significant inputs to observable third party and industrial sources, and evaluating the reasonableness of management's projected financial information by comparing to observable average industry historical trends and projections, and other internal and external data. We performed sensitivity analyses of significant assumptions to evaluate the reasonableness of management's cash flow analyses of the fair value of the liabilities. We then agreed the Company's conclusion to the relevant terms of contingent consideration in the business acquisition agreements. We assessed the Company's disclosure of its business combination accounting policies and fair value measurement included in Note 2 as well as the sufficiency of footnote disclosures to the changes in contingent consideration in Note 23.

/S BF Borgers CPA PC
BF Borgers CPA PC
PCAOB ID 5041
We served as the Company's auditor from 2018 to 2021
Lakewood, CO
March 31, 2021

IDEANOMICS, INC. CONSOLIDATED BALANCE SHEETS (USD in thousands)

As of December 31,	2021	2020
ASSETS		
Current assets:		
Cash and cash equivalents	$ 269,863	$ 165,764
Accounts receivable, net	3,338	7,400
Contract assets	2,772	—
Amount due from related parties	266	240
Notes receivable from third parties	54,907	—
Notes receivable from related party	697	—
Inventory	6,159	—
Prepaid expenses	20,015	2,629
Other current assets	4,490	3,726
Total current assets	**362,507**	**179,759**
Property and equipment, net	2,905	330
Fintech Village	—	7,250
Intangible assets, net	42,546	29,705
Goodwill	16,161	705
Operating lease right of use assets	12,827	155
Long-term investments	35,588	8,487
Other non-current assets	903	7,478
Total assets	**$ 473,437**	**$ 233,869**
LIABILITIES, CONVERTIBLE REDEEMABLE PREFERRED STOCK , REDEMABLE NON-CONTROLLING INTEREST AND EQUITY		
Current liabilities		
Accounts payable	$ 6,674	$ 5,057
Deferred revenue (including customer deposits of $3,163 and $31 as of December 31, 2021 and 2020, respectively)	5,392	1,129
Accrued salaries	8,957	1,750
Amount due to related parties	1,102	882
Other current liabilities	7,137	2,235
Current portion of operating lease liabilities	3,086	115
Current contingent consideration	648	1,325
Promissory note-short term	312	568
Convertible promissory note due to third-parties	57,809	—
Total current liabilities	**91,117**	**13,061**
Operating lease liability-long term	9,647	19
Non-current contingent liabilities	350	7,635
Deferred tax liabilities	5,073	5,045
Other long-term liabilities	620	7,275
Asset retirement obligations	—	4,653
Total liabilities	**106,807**	**37,688**
Commitments and contingencies (Note 21)		
Convertible redeemable preferred stock and Redeemable non-controlling interest:		
Series A - 7,000,000 shares issued and outstanding, liquidation and deemed liquidation preference of $3,500,000 as of December 31, 2021 and 2020, respectively	1,262	1,262
Redeemable non-controlling interest	—	7,485
Equity:		
Common stock - $0.001 par value; 1,500,000,000 shares authorized, 497,272,525 and 344,861,295 shares issued and outstanding as of December 31, 2021 and 2020, respectively	497	345
Additional paid-in capital	968,066	531,866
Accumulated deficit	(605,758)	(349,747)
Accumulated other comprehensive loss	222	1,231
Total Ideanomics, Inc. shareholder's equity	**363,027**	**183,695**
Non-controlling interest	2,341	3,739
Total equity	**365,368**	**187,434**
Total liabilities, convertible redeemable preferred stock, redeemable non-controlling interest and equity	**$ 473,437**	**$ 233,869**

The accompanying notes are an integral part of these consolidated financial statements.

IDEANOMICS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS (USD in thousands, except per share data)

For the years ended December 31,	2021	2020	2019
Revenue from sales of products (including from a related party of $1, $10 and $0 for the years ended December 31, 2021, 2020 and 2019, respectively)	$ 37,009	$ 25,128	$ —
Revenue from sales of services (including from a related party of $0, $0 and $43,271 for the years ended December 31, 2021, 2020 and 2019, respectively)	75,766	1,631	44,566
Other revenue	1,305	—	—
Total revenue	114,080	26,759	44,566
Cost of revenue from sales of products (including from a related party of $36, $13 and $0 for the years ended December 30, 2021, 2020 and 2019, respectively)	37,845	23,644	—
Cost of revenue from sales of services (including from a related party of $0, $0 and $467 for the years ended December 30, 2021, 2020 and 2019, respectively)	51,562	1,058	1,458
Cost of other revenue	1,445	—	—
Total cost of revenue	90,852	24,702	1,458
Gross profit	**23,228**	**2,057**	**43,108**
Operating expenses:			
Selling, general and administrative expenses	72,825	32,399	24,862
Research and development expense	760	1,635	—
Professional fees	34,710	12,541	5,828
Asset impairments	71,070	33,230	73,669
Goodwill impairments	101,470	18,089	—
Change in fair value of contingent consideration, net	(9,600)	(5,503)	5,094
Litigation settlements	5,432	—	—
Depreciation and amortization	6,118	5,310	2,229
Total operating expenses	**282,785**	**97,701**	**111,682**
Loss from operations	**(259,557)**	**(95,644)**	**(68,574)**
Interest and other income (expense):			
Interest income	1,502	108	68
Interest expense	(2,139)	(16,078)	(5,684)
Expense due to conversion of notes	—	(2,266)	—
Gain (loss) on extinguishment of debt	300	8,891	(3,940)
(Loss) gain on disposal of subsidiaries, net	(1,264)	276	(952)
Gain (loss) on remeasurement of investment	2,915	—	(3,179)
Other income (expense), net	1,261	6,604	(433)
Loss before income taxes and non-controlling interest	**(256,982)**	**(98,109)**	**(82,694)**
Income tax benefit (expense)	11,786	3,308	(417)
Impairment of and equity in loss of equity method investees	(11,529)	(16,780)	(13,718)
Net loss	**(256,725)**	**(111,581)**	**(96,829)**
Deemed dividend related to warrant repricing	—	(184)	(827)
Net loss attributable to common shareholders	**(256,725)**	**(111,765)**	**(97,656)**
Net (income) loss attributable to non-controlling interest	714	10,501	(852)
Net loss attributable to Ideanomics, Inc. common shareholders	**$ (256,011)**	**$ (101,264)**	**$ (98,508)**
Basic and diluted loss per share	**$ (0.57)**	**$ (0.47)**	**$ (0.82)**
Weighted average shares outstanding:			
Basic and diluted	**447,829,204**	**213,490,535**	**119,766,859**

The accompanying notes are an integral part of these consolidated financial statements.

IDEANOMICS, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS (USD in thousands)

For the years ended December 31,	2021	2020	2019
Net loss	**$ (256,725)**	**$ (111,581)**	**$ (96,829)**
Other comprehensive loss, net of nil tax			
Foreign currency translation adjustments	(1,385)	3,158	407
Comprehensive loss	**(258,110)**	**(108,423)**	**(96,422)**
Deemed dividend related to warrant repricing	—	(184)	(827)
Comprehensive loss attributable to non-controlling interest	2,020	9,238	(844)
Comprehensive loss attributable to Ideanomics, Inc. common shareholders	**$ (256,090)**	**$ (99,369)**	**$ (98,093)**

The accompanying notes are an integral part of these consolidated financial statements.

IDEANOMICS, INC.
CONSOLIDATED STATEMENTS OF EQUITY
For the years ended December 31, 2021, 2020 and 2019 (USD in thousands, except per share data)

	Common Stock	Par Value	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Ideanomics Shareholders' equity	Non-controlling Interest*	Total Equity
Balance, December 31, 2018	**102,766,006**	**$ 103**	**$ 195,780**	**$ (149,975)**	**$ (1,665)**	**$ 44,243**	**$ (1,031)**	**$ 43,212**
Share-based compensation	—	—	9,113	—	—	9,113	—	9,113
Common stock issued under employee stock incentive plan	129,840	—	—	—	—	—	—	—
Common stock issuance for acquisitions, investments, and assets	37,966,908	38	53,183	—	—	53,221	24,598	77,819
Common stock issuance for convertible notes	8,186,890	8	22,997	—	—	23,005	—	23,005
Disposal of subsidiary	—	—	1,374	—	586	1,960	446	2,406
Non-controlling shareholder contribution	575,431	1	(1)	—	—	—	321	321
Common stocked issued to settle debt	67,878	—	110	—	—	110	—	110
Net loss**	—	—	—	(98,508)	—	(98,508)	852	(97,656)
Foreign currency translation adjustments, net of nil tax	—	—	—		415	415	(8)	407
Balance, December 31, 2019	**149,692,953**	**150**	**282,556**	**(248,483)**	**(664)**	**33,559**	**25,178**	**58,737**
Share-based compensation	—	—	11,972	—	—	11,972	—	11,972
Common stock issuance for professional fees	1,804,033	2	1,640	—	—	1,642	—	1,642
Common stock issuance for convertible notes	40,662,420	40	45,626	—	—	45,666	—	45,666
Common stock issuance for acquisitions, investments, and assets	13,056,055	13	8,179	—	—	8,192	—	8,192
Common stock issuance for warrant exercise	8,995,906	9	7,206	—	—	7,215	—	7,215
Measurement period adjustment	—	—	—	—	—	—	(11,584)	(11,584)
Non-controlling shareholder contribution	—	—	—	—	—	—	100	100
Common stock issued to settle debt	4,577,876	5	2,309	—	—	2,314	—	2,314
Common stock issued under employee stock incentive plan	2,634,666	3	1,723	—	—	1,726	—	1,726
Extinguishment of convertible note	—	—	(12,000)	—	—	(12,000)	—	(12,000)
Common stock issuance	123,437,386	123	182,655	—	—	182,778	(280)	182,498
Net loss**	—	—	—	(101,264)	—	(101,264)	(10,938)	(112,202)
Foreign currency translation adjustments, net of nil tax	—	—	—	—	1,895	1,895	1,263	3,158
Balance, December 31, 2020	**344,861,295**	**345**	**531,866**	**(349,747)**	**1,231**	**183,695**	**3,739**	**187,434**
Share-based compensation	—	—	21,982	—	—	21,982	—	21,982
Contingent shares	—	—	1,520	—	—	1,520	—	1,520
Common stock issuance for acquisition	18,926,413	19	59,789	—	—	59,808	—	59,808
Common stock issuance for professional fees	962,689	—	2,318	—	—	2,318	—	2,318
Common stock issued under employee stock incentive plan	10,559,084	11	8,279	—	—	8,290	—	8,290
Common stock issuance for convertible note	55,278,885	55	157,711	—	—	157,766	—	157,766
Common stock issuance	68,293,722	69	188,477	—	—	188,546	—	188,546
Non-controlling shareholder contribution	—	—	—	—	—	—	157	157
Tax withholding paid for net share settlement of equity awards	(1,609,563)	(2)	(3,876)	—	—	(3,878)	—	(3,878)
Net loss	—	—	—	(256,011)	—	(256,011)	(1,179)	(257,190)
Foreign currency translation adjustments, net of nil tax	—	—	—	—	(1,009)	(1,009)	(376)	(1,385)
Balance, December 31, 2021	**497,272,525**	**$ 497**	**$ 968,066**	**$ (605,758)**	**$ 222**	**$ 363,027**	**$ 2,341**	**$ 365,368**

* Excludes accretion of dividend for redeemable non-controlling interest
** Excludes deemed dividend related to warrant repricing

The accompanying notes are an integral part of these consolidated financial statements.

IDEANOMICS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS (USD in thousands)

For the years ended December 31,	2021	2020	2019
Cash flows from operating activities:			
Net loss	$ (256,725)	$ (111,581)	$ (96,829)
Adjustments to reconcile net loss to net cash used in operating activities			
Share-based compensation expense	21,982	11,972	9,113
Depreciation and amortization	6,118	5,310	2,229
Obsolescence of inventory	856	—	—
Noncash lease expense	1,556	—	—
Non-cash interest expense (income)	(873)	14,785	5,511
Allowance for doubtful accounts	362	1,219	—
Bad debt expense	—	1,643	—
Income tax benefit	(12,011)	(3,308)	—
Issuance of common stock and warrants for professional fees	1,430	—	—
Expense due to conversion of notes	—	2,266	—
Other income (forgiveness of liabilities)	(1,198)	—	—
Change in fair value of contingent consideration, net	(9,600)	(5,503)	5,094
(Gain) loss on extinguishment of debt	(300)	(8,891)	3,940
Impairment of and equity in losses of equity method investees	11,529	16,780	13,718
Settlement of ROU operating lease liabilities	—	(5,926)	—
Impairment losses	172,540	51,319	73,669
(Gain) loss on disposal of subsidiaries, net	1,323	(276)	952
(Gain) loss on remeasurement of investment	(2,915)	—	3,179
Digital tokens received as payment for services	—	—	(40,700)
Disposal of equity method investments	—	—	245
Change in assets and liabilities, net of acquisitions:			
Accounts receivable	5,941	(6,214)	(2,278)
Inventory	(4,418)	—	—
Prepaid expenses and other assets	(13,089)	(6,745)	2,881
Accounts payable	(1,577)	2,206	2,862
Deferred revenue	2,188	652	168
Amount due to related parties (interest)	665	1,269	(1,256)
Accrued expenses, salary and other current liabilities	686	(2,445)	3,718
Net cash used in operating activities	**(75,530)**	**(41,468)**	**(13,784)**
Cash flows from investing activities:			
Acquisition of property and equipment	(2,807)	(191)	(1,816)
Acquisition of intangible assets	(3,712)	—	—
Disposal of subsidiaries, net of cash disposed	2,495	—	645
Acquisition of subsidiaries, net of cash acquired	(100,859)	—	(623)
Investment in debt securities	(70,047)	—	—
Investments in long-term investment	(44,941)	(2,850)	—
Loans to third-parties	—	(1,988)	—
Loans to related-party	(691)	—	—
Proceeds from loan repayment	473	1,529	—
Net cash used in investing activities	**(220,089)**	**(3,500)**	**(1,794)**
Cash flows from financing activities			
Proceeds from issuance of convertible notes	295,000	27,000	9,132
Repayment of convertible notes	(80,000)	(12,000)	—
Proceeds from exercise of options and warrants and issuance of common stock	196,835	191,440	2,821
Proceeds from noncontrolling interest shareholder	157	7,148	—
Repayment of redeemable noncontrolling interest	(8,820)	—	—
Tax withholding paid for net share settlement of equity awards	(3,877)	—	—
Proceeds (repayments) due from/to related parties	—	(2,999)	3,161
Borrowings (repayments) from/to third parties	—	(2,540)	—
Net cash provided by financing activities	**399,295**	**208,049**	**15,114**
Effect of exchange rate changes on cash	423	50	(9)
Net increase (decrease) in cash, cash equivalents and restricted cash	**104,099**	**163,131**	**(473)**
Cash, cash equivalents and restricted cash at the beginning of the year	**165,764**	**2,633**	**3,106**
Cash, cash equivalents and restricted cash at the end of the year	**$ 269,863**	**$ 165,764**	**$ 2,633**
Supplemental disclosure of cash flow information:			
Cash paid for income tax	$ 1,410	$ —	$ —
Cash paid for interest	1,516	3,004	73
Issuance of shares for contingent consideration	—	8,192	—
Issuance of shares for convertible notes conversion	157,766	45,114	—
Tree Technologies measurement period adjustment to goodwill, non-controlling interest and intangible assets	—	12,848	—
Disposal of assets in exchange of GTB	—	—	20,219
Issuance of shares for acquisition of intangible assets	—	—	10,005
Issuance of shares for acquisition of long-term investments	59,808	—	40,715

The accompanying notes are an integral part of these consolidated financial statements.

IDEANOMICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Organization and Principal Activities

Ideanomics, Inc. (Nasdaq: IDEX) is a Nevada corporation that primarily operates in Asia and the United States through its subsidiaries and VIEs. Unless the context otherwise requires, the use of the terms "we," "us," "our" and the “Company” in these notes to consolidated financial statements refers to Ideanomics, its consolidated subsidiaries and VIEs.

The Company’s chief operating decision maker has been identified as the chief executive officer, who reviews consolidated results when making decisions about allocating resources and assessing performance of the Company. Therefore, the Company operates in one segment with two business units, Ideanomics Mobility and Ideanomics Capital. Ideanomics China is a subsidiary which holds the Company’s China based vehicle operations.

Ideanomics Mobility’s mission is to use EVs and EV battery sales and financing to attract commercial fleet operators that will generate large scale demand for energy, energy storage systems, and energy management contracts. Ideanomics Mobility operates as an end-to-end solutions provider for the procurement, financing, charging and energy management needs for fleet operators of commercial EVs.

Ideanomics Capital is the Company's fintech business unit, which focuses on leveraging technology and innovation to improve efficiency, transparency, and profitability for the financial services industry.

Effects of COVID-19

COVID-19 is an infectious disease cause by severe acute respiratory syndrome coronavirus. The disease was first identified in December 2020 in Wuhan, the capital of China’s Hubei province, and has since spread globally, resulting in the ongoing COVID-19 pandemic. As of August 31, 2022, over 607.6 million cases had been reported across the globe, resulting in 6.5 million deaths.

The spread of COVID-19 has caused significant disruption to society as a whole, including the workplace. The resulting impact to the global supply chain has disrupted most aspects of national and international commerce, with government-mandated social distancing measures imposing stay-at-home and work-from-home orders in almost every country. The effects of social distancing have shut down significant parts of the local, regional, national, and international economies, for limited or extended periods of time, with the exception of government designated essential services.

In many parts of the world, stay-at-home and work-from-home orders were relaxed during the summer of 2021 as the effects of the Coronavirus appeared to lessen, and economic activity began to recover. However, commencing in the autumn and fall of 2021 and continuing, the U.S. as well as countries in Europe, South America and Asia began to experience an increase in new COVID-19 cases, and in some cases local, state, and national governments began to reinstate restrictive measures to stem the spread of the virus. The U.S. and other countries also experienced an increase in new COVID-19 cases after the fall and winter holiday season, with new, more infectious variants of COVID-19 identified. Various vaccines have been developed, with vaccinations programs in effect worldwide, though reaching acceptable levels for worldwide immunization against COVID-19 remains challenging.

The future effects of the virus are difficult to predict, due to uncertainty about the course of the virus, different variants that may evolve, and the supply of the vaccine on a local, regional, and global basis, as well as the ability to implement vaccination programs in a short time frame.

Many of the Company’s operations are in the development or early stage, have not had significant revenues to date, and the Company does not anticipate significant adverse effects on its operations’ revenue as compared to its business plan in the near- or mid-term, although the future effects of COVID-19 may result in regional restrictive measures which may constrain the Company’s operations.

The Company continues to monitor the overall situation with COVID-19 and its effects on local, regional and global economies.

Liquidity and Going Concern

The accompanying consolidated financial statements of the Company have been prepared assuming the Company will continue as a going concern and in accordance with generally accepted accounting principles in the United States of America. The going concern basis of presentation assumes that the Company will continue in operation one year after the date these financial statements are issued and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business. Pursuant to the requirements of the ASC 205, management must evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for one year from the date these financial statements are issued.

This evaluation does not take into consideration the potential mitigating effect of management's plans that have not been fully implemented or are not within control of the Company as of the date the financial statements are issued. When substantial doubt exists under this methodology, management evaluates whether the mitigating effect of its plans sufficiently alleviates substantial doubt about the Company's ability to continue as a going concern. The mitigating effect of management's plans, however, is only considered if both (1) it is probable that the plans will be effectively implemented within one year after the date that the financial statements are issued, and (2) it is probable that the plans, when implemented, will mitigate the relevant conditions or events that raise substantial doubt about the entity's ability to continue as a going concern within one year after the date that the financial statements are issued.

The Company has a pending acquisition of VIA, a U.S. manufacturer of electric commercial vehicles including Class 2 through Class 5 cargo vans, trucks, and buses. The Company is in the in the process of obtaining required shareholder approval to acquire 100% of VIA. The total aggregate consideration payable in connection with this transaction is equal to $630.0 million, consisting of an upfront payment at the closing of the transaction of $450.0 million, more than $62.9 million of which has been paid to date (prior to closing) in cash as documented in the form of convertible notes, as well as an earnout payment of up to $180.0 million. In addition, the company has provided an incremental $11.7 million in bridge financing to VIA for the support of ongoing operations due to the delay in closing. This bridge loan will be forgiven at the time of closing. The remaining consideration for the acquisition of VIA is to be consummated with Ideanomics common stock, rather than cash. However, transaction fees are material and estimated to be $45.0 million, and it is anticipated that VIA will require operational and capital funding of at least $260.0 million in the next twelve months. The Company has filed a registration statement on Form S-4 regarding shareholder approval for the transaction. As of the date of these financial statements, the registration statement had not been declared effective, and the financial statements contained therein must be updated to December 31, 2021. An amended S-4 statement with the required updated financial statements is anticipated to be filed with the SEC in the fourth quarter of 2022. The terms of the agreement stated that either party may terminate the agreement under specified conditions as of August 31, 2022, however the Company has exercised its option to extend that date to September 30, 2022.

As of December 31, 2021, the Company had cash and cash equivalents of approximately $269.9 million, of which $11.8 million is held in China and is subject to local foreign exchange regulations in that country, $0.4 million is held at a consolidated entity which requires the minority interest's permission to withdraw, and additionally two subsidiaries have required capital or liquidity requirements of $2.2 million. The Company also had accounts payable and accrued expenses of $15.6 million, other current liabilities of $7.1 million, current contingent consideration of $0.6 million, lease payments due within the next twelve months of $3.1 million, and payments of short-term and long-term debt due within the next twelve months of $58.1 million. Additionally, the Company has committed to invest in the MDI Fund a total of $25.0 million, of which $20.4 million remains and may be called at any time. The Company had a net loss of $256.7 million for the year ended December 31, 2021, and an accumulated deficit of $605.8 million.

The Company believes that its current level of cash and cash equivalents are not sufficient to fund continuing operations or the addition of the two planned acquisitions in various stages of completion. The Company will need to bring in new capital to support its growth and, as evidenced from its successful capital raising activities in 2020 and 2021, believes it has the ability to continue to do so. However, there can be no assurance that this will occur. As described in Note 15, on October 25, 2021 the Company executed a security purchase agreement with YA II PN, whereby the Company issued a convertible note of $75.0 million, and received aggregate gross proceeds of $75.0 million. The note is scheduled to mature on October 24, 2022 and bears interest at an annual rate of 4.0%, which would increase to 18.0% in the event of default. The note has a fixed conversion price of $1.88. The conversion price is not subject to adjustment except for subdivisions or combinations of common stock. Commencing April 1, 2022, the Company has the obligation to redeem $8.3 million per month, against the unpaid principal. This amount may be reduced by any conversions by YA II or optional redemptions made by the Company. As of December 31, 2021, after the conversion of principal in the amount of $17.5 million, $57.5 million remained outstanding.

The Company has various vehicles through which it could raise a limited amount of equity funding, however, these are subject to market conditions which are not within management's control. As our Quarterly Report on Form 10-Q was not filed timely, we will not be Form S-3 eligible until August 9, 2023, which could make fund raising more difficult or more expensive. Management continues to seek to raise additional funds through the issuance of equity, mezzanine or debt securities. As we seek additional sources of financing, there can be no assurance that such financing would be available to us on favorable terms or at all. Our ability to obtain additional financing in the debt and equity capital markets is subject to several factors, including market and economic conditions, our performance and investor sentiment with respect to us and our business and industry. These factors individually and collectively raise doubt about the Company's ability to continue as a going concern.

As of June 30, 2022, the Company's principal source of liquidity is its unrestricted cash balance in the amount of $85.5 million of which $12.2 million is held by the Company's subsidiaries located and China and is subject to foreign exchange control regulations and $2.2 million is minimum regulatory capital required to be held by US operating companies – we do not consider cash balances held in China or required minimum regulatory capital to be part of the Company's liquid cash balances. The Company had negative cash flow from operating activities of $81.8 million for the six months ended June 30, 2022. The Company has experienced greater net losses and negative cash flows from operating and investing activities in the third quarter consistent with its business plan for ongoing activities and planned acquisitions. As of the date of the filing of this Form 10-K, securing additional financing is in progress, and as such management has limited the extent to which it is taking actions to delay, scale back, or abandon future expenditures. As such, management's actions to preserve an adequate level of liquidity for a period extending twelve months from the date of the filing of this Form 10-K are no longer sufficient on their own without additional financing, to mitigate the conditions raising substantial doubt about the Company's ability to continue as a going concern. We currently do not have adequate cash to meet our short or long-term needs. In the event additional capital is raised, it may have a dilutive effect on our existing stockholders.

The Company's ability to raise capital is critical. On September 1, 2022, the company entered into a SEPA with YA II PN. The Company will be able to sell up to sixty million of the Company's shares of common stock, par value $0.001 per share (the at the Company's request any time during the 36 months following the date of the SEPA's entrance into force. The shares would be purchased at 95.0% of the Market Price (as defined below) and would be subject to certain limitations, including that YA could not purchase any shares that would result in it owning more than 5.0% of the Company's common stock. Market Price is the lowest daily VWAP of the Common Shares during the three consecutive trading days commencing on the advance notice date, other than the daily VWAP on any excluded days. VWAP means, for any trading day, the daily volume weighted average price of the Common Shares for such trading day on the principal market during regular trading hours as reported by Bloomberg L.P. Pursuant to the SEPA, the Company is required to register all shares which YA may acquire. The Company agreed to file with the SEC a Registration Statement (as defined in the SEPA) registering all of the shares of common stock that are to be offered and sold to YA pursuant to the SEPA. The Company is required to have a Registration Statement declared effective by the SEC before it can raise any funds using the SEPA. Unless earlier terminated as provided under the SEPA, the SEPA shall terminate automatically on the earliest of (i) the first day of the month next following the 36-month anniversary of the Effective Date or (ii) the date on which the YA shall have made payment of Advances (as defined in the SEPA) pursuant to the SEPA for the Common Shares equal to the Commitment Amount (as defined in the SEPA).
Although management continues to use these facilities and other opportunities to raise additional capital through a combination of debt financing, other non-dilutive financing and/or equity financing to supplement the Company's capitalization and liquidity, management cannot conclude as of the date of this filing that its plans are probable of being successfully implemented.

The accompanying consolidated financial statements do not include any adjustments related to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of this uncertainty.

We believe substantial doubt exists about the Company's ability to continue as a going concern for twelve months from the date of issuance of our financial statements.

Note 2. Immaterial Corrections of Prior Period Financial Statements

The Company has determined that there were immaterial errors in the consolidated financial statements as of and for the year ended December 31, 2020 related to its accounting of the acquisition of 51% of the ownership interests of Tree Technologies, a Malaysian company engaged in the EV market, in December 2019. The Company determined that it did not recognize a deferred tax liability and consequently, additional goodwill, in the initial purchase price allocation of Tree Technologies as of December 31, 2019, which also resulted in certain income tax benefits not being recognized during the year ended December 31, 2020. In addition, the Company determined that it did not recognize certain measurement period adjustments for the Tree

Technologies acquisition as of December 31, 2020 and income tax benefits associated with the impairment of the marketing and distribution agreement acquired in the acquisition during the year ended December 31, 2020.

The Company also determined that a legal agreement the Company entered into whereby the Company took possession of a property in Qingdao, China for no consideration was incorrectly accounted for as a lease in accordance with ASC 842.

Additionally, the Company changed the accounting model for one investment from that of a cost method investment to an equity method investment.

The Company assessed the materiality of these errors in accordance with Staff Accounting Bulletin No. 99, Materiality, and the Company determined that, qualitatively, the amounts, individually and in the aggregate, would have no bearing on the decision-making process of a reasonable investor. Accordingly, the Company is correcting the relevant consolidated financial statements and related footnotes as of and for the year ended December 31, 2020 within these consolidated financial statements.

The Company intends to revise its condensed consolidated financial statements for the periods ended March 31, 2021, June 30, 2021, and September 30, 2021 through subsequent periodic filings.

The following table reflects the impact of the immaterial corrections discussed above on the Company's previously reported consolidated balance sheet as of December 31, 2020 (in thousands):

	Previously Reported	Adjustments	As Revised
Assets			
Goodwill	$ 1,165	$ (460)	$ 705
Operating lease right of use assets	7,117	(6,962)	155
Long-term investments	8,570	(83)	8,487
Other non-current assets	517	6,961	7,478
Total assets	234,412	(543)	233,869
Liabilities			
Other current liabilities	1,920	315	2,235
Current portion of operating lease liabilities	430	(315)	115
Operating lease liability – long term	6,759	(6,740)	19
Deferred tax liabilities	—	5,045	5,045
Other long-term liabilities	535	6,740	7,275
Total liabilities	32,643	5,045	37,688
Stockholders' Equity			
Accumulated deficit	(346,883)	(2,864)	(349,747)
Accumulated other comprehensive income	1,256	(25)	1,231
Total Ideanomics, Inc. shareholders' equity	186,584	(2,889)	183,695
Non-controlling interest	6,438	(2,699)	3,739
Total equity	193,022	(5,588)	187,434
Total liabilities, convertible redeemable preferred stock. redeemable non-controlling interest and stockholders' equity	$ 234,412	$ (543)	$ 233,869

The following table reflects the impact of the immaterial corrections discussed above on the Company's previously reported consolidated statement of operations for the year ended December 31, 2020 (in thousands, except per share amounts):

	Previously Reported	Adjustment	As Revised
Goodwill impairment	$ 9,323	$ 8,766	$ 18,089
Loss from operations	(86,879)	(8,765)	(95,644)
Income tax benefit	—	3,308	3,308
Impairment of and equity in loss of equity method investees	(16,698)	(82)	(16,780)
Net loss	(106,043)	(5,538)	(111,581)
Net loss attributable to Ideanomics, Inc. common shareholders	(98,400)	(2,864)	(101,264)
Basic and diluted loss per share	$ (0.46)	$ (0.01)	$ (0.47)

The following table reflects the impact of the immaterial corrections discussed above on the Company's previously reported consolidated statement of comprehensive loss for the year ended December 31, 2020 (in thousands, except per share amounts):

	Previously Reported	Adjustment	As Revised
Net loss	$ (106,043)	$ (5,538)	$ (111,581)
Foreign currency translation adjustments	3,208	(50)	3,158
Comprehensive loss	(102,835)	(5,588)	(108,423)
Comprehensive loss attributable to non-controlling interest	6,539	2,699	9,238
Comprehensive loss attributable to Ideanomics, Inc. shareholders	$ (96,480)	$ (2,889)	$ (99,369)

In addition, certain additional temporary differences between financial statement amounts and tax amounts at December 31, 2020, relating to the PRC companies were identified after issuance of the financial statements. These resulted in the recognition of $0.3 million additional deferred tax assets, offset by $5,000 additional deferred tax liabilities and $0.3 million additional valuation allowance with no effect on the balance sheet or income statement.

The following table reflects the impact of the immaterial corrections discussed above on the Company's previously reported consolidated statement of cash flows for the year ended December 31, 2020 (in thousands):

	Previously Reported	Adjustment	As Revised
Cash flows from operating activities			
Net loss	$ (106,043)	$ (5,538)	$ (111,581)
Income tax benefit	—	(3,308)	(3,308)
Impairment of and equity in loss of equity method investees	$ 16,698	$ 82	$ 16,780
Impairment losses	42,554	8,765	51,319
Net cash used in operating activities	$ 41,468	$ —	$ 41,468

Note 3. Summary of Significant Accounting Policies

(a) Basis of Presentation

The consolidated financial statements of Ideanomics, its subsidiaries and VIEs were prepared in accordance with U.S. GAAP and include the assets, liabilities, revenues and expenses of the subsidiaries over which the Company exercises control and, when applicable, entities for which the Company has a controlling financial interest or is the primary beneficiary. Intercompany transactions and balances are eliminated in consolidation.

(b) Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, as well as the related disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

On an ongoing basis, the Company evaluates its estimates, including those related to the bad debt allowance, collectability of notes receivable, sales returns, fair values of financial instruments, equity investments, stock-based compensation, intangible assets and goodwill, useful lives of intangible assets and property and equipment, asset retirement obligations, income taxes, and contingent liabilities, among others. The Company bases its estimates on assumptions, both historical and forward looking, that are believed to be reasonable, the results of which form the basis for making judgments about the carrying amounts of assets and liabilities.

(c) Cash and Cash Equivalents

Cash consists of cash on hand, demand deposits, time deposits, and other highly liquid instruments with an original maturity of three months or less when purchased. Investments in money market or similar funds are evaluated in order to determine if the fund meets the definition of cash equivalents. The factors evaluated include the weighted-average maturity date of the fund's underlying securities, the fund's redemption policies, and if the fund's investment attributes are consistent with the investment attributes of an SEC-registered money market fund. Refer to Note 22 for additional information on our credit and foreign currency risks.

(d) Accounts Receivable, net

Accounts receivable are recognized at invoiced amounts and do not bear interest. The Company maintains an allowance for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. The Company reviews its allowance for doubtful accounts receivable on an ongoing basis. In establishing the required allowance, management considers any historical losses, the customer’s financial condition, the accounts receivable aging, and the customer’s payment patterns. After all attempts to collect a receivable have failed and the potential for recovery is remote, the receivable is written off against the allowance.

(e) Notes receivable

Notes receivable consist of two convertible promissory notes for which the Company had elected the fair value option. The convertible notes receivable were recorded at fair value at the reporting period and any changes to fair value and foreign currency were recorded in earnings. Refer to Note 6 for additional information.

(f) Property and Equipment, net

Property and equipment are stated at cost less accumulated depreciation. Expenditures for major renewals and improvements, which extend the original estimated economic useful lives of applicable assets, are capitalized. Expenditures for normal repairs and maintenance are charged to expense as incurred. The costs and related accumulated depreciation of assets sold or retired are removed from the accounts and any gain or loss thereon is recognized in the consolidated statement of operations. Depreciation is provided for on a straight-line basis over the estimated useful lives of the respective assets. The estimated useful life is 3 to 10 years for furniture and electronic equipment, 3 to 5 years for vehicles, 5 years for shop equipment and the lesser of lease terms or the estimated useful lives of the assets for leasehold improvements.

Construction in progress is stated at the lower of cost or fair value, which includes the cost of construction and other direct costs attributable to the construction. No provision for depreciation is made on construction in progress until such time as the relevant assets are completed and put into use. Construction in progress at December 31, 2020 represents Fintech Village under construction. The Company recorded impairment losses of $3.3 million and $2.3 million in the years ended December 31, 2020 and 2019, respectively, related to Fintech Village’s land, building and capitalized architect costs. Refer to Note 10 for additional information.

In the three months ended December 31, 2021, we closed on the sale of Fintech Village for $2.8 million, incurring commissions and fees of $0.2 million.

Asset Retirement Obligations

Asset retirement obligations generally apply to legal obligations associated with the retirement of a tangible long-lived asset that result from the acquisition, construction or development and the normal operation of a long-lived asset. If a reasonable estimate of fair value can be made, the fair value of a liability for an asset retirement obligation is recognized in the period in which it is incurred or a change in estimate occurs. Asset retirement costs associated with asset retirement obligations are capitalized with the carrying amount of the related long-lived assets and depreciated over the related asset's estimated useful life. The Company's asset retirement obligations as of December 31, 2020 were associated with the acquisition of Fintech Village, in which the Company was contractually obligated to remediate certain existing environmental conditions. Refer to Note 10 for additional information regarding Fintech Village.

The Company recorded impairment losses related to retirement asset costs of $0, $2.0 million and $1.5 million in the years ended December 31, 2021, 2020 and 2019, respectively. Refer to Note 10 for more information.

(g) Business Combinations

The Company includes the results of operations of the businesses that are acquired as of the acquisition date. The Company allocates the purchase price of the acquisitions to the assets acquired and liabilities assumed based on their estimated fair values. The excess of the purchase price over the fair values of identifiable assets and liabilities is recorded as goodwill. Acquisition-related expenses are recognized separately from the business combination and are expensed as incurred.

Contingent consideration in a business combination is included as part of the acquisition cost and is recognized at fair value as of the acquisition date. Fair value is generally estimated by using a probability-weighted discounted cash flow approach, Monte-Carlo simulation model, or scenario-based method. Any liability resulting from contingent consideration is remeasured to fair value at each reporting date until the contingency is resolved, and any changes in fair value are recognized in earnings.

(h) Intangible Assets and Goodwill

The Company accounts for intangible assets and goodwill in accordance with ASC 350. ASC 350 requires that goodwill and intangible assets with indefinite useful lives no longer be amortized, but instead be evaluated for impairment at least annually. In accordance with ASC 350, goodwill is allocated to reporting units, which are either the operating segment or one reporting level below the operating segment. On an annual basis and more frequently based on triggering events, as of October 1 of each year, management reviews goodwill for impairment by first assessing qualitative factors to determine whether the existence of events or circumstances makes it more-likely-than-not that the fair value of a reporting unit is less than its carrying amount. If it is determined that it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount, goodwill is further tested for impairment by comparing the carrying amount to the estimated fair value of its reporting units, determined using externally quoted prices (if available) or a discounted cash flow model and, when deemed necessary, a market approach. Goodwill impairment, if any, is measured as the amount by which a reporting unit's carrying amount exceeds its fair value.

Application of goodwill impairment tests requires significant management judgment, including the identification of reporting units, assigning assets, liabilities and goodwill to reporting units and determination of fair value of each reporting unit. Judgment applied when performing the qualitative analysis includes consideration of macroeconomic, industry and market conditions, overall financial performance of the reporting unit, composition, personnel or strategy changes affecting the reporting unit and recoverability of asset groups within a reporting unit. Judgments applied when performing the quantitative analysis includes estimating future cash flows, determining appropriate discount rates, and making other assumptions. Changes in these judgments, estimates and assumptions could materially affect the determination of fair value for each reporting unit.

The Company recorded an impairment loss of $101.5 million and $18.1 million related to goodwill in the year ended December 31, 2021 and 2020, respectively. Refer to Note 11 for additional information.

The Company has other intangible assets, excluding goodwill, which consist primarily of patents, trademarks, brands and land use rights, which are generally recorded in connection with acquisitions at their fair value. Intangible assets with estimable lives are amortized, generally on a straight-line basis, over their respective estimated useful lives to their estimated residual values and reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

Title plant consists of costs incurred to construct the title plant and to obtain, organize and summarize historical information for Glenn County title searches. These costs were capitalized until such time as the plant was deemed operational to conduct title searches and issue title insurance policies. Management has determined that the title plant has been properly maintained, has an indeterminable life, and in accordance with ASC 950, has not been amortized. The costs to maintain the current status of the title plant are recorded as a current period expense.

The Company recorded impairment losses related to intangible assets acquired in various acquisitions of $50.6 million and $20.4 million in the years ended December 31, 2021 and 2020, respectively. The Company recorded an impairment loss related to a secure mobile financial information, social and messaging platform of $5.7 million in the year ended December 31, 2019. Refer to Note 11 for additional information.

(i) Digital Currency

In the past, the Company has enter into transactions denominated in digital currency, which may consist of GTB Bitcoin, Ethereum and/or other types of digital currency.

Digital currency is a type of digital asset that is not a fiat currency and is not backed by hard assets or other financial instruments. As a result, the value of digital currency is determined by the value that various market participants place on the respective digital currencies through their transactions. Holders of digital currency make or lose money from buying and selling digital currency.

Given that there is limited precedent regarding the classification and measurement of cryptocurrencies and other digital currencies under U. S. GAAP at the time of the transactions, the Company determined to account for these currencies as indefinite-lived intangible assets in accordance with ASC 350.

In the year ended December 31, 2019, the Company entered into transactions in which it received 8.3 million GTB, valued at the time at $61.1 million. On October 29, 2019, GTB had an unexpected significant decline in quoted price, from $17.00 to $1.84. This decline continued through the three months ended December 31, 2019, and on December 31, 2019 the quoted price was $0.23. As a result of this decline in quoted price, and its inability to convert GTB into other digital currencies which were more liquid, or fiat currency, the Company performed an impairment analysis and recorded an impairment loss of $61.1 million. Refer to Note 11 for additional information.

(j) Inventory

Inventories, which include the costs of material, labor and overhead, are stated at the lower of cost or net realizable value, with cost generally computed on a first-in, first-out basis. Estimated losses from obsolete and slow-moving inventories are recorded to reduce inventory values to their estimated net realizable value and are charged to costs of revenue. At the point of loss recognition, a new cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in a recovery in carrying value.

The majority of the inventory represents finished assemblies and sub assemblies to be used in delivering electric powertrain components and electric tractors to customers.

There were no inventories as of December 31, 2020, as the inventories were acquired with the 2021 Acquisitions.

The composition of inventory is as follows (in thousands):

	December 31, 2021
Raw materials	$ 245
Work in progress	90
Finished goods	5,824
Total	$ 6,159

The following table summarizes the movement in the inventory reserve (in thousands):

	December 31, 2021
Balance at the beginning of the year	$ —
Increases	(856)
Decreases	—
Balance at the end of the year	$ (856)

(j) Long-term Investments

The Company accounts for equity investments through which management exercises significant influence but does not have control over the investee under the equity method. Under the equity method, the investment is initially recorded at cost and adjusted for the Company's share of undistributed earnings or losses of the investee. The Company's share of losses is not recognized when the investment is reduced to zero unless the Company guarantees the investees' obligations or has committed to providing additional funding.

The equity investments which are not consolidated or accounted for under the equity method are either carried at fair value or under the measurement alternative upon the adoption of the ASU No. 2016-1.

The Company utilizes the measurement alternative for equity investments that do not have readily determinable fair values and measures these investments at cost less impairment plus or minus observable price changes in orderly transactions for an identical or similar investment of the same issuer.

The Company classifies its long-term investments as non-current assets on the consolidated balance sheets.

Impairment of Investments

Management periodically reviews long-term investments for impairment whenever events or changes in business circumstances indicate that the carrying amount of the investment may not be fully recoverable. Management considers impairment indicators such as negative changes in industry and market conditions, financial performance, business prospects, and other relevant events and factors. If indicators exist and the fair value of the investment is below the carrying amount, an impairment loss is recorded to record the investment at fair value. The Company recorded impairment losses of $1.5 million, $0.2 million and $3.0 million in the years ended December 31, 2021, 2020 and 2019, respectively, for equity investments accounted for under the measurement alternative, and recorded impairment losses of $7.9 million, $16.7 million and $13.1 million in the years ended December 31, 2021, 2020 and 2019, respectively, for investments accounted for as equity method investments. Refer to Note 12 for additional information on impairment losses related to investments.

(k) Leases

The Company leases certain office space and equipment from third-parties. Leases with an initial term of 12 months or less are not recorded on the balance sheet and lease expense is recognized on a straight-line basis over the lease term. For leases beginning in 2019 and later, at the inception of a contract management assesses whether the contract is, or contains, a lease. The assessment is based on: (1) whether the contract involves the use of a distinct identified asset, (2) whether the right to substantially all the economic benefit from the use of the asset throughout the period is obtained, and (3) whether the Company has the right to direct the use of the asset. At the inception of a lease, management allocates the consideration in the contract to each lease component based on its relative stand-alone price to determine the lease payments. The Company accounts for lease components (e.g., fixed payments including rent, real estate taxes and insurance costs) separately from the non-lease components (e.g., common-area maintenance costs).

Leases may include one or more options to renew, with renewal terms that can extend the lease term from one year or more. Renewal periods are included in the lease term only when renewal is reasonably certain, which is a high threshold and requires management to apply judgment to determine the appropriate lease term. The Company's leases do not include options to purchase the leased property. The depreciable life of assets and leasehold improvements are limited by the expected lease term. Certain lease agreements include rental payments adjusted periodically for inflation. The Company's lease agreements do not contain any material residual value guarantees or material restrictive covenants. All of the Company's leases are classified as operating leases. The Company has elected not to recognize right-of-use assets and lease liabilities for short-term leases that have a term of 12 months or less. The effect of short-term leases and initial direct costs on our right-of-use asset and lease liability was not material.

ASC 842 requires the Company to make certain assumptions and judgments in applying the guidance, including determining whether an arrangement includes a lease, determining the term of a lease when the contract has renewal or cancellation provisions, and determining the discount rate.

As the rate implicit in the lease is not usually available, the Company used an incremental borrowing rate based on the information available at the adoption date of ASC 842 in determining the present value of lease payments for existing leases. The Company uses information available at the lease commencement date, or in the event of leases assumed in a business combination, the acquisition date, to determine the discount rate for any new leases.

In the years ended December 31, 2021 and 2020, the Company recorded impairment losses of $0.1 million and $6.3 million related to right of use assets subsequent to vacating the real estate. The Company did not record impairment losses related to right of use assets for the year ended December 31, 2019.

Refer to Note 13 for additional information.

(l) Product Warranties

Certain of the Company’s products are sold subject to standard product warranty terms, which generally include post-sales support and repairs or replacement of a product at no additional charge for a specified period of time. Accruals for estimated expenses related to product warranties are made at the time revenue is recognized and are recorded as a component of costs of revenue. The Company estimates the liability for warranty claims based on standard warranties, the historical frequency of claims and the cost to replace or repair products under warranty. Factors that influence the warranty liability include the number of units sold, the length of warranty term, historical and anticipated rates of warranty claims and the cost per claim. The warranty liability as of December 31, 2021 is $0.5 million and is included in “Other current liabilities” within the consolidated balance sheet. The warranty liability has not changed substantially subsequent to WAVE's acquisition.

(m) Convertible Promissory Notes

The Company accounts for its convertible notes at issuance by allocating the proceeds received among freestanding instruments according to ASC 470, based upon their relative fair values. The fair value of debt and common stock is determined based on the closing price of the common stock on the date of the transaction, and the fair value of warrants, if any, is determined using the Black-Scholes Merton option-pricing model. Convertible notes are subsequently carried at amortized cost. The fair value of warrants is recorded as additional paid-in capital, with a corresponding debt discount from the face amount of the convertible note.

The discounts on the convertible notes, consisting of amounts ascribed to warrants are amortized to interest expense, using the effective interest method, over the terms of the related convertible notes.

Each convertible note is also analyzed for the existence of embedded derivatives, which may require bifurcation from the convertible note and separate accounting treatment.

The Company also analyzes the features of its convertible notes which, when triggered, mandate a downward adjustment to the instrument’s strike price (or conversion price) if equity shares are issued at a lower price (or equity-linked financial instruments are issued at a lower strike price) than the instrument’s then-current strike price. The purpose of the feature is typically to protect the instrument’s counterparty from future issuances of equity shares at a more favorable price.

(n) Fair Value Measurements

U.S. GAAP requires the categorization of financial assets and liabilities, based on the inputs to the valuation technique, into a three-level fair value hierarchy. The various levels of the fair value hierarchy are described as follows:

- Level 1 - Unadjusted quoted market prices for identical assets and liabilities in an active market that the Company has the ability to access.
- Level 2 - Quoted prices in markets that are not active or model inputs that are observable for substantially the full term of the asset or liability.
- Level 3 - Prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement.

The fair value hierarchy requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

The Company reviews the valuation techniques used to determine if the fair value measurements are still appropriate on an annual basis, and evaluates and adjusts the unobservable inputs used in the fair value measurements based on current market conditions and third-party information.

The fair values of certain financial assets and liabilities, such as cash and cash equivalents, accounts receivable, notes receivable, accrued expenses and other current liabilities approximate carrying amounts because of the short-term nature of these instruments. Investments that are classified as available-for-sale are measured at fair value on a recurring basis.

Our financial and non-financial assets and liabilities that are measured at fair value on a nonrecurring basis include goodwill and other intangible assets, asset retirement obligations, and adjustment in carrying amount of equity securities for which the measurement alternative of cost less impairment plus or minus observable price changes is used.

(o) Assets and Liabilities Held for Sale

The Company classifies assets and liabilities (disposal group) to be sold as held for sale in the period in which all of the following criteria are met: (1) management, having the authority to approve the action, commits to a plan to sell the disposal groups; (2) the disposal group is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such disposal group; (3) an active program to locate a buyer and other actions required to complete the plan to sell the disposal group have been initiated; (4) the sale of the disposal group is probable, and (5) transfer of the disposal group is expected to qualify as a completed sale within one year, except if events or circumstances beyond the Company's control extend the period of time required to sell the disposal group beyond one year; (6) the disposal group is being actively marketed for sale at a price that is reasonable in relation to its current fair value; and (7) actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

The Company initially measures a disposal group that is classified as held for sale at the lower of its carrying amount or fair value less any costs to sell. Any loss resulting from this measurement is recognized in the period in which the held for sale criteria are met. Gains are not recognized on the sale of a disposal group until the date of sale. The Company assesses the fair value of a disposal group, less any costs to sell, each reporting period it remains classified as held for sale and reports any subsequent losses as an adjustment to the carrying amount of the disposal group.

As part of this assessment, the Company also evaluates the criteria for reporting the disposal group as a discontinued operation. Factors which the Company considers includes, but is not limited to, the level of continuing involvement, if any, whether the disposal constitutes a strategic shift, and the relative magnitude of revenue, net income or loss, and total assets.

(p) Foreign Currency Translation

The Company uses the United States dollar as its reporting currency. The Company's worldwide operations utilize the local currency or USD as the functional currency, where applicable. For certain foreign subsidiaries, USD is used as the functional currency. This occurs when the subsidiary is considered an extension of the parent. The functional currency of certain subsidiaries and VIEs located in the PRC and Hong Kong is either the RMB or HKD. In the consolidated financial statements, the financial information of the entities which use RMB and HKD as their functional currency has been translated into USD: assets and liabilities are translated at the exchange rates on the balance sheet date, equity amounts are translated at the historical exchange rates, and revenues, expenses, gains and losses are translated using the average rate for the period. Translation adjustments arising from these are reported as foreign currency translation adjustments and are shown as a component of "Accumulated other comprehensive loss" in the equity section of the consolidated balance sheets.

Transactions denominated in currencies other than functional currency are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are translated in the functional currency at the applicable rates of exchange in effect at the balance sheet date. Foreign currency (gains) losses of $0.2 million, $(0.1) million, and $0.1 million were recorded in the years ended December 31, 2021, 2020, and 2019, respectively.

(q) Escrow and Trust Deposits

In providing escrow services, the Company holds funds for others in a fiduciary capacity, pending completion of real estate transactions. A separate, self-balancing set of accounting records is maintained to record escrow transactions. Escrow trust funds held for others are not the Company's and, therefore, are excluded from the consolidated balance sheet, however, the Company remains contingently liable for the disposition of these deposits. Escrow trust balances at December 31, 2021 were $21.4 million. It is a common industry practice for financial institutions where escrow funds are deposited to either reimburse or to directly provide for certain costs related to the delivery of escrow services. The Company follows the practice of non-recognition of costs borne by the financial institution where escrow funds are deposited.

There were no escrow trust balances as of December 31, 2020 as these were acquired with the acquisition of Timios in January 2021.

(r) Revenue Recognition General

The Company recognizes revenue when its customer obtains control of promised goods or services in an amount that reflects the consideration which the Company expects to receive in exchange for those goods or services. For most of the Company's customer arrangements, control transfers to customers at a point in time, as that is generally when legal title, physical possession and risk and rewards of goods/services transfer to the customer. In certain arrangements, control transfers over time as the customer simultaneously receives and consumes the benefits as the Company completes the performance obligations.

Our contracts with customers may include multiple performance obligations. For such arrangements, revenue is allocated to each performance obligation based on its relative standalone selling price. Standalone selling prices are based on the observable prices charged to customers or adjusted market assessment or using expected cost-plus margin when one is available. Adjusted market assessment price is determined based on overall pricing objectives taking into consideration market conditions and entity specific factors.

The Company performs an analysis of the relevant terms of its sales contracts, including whether or not it controls the product prior to sale, whether or not it incurs inventory risk, and other factors in order to determine if revenue should be recorded as a principal or agent.

Certain customers may receive discounts or rebates, which are accounted for as variable consideration. Variable consideration is estimated based on the expected amount to be provided to customers, and initially reduces revenues recognized.

The Company records deferred revenues when cash payments are received or due in advance of performance, including amounts which are refundable.

The Company does not disclose the value of unsatisfied performance obligations for contracts with an original expected length of one year or less. The Company expenses as incurred any commissions or other fees which, if capitalizable, would have an amortization period of less than one year.

The Company recognizes revenue either on a Principal or Agent basis, depending on the terms of the underlying transaction, including the ability to control the product and the level of inventory risk taken. Revenues recognized in a Principal capacity are reported gross, while revenues recognized as an Agent are reported net.

Substantially all of the deferred revenue as of December 31, 2019 was recognized as revenue in the year ended December 31, 2020.

Title, Closing and Appraisal Revenue

Premiums from title insurance policies written by independent agencies are recognized net of commission costs when the policies are reported to the Company upon the closing of a transaction and not before the effective date of the policy. Regulation of title insurance rates varies by state. Premiums are charged to customers based on rates predetermined in coordination with each states' respective Department of Insurance.

A closing or escrow is a transaction pursuant to an agreement of a buyer, seller, borrower, or lender wherein an impartial third-party, such as the Company, acts in a fiduciary capacity on behalf of the parties in accordance with the terms of such agreement in order to accomplish the directions stated therein. Services provided include, among others, acting as escrow or other fiduciary agent, obtaining releases, and conducting the actual closing or settlement. Closing and escrow fees are recognized upon closing of the escrow, which is generally at the same time of the closing of the related real estate transaction.

Revenue from appraisal services are primarily related to establishing the ownership, legal status and valuation of the property in a real estate transaction. In these cases, the Company does not issue a title insurance policy or perform duties of an escrow agent. Revenues from these services are recognized upon delivery of the service to the customer.

EV and Related Revenue

For product sales, the Company considers practical and contractual limitations in determining whether there is an alternative use for the product. For example, long-term design and build contracts are typically highly customized to a customer's specifications. For contracts with no alternative use and an enforceable right to payment for work performed to date, including a reasonable profit if the contract were terminated at the customer's convenience for reason other than nonperformance, the Company recognizes revenue over time. All other product sales are recognized at a point in time.

For contracts recognized over time, revenue is determined each quarter, on the basis of accumulated project expenses in relation to estimated accumulated project expenses upon completion.

For contracts recognized at a point in time, the Company recognizes revenue when control passes to the customer, which is generally based on shipping terms that address when title and risk and rewards pass to the customer. However, the Company also considers certain customer acceptance provisions as certain contracts with customers include installation, testing, certification or other acceptance provisions. In instances where contractual terms include a provision for customer acceptance, the Company considers whether it has previously demonstrated that the product meets objective criteria specified by either the seller or customer in assessing whether control has passed to the customer.

For service contracts, the Company recognizes revenue as the services are rendered if the customer is benefiting from the service as it is performed, or otherwise upon completion of the service. Separately priced extended warranties are recognized as a separate performance obligation over the warranty period.

The transaction price in the contracts consists of fixed consideration and the impact of variable consideration including returns, rebates and allowances, and penalties. Variable consideration is generally estimated using a probability-weighted approach based on historical experience, known trends, and current factors including market conditions and status of negotiations.

For design and build contracts, the Company may at times collect progress payments from the customer throughout the term of the contract, resulting in contract assets or liabilities depending on the timing of the payments. Contract assets consist of unbilled amounts when revenue recognized exceeds customer billings. Contract liabilities consist of advance payments and billings in excess of revenue recognized. Costs to obtain a contract (e.g., commissions) for contracts greater than one year are deferred and amortized in a manner consistent with revenue recognition of the related contract.

The Company enters into contracts with governmental agencies for services and products. These contracts are analyzed in order to determine if they should be accounted for under a revenue recognition model pursuant to ASC 606 or a grant model pursuant to ASC 958. If accounted for pursuant to a grant model, the Company must determine if the grant is conditional or unconditional, and if conditional any barriers exist which must be overcome. If unconditional, the grant is recognized as revenue immediately, and if conditional, the grant is recognized as revenue as and when the barriers are overcome. The significant barrier to the current conditional grants are that the expenses incurred must meet the qualifications as established by the respective governmental agencies, so that the grant revenue is recognized as the qualified expenses are incurred. Revenue recorded pursuant to a grant model are recorded as "Other revenue."

(s) Advertising and Marketing Costs

Advertising and marketing costs are expensed as incurred. Advertising and marketing costs were $2.3 million, $0.2 million and $24,394 in the years ended December 31, 2021, 2020 and 2019, respectively.

(t) Research and Development Costs

The Company expenses research and development costs, which may be incurred for the design, development, experimentation and testing of products related to the automotive industry.

(u) Share-Based Compensation

The Company awards share options and other equity-based instruments to its employees, directors and consultants (collectively "share-based payments.") Compensation cost related to such awards is measured based on the fair value of the instrument on the grant date. The Company recognizes the compensation cost over the period the individual is required to provide service in exchange for the award, which generally is the vesting period. The amount of cost recognized is adjusted to reflect the effect of forfeiture as they occur. When no future services are required to be performed by the individual in exchange for an award of equity instruments, and if such award does not contain a performance or market condition, the cost of the award is expensed on the grant date. The Company recognizes compensation cost for an award with only service conditions that has a graded vesting schedule on a straight-line basis over the requisite service period for the entire award, provided that the cumulative amount of compensation cost recognized at any date at least equals the portion of the grant-date value of such award that is vested at that date. For options with market conditions, the fair value of each award is estimated on the date of grant using a Monte-Carlo valuation model and the fair value of each option recognized as compensation expense over the derived service period. For options with performance conditions, the fair value of each award is estimated on the date of grant using the Black-Scholes Merton valuation model and the fair value of each option recognized as compensation expense over the implicit service period. When using the Black-Scholes model to determine the fair value of the awards granted, management noted it could not rely on its historical exercise data to develop an accurate expected term as the Company has made significant structural changes in its business via multiple acquisitions and divestures over the last few years. Thus, the Management deemed the Company's use of the "simplified" method to develop the estimate of the expected term for the stock options to be appropriate. The simplified method uses the mid-point between the vesting period and the contractual term for each grant as the expected term.

(v) Income Taxes

The Company accounts for income taxes in accordance with the asset and liability method. Deferred taxes are recognized for the future tax consequences attributable to temporary differences between the carrying amounts of assets and liabilities for financial statement purposes and income tax purposes using enacted rates expected to be in effect when such amounts are realized or settled. The effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is established, as needed, to reduce the amount of deferred tax assets if it is considered more-likely-than-not that some portion or all of the deferred tax assets will not be realized.

The Company recognizes the effect of uncertain income tax positions only if those positions are more-likely-than-not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than 50.0% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. The Company's policy is to record interest and penalties related to income taxes as a component of income tax expense. There were no material interest or penalties for the years ended December 31, 2021, 2020 and 2019, respectively.

On December 22, 2017, the TCJA was signed into law, which among other effects, reduces the U.S. federal CIT rate to 21.0% from 34.0% (or 35.0% in certain cases) beginning in 2019, and requires companies to pay a one-time transition tax on certain unrepatriated earnings from non-U.S. subsidiaries that is payable over eight years. No tax was due under this provision. The TCJA also makes the receipt of future non-U.S. sourced income of non-U.S. subsidiaries tax-free to U.S. companies and creates a new minimum tax on the earnings of non-U.S. subsidiaries relating to the parent's deductions for payments to the subsidiaries.

(w) Net Loss Per Share Attributable to Ideanomics Shareholders

Net loss per share attributable to our shareholders is computed in accordance with ASC 260. The two-class method is used for computing earnings per share. Under the two-class method, net income is allocated between common shares and participating securities based on dividends declared (or accumulated) and participating rights in undistributed earnings as if all the earnings for the reporting period had been distributed. The Company's convertible redeemable preferred shares are participating securities because the holders are entitled to receive dividends or distributions on an as converted basis. For the years presented herein, the computation of basic loss per share using the two-class method is not applicable as the Company is in a net loss position and net loss is not allocated to other participating securities, since these securities are not obligated to share the losses in accordance with the contractual terms.

Basic net loss per share is computed by dividing net loss attributable to Ideanomics common shareholders by the weighted average number of common shares outstanding during the period. Options and warrants are not considered outstanding in computation of basic earnings per share. Diluted net loss per share is computed by dividing net loss attributable to Ideanomics common shareholders by the weighted-average number of common shares and potential common shares outstanding during the period under the treasury stock method. Potential common shares include options and warrants to purchase common shares, preferred shares and convertible promissory notes, unless they were anti-dilutive. The computation of diluted net loss per share does not assume conversion, exercise, or contingent issuance of securities that would have an anti-dilutive effect (i.e. an increase in earnings per share amounts or a decrease in loss per share amounts) on net loss per share.

Recently Adopted Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02 which requires lessees to recognize a right-of-use asset and lease liability for all leases. Recognition, measurement and presentation of expenses depends on classification as a finance or operating lease. The Company adopted ASU 2016-02 as of January 1, 2019, using a modified retrospective transition method. The Company elected the practical expedient to not apply the provisions of ASC 842 to leases of twelve months or less.

The lease liability was based on the present value of the remaining minimum lease payments, determined under ASC 842, discounted using the Company's incremental borrowing rate at the effective date of January 1, 2019, using the original lease term as the tenor. As permitted under the transition guidance, the Company elected the package of practical expedients that permitted the Company to not reassess (1) whether a contract is or contains a lease, (2) the classification of existing leases, and (3) whether previously capitalized costs continue to qualify as initial indirect costs. The application of the practical expedients did not have a significant impact on the measurement of the operating lease liability. The adoption of ASU 2016-02 resulted in the recording of operating right-of-use assets and the related lease liabilities of $3.6 million and $3.7 million, respectively, as of January 1, 2019. The difference between the additional right-of-use assets and lease liabilities was immaterial. The adoption of ASU 2016-02 did not materially impact the consolidated statement of operations and had no impact on the consolidated statement of cash flows. Refer to Note 13 for additional information.

In July 2017, the FASB issued ASU No. 2017-11, which applies to issuers of financial instruments with down round features. A down round feature is a term in an equity-linked financial instrument (i.e. a freestanding warrant contract or an equity conversion feature embedded within a host debt or equity contract) that triggers a downward adjustment to the instrument's strike price (or conversion price) if equity shares are issued at a lower price (or equity-linked financial instruments are issued at a lower strike price) than the instrument's then-current strike price. The purpose of the feature is typically to protect the instrument's counterparty from future issuances of equity shares at a more favorable price. ASU 2017-11 amends (1) the classification of such instruments as liabilities or equity by revising the certain guidance relative to evaluating if they must be accounted for as derivative instruments, and (2) the guidance on recognition and measurement of freestanding equity-classified instruments. The Company adopted ASU 2017-11 as of January 1, 2019 on a prospective basis. Refer to Note 15 for additional information.

In June 2018, the FASB issued ASU No. 2018-07, which largely aligns the measurement and classification guidance for share-based payments to nonemployees with the guidance for share-based payments to employees. ASU 2018-07 also clarifies that any share-based payment issued to a customer should be evaluated under ASC 606. The Company adopted ASU 2018-07 as of January 1, 2019 on a modified retrospective basis. There was no impact to the consolidated financial statements because the Company did not have material payments in the year ended December 31, 2019.

In December 2019, the FASB issued ASU No. 2019-12, which simplifies the accounting for income taxes by removing certain exceptions currently provided for in ASC 740 and by amending certain other requirements of ASC 740. The Company adopted ASU 2019-12 effective January 1, 2021. The effect of the adoption of ASU 2019-12 was not material.

In August 2020, the FASB issued ASU No. 2020-06, which simplifies the accounting for convertible instruments by reducing the number of accounting models for convertible debt instruments and convertible preferred stock. Limiting the accounting models results in fewer embedded conversion features being separately recognized from the host contract as compared with current U.S. GAAP. Convertible instruments that continue to be subject to separation models are (1) those with embedded conversion features that are not clearly and closely related to the host contract, that meet the definition of a derivative, and that do not qualify for a scope exception from derivative accounting, and (2) convertible debt instruments issued with substantial premiums for which the premiums are recorded as additional paid-in capital. ASU 2020-06 also amends the guidance for the derivatives scope exception for contracts in an entity's own equity to reduce form-over-substance-based accounting conclusions. The Company adopted ASU 2020-06 effective January 1, 2021. As the Company had no outstanding convertible instruments as of that date, the adoption of ASU 2020-06 had no effect.

Accounting Pronouncements Not Yet Adopted

In June 2016, the FASB issued ASU No. 2016-13, which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost. ASU 2016-13 replaces the existing incurred loss impairment model with an expected loss model which requires the use of forward-looking information to calculate credit loss estimates. It also eliminates the concept of other-than-temporary impairment and requires credit losses related to available-for-sale debt securities to be recorded through an allowance for credit losses rather than as a reduction in the amortized cost basis of the securities. These changes will result in earlier recognition of credit losses. In November 2019, the FASB issued ASU 2019-10, which defers the effective date of ASU 2016-13 to fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, for public entities which meet the definition of a smaller reporting company on the date the ASU was issued. The Company will adopt ASU 2016-13 effective January 1, 2023. Management is currently evaluating the effect of the adoption of ASU 2016-13 on the consolidated financial statements. The effect will largely depend on the composition and credit quality of our investment portfolio and the economic conditions at the time of adoption.

In May 2021, the FASB issued ASU No. 2021-04, which provides guidance on modifications or exchanges of a freestanding equity-classified written call option that is not within the scope of another Topic. An entity should treat a modification of the terms or conditions or an exchange of a freestanding equity-classified written call option that remains equity classified after modification or exchange as an exchange of the original instrument for a new instrument, and provides further guidance on measuring the effect of a modification or an exchange of a freestanding equity-classified written call option that remains equity classified after modification or exchange. ASU 2021-04 also provides guidance on the recognition of the effect of a modification or an exchange of a freestanding equity-classified written call option that remains equity classified after modification or exchange on the basis of the substance of the transaction, in the same manner as if cash had been paid as consideration. The Company will adopt ASU 2021-04 on January 1, 2022. The Company has no freestanding equity-classified written call options. The effect will largely depend on the terms of written call options or financings issued or modified in the future.

In October 2021, the FASB issued ASU No. 2021-08, which will require companies to apply the definition of a performance obligation under ASC Topic 606 to recognize and measure contract assets and contract liabilities (i.e., deferred revenue) relating to contracts with customers that are acquired in a business combination. Under current U.S. GAAP, an acquirer generally recognizes assets acquired and liabilities assumed in a business combination, including contract assets and contract liabilities arising from revenue contracts with customers, at fair value on the acquisition date. ASU No. 2021-08 will result in the acquirer recording acquired contract assets and liabilities on the same basis that would have been recorded by the acquiree before the acquisition under ASC Topic 606. ASU No. 2021-08 is effective for fiscal years beginning after December 15, 2022, with early adoption permitted. The Company is currently evaluating the impact of this ASU on its financial statements and the effects will be based upon the contract assets and liabilities acquired in the future.

Note 4. Revenue

The following table summarizes the Company's revenues disaggregated by revenue source, geography (based on the Company's business locations), and timing of revenue recognition (in thousands):

	Year Ended		
	December 31, 2021	December 31, 2020	December 31, 2019
Geographic Markets			
Malaysia	$ 65	$ 83	$ —
USA	84,303	1,631	41,873
PRC	29,712	25,045	2,693
Total	$ 114,080	$ 26,759	$ 44,566
Product or Service			
Digital asset management services	$ —	$ —	$ 40,700
Digital advertising services and other	231	1,631	1,173
Title and escrow services	72,686	—	—
Electric vehicle products	31,123	19,462	—
Electric vehicle services	204	—	2,693
Combustion engine vehicles	—	5,160	—
Charging, battery and powertrain products	5,886	506	—
Charging, battery and powertrain services	2,645	—	—
Other revenue	1,305	—	—
Total	$ 114,080	$ 26,759	$ 44,566
Timing of Revenue Recognition			
Products and services transferred at a point in time	$ 110,079	$ 26,729	$ 3,866
Products and services provided over time	4,001	30	40,700
Total	$ 114,080	$ 26,759	$ 44,566

The following table provides information about client receivables, contract liabilities and contract assets from contracts with customers:

	Year ended	
	December 31, 2021	December 31, 2020
Balances from contracts with customers:		
Accounts receivable	$ 3,338	$ 7,400
Deferred revenue	5,392	1,129
Contract assets	2,772	—

In the years ended December 31, 2021, 2020 and 2019, the Company recognized revenue of $0.6 million, $0.5 million, and $0.3 million recorded in deferred revenue as of the beginning of the period.

In the years ended December 31, 2021, 2020 and 2019, the Company recorded grant revenue of $1.3 million, $0.0 million, and $0.0 million in "Other revenue" in the consolidated statements of operations.

In the year ended December 31, 2021 the Company recorded a contract asset of $0.6 million as US Hybrid has an amount due of this amount from a customer contract for which US Hybrid has not yet performed the performance obligations. The Company expects to recognize this revenue of $0.6 million in the year ending December 31, 2022, and at that time will reclassify the contract asset.

Note 5. Available-for-Sale Securities

The Company accounts for its available-for-sale securities at their fair value, with changes in fair value, if any, recorded in other comprehensive income.

The following table provides certain information related to available-for-sale debt securities (in thousands):

	As of December 31, 2021					
	Cost	Interest	Unrealized Gains	Unrealized Losses	Impairment	Estimated Fair Value
Silk EV Note	$ 15,000	$ 833	$ 4	$ (20)	$ (15,817)	$ —
Total available-for-sale securities	$ 15,000	$ 833	$ 4	$ (20)	$ (15,817)	$ —

<u>Silk EV Convertible Promissory Note</u>

On January 28, 2021, the Company invested $15.0 million in Silk EV via a convertible promissory note. Silk is an Italian engineering and design services company that has recently partnered with FAW to form a new company Silk-FAW to produce fully electric, luxury vehicles for the Chinese and global auto markets.

The principal amount of the convertible promissory note is $15.0 million, is unsecured, bears interest at an annual rate of 6.0%, and the scheduled maturity date is January 28, 2022.

Upon a qualified equity financing, as defined, the outstanding principal and accrued interest convert into equity securities sold in the qualified equity financing at a conversion price equal to the cash price for the equity securities times 0.80.

The convertible promissory note contains certain customary events of default and other rights and obligations of the parties.

SILK EV did not remit payment of principal and interest on the scheduled maturity date of January 28, 2022, and the Company has sent a notice of default. The Company determined that the Silk EV note was fully impaired and recorded an impairment loss of $15.8 million recorded in "Asset impairments" in the year ended December 31, 2021.

Note 6. Notes Receivable

The following table provides certain information related to notes receivable consists of the following (in thousands):

	As of December 31, 2021					
	Cost	Interest	Unrealized Gains	Unrealized Losses	Impairment	Estimated Fair Value
VIA Note (a)	$ 42,500	$ 578	$ —	$ —	$ —	$ 43,078
Inobat Note (b)	11,819	10	—	—	—	11,829
Total notes receivable	$ 54,319	$ 588	$ —	$ —	$ —	$ 54,907

(a) VIA Convertible Promissory Note

On August 30, 2021, the Company invested $42.5 million in VIA, in the form of a convertible promissory note. VIA is a leading electric commercial vehicle company with proven advanced electric drive technology, delivering sustainable mobility solutions for a more livable world. VIA designs, manufactures and markets electric commercial vehicles, with superior life-cycle economics, for use across a broad cross-section of the global fleet customer base.

The principal amount of the convertible promissory note is $42.5 million, is unsecured, bears interest at an annual rate of 4.0%, and the scheduled maturity date is the earlier of the closing date of the acquisition or one year after the agreement is terminated according to its terms.

The convertible promissory note contains certain customary events of default and other rights and obligations of the parties. The company expects to convert this promissory note in conjunction with the closing of the acquisition of VIA. Management assessed the probability of closing the acquisition in determining the recoverability of the promissory note.

The fair value of the VIA convertible promissory note was valued using a scenario-based approach utilizing Level 3 inputs. The significant unobservable inputs include the probability of the consummation of the acquisition and the implied yield rate.

Significant increases or decreases in any of those inputs in isolation would result in a significantly different fair value measurement. The following table summarizes the significant inputs and assumptions used in the model:

	December 31, 2021
Probability	90 %
Yield rate	4.0 %

(b) Inobat Convertible Promissory Note

On December 24, 2021, the Company invested €10.0 million ($11.4 million) in Inobat via a convertible promissory note, that is due December 24, 2022. Inobat specializes in the research, development, manufacture, and provision of innovative electric batteries custom-designed to meet the specific requirements of global mainstream and specialist OEMs within the automotive, commercial vehicle, motorsport, and aerospace sectors. Inobat is a European based battery manufacturer, that has a battery research and development facility and pilot line under development in Slovakia.

The principal amount of the convertible promissory note is €10.0 million ($11.4 million) is unsecured, bears interest at an annual rate of 8.0%, and the scheduled maturity date is December 28, 2022.

The convertible promissory note contains certain customary events of default and other rights and obligations of the parties.

The fair value of the Inobat convertible promissory note was valued using a scenario-based approach utilizing Level 3 inputs. The significant unobservable inputs include the probability of a qualified financing and the implied yield rate. Significant increases or decreases in any of those inputs in isolation would result in a significantly different fair value measurement. The following table summarizes the significant inputs and assumptions used in the model:

	December 31, 2021
Probability	50 %
Yield rate	17.5 %

Note 7. PRC VIE Structures and Arrangements

In the year ended December 31, 2019, the Company consolidated certain VIEs located in the PRC in which it held variable interests and was the primary beneficiary through contractual agreements. The Company was the primary beneficiary because it had the power to direct activities that most significantly affected their economic performance and had the obligation to absorb or right to receive the majority of their losses or benefits. The results of operations and financial position of these VIEs are included in the consolidated financial statements for the year ended December 31, 2019. A shareholder in one of the VIEs is the spouse of Dr. Wu, the former Chairman of the Company.

The contractual agreements which granted the Company the power to direct the VIEs activities that most significantly affected their economic performance, as well to cause the Company to have the obligation to absorb or right to receive the majority of their losses or benefits, were terminated by all parties on December 31, 2019. As a result, the Company deconsolidated the VIEs as of December 31, 2019. The deconsolidation resulted in a net loss of $2.0 million, which included the transfer of cumulative translation adjustments of $0.6 million, recorded in "(Loss) gain on disposal of subsidiaries, net" in the consolidated statements of operations, and a statutory income tax of $0.2 million in the year ended December 31, 2019.

Note 8. Acquisitions and Divestitures

The Company continually evaluates potential acquisitions that align with the Company's strategy of accelerating the adoption of electric vehicles. The Company has completed a number of acquisitions that have been accounted for as purchases and have resulted in the recognition of goodwill in the Company's Consolidated Financial Statements. This goodwill arises because the purchase prices for these businesses exceeds the fair value of acquired identifiable net assets due to the purchase prices reflecting a number of factors including the future earnings and cash flow potential of these businesses, the multiple to earnings, cash flow and other factors at which similar businesses have been purchased by other acquirers, the competitive nature of the processes by which the Company acquired the businesses and the complementary strategic fit and resulting synergies these businesses bring to existing operations.

The Company may divest certain businesses from time to time based upon review of the Company's portfolio considering, among other items, factors relative to the extent of strategic and technological alignment and optimization of capital deployment, in addition to considering if selling the businesses results in the greatest value creation for the Company and for shareholders.

2021 Acquisitions and Divestitures

The Company has completed the below acquisitions in the year ended December 31, 2021. The accompanying consolidated financial statements include the operations of the acquired entities from their respective acquisition dates. All of the acquisitions have been accounted for as business combinations. Accordingly, consideration paid by the Company to complete the acquisitions is initially allocated to the acquired assets and liabilities assumed based upon their estimated acquisition date fair values. The recorded amounts for assets acquired and liabilities assumed are provisional and subject to change during the measurement period, which is up to 12 months from the acquisition date. Management considers the valuations final for Timios, WAVE, US Hybrid and Solectrac.

The acquisitions below are collectively defined as the 2021 Acquisitions.

Timios

On January 8, 2021, the Company purchased 100% of Timios and its affiliates, a privately held company, pursuant to a stock purchase agreement for a purchase price of $40.0 million, net of cash acquired of $6.5 million. The purchase price was paid in cash and pursuant to the Agreement, $5.1 million of the cash consideration was paid into escrow pending a one year indemnification review.

Timios is a nationwide title and settlement solutions provider, which has been expanding in recent years though offering innovative solutions for real estate transactions, including residential and commercial title insurance, closing and settlement services, as well as specialized offers for the mortgage industry. The Company expects Timios to become one of the cornerstones of the Company's fintech business unit.

Revenue of $72.7 million and net loss of $13.6 million for the year ended December 31, 2021, related to Timios have been included in the consolidated financial statements since the acquisition.

The final purchase price allocation for Timios is summarized in the table below in the “Acquisition Method Accounting Estimates” section of this note.

Refer to Note 11 for information related to an impairment charge recognized for the Timios reporting unit during the year ended December 31, 2021.

WAVE

On January 15, 2021, the Company purchased 100.00% of WAVE, a privately held company, pursuant to an agreement and plan of merger for a purchase price of $15.0 million of cash plus a total of 12.6 million unregistered shares of the Company’s common stock, valued at $40.0 million at the date of closing. Pursuant to the Wave Agreement, $5.0 million of the cash consideration was paid into escrow pending a one-year indemnification review. The agreement provided that 3.6 million shares of the Company’s common stock be held back at closing, to be released upon the receipt of certain customer consents not obtained prior to closing.

WAVE is a technology company focused on creating practical and economical solutions for the worldwide transit and off-road EV markets and is a leading provider of wireless charging solutions for medium and heavy duty EVs. The Company expects WAVE to create immediate synergies with its existing EV initiatives as it brings wireless charging to the Company’s current product offerings.

As of December 31, 2021, 0.5 million shares of the Company’s common stock remain unissued pending receipt of a final consent. Since receipt of this consent is probable, the Company has included the total common shares to be issued as contingent consideration in the amount of $11.4 million as of the acquisition date and recorded this as a component of equity. Pursuant to the original agreement, if any such consent is not obtained within six months following the closing date, the portion of the common stock allocated to such consent in the agreement would not be issued to the sellers. The Company has extended the time frame for this contractual provision as the receipt of the consents is outside the control of the former WAVE shareholders.

In addition to the purchase price to be paid at closing, the WAVE Agreement contains three earnouts that could result in additional payments of up to $30.0 million to the sellers based upon: (1) revenue and gross profit margin metrics in calendar year 2021; (2) revenue and gross profit margin metrics in calendar year 2022; and (3) revenue and gross profit margin metrics for 2021 and 2022 collectively. The Company considers this earnout to be contingent consideration that as of the acquisition date is unlikely to occur and has therefore attributed zero value for purposes of the preliminary purchase price allocation. No earnout was earned for the period ending December 31, 2021. The Company will continue to monitor the fair value of this contingent considerations with any changes being recorded in the consolidated statement of operations if and when a change occurs.

The Company also agreed to a performance and retention plan for the benefit of certain WAVE’s employees which could result in up to $10.0 million paid to such employees if certain gross revenue targets and certain gross profit margins are achieved for calendar years 2021 and 2022. The Company has concluded that this performance and retention plan does not constitute purchase consideration and will be recorded as compensation expense when the criteria are probable of being met. The Company has not accrued any of this retention plan as the revenue and gross profit margin criteria are not probable of being met.

During the three months ended December 31, 2021, the Company recorded a change to the previously disclosed purchase price allocation to reflect a liability for $0.8 million for a sales tax obligation that the Company was previously unaware of, however since this amount is fully indemnified by the sellers, the Company recorded a $0.8 million receivable. There was no adjustment to the carrying value of goodwill. Additionally, during the three months ended December 31, 2021 the Company concluded its analysis of any limitations on net operating loss carryforwards and certain built-in losses following ownership changes. The Company concluded that $7.7 million of historic net operating losses could not be utilized by the Company. This resulted in a reduction of $1.4 million of deferred tax assets and an increase to goodwill for the same amount. This amount was recorded as a measurement period adjustment in 2021 and is included in the purchase price allocation table below.

Revenue of $7.0 million and net loss of $7.2 million for the year ended December 31, 2021, related to WAVE have been included in the consolidated financial statements since the date of acquisition.

The final purchase price allocation for WAVE is summarized in the table below in the "Acquisition Method Accounting Estimates" section of this note.

Refer to Note 11 for information related to an impairment charge recognized for the WAVE reporting unit during the year ended December 31, 2021.

US Hybrid

On June 10, 2021, the Company purchased 100% of US Hybrid, a privately held company, pursuant to an agreement and plan of merger for a purchase price of $50.0 million in a combination of $30.0 million in cash and 6.6 million in unregistered shares of the Company's common stock, valued at $20.9 million at the date of closing. Pursuant to the agreement, $1.0 million of the cash consideration was paid into escrow pending a true up of net working capital within 90 days of the closing date. The agreement provided that the 6.6 million shares were paid into an indemnity escrow to satisfy future indemnification obligations of the selling shareholders, if any.

US Hybrid specializes in the design and manufacturing of zero-emission electric powertrain components including traction motors, controllers, auxiliary drives, energy storage and fuel cell engines for electric, hybrid, and fuel cell medium and heavy-duty municipality vehicles, commercial trucks, buses, and specialty vehicles throughout the world. The Company expects US Hybrid to become another cornerstone in the Company's mission to reduce commercial fleet greenhouse gas emissions through advanced EV technologies and forward-thinking partnerships.

The Company has also agreed to a performance and retention plan for the benefit of certain US Hybrid employees which could result in up to $16.7 million paid to such employees if certain gross revenue targets, gross profit margins and certain operational targets are achieved for annual performance periods commencing July 1, 2021 and concluding on June 30, 2024. The Company has concluded that this performance and retention plan does not constitute purchase consideration and will be recorded as compensation expense when the criteria are probable of being met. As of December 31, 2021 the Company has accrued $1.0 million of this retention plan as certain criteria for the first performance period were partially met. Criteria associated with the second and third performance periods are not probable of being met and will be evaluated on a regular basis once those performance periods commence.

Revenue of $2.7 million and net loss of $4.8 million, for the year ended December 31, 2021, related to US Hybrid have been included in the consolidated financial statements since the date of acquisition.

The final purchase price allocation for US Hybrid is summarized in the table below in the "Acquisition Method Accounting Estimates" section of this note.

Refer to Note 11 for information related to an impairment charge recognized for the US Hybrid reporting unit during the year ended December 31, 2021. Refer to Note 26 for a subsequent event that occurred in July 2022 that affected US Hybrid.

Solectrac

On June 11, 2021, the Company purchased the remaining 78.6% of Solectrac, a privately held company, pursuant to an agreement and plan of merger for a purchase price of $17.7 million plus $0.3 million paid upon the true up of the Net Working Capital. The Company had previously acquired 21.4% of Solectrac in 2020. The Company now owns 100% of Solectrac. The purchase price was paid in cash and pursuant to the agreement $2.0 million of the cash consideration was paid into an indemnity escrow to satisfy future indemnification obligations of the selling shareholders, if any. In conjunction with the acquisition of Solectrac, the Company remeasured the 21.4% previously accounted for as an equity method investment. The Company determined the enterprise value using external specialists in support of the preliminary purchase price allocation referenced in the table below. The Company used this enterprise value to remeasure the previous equity investment by grossing up the value of the 21.4% equity ownership to reflect the proceeds paid to gain control of Solectrac. This remeasurement resulted in a gain of $2.9 million recorded in the year ended December 31, 2021, this was recorded in Gain (loss) on remeasurement of investment, in our consolidated statement of operations.

Solectrac is a manufacturer and distributor of clean agricultural equipment of 100% battery-powered, all-electric tractors for agriculture and utility operations. Solectrac tractors provide an opportunity for farmers around the world to power their tractors by using the sun, wind, and other clean renewable sources of energy. The Company expects Solectrac to create immediate synergies with its existing EV initiatives as it brings a rapidly growing agricultural sector to the Company's current product offerings.

In addition to the purchase price, the Solectrac Agreement contains three earnouts that could result in additional payments of up to $6.0 million to the sellers based upon: (1) revenue and gross profit margin metrics in calendar year 2021; (2) revenue and gross profit margin metrics in calendar year 2022; and (3) revenue and gross profit margin metrics in calendar year 2023. The Company considers this earnout to be contingent consideration that as of the acquisition date is probable to occur in certain years and has attributed $1.6 million as additional consideration for purposes of the preliminary purchase price allocation. During the three months ended December 31, 2021 the Company re-evaluated the likelihood of the earnout being achieved in light of macro-economic events impacting the supply chain timeframes and adoption of electric tractors. The Company concluded that the fair value of the contingent consideration approximated $0.1 million and $1.5 million has been recorded as an income for the year ended December 31, 2021 in the consolidated statement of operations, other income (expense) caption. The Company will continue to monitor the fair value of this contingent consideration with any changes being recorded in the consolidated statement of operations if and when a change occurs.

The Company has also agreed to a performance and retention plan for the benefit of certain Solectrac employees which could result in up to $3.0 million paid to such employees if certain gross revenue targets, gross profit margins and certain operational targets are achieved for calendar years 2021, 2022 and 2023. The Company has concluded that this performance and retention plan does not constitute purchase consideration and will be recorded as compensation expense when the criteria are probable of being met. As of December 31, 2021 the Company has not accrued any of this retention plan as the various criteria are not yet probable of occurring.

Revenue of $1.8 million and net loss of $1.9 million, for the year ended December 31, 2021, respectively, have been included in the consolidated financial statements.

The final purchase price allocation for Solectrac is summarized in the table below in the "Acquisition Method Accounting Estimates" section of this note.

Acquisition Method Accounting Estimates

The Company makes an initial allocation of the purchase price at the date of acquisition based upon its understanding of the fair value of the acquired assets and assumed liabilities. The Company obtains the information used for the purchase price allocation during due diligence and through other sources. In the months after closing, as the Company obtains additional information about the acquired assets and liabilities, including through tangible and intangible asset appraisals, and learns more about the newly acquired business, it is able to refine the estimates of fair value and more accurately allocate the purchase price.

The fair values of acquired intangibles are determined based on estimates and assumptions that are deemed reasonable by the Company. Significant assumptions include the discount rates and certain assumptions that form the basis of the forecasted results of the acquired business including earnings before interest, taxes, depreciation and amortization, revenue, revenue growth rates, royalty rates and technology obsolescence rates. These assumptions are forward looking and could be affected by future economic and market conditions. The Company engages third-party valuation specialists who review the Company's critical assumptions and calculations of the fair value of acquired intangible assets in connection with significant acquisitions.

Only facts and circumstances that existed as of the acquisition date are considered for subsequent adjustment. The Company will make appropriate adjustments to the purchase price allocation prior to completion of the measurement period, as required.

The table below reflects the Company's estimates of the acquisition date fair values of the assets acquired and liabilities assumed for the 2021 Acquisitions (in thousands):

	Solectrac	US Hybrid	Timios	WAVE
Purchase Price				
Cash paid at closing, including working capital estimates	$ 18,025	$ 30,139	$ 46,576	$ 15,000
Fair value of previously held interest	5,287	—		
Fair value of common stock	—	20,877	—	28,616
Fair value of contingent consideration	1,640	—	—	11,418
Total purchase consideration	24,952	51,016	46,576	55,034
Purchase Price Allocation				
Assets acquired				
Current assets	2,700	3,793	7,292	2,820
Property, plant and equipment	30	5	429	—
Other assets	45	52	48	—
Intangible assets – tradename	4,210	1,740	8,426	12,630
Intangible assets – lender relationships	—	—	16,600	—
Intangible assets - technology	2,350	5,110		
Intangible assets – patents	—	—	—	13,000
Intangible assets - non-compete	—	520	—	—
Intangible assets – licenses	—	—	1,000	—
Indefinite lived title plant	—	—	500	—
Goodwill	17,714	42,218	21,824	35,689
Total assets acquired	27,049	53,438	56,119	64,139
Liabilities assumed:				
Current liabilities	(509)	(1,602)	(4,306)	(4,578)
Deferred tax liability	(1,588)	(820)	(5,237)	(4,527)
Total liabilities assumed	(2,097)	(2,422)	(9,543)	(9,105)
Net assets acquired	$ 24,952	$ 51,016	$ 46,576	$ 55,034

The useful lives of the intangible assets acquired is as follows:

	Solectrac	US Hybrid	Timios	WAVE
Intangible assets – tradename	6	7	15	15
Intangible assets – lender relationships	—	—	7	—
Intangible assets – technology	10	13	—	—
Intangible assets – patents	—	—	—	14
Intangible assets - non-compete	—	5	—	—
Intangible assets – licenses	—	—	15	—
Weighted average useful life	7.4	11	10	14.5

Excluding the impact of any impairments, the estimated amortization expense related to these intangible assets for each of the years subsequent to December 31, 2021 is as follows (amounts in thousands):

2022 remaining	$	6,511
2023		6,511
2024		6,511
2025		6,511
2026		6,511
2027 and beyond		27,473
Total	$	60,028

Amortization expense related to intangible assets created as a result of the 2021 Acquisitions of $4.9 million has been recorded for the year ended December 31, 2021.

Cumulative Goodwill, excluding any impairments, in the amount of $117.4 million was recorded as a result of the 2021 Acquisitions. The goodwill from the 2021 Acquisitions represents future economic benefits that we expect to achieve as a result of the acquisitions, Goodwill is calculated as the excess of the consideration transferred over the net assets acquired and represents the future economic benefits arising from other assets acquired that could not be individually identified and separately recognized. The goodwill is not expected to be deductible for tax purposes for any of the 2021 Acquisitions. Goodwill will not be amortized but instead will be tested for impairment at least annually and more frequent if certain indicators of impairment are present.

Transaction Costs

Transaction costs describe the broad category of costs the Company incurs in connection with signed and/or closed acquisitions. Transaction costs include expenses associated with legal, accounting, regulatory, and other transition services rendered in connection with acquisition, travel expense, and other non-recurring direct expenses associated with acquisitions. The Company incurred transaction costs of $3.8 million during the year ended December 31, 2021 related to the 2021 Acquisitions. In addition, the Company incurred transaction costs of $3.7 million during the year ended December 31, 2021, associated with the proposed VIA acquisition. Transaction costs have been included in selling, general and administrative expenses in the consolidated statements of operations and in cash flows from operating activities in the consolidated statements of cash flows.

Pro forma Financial Information

The unaudited pro forma results presented below include the effects of the Company’s acquisitions as if the acquisitions had occurred on January 1, 2020. The Company filed an Amended Form 8-K on April 6, 2021 to disclose unaudited pro forma financial information, and explanatory notes, related to the acquisition of Timios as it met the criteria of a significant acquisition. The remainder of the 2021 Acquisitions did not meet the criteria of a significant acquisition, in aggregate or individually.

The pro forma adjustments are based on historically reported transactions by the acquired companies. The pro forma results do not include any material, nonrecurring adjustments directly attributable to the 2021 Acquisitions. The pro forma results do not include any anticipated synergies or other expected benefits of the acquisitions. The unaudited pro forma financial information below is not necessarily indicative of either future results of operations or results that might have been achieved had the acquisitions occurred on January 1, 2020.

(Amounts in thousands, except per share and share data)	Year Ended December 31, 2021	Year Ended December 31, 2020
Total revenue	$ 117,617	$ 114,588
Net loss attributable to IDEX common shareholders	(257,281)	(94,097)
Earnings (loss) per share		
Basic and Diluted	$ (0.57)	$ (0.40)
Weighted average shares outstanding		
Basic and Diluted	447,829,204	232,707,448

Divestitures

On April 20, 2021, Ideanomics entered into a stock purchase agreement with FNL the owner and operator of the social media platform Hoo.be, pursuant to which Ideanomics made an investment into FNL, including cash, Ideanomics common stock, and 100% of the common stock outstanding of Grapevine, a wholly-owned subsidiary of the Company focused on influencer marketing. Subsequent to this transaction, the Company owned 29.0% of the outstanding common stock of FNL.

The Company recognized a disposal loss of $1.2 million as a result of the deconsolidation of Grapevine, and such loss was recorded in “(Loss) gain on disposal of subsidiaries, net” in the consolidated statements of operations. Through its ownership in FNL, the Company has retained a 29.0% interest in Grapevine. The disposal loss of $1.2 million includes the adjustment recorded to adjust the retained interest of 29.0% in Grapevine to its fair value on the date of disposal. The fair value of the retained interest in Grapevine was determined based on the present value of estimated future cash flows which are Level 3 unobservable inputs in the fair value hierarchy. The Company prepared cash flow projections based on management's estimates of revenue growth rates and operating margins, taking into consideration the historical performance and the current macroeconomic industry and market conditions.

2020 Acquisitions and Divestitures

The Company has not acquired any companies nor disposed of any subsidiaries in the year ended December 31, 2020, with the exception of the disposition of its remaining 10.0% interest in Amer as disclosed below.

In the year ended December 31, 2020, the Company commenced the liquidation of a consolidated entity and therefore deconsolidated the entity. As a result of the deconsolidation, the Company recorded a gain of $0.3 million in "(Loss) gain on disposal of subsidiaries, net” and bad debt expense of $0.2 million in "Selling, general and administrative expense" in the consolidated statements of operations.

2019 Acquisitions and Divestitures

(a) Acquisition of Tree Technologies

On December 26, 2019, the Company completed the acquisition of a 51.0% interest in Tree Technologies, a Malaysian company engaged in the EV market. The acquisition price was comprised of (1) $0.9 million in cash, (2) 9.5 million shares of Ideanomics common stock, and (3) contingent consideration of up to $32.0 million over three years, to be paid in cash or Ideanomics common shares at the election of the Company. The contingent consideration was initially based upon revenue targets over three 12 month periods beginning in the three months ended December 31, 2019; due to financing delays and resulting production delays, these three 12 month periods commenced on July 1, 2020. In the year ended December 31, 2020, the Company recorded remeasurement gains of $7.0 million in "Change in fair value of contingent consideration, net" in the consolidated statements of operations. As of December 31, 2020, the recorded balance of this liability was $8.3 million.

The fair value of the Ideanomics stock was based upon the closing price of $0.82 on December 26, 2019, and the fair value of the contingent consideration was estimated to be $15.5 million, and revised to $15.3 million upon finalization of the purchase, and was recorded as a liability on the date of acquisition. The Company estimated the fair value of the contingent consideration using a scenario-based method which incorporates various estimates, including projected gross revenue for the periods, probability estimates, discount rates and other factors. This fair value measurement is based on significant Level 3 inputs. The resulting probability-weighted cash flows were discounted using the Company's estimated weighted average cost of capital of 15.0%.

Tree Technologies holds the land use rights for 250 acres of vacant land zoned for industrial development in the Gebeng Industrial Area adjacent to Kuantan Port. Kuantan is the capital city of the state of Pahang on the east coast of Peninsular Malaysia. The Company intends to develop this land and lease it to Tree Manufacturing for the manufacture of EVs. As part of the acquisition, Tree Technologies acquired an exclusive right to market and distribute the EVs manufactured by Tree Manufacturing. The goodwill arising from the acquisition consists largely of the synergies expected from the fulfillment of these contracts. None of the goodwill recognized is expected to be deductible for tax purposes.

The following table summarizes the acquisition-date fair value of assets acquired and liabilities assumed, as well as the fair value of the non-controlling interest in Tree Technologies recognized. The Company has completed the fair value analysis of the assets acquired, liabilities assumed, the noncontrolling interest, and the contingent consideration, and therefore the adjustments are incorporated in the table below (in thousands):

Land use rights	$	27,140
Accounts payable		(743)
Noncontrolling interest		(15,452)
Goodwill		468
Marketing and distribution agreement		12,590
Total	$	24,003

The completion of the fair value analysis resulted in measurement period adjustments of $12.8 million, primarily to the amount initially assigned to the noncontrolling interest, and reduced the amount of goodwill recorded.

The accounts payable above of $0.7 million primarily represents the transfer tax payable for the land use rights for the 250 acres of vacant land, which the Company paid in the three months ended September 30, 2020.

Tree Technologies had not commenced operations as of the acquisition date, therefore pro forma results as if the acquisition had occurred as of January 1, 2019, and related information, are not presented.

Refer to Note 11 for information regarding the impairment of the marketing and distribution agreement.

(b) Acquisition of Grapevine

On September 4, 2018, the Company completed the acquisition of 65.7% share of Grapevine for $2.4 million in cash. Fomalhaut, a British Virgin Islands company and an affiliate of Dr. Wu, the former Chairman of the Company, was the non-controlling equity holder of the Fomalhaut Interest. Fomalhaut entered into an option agreement, effective as of August 31, 2018 (the "Option Agreement,") with the Company pursuant to which the Company provided Fomalhaut with the option to sell the Fomalhaut Interest to the Company. The aggregate sale price for the Fomalhaut Interest was the fair market value of the Fomalhaut Interest as of the close of business on the date preceding the date upon which the right to sell the Fomalhaut Interest to the Company is exercised by Fomalhaut. If the option was to be exercised, the sale price for the Fomalhaut Interest was payable in a combination of one-third in cash and two-thirds in the Company's shares of common stock at the then market value on the exercise date.

In May 2019, the Company entered into two amendments to the Option Agreement. The aggregate exercise price for the Option was amended to the greater of: (1) fair market value of the Fomalhaut Interest in Grapevine as of the close of business on the date preceding the date upon which the option is exercised; and (2) $1.84 per share of the Company's common stock. It was also agreed that the full amount of the exercise price was to be paid in the form of common stock of the Company.

In June 2019, the Company issued 0.6 million shares in exchange for a 34.3% ownership in Grapevine as a result of the exercise of the Option. At the completion of this transaction the Company owned 100.0% of Grapevine. At the date of the transaction, the carrying amount of the non-controlling interest in Grapevine was $0.5 million. The difference between the value of the consideration exchanged of $1.1 million and the carrying amount of the non-controlling interest in Grapevine is recorded as a debit to additional paid-in capital based on ASC 810.

Refer to Note 11 for information regarding the impairment of Grapevine's influencer network.

(c) Acquisition of JUSTLY (formerly known as Delaware Board of Trade ("DBOT"))

In April 2019, the Company entered into a securities purchase agreement to acquire 6.9 million shares in DBOT in exchange for 4.4 million shares of the Company's common stock at $2.11 per share. In July 2019, the Company entered into another securities purchase agreement to acquire an additional 2.2 million shares in DBOT in exchange for 1.4 million shares of the Company's common stock at $2.11 per share. The two transactions, which increased the Company's ownership in DBOT to 99.0% as of that date, were completed in July 2019. The securities purchase agreements required the Company to issue contingent consideration in the form of additional shares of the Company's common stock in the event the stock price of the common stock falls below $2.11 at the close of trading on the date immediately preceding the lock-up date, which was 9 months from the closing date. The Company accounted for the contingent consideration as a liability in accordance with ASC 480. The Company recorded this liability at fair value of $2.2 million on the date of acquisition. As of December 31, 2019, the Company remeasured this liability to $7.3 million and the remeasurement loss of $5.1 million was recorded in "Change in fair value of contingent consideration, net" in the consolidated statements of operations. In the year ended December 31, 2020, the Company recorded remeasurement losses of $1.5 million in "Change in fair value of contingent acquisition, net" in the consolidated statements of operations, and partially satisfied the liability with the issuance of 13.1 million shares of common stock. As of December 31, 2020, the recorded balance of this liability was $0.6 million. The contractual period which required periodic remeasurement has expired, and therefore the Company will not remeasure this liability in the future.

Immediately prior to the consummation of the transaction, the Company's investment in DBOT consisted of 37.0% of the common shares outstanding, which had a fair value of $3.1 million, and the Company recorded a loss of $3.2 million to record the investment in DBOT to its fair value. This loss was recorded in "Loss on remeasurement of DBOT investment" in the consolidated statements of operations in the year ended December 31, 2019. The fair value of the investment in DBOT immediately prior to the consummation of the transaction was determined in conjunction with the overall fair value determination of the DBOT assets acquired and liabilities assumed.

DBOT operated three companies: (1) DBOT ATS LLC, an SEC recognized ATS; (2) DBOT Issuer Services LLC, focused on setting and maintaining issuer standards, as well as the provision of issuer services to DBOT designated issuers; and (3) DBOT Technology Services LLC, focused on the provision of market data and marketplace connectivity. The goodwill arising from the acquisition consists largely of the synergies and economies of scale expected from combining the operations of the Company and DBOT, as the Company expected to execute its business plan of selling digital tokens and digital assets and other commodities on an approved ATS.

The consolidated statements of operation for the year ended December 31, 2019 include the results of DBOT from July 2019 to December 31, 2019. For the time period from July 2019 through December 31, 2019, DBOT contributed $15,838 and $1.9 million to the Company's revenue and net loss, respectively.

The following table summarizes supplemental information on an unaudited pro forma basis, as if the acquisition had been consummated as of January 1, 2019 (in thousands):

	December 31, 2019
Revenue	$ 44,675
Net loss attributable to IDEX common shareholders	$ (99,417)

The unaudited pro forma results of operations do not purport to represent what the Company's results of operations would actually have been had the acquisition occurred on January 1, 2019. Actual future results may vary considerably based on a variety of factors beyond the Company's control.

The following table summarizes the acquisition-date fair value of assets acquired and liabilities assumed, as well as the fair value of the non-controlling interest in DBOT recognized (in thousands):

Cash	$	247
Other financial assets		1,686
Financial liabilities		(4,411)
Noncontrolling interest		(105)
Goodwill		9,324
Intangible asset – continuing membership agreement		8,255
Intangible asset – customer list		59
Total	$	15,055

The excess of the consideration over the fair value of the net assets acquired has been recorded as goodwill, of which none is expected to be deductible for tax purposes. For all intangible assets acquired, the continuing membership agreements were determined to have a useful life of 20 years and the customer list a useful life of 3 years.

Refer to Note 11 for information regarding the impairment of DBOT's goodwill, continuing membership agreement, and customer list.

2019 Divestitures

(d) Red Rock

In May 2019, the Company determined to sell the Red Rock business and entered into an agreement with Redrock Capital Group Limited, an affiliate of Dr. Wu, the former Chairman of the Company, to sell its entire interest in Red Rock for consideration of $0.7 million. The Company decided to sell Red Rock primarily because it had incurred operating losses and its business was no longer needed based on the Company's business plan. The transaction was completed in July 2019 and the Company recorded a disposal gain of $0.6 million recorded in "(Loss) gain on disposal of subsidiaries, net" in the consolidated statements of operations in the year ended December 31, 2019.

(e) Amer Global Technology Limited

On June 30, 2019, the Company entered into an agreement with BCC and Tekang pursuant to which Tekang will inject certain assets in the robotics and electronic internet industry and Internet of Things business consisting of manufacturing data, supply chain management and financing, and lease financing of industrial robotics into Amer in exchange for 71.8% of ownership interest in Amer. The parties subsequently entered into several amendments including: (1) changing the name of Amer to Logistorm Technology Limited, (2) issuing 39,500 new shares in Amer or 71.8% ownership interest to BCC instead of Tekang, (3) issuing 5,500 new shares in Amer or 10.0% ownership interest to MHTL, and (4) the Company is responsible for 20.0% of any potential tax obligation associated with Amer, if Amer fails to be publicly listed in 36 months from the closing date of this transaction. The Company concluded that it's not probable that this contingent liability would be incurred. As a result of this transaction, the Company's ownership interest in Amer was diluted from 55.0% to 10.0%. The transaction was completed on August 31, 2019.

The Company recognized a disposal gain of $0.5 million as a result of the deconsolidating Amer, and such gain was recorded in "(Loss) gain on disposal of subsidiaries, net" in the consolidated statements of operations in the year ended December 31, 2019. $0.1 million of the gain is attributable to the 10.0% ownership interest retained in Amer. In addition, on the date Amer was deconsolidated, the Company recorded a bad debt expense of $0.6 million relating to a receivable due from Amer to a subsidiary of the Company, which was recorded in "Selling, general and administrative expense" in the consolidated statements of operations in the year ended December 31, 2019.

Pro forma results of operations for the year ended December 31, 2019 have not been presented because they are not material to the consolidated results of operations. Amer had no revenue and minimal operating expenses in the year ended December 31, 2019.

In the three months ended September 30, 2020, the Company sold its remaining 10.0% interest in Amer to Fintalk Media Inc., a related party, for a nominal amount. As the Company had no basis in its remaining interest in Amer, the gain recognized on the sale was de minimis. As part of this transfer, the Company is no longer liable for the contingent liability mentioned above.

Note 9. Accounts Receivable

The following table summarizes the Company's accounts receivable (in thousands):

	December 31, 2021	December 31, 2020
Accounts receivable, gross	$ 4,945	$ 8,619
Less: allowance for doubtful accounts	(1,607)	(1,219)
Accounts receivable, net	$ 3,338	$ 7,400

As of December 31, 2021 and 2020, the gross balance includes the taxi commission revenue receivables from the related party Qianxi of $1.3 million and $1.2 million, respectively.

The following table summarizes the movement of the allowance for doubtful accounts (in thousands):

	December 31, 2021	December 31, 2020	December 31, 2019
Balance at the beginning of the year	$ (1,219)	$ —	$ —
Increase in the allowance for doubtful accounts	(350)	(1,219)	—
Effect of change in foreign currency exchange rates	(38)	—	—
Balance at the end of the year	$ (1,607)	$ (1,219)	$ —

In the years ended December 31, 2021 and 2020, the Company increased its allowance for doubtful accounts by $0.4 million for accounts receivable from a third-party and $1.2 million from the related party Qianxi, respectively.

Note 10. Property and Equipment, net

The following table summarizes the Company's property and equipment (in thousands):

	December 31, 2021	December 31, 2020
Furniture and office equipment	$ 1,432	$ 315
Vehicles	900	229
Leasehold improvements	581	246
Shop equipment	825	—
Total property and equipment	3,738	790
Less: accumulated depreciation	(833)	(460)
Property and equipment, net	$ 2,905	$ 330
Fintech Village		
Land	$ —	$ 2,750
Retirement asset costs - environmental remediation	—	4,500
Fintech Village	$ —	$ 7,250

The Company recorded depreciation expense of $0.5 million, $0.1 million and $0.1 million in the years ended December 31, 2021, 2020 and 2019, respectively.

Fintech Village

On October 10, 2018, the Company purchased a 58-acre former University of Connecticut campus in West Hartford from the State of Connecticut for $5.2 million in cash and also assumed responsibility of the environmental remediation. The Company obtained a surety bond in favor of the seller in connection with the Company's environmental remediation obligations. The Company initially recorded asset retirement obligations in the amount of $8.0 million, which was the estimate performed by the seller and at a discount to the purchase price, therefore, the Company considered it a reasonable estimate of fair value of its asset retirement obligation pursuant to ASC 410.

On January 28, 2021, the Company's Board accepted an offer of $2.8 million for Fintech Village, and subsequently signed a sale contract on March 15, 2021.

In the year ended December 31, 2021, the Company closed on the sale of Fintech Village for $2.8 million, excluding commissions and other costs of $0.2 million.

The asset retirement obligations were derecognized in the year ended December 31, 2021.

The following table summarizes the activity in the asset retirement obligation for the year ended December 31, 2021, and 2020 (in thousands):

	January 1, 2021	Liabilities Incurred	Remediation Performed	Accretion Expense	Derecognition	December 31, 2021
Asset retirement obligation	$ 4,653	$ —	$ —	$ —	$ (4,653)	$ —

	January 1, 2020	Liabilities Incurred	Remediation Performed	Accretion Expense	Derecognition	December 31, 2020
Asset retirement obligation	$ 5,094	$ —	$ (441)	$ —	$ —	$ 4,653

In the year ended December 31, 2020, the Company impaired the remaining building with a carrying amount of $0.3 million and land with a carrying amount of $0.3 million and the related asset retirement cost with a carrying amount of $2.0 million and the capitalized architect costs with a carrying amount of $2.7 million.

In the year ended December 31, 2019, the Company impaired buildings with a carrying amount of $2.3 million, which were subsequently demolished, and impaired related asset retirement costs of $1.5 million.

Note 11. Goodwill and Intangible Assets

A reporting unit is the level at which goodwill is tested for impairment, and is defined as an operating segment or one level below an operating segment, if certain criteria are met. Under its current corporate structure, the Company has one operating segment and seven reporting units.

Goodwill

The following table summarizes changes in the carrying amount of goodwill for the years ended December 31, 2021, 2020 and 2019 (in thousands):

Balance as of Balance of January 1, 2019	$ 705
Acquisitions	30,949
Balance as of January 1, 2020	31,654
Measurement period adjustments	(12,848)
Effect of change in foreign currency exchange rates	(12)
Impairment loss (a)	(18,089)
Balance as of January 1, 2021	705
Measurement period adjustments	186
Impairment (b,c,d,f)	(101,470)
Acquisitions	117,445
Effect of change in foreign currency exchange rates	(1)
Disposal of Grapevine (e)	(704)
Balance as of December 31, 2021	$ 16,161

(a) Throughout 2020, the Company pursued its initial business goals for DBOT involving the sale of digital securities and brokering commodity products, more specifically investigating applications to new and underserved markets, or targeting of specific transactions, such as the origination of foreign securities, the formation of an investment vehicle with a third-party, or the securitization of digital assets. These efforts did not come to fruition, and the Company concluded sufficient impairment indicators existed to evaluate the fair value of DBOT's intangible assets. As part of this fair value analysis, the Company determined that the goodwill associated with the DBOT acquisition was fully impaired and recorded an impairment loss of $9.3 million. Refer to Note 11 for information regarding the impairment of the continuing membership agreement and customer list.

The Company acquired Tree Technologies in December, 2019 and determined that there were immaterial errors in the initial accounting for the acquisition. A deferred tax liability should have been recorded in connection with the acquisition, with a corresponding amount of goodwill of $8.3 million. Tree Technologies business objectives developed more slowly than originally projected, due to a revaluation of the market opportunity, both in the context of the time and amount of investment required to achieve the originally projected results, and further complicated by various factors, including COVID-19, the temporary closures of businesses in the area, which resulted in the lack of demand for motorbikes, rolling business and government shutdowns, and supply chain constraints. The Company determined that sufficient impairment indicators existed and decided to perform a quantitative impairment analysis in the three months ended December 31, 2020.

Under the income approach, the Company estimated the fair value of Tree Technologies based on the present value of estimated future cash flows which are Level 3 unobservable inputs in the fair value hierarchy. The Company utilized cash flow projections based on information known and knowable at that time, and included management's estimates of revenue growth rates and operating margins, taking into consideration the historical performance and the then current macroeconomic industry and market conditions. The Company based the discount rate on the weighted-average cost of capital adjusted for the relevant risk associated with business-specific characteristics and the uncertainty related to Tree Technologies' ability to execute on its business plan.

(b) On July 26, 2021, Timios experienced a systems outage that was caused by a cybersecurity incident, which caused disruption to parts of Timios' business, including its ability to perform its mortgage title, closing and escrow services offerings. This resulted in an adverse impact on Timios' revenues in that one significant customer was lost and other customers have reduced their volume. The Company determined that an indicator of potential impairment existed and decided to perform an interim quantitative tangible and intangible asset and goodwill impairment tests for its Timios reporting unit.

Based on the results of this interim quantitative impairment test, the fair value of the Timios reporting unit was below the carrying value of its net assets. The decline in the fair value of the Timios reporting unit resulted from the cybersecurity event described above, which lowered the projected revenue and profitability levels of the reporting unit. The fair value of the Timios reporting unit was based on the income approach. Under the income approach, the Company estimated the fair value of the reporting unit based on the present value of estimated future cash flows which are Level 3 unobservable inputs in the fair value hierarchy. The Company prepared cash flow projections based on management's estimates of revenue growth rates and operating margins, taking into consideration the historical performance and the current macroeconomic industry and market conditions. The Company based the discount rate on the weighted-average cost of capital adjusted for the relevant risk associated with business-specific characteristics and the uncertainty related to the Timios' ability to execute on the projected cash flows. The fair value of Timios' reporting unit is based on management's best estimates, and should actual results differ from those estimates, future impairment charges may be required in future periods.

The quantitative analysis indicated that the carrying amount of the Timios reporting unit exceeded its fair value by $19.5 million. As a result, the Company recorded a goodwill impairment charge of $5.6 million, and impairment charges related to the Timios tradename and lender relationships of $0.7 million and $13.2 million, respectively, in the three months ended September 30, 2021.

(c) For the year ended December 31, 2021, market conditions and supply chain issues have had an adverse impact on WAVE's business forecasts. The projections have negatively impacted WAVE's performance, resulting in lower gross margins and revenue forecasts being reduced. As a result, the Company recorded a goodwill impairment charge of $35.7 million for the year ended December 31, 2021.

(d) For the period ended December 31, 2021, market conditions and supply chain issues have had an adverse impact on US Hybrid's business forecasts. The projections have negatively impacted US Hybrid's performance, resulting in lower gross margins and revenue forecasts being reduced. As a result, the Company recorded a goodwill impairment charge of $42.2 million for the year ended December 31, 2021.

(e) During the three months ended June 30, 2021, the Company completed the sale of Grapevine. Refer to Note 8 for additional information.

(f) For the period ended December 31, 2021, market conditions and supply chain issues have had an adverse impact on Solectrac's business forecasts. The projections have negatively impacted Solectrac's performance, resulting in lower gross margins and revenue forecasts being reduced. As a result, the Company recorded a goodwill impairment charge of $17.7 million for the year ended December 31, 2021.

Intangible Assets

The following table summarizes information regarding amortizing and indefinite lived intangible assets (in thousands):

		December 31, 2021				December 31, 2020		
	Weight Average Remaining Useful Life	Gross Carrying Amount	Accumulated Amortization	Impairment Loss	Net Balance	Gross Carrying Amount	Accumulated Amortization	Net Balance
Amortizing Intangible Assets								
Influencer network (a,g)	—	$ —	$ —	$ —	$ —	$ 1,137	$ (462)	$ 675
Customer contract (a,g)	—	—	—	—	—	500	(389)	111
Continuing membership agreement (b)	17.5	1,179	(649)	—	530	1,179	(619)	560
Patents, trademarks and brands (a,d,g,f,h,i)	57.0	39,820	(2,715)	(30,492)	6,613	110	(17)	93
Technology platform (a,g)	—	—	—	—	—	290	(97)	193
Land use rights (c)	97.0	27,102	(411)	—	26,691	28,162	(142)	28,020
Licenses (d)	14.0	1,000	(65)	—	935	—	—	—
Lender relationships (d)	6.0	16,600	(1,638)	(12,550)	2,412	—	—	—
Internally developed software (e)	2.6	452	(76)	—	376	—	—	—
Software (h,j)	13.7	4,492	(178)	—	4,314	—	—	—
Non-compete (i)	4.5	520	(57)	(463)	—	—	—	—
Technology (h,i)	21.9	7,460	(347)	(7,113)	—	—	—	—
Assembled workforce	1.9	150	(6)	—	144	—	—	—
Total		98,775	(6,142)	(50,618)	42,015	31,378	(1,726)	29,652
Indefinite lived intangible assets								
Title plant (d)		500	—	—	500	—	—	—
Website name		25	—	—	25	25	—	25
Title License		6	—	—	6	—	—	—
Patent		—	—	—	—	28	—	28
Total		$ 99,306	$ (6,142)	$ (50,618)	$ 42,546	$ 31,431	$ (1,726)	$ 29,705

(a) During the three months ended September 30, 2018, the Company completed the acquisition of 65.7% share of Grapevine. Refer to Note 8. In connection with the previously mentioned business analysis of Grapevine, the Company determined that the attrition rate of the influencer network had accelerated, and performed an impairment analysis, and recorded an impairment loss of $0.8 million. As a result of this analysis of the influencer network, the Company also determined that the remaining useful life of the influencer network should be reduced to two years, effective January 1, 2021.

(b) During the three months ended September 30, 2019, the Company completed the acquisition of additional shares in DBOT, which increased its ownership to 99.0%. Intangible assets of $8.3 million were recognized on the date of acquisition. As part of the determination of the fair value of DBOT's intangible assets mentioned above, the Company utilized the cost method to determine the fair value of the continuing membership agreement, and determined the fair value was $0.6 million, and recorded an impairment loss of $7.1 million. The Company also recorded an impairment loss of $30,000 related to DBOT's customer list. Refer to Note 8 for additional information related to the acquisition.

(c) During the three months ended December 31, 2019, the Company completed the acquisition of a 51.0% interest in Tree Technologies, a Malaysian company engaged in the EV market. As part of the acquisition, Tree Technologies acquired an exclusive right to market and distribute the EVs manufactured by Tree Manufacturing. Upon acquisition, the fair value of this agreement was determined to be $11.3 million. In the three months ended December 31, 2020, Tree Technologies obtained a domestic EV manufacturing license in Malaysia; and therefore determined it would not purchase vehicles from Tree Manufacturing. The Company subsequently severed all commercial relationships with Tree Manufacturing.

Accordingly, the Company determined there was no underlying value to the marketing and distribution agreement, and recorded an impairment loss of $12.5 million. Refer to Note 8 for additional information related to the acquisition.

(d) During the three months ended March 31. 2021, the Company completed the acquisition of 100.0% interest in Timios. Refer to Note 8 for additional information related to the acquisition.

(e) Relates to software development costs capitalized during the three months ended September 30, 2021 at Timios. The asset was placed into service in July 2021.

(f) During three months ended March 31, 2021, the Company completed the acquisition of 100% interest in WAVE. Refer to Note 8 for additional information related to the acquisition.

(g) During the three months ended June 30, 2021, the Company completed a stock purchase agreement with FNL, pursuant to which Ideanomics made an investment into FNL, including cash, Ideanomics common stock, and 100% of the common stock outstanding of Grapevine.

(h) During three months ended June 30, 2021, the Company completed the acquisition of privately held Solectrac. Solectrac develops 100% battery-powered, all-electric tractors for agriculture and utility operations. Refer to Note 8 for additional information related to the acquisition.

(i) During three months ended June 30, 2021, the Company completed the acquisition of privately held US Hybrid Corporation. US Hybrid specializes in the design and manufacturing of zero-emission electric powertrain components. Refer to Note 8 for additional information related to the acquisition.

(j) Relates to software costs capitalized during the three months ended September 30, 2021.

During the three months ended March 31, 2019, the Company completed the sale of certain intangible assets to GTD, and entered into a service agreement with GTD, a minority shareholder, in exchange for GTB. As a result of these transactions, the Company received 8.3 million GTB. On October 29, 2019, GTB had an unexpected significant decline in quoted price, from $17.00 to $1.84. This decline continued through the fourth quarter of 2019, and on December 31, 2019 the quoted price was $0.23. As a result of this decline in quoted price, and its inability to convert GTB into other digital currencies which were more liquid, or fiat currency, the Company performed an impairment analysis in the fourth quarter of 2019 and recorded an impairment loss of $61.1 million. Refer to Note 17 for additional information on the transactions denominated in GTB.

Amortization expense, excluding impairment losses of $13.9 million, $20.5 million and $66.8 million for the years ended December 31, 2021, 2020 and 2019, respectively, mentioned above, relating to intangible assets was $5.5 million, $5.2 million and $2.1 million for the years ended December 31, 2021, 2020 and 2019, respectively.

The following table summarizes future expected amortization expense (in thousands):

Years ending December 31,	Amortization to be recognized
2022	$ 4,199
2023	4,183
2024	3,918
2025	3,454
2026	3,404
2027 and thereafter	22,857
Total	$ 42,015

Note 12. Long-term Investments

The following table summarizes the composition of long-term investments (in thousands):

	December 31, 2021	December 31, 2020
Non-marketable equity investments	$ 7,500	$ 4,787
Equity method investments	28,088	3,700
Total	$ 35,588	$ 8,487

Non-marketable equity investments

Our non-marketable equity investments are investments in privately held companies without readily determinable fair values are carried at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer.

The Company reviews its equity securities without readily determinable fair values on a regular basis to determine if the investment is impaired. For purposes of this assessment, the Company considers the investee’s cash position, earnings and revenue outlook, liquidity and management ownership, among other factors, in its review. If management’s assessment indicates that an impairment exists, the Company estimates the fair value of the equity investment and recognizes an impairment loss that is equal to the difference between the fair value of the equity investment and its carrying amount. Based on management’s analysis of certain investment’s performance, impairment losses of $4.5 million, $0.2 million and $3.0 million were recorded in the years ended December 31, 2021, 2020 and 2019, and are recorded in “Asset impairments” in the consolidated statements of operations.

Equity method investments

The following table summarizes the Company’s investment in companies accounted for using the equity method of accounting (in thousands):

		December 31, 2021							
		January 1, 2021	Addition	Income (loss) on investment	Reclassification to subsidiaries	Impairment losses	Reclassification to equity method investee	Dilution loss due to investee share issuance	December 31, 2021
Solectrac	(a)	$ 2,556	$ —	$ (153)	$ (2,372)	$ —	$ —	$ (31)	$ —
Energica	(b)	—	13,555	(1,226)	—	—	—	—	12,329
FNL	(c)	—	3,505	(899)	—	—	250	—	2,856
MDI Fund	(d)	—	4,646	(881)	—	—	—	—	3,765
TM2	(e)	1,144	7,226	(506)	—	(7,864)	—	—	—
PEA	(f)	—	9,138	—	—	—	—	—	9,138
Total		$ 3,700	$ 38,070	$ (3,665)	$ (2,372)	$ (7,864)	$ 250	$ (31)	$ 28,088

		December 31, 2020							
		January 1, 2020	Addition	Income (loss) on investment	Reclassification to subsidiaries	Impairment losses	Reclassification to equity method investee	Dilution loss due to investee share issuance	December 31, 2020
TM2	(e)	$ 1,227	$ —	$ (83)	$ —	$ —	$ —	$ —	$ 1,144
Intelligenta	(g)	$ 9,800	$ —	$ —	$ —	$ (9,800)	$ —	$ —	$ —
Glory	(h)	6,854	—	(4)	—	(6,850)	—	—	—
Solectrac	(a)	—	2,600	(44)	—	—	—	—	2,556
Total		$ 17,881	$ 2,600	$ (131)	$ —	$ (16,650)	$ —	$ —	$ 3,700

The Company has received no dividends from equity method investees in the years ended December 31, 2021, 2020 and 2019.

(a) Solectrac

On October 22, 2020, the Company acquired 1.4 million common shares, representing 15.0% of the total common shares outstanding, of Solectrac for a purchase price of $0.91 per share, for total consideration of $1.3 million. On November 19, 2020, Ideanomics acquired an additional 1.3 million shares of common stock for $1.00 per share, for a subsequent investment of $1.3 million. The Company’s ownership in Solectrac was diluted to 24.3% as of March 31, 2021 due to the new share issuance by Solectrac during the three months ended March 31, 2021.

On June 11, 2021, Ideanomics entered into a stock purchase agreement and plan of merger with Solectrac and its shareholders, and acquired the remaining common shares outstanding of Solectrac for total consideration of $17.7 million. Ideanomics now owns 100% of Solectrac, and commenced consolidation of Solectrac on that date.

Refer to Note 8 for additional information on the acquisition of Solectrac.

(b) Energica

On March 3, 2021, the Company entered into an investment agreement with Energica. The Company invested €10.1 million ($13.6 million) for 6.1 million ordinary shares of Energica at a subscription price of €1.78 ($2.21) for each ordinary share. Pursuant to the purchase of the shares the Company will hold 20.0% of Energica's share capital. From March 3, 2021 through September 30, 2021 the Company has the right to participate in any equity financing by Energica. Ideanomics was restricted from selling any of the shares for a period of 90 days.

Energica is the world's leading manufacturer of high performance electric motorcycles and the sole manufacturer of the FIM Enel MotoE™ World Cup. Energica motorcycles are currently on sale through the official network of dealers and importers.

The Company has decided to account for Energica on a one quarter lag as Energica, which is publicly traded on the Milan stock exchange, is only required to prepare and file semi-annual and annual financial statements, and the time frame in which the filings must be complete is much more lenient than in the U.S. Energica prepares its financial statements in accordance with Article 2423 et seq of the Italian Civil Code, rather than U.S. GAAP. Energica's financial statements will either be prepared in or reconciled to U. S. GAAP prior to the Company recording its share of Energica's earnings or losses, and the one quarter lag will be utilized to accomplish this, as well as related disclosure matters.

As of December 31, 2021, the excess of the Company's investment over its proportionate share of Energica's net assets was $11.0 million. The difference represents goodwill.

Certain shareholders of Energica have rights such that they may convert their ordinary shares into ordinary shares with supervoting rights under certain conditions. If some or all of these ordinary shares were converted into ordinary shares with supervoting rights, the Company's ownership in Energica would be diluted, perhaps significantly.
The aggregate market value of the Energica common shares owned by the Company was $21.8 million as of December 31, 2021.

(c) FNL

On April 20, 2021, Ideanomics entered into a stock purchase agreement with FNL, pursuant to which Ideanomics made an investment into FNL, which included the investment of $2.9 million cash into FNL, the issuance of 0.1 million shares of Ideanomics common stock, and 100.0% of the common stock outstanding of Grapevine. Ideanomics received 0.6 million shares of common stock of FNL at a subscription price of $8.09 per share of common stock, and Ideanomics also converted a $250,000 SAFE into 30,902 shares of common stock. The Company determined that the basis in the FNL investment is the aggregate of the cash invested, including the SAFE, the fair value of the Ideanomics common stock issued, and the fair value of Grapevine. As a result of this transaction, Ideanomics owns 29.0% of the common stock outstanding of FNL, and FNL appointed Alfred Poor, Ideanomics' Chief Executive Officer, to be a member of its board of directors.

The Company has decided to account for FNL on a one quarter lag, as FNL is in the development stage and will require the additional time to prepare financial statements in accordance with U.S. GAAP.

(d) MDI Fund

On July 26, 2021, the Company entered into a subscription agreement to invest $25.0 million in the MDI Fund. The MDI Fund an organization of minority-owned banks that aim to increase inclusivity in the financial services industry, is sponsored by the National Bankers' Association. The MDI Fund will provide capital resources primarily in low and moderate income areas to grow a more skilled workforce, increase employment opportunities, and support businesses' growth among minority and underserved communities. The initial investment of $0.6 million was made on July 26, 2021.

The Company has decided to account for the MDI Fund on a one quarter lag since the MDI Fund's reporting requirements differ from the Company's quarterly reporting schedule.

(e) TM2

On January 28, 2021, the Company entered into a SAFE with TM2. As of August 13, 2021, the SAFE was amended to which Ideanomics would invest €5.0 million ($5.9 million), an increase in the investment of €3.5 million ($4.1 million), from the original contracted investment of €1.5 million ($1.8 million.) If there is an equity financing (of above €5.0 million ($6.8 million)) during the twelve months immediately following execution of the SAFE, on the initial closing of such equity financing the SAFE will automatically convert into the number of ordinary shares equal to the purchase amount divided by the lowest price per share of the ordinary shares paid during such equity financing. If no equity financing has taken place during the twelve-month period immediately following the date of the SAFE, the parties shall in good faith attempt for one month to agree to a fair value per ordinary share represented by the SAFE, following which the SAFE shall convert into the number of ordinary shares equal to the purchase amount divided by such fair value. If the parties are unable to establish a fair value per ordinary share within such one-month period, the Company shall be entitled to convert the purchase amount into ordinary shares based on the pre-investment valuation of the Company of €10.0 million ($11.1 million) on December 20, 2019, plus the value of any investment into the SAFE since the original investment resulting in a current valuation of the Company of €11.0 million ($12.5 million), but subject to increase by the amount of any further debt, equity, convertible investment prior to January 28, 2022. In the event of a non-qualifying financing, TM2 shall provide the Company with sufficient information to verify such funding and increase in valuation. The Company accounts for TM2 as an equity method investment, as it holds a 10.0% equity ownership interest and has one of four seats on the board of directors.

(f) PEA

On August 2, 2021, the Company announced a strategic investment in PEA, a business unit within the Prettl Group, a large German industrial company that manufactures and distributes components and systems for the automotive, energy, and electronics industries. The terms include a strategic investment of €7.5 million ($9.1 million) for 11,175 preferred shares. Ideanomics will receive exclusive sales and distribution rights for PEA charging infrastructure products and solutions in North America and CEO Alf Poor will join PEA's Board of Directors. The Company received legal ownership as of October 19, 2021, after payment of €7.5 million ($9.1 million) representing a 30% equity ownership.

(g) Intelligenta

In 2018, the Company signed an investment agreement with two unrelated parties to establish BDCG, subsequently renamed Intelligenta, for providing block chain services for financial or energy industries by utilizing artificial intelligence and big data technology in the United States. On April 24, 2018, the Company acquired 20.0% equity ownership in BDCG from one noncontrolling party for total consideration of $9.8 million which consisted of $2.0 million in cash and $7.8 million paid in the form of the Company’s capital stock (valued at $2.60 per share and equal to 3.0 million shares of the Company’s common stock), increasing the Company’s ownership to 60.0%. The remaining 40.0% of Intelligenta are held by Seasail. The accounting treatment for the investment is based on the equity method due to variable substantive participating rights (in accordance with ASC 810) granted to Seasail.

Intelligenta’s target customer base is financial institutions and large energy companies in the U. S.; however, due to the political relations between the U.S. and China, Intelligenta has been unable to commercialize its product as such companies are hesitant to engage a company with China-based ownership to perform AI and block chain services. The Company evaluated the business prospects of Intelligenta, and determined the investment was impaired and the impairment was other-than-temporary. Accordingly, the Company recorded an impairment loss of $9.8 million in “Impairment of and equity in loss of equity method investees” in the consolidated statements of operations in the year ended December 31, 2020.

Intelligenta has yet to record revenue or earnings or losses, and therefore its statement of operations and balance sheet data are not material.

As of December 31, 2019, the excess of the Company’s investment over its proportionate share of Intelligenta’s net assets was $9.8 million. The difference represented goodwill and was not amortized.

(h) Glory

On July 18, 2019, the Company entered into an acquisition agreement to purchase a 34.0% interest in Glory, a Malaysian company, from its shareholder Beijing Financial Holding Limited, a Hong Kong registered company, for the consideration of 12.2 million restricted common shares of the Company, initially representing $24.4 million at $2.00 per share, the contract price, and subsequently revised to $20.0 million at $1.64 per share, the closing price on the date of acquisition. As part of this transaction, the Company was also granted an option to purchase a 40.0% interest in Bigfair from its shareholder Beijing Financial Holding Limited for an exercise price of $13.2 million in the form of common shares of the Company. Bigfair holds a 51.0% ownership stake in Glory. The option was exercisable from July 18, 2020 to July 19, 2021.

Upon the initial investment, the Company performed a valuation analysis and allocated $23.0 million and $1.4 million of the consideration transferred to the equity method investment and the call option, respectively, which was subsequently revised to $20.0 million and $0, respectively.

As initially contemplated, Glory, through its subsidiary Tree Manufacturing, would hold a domestic EV manufacturing license in Malaysia, a marketing and distribution agreement for EVs in the ASEAN region, as well as the land use rights for 250 acres of vacant land zoned for industrial development in the Gebeng Industrial Area adjacent to Kuantan Port. Kuantan is the capital city of the state of Pahang on the east coast of Peninsular Malaysia, which was to be the site of the manufacturing operations.

In December 2019, the Company acquired a 51.0% ownership interest in Tree Technologies. Tree Technologies had previously been granted the land use rights to the 250 acres of vacant land mentioned above, which was previously anticipated would be owned by Glory. As Glory would no longer receive the land use rights to the 250 acres of vacant land, the Company evaluated its investment in Glory for impairment, and recorded an impairment loss of $13.1 million in “Impairment of and equity in loss of equity method investees” in the consolidated statements of operations in the year ended December 31, 2019.

Tree Technologies had also entered into a product supply arrangement and a product distribution arrangement with a subsidiary of Glory. The Company performed an assessment of these arrangements, and determined that Glory is a variable interest entity, but that the Company is not the prime beneficiary. As of December 31, 2020, the Company accounted for Glory as an equity method investment. Refer to Note 8 for additional information on the acquisition of Tree Technologies.

In the three months ended December 31, 2020, Tree Technologies obtained a domestic EV manufacturing license in Malaysia; and therefore determined it would not purchase vehicles from Glory's subsidiary, Tree Manufacturing. As Glory's value was predicated on the underlying manufacturing agreement between Tree Technologies and Tree Manufacturing, the Company evaluated the business prospects of Glory, and determined that its investment was impaired and the impairment was other-than-temporary. Accordingly, the Company recorded an impairment loss of $6.9 million in "Impairment of and equity in loss of equity method investees" in the consolidated statements of operations in the year ended December 31, 2020. Refer to Note 11 for information on the impairment loss recorded with respect to the manufacturing agreement with Tree Manufacturing.

Note 13. Leases

As of December 31, 2021 and 2020, the Company’s operating lease right of use assets were $12.8 million and $0.2 million, respectively. As of December 31, 2021 and 2020, the Company’s operating lease liabilities were $12.7 million and $0.1 million, respectively. The weighted-average remaining lease term is 4.2 years and the weighted-average discount rate is 5.2%.

The following table summarizes the components of lease expense (in thousands):

	Year Ended		
	December 31, 2021	December 31, 2020	December 31, 2019
Operating lease cost	$ 1,764	$ 1,600	$ 1,708
Short-term lease cost	720	349	317
Sublease income	—	(74)	(42)
Total	$ 2,484	$ 1,875	$ 1,983

The following table summarizes supplemental information related to leases (in thousands):

	Year Ended		
	December 31, 2021	December 31, 2020	December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows from operating leases	$ 1,856	$ 991	$ 1,407
Right-of-use assets obtained in exchange for new operating lease liabilities	14,293	486	935

The additional right of use assets were primarily acquired in the Timios, WAVE, US Hybrid and Solectrac acquisitions. The facilities acquired are primarily office buildings and warehouses in U.S. locations where they conduct business. Additionally, the Company leased a showroom in New Jersey in November, 2021.

The following table summarizes the maturity of operating lease liabilities (in thousands):

Years ending December 31	Leased Property Costs
2022	$ 3,629
2023	3,647
2024	2,728
2025	2,281
2026	1,685
2027 and thereafter	222
Total lease payments	14,192
Less: Interest	(1,459)
Total	$ 12,733

In the year ended December 31, 2021, the Company vacated two leases and recorded an impairment loss related to the right of use asset of $0.1 million.

In the three months ended March 31, 2020 the Company ceased to use the premises underlying one lease and vacated the real estate. As a result, the Company recorded an impairment loss related to the right of use asset of $0.9 million. In the three months ended June 30, 2020, the Company completed negotiations with the landlord to settle the remaining operating lease liability of $0.9 million by issuing a promissory note for $0.1 million, bearing an annual interest rate of 4.0%, and which was due on December 31, 2021 and was paid in the year ended December 31, 2021. The Company recorded a gain of $0.8 million in “Other income (expense), net” in the consolidated statements of operations for the settlement of the operating lease liability.

In the three months ended June 30, 2020 the Company ceased to use its New York City headquarters at 55 Broadway, which were subject to two leases, and vacated the real estate. As a result, the Company recorded an impairment loss related to the right of use asset of $5.3 million. The Company had an operating use liability of $5.8 million with respect to these leases, excluding $0.6 million in accounts payable. In the three months ended September 30, 2020, the Company completed negotiations with the landlord to settle the remaining amounts due of $6.4 million for a cash payment of $1.5 million. The Company recorded a gain of $4.9 million in “Other income (expense), net” in the consolidated statements of operations for the settlement of the operating lease.

Note 14. Supplementary Information

Other Current Assets

“Other current assets” were $4.5 million and $3.7 million as of December 31, 2021 and 2020, respectively. Components of “Other current assets” as of December 31, 2021 and 2020 include a receivable of $1.9 million from a third-party and a deposit of $3.4 million to a third-party supplier for EV purchases, respectively. In the year ended December 31, 2021, the Company collected the $3.4 million deposit that was made to the third-party supplier in 2020. There were no components of "Other current assets" as of December 31, 2021 and 2020, which were more than 5% of total current assets.

Other Current Liabilities

“Other current liabilities” were $7.1 million and $2.2 million as of December 31, 2021 and 2020, respectively. There were no components of "Other current liabilities" as of December 31, 2021, which were more than 5% of total current liabilities. Components of "Other current liabilities" as of December 31, 2020 that were more than 5% of total current liabilities were other payables to third-parties in the amount of $0.8 million.

Current Liabilities, Other Non-current Assets and Other Long-term Liabilities

On December 31, 2021 the Company terminated a legal agreement previously entered into whereby the Company took possession of a property in Qingdao, China for no consideration. The termination resulted in the derecognition of an asset of

$6.6 million recorded in “Other non-current assets,” and a liability of $6.7 million, of which $0.3 million was recorded in “Other current liabilities” and $6.4 million was recorded in “Other long-term liabilities.” This resulted in a gain of $0.2 million recorded in “Other income (expense), net.”

Note 15. Promissory Notes

The following is the summary of outstanding promissory notes as of December 31, 2021 and 2020 (in thousands):

		December 31, 2021		December 31, 2020	
	Interest rate	Principal Amount	Carrying Amount*	Principal Amount	Carrying Amount*
Convertible Debenture (a)	4.0%	$ 57,500	$ 57,809	$ —	$ —
Vendor Note Payable (b)	0.25%-4%	—	—	105	105
Small Business Association Paycheck Protection Program (c)	1.0%	311	312	460	463
Total		$ 57,811	58,121	$ 565	568
Less: Current portion			(58,121)		(568)
Long-term Note, less current portion			$ —		$ —

Ties to

*Carrying amount includes the accrued interest and approximates the fair value because of the short-term nature of these instruments.

The weighted average interest rate for these borrowings is 4.0% and 1.4% as of December 31, 2021 and December 31, 2020, respectively.

As of December 31, 2021 and 2020, the Company was in compliance with all ratios and covenants.

The following table summarizes the impact to the consolidated statements of operations associated with outstanding promissory notes (in thousands):

	Year Ended		
	December 31 2021	December 31 2020	December 31 2019
Interest expense excluding amortization of debt discount	$ 2,139	$ 1,593	$ 1,449
Interest expense related to amortization of debt discount	—	14,485	4,235
Total interest expense	$ 2,139	$ 16,078	$ 5,684
Expense due to conversion of notes	$ —	$ 2,266	$ —
(Gain)loss on extinguishment of debt	$ (300)	$ (8,891)	$ 3,940

(a) $75.0 million Convertible Debenture due October 24, 2022 – YA II PN

On October 25, 2021, the Company executed a security purchase agreement with YA II PN, whereby the Company issued a convertible note of $75.0 million, and received aggregate gross proceeds of $75.0 million. The note is scheduled to mature on October 24, 2022 and bears interest at an annual rate of 4.0%, which would increase to 18.0% in the event of default. The note has a fixed conversion price of $1.88. The conversion price is not subject to adjustment except for subdivisions or combinations of common stock. The Company has the right, but not the obligation, to redeem a portion or all amounts outstanding under this note prior to the maturity date at a cash redemption price equal to the principal to be redeemed, plus accrued and unpaid interest. The note contained customary events of default, indemnification obligations of the Company and other obligations and rights of the parties. Commencing February 1, 2022, the Company has the obligation to redeem $8.3 million per month, against the unpaid principal. This amount may be reduced by any conversions by YA II PN or optional redemptions made by the Company.

During the year ended December 31, 2021, the principal and accrued and unpaid interest in the amount of $17.6 million was converted into 9.4 million shares of common stock of the Company. Total interest expense recognized was $0.6 million for the year ended December 31, 2021.

(b) Vendor Notes Payable

On May 13, 2020, DBOT entered into a settlement agreement with a vendor whereby the existing agreement with the vendor was terminated, the vendor ceased to provide services, and all outstanding amounts were settled. In connection with this agreement, DBOT paid an initial $30,000 and executed an unsecured promissory note in the amount of $60,000, bearing interest at 0.25% per annum, and payable in two installments of $30,000. The first installment was due on December 31, 2020 and was repaid, the remaining payment was due on August 31, 2021 and was repaid.

In the three months ended March 31, 2020 the Company ceased to use the premises underlying one lease and vacated the real estate. In the three months ended June 30, 2020, the Company completed negotiations with the landlord to settle the remaining operating lease liability of $0.9 million by issuing a promissory note for $0.1 million, bearing an annual interest rate of 4.0%, and which was due and repaid as of December 31, 2021.

(c) Small Business Association Paycheck Protection Program

On April 10, 2020, the Company borrowed $0.3 million at an annual rate of 1.0% from a commercial bank through the Small Business Association Paycheck Protection Program. The loan was originally payable in 18 installments of $18,993 commencing on November 10, 2020, with a final payment due on April 10, 2022. With several amendments, the loan is currently payable monthly commencing on September 10, 2021, with a final payment due on April 10, 2025. The forgiveness application of the loan was submitted in August 2021 and the Company has made payments totaling $31,674 of principal and interest during the year ended December 31, 2021 while the forgiveness application is under review.

On May 1, 2020 Grapevine borrowed $0.1 million at an annual rate of 1.0% from a commercial bank through the Small Business Association Paycheck Protection Program. The loan was originally payable in 18 installments of approximately $7,000 commencing on December 1, 2020, with a final payment due on May 1, 2022. With several amendments, the loan was payable commencing on October 1, 2021, with a final payment due on April 10, 2025. On April 20, 2021, the Company completed the disposal of Grapevine and the loan balance was deconsolidated from consolidated balance sheet.

On May 3, 2020 WAVE borrowed $0.3 million at an annual rate of 1.0% from a commercial bank through the Small Business Association Paycheck Protection Program. The loan was originally payable in 18 installments of $12,630 commencing on November 1, 2020, with a final payment due on May 3, 2022. After the issuance of an additional grace period, payments were to commence on September 21, 2021 until the original maturity date of May 3, 2022. The loan and the accrued interest were forgiven and paid by the U.S. Small Business Administration according to the notice received from the bank on September 16, 2021. The Company recorded the forgiveness as "Gain (loss) on extinguishment of debt" on the consolidated statement of operations.

On February 24, 2021 US Hybrid borrowed $0.5 million at an annual rate of 1.0% from a commercial bank through the Small Business Association Paycheck Protection Program. The loan had a maturity date of February 24, 2026. After the issuance there was a 2 month loan forgiveness covered period followed by a 10 month deferment period, and payments were to commence on March 10, 2022 and continue until the maturity date. US Hybrid used the loan for qualifying expenses. The loan was forgiven in June 2021 and was accounted for in conjunction with the acquisition accounting in Note 8.

Promissory Notes Issued and Repaid in the Year Ended December 31, 2021

During the year ended December 31, 2021, the Company issued several convertible debt instruments to YA II PN, the terms of which are summarized in the following table (principal and gross proceeds in thousands):

	YA II PN Note 1	YA II PN Note 2	YA II PN Note 3	YA II PN Note 4
Principal	$ 37,500	$ 37,500	$ 65,000	$ 80,000
Gross proceeds	$ 37,500	$ 37,500	$ 65,000	$ 80,000
Interest rate	4.0 %	4.0 %	4.0 %	4.0 %
Conversion price	$ 2.00	$ 3.31	$ 4.12	$ 4.95
Maturity dates	July 4, 2021	July 15, 2021	July 28, 2021	August 8, 2021

The conversion prices on the notes above were fixed, and were not subject to adjustment except for subdivisions or combinations of common stock. The Company had the right, but not the obligation, to redeem a portion or all amounts outstanding under these notes prior to their maturity date at a cash redemption price equal to the principal to be redeemed, plus accrued and unpaid interest. The notes contained customary events of default, indemnification obligations of the Company and other obligations and rights of the parties. In the event of default, the interest rate would increase to 18.0%.

During the year ended December 31, 2021, the notes, plus accrued and unpaid interest, were converted into 45.9 million shares of common stock of the Company, and one note of $80.0 million was repaid.

Promissory Notes Outstanding Prior to December 31, 2020

The Company had various debt instruments outstanding prior to December 31, 2020. Certain of these instruments contained beneficial conversion features and/or down round provisions, which were triggered by the subsequent issuance of common stock at a price lower than the down round provisions in the instruments. Certain of these instruments were modified, amended or extinguished, resulting in additional expenses or gains. These debt instruments were either converted into common stock of the Company or repaid on or prior to their scheduled maturity dates in the year ended December 31, 2020.

Note 16. Stockholders' Equity, Redeemable Convertible Preferred Stock and Redeemable Non-controlling Interest

Convertible Preferred Stock

Our Board has authorized 50.0 million shares of convertible preferred stock, $0.001 par value, issuable in series. As of December 31, 2021 and 2020, 7.0 million shares of Series A preferred stock were issued and outstanding. The Series A preferred stock shall be entitled to one vote per common stock on an as-converted basis and is only entitled to receive dividends when and if declared by the Board.

Each share of Series A Preferred Stock shall be convertible, at the option of the holder thereof, at any time, at the office of the Company or any transfer agent for such stock, into ten fully paid and nonassessable shares of Common Stock, and redeemable at a stated dollar amount upon a merger/consolidation/change in control.

Upon the occurrence of a liquidation event, the holders of shares of Series A Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Company available for distribution to its stockholders, whether from capital, surplus or earnings, an amount per share equal to $0.50, as may be adjusted from time to time plus all accrued, but unpaid dividends, whether declared or not.

Common Stock

Our Board has authorized 1,500 million shares of common stock, $0.001 par value.

Redeemable Non-controlling Interest

The Company and Qingdao formed an entity named New Energy. Qingdao entered into a capital subscription agreement for a total of RMB 200.0 million ($28.0 million), and made the first capital contribution of RMB 50.0 million ($7.0 million) in the three months ended March 31, 2020. The remaining RMB 150.0 million ($21.0 million) was payable in three installments of RMB 50.0 million ($7.0 million) upon New Energy attaining certain revenue or market value benchmarks.

The investment agreement stipulated that New Energy must pay Qingdao dividends at the rate of 6.0%. After one year, Qingdao may sell its investment to an institutional investor, and after three years may redeem its investment for the face amount plus 6.0% interest less dividends paid. The redemption feature was neither mandatory nor certain. Due to the redemption feature, the Company had classified the investment outside of permanent equity. Redeemable non-controlling interest is recorded as
the greater of (i) the redemption amount or (ii) the cumulative amount that would result from applying the measurement guidance in ASC 810.

In the year ended December 31, 2021, Qingdao officially requested redemption of the invested funds and dividend, RMB 56.0 million ($7.9 million) in total prior to December 31, 2021. The Company designated Qingdao Medici to pay the redemption price. After the payment, Qingdao Medici owns 100% of New Energy. Because Qingdao Medici cannot complete its foreign exchange settlement prior to December 31, 2021, New Energy made the payment on behalf of Qingdao Medici. Qingdao, Qingdao Medici and New Energy agreed that Qingdao Medici will make the payment to Qingdao directly when it completes the foreign exchange settlement and Qingdao will return the money previously paid by New Energy to New Energy immediately after it receives the fund from Qingdao Medici.

The following table summarizes activity for the redeemable non-controlling interest for the years ended December 31, 2021 and 2020 (in thousands):

January 1, 2020	
Initial investment	$ 7,047
Accretion of dividend	438
Loss attributable to non-controlling interest	(135)
Adjustment to redemption value	135
December 31, 2020	7,485
Accretion of dividend	464
Loss attributable to non-controlling interest	(206)
Adjustment to redemption value	206
Settlement	(7,949)
December 31, 2021	$ —

2021 Equity Transactions

On February 26, 2021, the Company entered into a sales agreement with Roth Capital. In accordance with the terms of the sales agreement, the Company may offer and sell from time to time through Roth Capital the Company's common stock having an aggregate offering price of up to $150.0 million. The Company shall pay to Roth Capital in cash, upon each sale of such shares pursuant to the sales agreement, an amount equal to 3.0% of the gross proceeds from each sale of such shares. During the year ended December 31, 2021, the Company issued 50.4 million shares of common stock and received net proceeds of $145.5 million after deducting $4.5 million commission and transaction fees.

On June 11, 2021, the Company entered into a SEDA with YA II PN. The Company will be able to sell up to $80.4 million shares of its common stock at the Company's request any time during the 36 months following the date of the SEDA's entrance into force. The shares would be purchased at (1) 95% of the Market Price if the applicable pricing period is two consecutive trading days or (2) 96% of the Market Price if the applicable pricing period is five consecutive trading days, and, in each case, would be subject to certain limitations, including that YA II PN could not purchase any shares that would result in it owning more than 4.99% of the Company's common stock. "Market Price" shall mean the lowest daily volume weighted average price of the Company's common stock during the two or five consecutive trading days, as applicable, commencing on the trading day following the date the Company submits an advance notice to YA II PN. Pursuant to the SEDA, the Company is required to register all shares which YA II PN may acquire. The SEDA contains customary representations, warranties and agreements of the Company and YA II PN, indemnification rights and other obligations of the parties. YA II PN has covenanted not to cause or engage in any direct or indirect short selling or hedging of the Company's shares of common stock. During the year ended December 31, 2021, the Company issued 10.0 million shares of common stock for a total of $27.3 million.

On August 12, 2021, the Company entered into a controlled equity offering sales agreement with Cantor. In accordance with the terms of the agreement, the Company may offer and sell from time to time through or to Cantor, as sales agent or principal, the Company's common stock having an aggregate offering price of up to $350.0 million. The shares will be offered and sold pursuant to the Company's shelf registration statement on Form S-3 (Registration No. 333- 252230.) The Company shall pay to Cantor in cash, upon each sale of shares pursuant to this agreement, an amount equal to up to 3.0% of the aggregate gross proceeds from each sale of shares. During the year ended December 31, 2021, the Company issued 7.9 million shares of common stock and received net proceeds of $15.7 million after deducting $0.4 million commission and transaction fees.

Refer to Note 8 for information related to the issuance to common stock for acquisitions, Note 15 for information related to issuance of common stock with convertible notes, Note 18 for information related to the issuance to common stock for option exercise.

2020 Equity Transactions

The Company entered into a SEDA with YA II PN on April 3, 2020 and amended the SEDA to reduce the aggregate amount of facility from $50.0 million to $45.0 million on June 9, 2020, and terminated the SEDA on September 10, 2020. The Company had the right to issue and sell to YA II PN up to $45.0 million of the Company's common stock over 36 months following the date of the SEDA's entrance into force, the maximum amount of each of which is limited to $1.0 million. In connection with the SEDA, the Company issued commitment shares to a subsidiary of YA II PN on April 3, 2020 The Company recognized such commitment shares as deferred offering costs and additional paid-in capital for a total of $0.9 million and, subsequently fully charged these costs against the gross proceeds received from SEDA for the year ended December 31, 2020.

The Company entered into the second SEDA with YA II PN on September 4, 2020. The Company was able to sell up to $150.0 million of its common stock at the Company's request any time during the 36 months following the date of the SEDA's entrance into force.

For each share of common stock purchased under the SEDA, YA II PN was to pay 90% of the lowest VWAP of the Company's shares during the five trading days following the Company's advance notice to YA II PN. In general, the VWAP represents the sum of the value of all the sales of the Company's common stock for a given day (the total shares sold in each trade times the sales price per share of the common stock for that trade), divided by the total number of shares sold on that day.

YA II PN's obligation under the SEDA was subject to certain conditions, including the Company maintaining the effectiveness of a registration statement for the securities sold under the SEDA. In addition, the Company could not request advances if the common shares to be issued would result in YA II PN owning more than 4.99% of the Company's outstanding common stock, with any such request being automatically modified to reduce the advance amount.

The SEDA contained customary representations, warranties and agreements of the Company and YA II PN, indemnification rights and other obligations of the parties. YA II PN had covenanted not to cause or engage in any direct or indirect short selling or hedging of the Company's shares of common stock.

During the year ended December 31, 2020, the Company issued 122.9 million shares of common stock for a total of $182.5 million under the SEDA.

Refer to Note 15 for information related to issuance of common stock resulting from the conversion of convertible notes, Note 17 for information related to the issuance of common stock resulting from the conversion of convertible notes with related parties, Note 18 for information related to the issuance to common stock for warrant and option exercise, and Note 8 for the information related to the issuance of common stock for DBOT contingent consideration.

2019 Equity Transactions

Refer to Note 15 for information related to issuance of common stock resulting from the conversion of convertible notes, Note 8 for information related to the issuance of common stock resulting from the business acquisitions and Note 12 for the information related to the issuance of common stock for long-term investment. The Company also issued 7.4 million shares of common stock related to asset acquisitions.

Note 17. Related Party Transactions

(a) Convertible Notes

$3.0 million Convertible Note with Mr. McMahon

On May 10, 2012, Mr. McMahon, our Executive Chairman, made a loan to the Company in the amount of $3.0 million. In consideration for the loan, the Company issued the note at a 4.0% interest rate computed on the basis of a 365-day year. The Company entered several amendments with respect to the effective conversion price (changed from $1.75 to $1.50), convertible stocks (changed from Common Stock to Series E Preferred Stock then back to Common Stock). The last amendment was made on May 9, 2020, and extended the maturity date to December 31, 2022.

On June 5, 2020, the Audit Committee and the Board approved the reduction of conversion price to $0.59, contingent upon the immediate conversion of the note. On June 5, 2020, the note was converted into 5.1 million shares of common stock. The Company recorded $1.5 million expense due to conversion in "Expense due to conversion of notes" in the consolidated statement of operation for the year ended December 31, 2020. The Company paid the accumulated interest of $0.3 million in cash prior to the conversion.

For the years ended December 31, 2021, 2020 and 2019, the Company recorded interest expense of $0, $0.1 million and $0.1 million, respectively, related to the note.

$2.5 million Convertible Promissory Note with SSSIG

On February 8, 2019, the Company entered into a convertible promissory note agreement with SSSIG, an affiliate of Dr. Wu, the former Chairman of the Company, in the aggregate principal amount of $2.5 million. The convertible promissory note bore interest at a rate of 4.0%, was scheduled to mature on February 8, 2020, and was convertible into shares of the Company's common stock at a conversion price of $1.83 per share anytime at the option of SSSIG.

The Company received $1.3 million from SSSIG, and did not receive the remaining $1.2 million. On June 5, 2020, the Audit Committee and the Board approved the reduction of the conversion price to $0.59, contingent upon the immediate conversion of the convertible promissory note. On June 5, 2020, the convertible promissory note, including accumulated interest, was converted into 2.2 million shares of common stock. The Company recorded $0.7 million expense due to conversion in "Expense due to conversion of notes" in the consolidated statement of operation for the year ended December 31, 2020.

For the years ended December 31, 2021, 2020 and 2019, the Company recorded interest expense of $0, $21,546 and $48,357, related to the convertible promissory note, respectively. The Company did not pay the interest in cash on this note.

$1.0 million Convertible Promissory Note with SSSIG

On November 25, 2019, the Company entered into a convertible promissory note agreement with SSSIG, an affiliate of Dr. Wu, the former Chairman of the Company, in the aggregate principal amount of $1.0 million. The convertible promissory note bore interest at a rate of 4.0%, was initially scheduled to mature on November 25, 2021, and was convertible into the shares of the Company's common stock at a conversion price of $1.25 per share anytime at the option of SSSIG.

The Company received $0.3 million from SSSIG and did not receive the remaining $0.8 million. On June 5, 2020, the Audit Committee and the Board of Directors approved the reduction of conversion price to $0.59, contingent upon the immediate conversion of the convertible promissory note. On June 5, 2020, the convertible promissory note, including accumulated interest, was converted into 0.4 million shares of common stock. The Company recorded $0.1 million expense due to conversion "Expense due to conversion of notes" in the consolidated statement of operation for the year ended December 31, 2020.

For the years ended December 31, 2021, 2020 and 2019, the Company recorded interest expense of $0, $4,301 and $1,000, respectively. The Company did not pay the interest in cash on this note.

(b) Transactions with GTD

Disposal of Assets in exchange of GTB

In March 2019, the Company completed the sale of the following assets (with total carrying amount of $20.4 million) to GTD, a minority shareholder based in Singapore, in exchange for 1.3 million GTB. The Company considered the arrangement as a nonmonetary transaction and that fair values of GTB were not reasonably determinable due to the reasons described below. Therefore, the GTB received were recorded at the carrying amount of the assets exchanged and the Company did not recognize any gain or loss based on the provisions of ASC 845.

- License content (net carrying amount $17.0 million.)
- 13% ownership interest in Topsgame (carrying amount of $3.2 million which was included in long-term investment as a non-marketable equity investment.)
- Animation copy right (net carrying amount $0.2 million which was included in intangible assets.)

Digital asset management services

The Company recognized revenue for the master plan development services over the contract period based on the progress of the services provided towards completed satisfaction. Based on ASC 606, at contract inception, the Company considered the following factors to estimate the value of GTB (noncash consideration): 1) it only trades in one exchange, which had operated for less than one year; 2) its historical volatility was high; and 3) the Company's intention at the time to hold the majority of GTB, as part of its digital asset management services; and 4) associated risks related to holding GTB. Therefore, the value of 7.1 million GTB using Level 2 measurement was $40.7 million with a 76.0% discount to the fixed contract price agreed upon by both parties when signing the contract. The Company considered similar assets exchanges in Singapore and considered the volatility of the quoted prices and determined a discount of 76.0% The estimated value of GTB was calculated using the Black-Scholes Merton valuation model using the following assumptions: expected terms 3.0 years; volatility 155%; dividend yield:

zero and risk-free interest rate of 2.25%. As of December 31, 2019, all performance obligations associated with the development of the master plan for GTD's assets had been satisfied. Accordingly, the Company recognized revenue of $40.7 million in the year ended December 31, 2019.

Refer to Note 11 for information concerning the impairment loss of $61.1 million recorded related to GTB in the year ended December 31, 2019.

(c) Long-Term Investment to Qianxi

In November 2019, the Company entered into a share transfer agreement with Shenma to acquire its 1.72% ownership in Qianxi for consideration of $4.9 million, which was to be paid in six installments. Shenma was required to complete the share transfer registration prior to May 31, 2020, otherwise it would be required to return the consideration to the Company. The Company had paid $0.5 million as of December 31, 2021 and 2020, and recorded it on the "Other Non-Current Assets" since the share transfer registration was not yet completed. The Company is currently taking actions to resolve these matters. The Company has requested that Shenma return the consideration provided and currently has full allowance against this receivable.

(d) Borrowing from DBOT

During the three months ended June 30, 2019, the Company obtained several borrowings, $0.6 million in total, from DBOT, These borrowings bore no interest. The Company paid $0.3 million in July, 2019. DBOT became a subsidiary in July 2019.

(e) Acquisition of Fintalk Assets

In 2018, the Company entered into an agreement to purchase Fintalk Assets from Sun Seven Star International Limited, a Hong Kong company and an affiliate of Dr. Wu. FinTalk Assets include the rights, titles and interest in a secure mobile financial information, social, and messaging platform that has been designed for streamlining financial-based communication for professional and retail users. The initial purchase price for the Fintalk Assets was $7.0 million payable with $1.0 million in cash and shares of the Company's common stock with a fair market value of $6.0 million. The Company paid $1.0 million in October 2018. The purchase price was later amended to $6.4 million, payable with $1.0 million in cash and shares of the Company's common stock with a value of $5.4 million. The Company issued 2.9 million common shares in June 2019 and completed the transaction. In the three months ended December 31, 2019, management determined these assets had no future use and recorded an impairment loss of $5.7 million.

(f) Sale of Red Rock

Refer to Note 8 for additional information.

(g) Acquisition of Grapevine

Refer to Note 8 for additional information.

(h) Sale of Amer

Refer to Note 8 for additional information.

(i) Taxis commission revenue from Qianxi

During the three months ended June 30, 2019, the Company signed an agreement with iUnicorn (also known as Shenma Zhuanche) to form a strategic entity that would focus on green finance and integrated marketing services for new energy taxi vehicles as part of Ideanomics China. The Company agreed to contribute advisory and sales resources which include arranging ABS-based auto financing with its bank partners, and have 50.1% ownership interest in the investment and will have control of the board. iUnicorn, which own 49.9% of the of the joint venture, agreed to contribute its vehicles sales orders in Sichuan province. The entity will generate revenues from commissions on vehicle sales order and ABS fees related to the financing, which will vary accordingly to manufacturer and vehicle model.

During the three months ended September 30, 2019, the joint venture took over an order of 4,172 EV taxis from a third-party and helped facilitate the completion of the order. As part of the transaction, Qianxi agreed to pay a commission of $2.7 million to the joint venture for facilitating the completion of this order. There is no other remaining performance obligation relating to this commission. In addition, the commission revenue is considered revenue from a related party as the minority shareholder of the joint venture is an affiliate of our customer, Qianxi. The Company has provided the full allowance against this receivable.

(j) Fuzhou Note Receivable

In May 2020, Energy Sales provided a note receivable to Zhengtong in the amount of 3.0 million RMB ($0.4 million). The note receivable was not collateralized. Zhengtong agreed to repay 3.3 million RMB ($0.5 million) within three months of the disbursement date. The Company has recorded a reserve of $0.5 million against this note receivable as of December 31, 2020. In September 2021, Zhengtong, BSSGCD, an affiliate of Bruno Wu, the former Chairman of the Company, and the Company reached an assignment agreement pursuant to which BSSGCD accepted from Zhengtong all the rights and claims arising from this note receivable. The Company received the payment in full of 3.3 million RMB (approximately $0.5 million at such time,) from BSSGCD subsequently and recorded this recovery in "Selling, general and administrative expenses."

(k) Zhu Note Receivable

In May 2020, a subsidiary of the Company, Energy Sales provided a note receivable to Mr. Zhu in the amount of 10.0 million RMB ($1.4 million). Mr. Zhu, through his wholly-owned entity Prime Capital Enterprise Pte. Ltd., provided collateral in the form of its 50.0% ownership of Founder Space. Founder Space is also 50.0% owned by a related party, Seven Stars Innovative Industries Group Limited, an affiliate of Dr. Wu, the former Chairman of the Company. Mr. Zhu agreed to repay 10.5 million RMB ($1.5 million) one month from the disbursement date. In September 2020, a third-party satisfied the note receivable and accrued interest in the amount of 10.5 million RMB ($1.5 million) on behalf of Mr. Zhu, and the Company terminated the note and collateral agreement.

(l) Research and development contract with a related party

The Company has entered a research and development contract with an entity with the total amount of $2.8 million for EV design and technology development. The Company paid $1.6 million for the year ended December 31, 2020 and recorded this amount in "Research and development expense." No service is currently being provided under this contract. One of the shareholders of this entity held a senior position in several of Dr. Wu's affiliated entities.

(m) Transaction with Dr. Wu and his affiliates

On June 5, 2020, the Audit Committee and the Board approved the conversion of some borrowings at a conversion price of $0.59 per common share, contingent upon the immediate conversion of these amounts. On June 5, 2020, the borrowings of $1.5 million, including the $0.4 million transferred from Beijing Financial Holding Limited, were converted into 2.6 million shares of common stock.

As of December 31, 2021 and 2020, the Company has receivables of $0.2 million and $0.2 million, respectively, due from Dr. Wu, the former Chairman of the Company, and his affiliates and recorded in "Amounts due from related parties" in the consolidated balance sheets.

As of December 31, 2021 and 2020, the Company has payables of $0.7 million and $0.6 million, respectively, due to Dr. Wu, the former Chairman of the Company, and his affiliates and recorded in "Amounts due to related parties" in the consolidated balance sheets.

Service agreement with SSSIG

The Company entered a service agreement with SSSIG for the period from July 1, 2020 through June 30, 2021 for $1.4 million in exchange for consulting services from SSSIG, the services include but are not limited to human resources, finance and legal advice. The Company recorded the service charges of $0.4 million and $0.7 million in "Professional fees" for the years ended December 31, 2021 and 2020, respectively. The agreement was terminated in May 2021 and both parties agree that the service agreement has been completely performed and no payment is outstanding, and the termination shall not be regarded as a breach by either party. As a result, the Company recorded the reversal of the unpaid $0.6 million in "Other income (expense), net" in the consolidated statement of operations for the year ended December 31, 2021.

The Company entered a new consulting service agreement with SSSIG on April, 20, 2021 for the period from April 1, 2021 through June 30, 2021 for $0.4 million. The service agreement includes employment transfer, financial transition, corporate documents handover, legal representative and board member change for the Company's subsidiaries and affiliates. The

Company recorded $0.4 million in the “Amount due to related parties” in the consolidated balance sheets as of December 31, 2021.

(n) Borrowing from Beijing Financial Holdings Limited

In the three months ended June 30 2020, the borrowing of $0.4 million from Beijing Financial Holding Limited was transferred to Dr. Wu, the former Chairman of the Company, and was subsequently converted to shares at a conversion price of $0.59 per common share on June 5, 2020. Effective January 1, 2020, Beijing Financials Holding limited is considered a related party because MHTL, was, at a point in time, intended to act as a trustee over 10,000 common shares of Ideanomics China to affect a share-based compensation plan and has the same owner of Beijing Financial Holdings Limited.

(o) Amounts due from and due to Glory

Glory has made partial payment of $0.5 million on behalf of the Company to acquire the land use rights and the Company has made payments on behalf of Glory for some of its operational expenses during the year ended December 31, 2021 and December 31, 2020. The net balance of $0.2 million and $0.3 million due to Glory as result of these payments is recorded in “Amount due to related parties” in the consolidated balance sheets as of December 31, 2021 and December 31, 2020, respectively.

(p) Receivable due from Ocasia

In the year ended December 31, 2021, SSE, one of Ideanomics' subsidiaries, remitted $0.2 million to Ocasia for the purpose of a business cooperation project. Ocasia returned $0.2 million subsequently because the project was put on hold.

(q) Receivable due from Mr. McMahon

In the year ended December 31, 2021, the Company paid $0.1 million on behalf of Mr. McMahon and subsequently reduced his compensation payment by the same amount.

(r) Stock purchase consideration payable due to FNL

On April 20, 2021, Ideanomics entered into a stock purchase agreement with FNL, pursuant to which Ideanomics made an investment into FNL. The unpaid consideration of $0.1 million is recorded in the “Amount due to related parties” in the consolidated balance sheets as of December 31, 2021. Refer to Note 8 for additional information.

(s) Energica Note Receivable

In October 2021, the Company extended a revolving line of credit to Energica Motor Company in the amount of $4.5 million. The parent company of Energica Motor Company is Energica, of which the Company has 20% ownership. The revolving loan commitment termination date is December 31, 2022. The revolving loan due date is 210 days from the date an individual revolving loan is made. Interest rate is the prime rate, as defined. All accrued and unpaid interest on each revolving loan shall be payable commencing on the nineteenth day after the making of such revolving loan, and then again thirty days thereafter until the principal balance of such revolving loan is repaid in full. Overdue principal shall bear interest at the Interest Rate plus four percentage points. Each revolving loan is solely for the purpose of purchasing financed vehicles in order to resell such financed vehicles to an approved dealer, or delivered to an approved dealer for later sale to a customer of such approved dealer. The loan is secured by a series of assets, including financed vehicles, all accounts receivable, all goods and inventory.

The Company has provided a loan of $0.7 million to Energica Motor Company as of December 31, 2021, and recorded in “Notes receivable from related party” in the consolidated balance sheets at cost, The interest income recognized is $6,476 for the year ended December 31, 2021 and is recorded as earned based on the outstanding balance for the time period at the rate per the agreement.

Note 18. Share-Based Compensation

As of December 31, 2021, the Company had 21.8 million options and 1.1 million warrants outstanding.

The Company awards common stock and stock options to employees, consultants, and directors as compensation for their services, and accounts for its stock option awards to employees, consultants, and directors pursuant to the provisions of ASC 718. For the options with market conditions, the fair value of each award is estimated on the date of grant using a Monte-Carlo valuation model and the fair value of each option recognized as compensation expense over the derived service period. For the options with performance conditions, the fair value of each award is estimated on the date of grant using the Black-Scholes Merton valuation model and the fair value of each option recognized as compensation expense over the implicit service period. For restricted stock and option awards only with service conditions, the fair value of each option award is estimated on the date of grant using the Black-Scholes Merton valuation model. The Company recognizes the fair value of each option as compensation expense ratably using the straight-line attribution method over the service period, which is generally the vesting period.

Effective as of December 3, 2010 and amended on August 3, 2018, the Company's Board approved the 2010 Plan pursuant to which options or other similar securities may be granted. On October 22, 2020, the Company's shareholders approved the amendment and restatement of the 2010 Plan. The maximum aggregate number of shares of common stock that may be issued under the 2010 Plan increased from 31.5 million shares to 56.8 million shares. As of December 31, 2021, options available for issuance are 17.4 million shares.

For the years ended December 31, 2021, 2020 and 2019, total share-based payments expense was $22.0 million, $12.0 million and $9.1 million, respectively.

(a) Stock Options

The following table summarizes stock option activity for the years ended December 31, 2021 and 2020:

	Options Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregated Intrinsic Value
Outstanding at December 31, 2019	14,936,726	$ 2.13	—	$ —
Granted	15,854,166	0.60	—	—
Exercised	(2,421,657)	0.78	—	2,421,499
Expired	(1,682,658)	2.72	—	—
Forfeited	(1,599,161)	1.58	—	—
Outstanding at December 31, 2020	25,087,416	1.29	7.92	18,554,241
Granted	9,562,000	2.49	—	—
Exercised	(5,589,084)	1.50	—	7,731,175
Expired	(2,966,509)	1.69	—	—
Forfeited	(4,250,042)	1.10	—	—
Outstanding at December 31, 2021	21,843,781	1.74	8.06	4,596,393
Vested as of December 31, 2021	14,264,369	1.53	7.71	3,927,341
Expected to vest as of December 31, 2021	7,579,412	2.15	9.37	669,052

As of December 31, 2021, $12.9 million of total unrecognized compensation expense related to non-vested share options is expected to be recognized over a weighted average period of 1.40 years. The total intrinsic value of shares exercised in the years ended December 31, 2021, 2020 and 2019, was $7.7 million, $2.4 million and $0.0 million, respectively. The total fair value of shares vested in the years ended December 31, 2021, 2020 and 2019, was $8.4 million, $11.8 million and $8.5 million, respectively. Cash received from options exercised in the years ended December 31, 2021, 2020 and 2019, was $8.4 million, $1.7 million and $0.0 million, respectively.

For the options with performance and service conditions, the assumptions used to estimate the fair values of the stock options granted in the year ended December 31, 2021, 2020 and 2019 are as follows:

	Year ended		
	December 31, 2021	December 31, 2020	December 31, 2019
Expected term (in years)	4.79-7.17	5.15-5.52	5.52
Expected volatility	112%-130%	101%-122%	98 %
Expected dividend yield	— %	— %	— %
Risk free interest rate	0.51%-1.29%	0.39%-0.44%	2.51 %

For the options with market conditions, the assumptions used to estimate the fair values of the stock options granted in the year ended December 31, 2021 as follows:

Expected term (in years)	1.88
Expected volatility	106.92 %
Expected dividend yield	— %
Risk free interest rate	1.31 %

(b) Warrants

In connection with certain of the Company's service agreements, the Company issued warrants to service providers to purchase common stock of the Company. As of December 31, 2021, the weighted average exercise price was $4.00, and the weighted average remaining life was 0.61 years.

A summary of the warrants is as follows:

	2021	2020		
Warrants Outstanding	Number of Warrants Outstanding and Exercisable	Number of Warrants Outstanding and Exercisable	Exercise Price	Expiration Date
Service providers	200,000	200,000	$ 5.00	July 1, 2022
Service providers	700,000	700,000	2.50	February 28, 2022-October 1, 2022
Service providers	100,000	—	7.50	January 1, 2023
Service providers	100,000	—	9.00	January 1, 2023
	1,100,000	900,000		

(c) Restricted Shares

In July 2021, the Company granted 5.0 million restricted shares to seven employees and directors under the 2010 Plan which was approved by the Board. The restricted shares were vested immediately on the grant date. The aggregated grant date fair value of all those restricted shares was $12.4 million.

In November 2020, the Company granted 0.1 million restricted shares to one employee under the 2010 Plan which was approved by the Board of Directors. The restricted shares were vested immediately on the commencement date. The aggregated grant date fair value of all those restricted shares was $0.1 million.

A summary of the unvested restricted shares is as follows:

	Shares	Weighted-average fair value
Non-vested restricted shares outstanding at December 31, 2020	—	
Granted	5,025,000	2.46
Forfeited	—	—
Vested	(5,025,000)	2.46
Non-vested restricted shares outstanding at December 31, 2021	—	—

As of December 31, 2021, there was $0 of unrecognized compensation cost related to unvested restricted shares.

Note 19. Loss Per Common Share

The following table summarizes the Company's earnings (loss) per share (USD in thousands, except per share amounts):

	For the year ended		
	December 31, 2021	December 31, 2020	December 31, 2019
Net loss attributable to Ideanomics, Inc. common stockholders	$ (256,011)	$ (101,264)	$ (98,508)
Basic			
Basic weighted average common shares outstanding	447,829,204	213,490,535	119,766,859
Diluted			
Diluted weighted average common shares outstanding	447,829,204	213,490,535	119,766,859
Net loss per share:			
Basic	$ (0.57)	$ (0.47)	$ (0.82)
Diluted	$ (0.57)	$ (0.47)	$ (0.82)

Basic loss per common share attributable to our shareholders is calculated by dividing the net loss attributable to our shareholders by the weighted average number of outstanding common shares during the period.

Diluted loss per share is calculated by taking net loss, divided by the diluted weighted average common shares outstanding. Diluted net loss per share equals basic net loss per share because the effect of securities convertible into common shares is anti-dilutive.

The following table includes the number of shares that may be dilutive potential common shares in the future. The holders of these shares do not have a contractual obligation to share in our losses and thus these shares were not included in the computation of diluted loss per share because the effect was antidilutive (in thousands.)

	December 31, 2021	December 31, 2020	December 31, 2019
Warrants	1,100	900	8,996
Options and RSUs	21,859	25,172	14,937
Series A Preferred Stock	933	933	933
Contingent shares	1,491	1,013	8,501
Convertible promissory note and interest	30,585	—	21,678
Total	55,968	28,018	55,045

Note 20. Income Taxes

(a) CIT

Ideanomics, Inc., and its US subsidiaries are subject to U.S. federal and state income tax.

Taxes that are based on gross revenue, rather than net income, are not CIT. In the year ended December 31, 2021, Timios incurred $0.1 million of such taxes that are included in selling, general and administrative expense in the statement of operations.

CB Cayman was incorporated in the Cayman Islands as an exempted company and is not subject to income tax under the current laws of the Cayman Islands.

Mobile Energy Operation Group Limited, M.Y. Products Global Limited and M.Y. Products Global Holdings Limited were incorporated in the British Virgin Islands (BVI) and are not subject to income tax under the current laws of the British Virgin Islands.

Medici Operation Limited and MEG Technology Services Group Limited were incorporated in HK SAR their activities relate to support and ownership of businesses outside of Hong Kong, and consequently their expenses do not create operating loss carryovers.

Tree Technologies is subject to Malaysian federal income tax. At the acquisition of Tree Technologies at the end of 2019, the Company recognized approximately $8.2 million of deferred tax liabilities related to land-use rights and a distribution and marketing agreement with carrying values well in excess of their tax basis. During the year ended December 31, 2020, Tree Technologies recorded a $3.3 million income tax benefit. This resulted principally from a $3.1 million benefit from amortization and eventual impairment, of the distribution and marketing agreement which resulted in the reversal of the deferred tax liabilities related to the agreement. The remaining $0.2 million benefit resulted from the operating losses creating carryovers that could offset part of the remaining deferred tax liabilities.

During the year ended December 31, 2021, Tree Technologies recorded a $0.4 million deferred tax benefit. This benefit resulted from a net operating loss carryover for the period, part of which was able to offset previously recorded deferred tax liabilities and part of which were offset by a valuation allowance.

With the exception of the two HK SAR companies, the three BVI companies, SSE, incorporated in Singapore, and M.Y. Products LLC, all subsidiaries of Ideanomics China are PRC entities. The income tax provision of these entities is calculated at the applicable tax rates on the taxable income for the periods based on existing legislation, interpretations and practices in the PRC.

In accordance with the CIT Law, effective beginning on January 1, 2008, enterprises established under the laws of foreign countries or regions and whose “place of effective management” is located within the PRC territory are considered PRC resident enterprises and subject to the PRC income tax at the rate of 25.0% on worldwide income. The definition of “place of effective management” refers to an establishment that exercises, in substance, and among other items, overall management and control over the production and business, personnel, accounting, and properties of an enterprise. If the Company’s non-PRC incorporated entities are deemed PRC tax residents, such entities would be subject to PRC tax under the CIT Law. Since our non-PRC entities have accumulated losses, the application of this tax rule will not result in any PRC tax liability, if our non-PRC incorporated entities are deemed PRC tax residents.

The CIT Law imposes a 10.0% withholding income tax, subject to reduction based on tax treaty where applicable, for dividends distributed by a FIE to its immediate holding company outside China. Under the PRC-HK tax treaty, the withholding tax on dividends is 5.0% provided that a HK holding company qualifies as a HK tax resident as defined in the tax treaty. No provision was made for the withholding income tax liability as the Company’s foreign subsidiaries were in accumulated loss.

Loss before tax (after impairment of an equity in loss of equity method investees) and the provision for income tax benefit consists of the following components (in thousands):

	2021	2020	2019
Loss before tax, after impairment of and equity in loss of equity method investees			
United States	$ (256,851)	$ (82,999)	$ (88,688)
PRC/Hong Kong/Singapore/Malaysia	(11,660)	(31,890)	(7,724)
	$ (268,511)	$ (114,889)	$ (96,412)
Deferred tax expense (benefit) of net operating loss			
United States - Federal	$ —	$ —	$ —
United States - State	—	—	—
PRC/Hong Kong/Singapore/Malaysia	(371)	(241)	(176)
	(371)	(241)	(176)
Deferred tax (benefit) of a decrease in the beginning of the year			
Valuation allowance as a result of a change in circumstances	—	—	—
United States - Federal	(8,873)	—	—
United States - State	(1,261)	—	—
PRC/Hong Kong/Singapore/Malaysia	—	—	—
	(10,134)	—	—
Deferred tax expense (benefit) other than the above two categories			
United States - Federal	(89)	—	—
United States - State	(1,359)	—	(514)
PRC/Hong Kong/Singapore/Malaysia	(58)	(3,067)	—
Total deferred income tax (expense) benefit	(1,506)	(3,067)	(514)
Current tax expense (benefit) other than benefit of net operating loss			
United States - Federal	—	—	—
United States - State	225	—	—
PRC/Hong Kong/Singapore/Malaysia	—	—	1,107
Total current income tax (expense) benefit	225	—	1,107
Total income tax expense (benefit)	$ (11,786)	$ (3,308)	$ 417

At the acquisition of each of Timios, WAVE, US Hybrid and Solectrac in 2021, the companies immediately became includable in the consolidated federal tax return of Ideanomics. WAVE will be included in the state tax returns of Ideanomics. In the case of each acquisition, intangible assets were recognized for financial reporting purposes that were not recognized for income tax purposes. This, in combination with some smaller temporary differences of the four acquired businesses, resulted in the recognition of $12.2 million deferred tax liabilities. The federal deferred tax liabilities, and the WAVE state deferred tax liabilities created, resulted in the valuation allowance on Ideanomics' deferred tax assets being reduced. by a similar amount. Ideanomics' net deferred tax assets that had previously been judged to be more likely that not to be unable to reduce the Company's income tax liability. As a result, the net deferred tax assets were completely offset by a valuation allowance. Once the acquisitions of four acquired businesses occurred, a portion of Ideanomics' deferred tax assets could be utilized in offsetting the newly acquired deferred tax liabilities, this resulted in a one-time income tax benefit of $10.1 million.

The current CIT for 2021 all relates to Timios, which had taxable income since its acquisition in January 2021 resulting from the non-deductibility of amortization and impairment charges.

A reconciliation of the expected income tax derived by the application of the U.S. CIT rate to the Company's loss before income tax benefit is as follows:

	2021	2020	2019
U. S. statutory income tax rate	21.0 %	21.0 %	21.0 %
Non-deductible expenses:			
Non-deductible stock awards	(0.6)	(0.6)	(1.9)
Non-deductible impairment or disposal of goodwill	(10.5)	(3.7)	—
Non-deductible acquisition costs	(0.7)	—	—
Non-deductible officers' compensation	(0.6)	—	—
Non-deductible interest expenses	(0.2)	(2.0)	(1.2)
Additional tax cost basis on disposal of subsidiary	0.4	—	—
Expiration of and disposal of subsidiary NOL carryovers	(0.5)	—	—
Change in state tax rates due to change in state apportionment	1.1	1.3	—
Increase in valuation allowance	(10.3)	(15.7)	(16.4)
Tax rate differential(state and foreign)	5.0	1.3	(0.5)
Non-taxable gain Non-deductible (loss) on contingent consideration	0.9	1.1	(1.1)
Others	(0.6)	0.2	(0.3)
Effective income tax rate	4.4 %	2.9 %	(0.4)%

The Company's acquisition of WAVE in 2021, which will be included with Ideanomics in all state income tax filings, is expected to have a significant effect on the states to which Ideanomics' income and loss is apportioned. This results in a higher income tax rate at which many of Ideanomics deductible temporary differences are expected to reverse. The increase in the expected rate consequently resulted in a significant increase in the relate deferred tax assets, which were then offset with a valuation allowance.

Deferred income taxes are recognized for future tax consequences attributable to temporary differences between the carrying amounts of assets and liabilities for financial statement purposes and income tax purposes using enacted rates expected to be in effect when such amounts are realized or settled. Significant components of the Company's deferred tax assets and liabilities at December 31, 2021 and 2020 are as follows (in thousands):

	December 31, 2021	December 31, 2020
U.S. NOL	$ 46,693	$ 23,585
Foreign NOL	6,554	5,967
U.S. capital loss carryover	873	4,371
U. S. Section 1231 carryover	2,360	
Accrued payroll and expense	1,012	—
Nonqualified options	2,999	1,927
Convertible notes	—	827
Inventory reserve	563	—
Bad debt allowance	281	281
Impaired assets	10,728	7,996
Other	126	
Equity investment loss and others	5,081	3,596
Total deferred tax assets	77,270	48,550
Less: valuation allowance	(74,972)	(46,732)
Property and equipment	(357)	(81)
Intangible assets	(5,954)	(6,782)
Outside basis in domestic subsidiary and other	(1,060)	—
Total deferred tax liabilities	(7,371)	(6,863)
Net deferred tax assets (liabilities)	$ (5,073)	$ (5,045)

As of December 31, 2021, 2020 and 2019, the Company had U.S. domestic cumulative tax loss carryforwards of $191.4 million, $99.3 million and $83.1 million, respectively, and foreign cumulative tax loss carryforwards of $26.9 million, $24.0 million and $28.3 million, respectively, which may be available to reduce future income tax liabilities in certain jurisdictions. $28.2 million of the U.S. carryforwards expire in the years 2027 through 2037. The remaining U.S. tax loss is not subject to expiration. PRC tax loss carryforwards of $23.0 million will expire beginning year 2022 to year 2026. Malaysian tax loss carryforwards of $3.3 million will expire in the years 2030 and 2031. At December 31, 2021, The Company also has U.S. capital loss and section 1231 loss carryovers of $3.4 million and $9.1 million respectively. The capital loss carryover expires in 2027, while the 1231 loss carryover does not expire. Utilization of NOLs may be subject to an annual limitation due to ownership change limitations provided in the Internal Revenue Code and similar state and foreign provisions. This annual limitation may result in the expiration of NOLs before utilization. Management has however, excluded from the carryforward totals amounts shown on the tax returns but for which management has assessed cannot be used before expiration because of the annual limitations.

Realization of the Company's net deferred tax assets is largely dependent upon the Company's ability to generate future taxable income in the respective tax jurisdictions to obtain benefit from the reversal of temporary differences and NOL carryforwards. It is, however, reasonably possible that the Company could record an income tax benefit in 2022 or later years from the reduction of the valuation allowance resulting from acquisitions in which deferred tax liabilities are recorded. In such a case, as occurred in 2021, deferred tax assets could be utilized to offset the acquired deferred tax liabilities. The valuation allowance increased by $28.2 million, $16.5 million and $14.8 million in the years ended December 31, 2021, 2020 and 2019, respectively.

The following table reflects the changes in the valuation allowance (in thousands):

Valuation allowance - January 1, 2019	$	15,468
Increase - year ended December 31, 2019		14,807
Valuation allowance - December 31, 2019		30,275
Increase - year ended December 31, 2020		16,457
Valuation allowance - December 31, 2020		46,732
Increase - year ended December 31, 2021		28,240
Valuation allowance - December 31, 2021	$	74,972

(b) Uncertain Tax Positions

Accounting guidance for recognizing and measuring uncertain tax positions prescribes a threshold condition that a tax position must meet for any of the benefit of uncertain tax position to be recognized in the financial statements. The deferred tax assets listed above as of December 31, 2021, do not include $0.3 million of potential deferred tax assets, arising in the current year, not recognized because they do not meet the threshold for recognition. If these assets were to be recognized they would be fully offset by a valuation allowance. There were no identified uncertain tax positions December 31, 2020 and 2019.

The following table reflects changes in the gross unrecognized tax positions (in thousands):

Unrecognized tax benefits at beginning of year - January 1, 2019	$	—
Gross changes - year ended December 31, 2019		—
Unrecognized tax benefits at end of year - December 31, 2019		—
Gross changes - year ended December 31, 2020		—
Unrecognized tax benefits at end of year - December 31, 2020		—
Gross increases - current year tax positions		256
Unrecognized tax benefits at end of year - December 31, 2020	$	256

As of December 31, 2021, 2020 and 2019, the Company did not accrue any material interest and penalties. The Company’s United States federal and state income tax returns are generally subject to examination for potential assessment for 2018 and later years. The use of U.S. net operating loss carryovers from earlier years are subject to challenge in any future year utilized. Due to the uncertainty regarding the filing of tax returns for years before 2007, it is possible that the Company is subject to examination by the IRS for earlier years. All of the PRC tax returns for the PRC operating companies are subject to examination by the PRC tax authorities for all periods from the companies’ inceptions in 2009 through 2021 as applicable. All of Tree Technologies’ tax returns since inception in 2018 are subject to examination by the Malaysian tax authorities. All of Tree Technologies’ tax returns since inception in 2018 are subject to examination by the Malaysian tax authorities.

Note 21. Commitments and Contingencies

Lawsuits and Legal Proceedings

From time to time, the Company may become involved in various lawsuits and legal proceedings which arise in the ordinary course of business. However, litigation is subject to inherent uncertainties, and an adverse result in these or other matters may arise from time to time that may harm the business.

Vendor Settlement

In the year ended December 31, 2020, Ideanomics preliminarily settled a payable of $1.7 million with one vendor for $1.3 million. The settlement were conditioned upon factors which did not expire until three months from the date of the settlement; therefore, the Company recognized the gain of $0.4 million in the year ended December 31, 2020.

Shareholder Class Actions and Derivative Litigations

On July 19, 2019, a purported class action, now captioned *Rudani v. Ideanomics, Inc. et al.*, was filed in the United States District Court for the Southern District of New York against the Company and certain of its then current and former officers and directors. The Amended Complaint alleged violations of Section 10(b) and 20(a) of the Securities Exchange Act of 1934. Among other things, the Amended Complaint alleged purported misstatements made by the Company in 2017 and 2018, seeking damages. As part of a mediation, the parties reached a settlement for $5.0 million. The Court granted final approval of the settlement on January 25, 2022.

On June 28, 2020, a purported securities class action, captioned *Lundy v. Ideanomics Inc. et al.*, was filed in the United States District Court for the Southern District of New York against the Company and certain current officers and directors of the Company. Additionally, on July 7, 2020, a purported securities class action captioned *Kim v. Ideanomics Inc. et al*, was filed in the Southern District of New York against the Company and certain current officers and directors of the Company. Both cases alleged violations of Section 10(b) and 20(a) of the Exchange Act arising from certain purported misstatements by the Company beginning in September 2020 regarding its Ideanomics China division. On November 4, 2020, the *Lundy* and *Kim* actions were consolidated and the litigation is now titled "*In re Ideanomics, Inc. Securities* Litigation." In December 2020, the Court appointed Rene Aghajanian as lead plaintiff and an amended complaint was filed in February 2021, alleging violations of Section 10(b) and 20(a) of the Exchange Act arising from certain purported misstatements by the Company beginning in March 2020 regarding its Ideanomics China division and seeking damages. The defendants filed a motion to dismiss on May 6, 2021. On March 15, 2022, the Court granted Defendants' motions to dismiss in full and dismissed Plaintiff's complaint. On April 14, 2022, Plaintiff sought leave to amend its complaint and Defendants opposed that request. The Court has not yet ruled on Plaintiff's request to amend the complaint. While the Company believes that this action is without merit, there can be no assurance that the Company will prevail. We cannot predict the outcome of the pending request seeking leave to amend the complaint. The Company cannot currently estimate the possible loss or range of losses, if any, that it may experience in connection with this litigation.

On July 10, 2020, the Company was named as a nominal defendant, and certain of its former officers and directors were named as defendants, in a shareholder derivative action filed in the United States District Court for the Southern District of New York, captioned *Toorani v. Ideanomics, et al*. The Complaint alleges violations of Section 14(a) of the Exchange Act 1934, breach of fiduciary duties, unjust enrichment, abuse of control, gross mismanagement, and corporate waste and seeks monetary damages and other relief on behalf of the Company. Additionally, on September 11, 2020, the Company was named as a nominal defendant, and certain of its former officers and directors were named as defendants, in a shareholder derivative action filed in the United States District Court for the Southern District of New York, captioned *Elleisy, Jr. v. Ideanomics, et al*, alleging violations and allegations similar to the *Toorani* litigation. On October 10, 2020, the Court in the *Elleisy* and *Toorani*, consolidated these two actions. Additionally, on October 27, 2020, the Company was named as a nominal defendant, and certain of its former officers and directors were named as defendants, in a shareholder derivative action filed in the United States District Court for the District of Nevada, captioned *Zare v. Ideanomics, et al*, alleging violations and allegations similar to the *Toorani* and *Elleisy* litigation. The Company and certain of the defendants have reached a settlement in which the Company has agreed to certain corporate governance and internal procedure reforms. The Court granted final approval on March 1, 2022.

Merger-related Litigation and Demand Letters

Following the announcement of the Company's agreement to acquire VIA, the Company has received several demand letters on behalf of purported stockholders of the Company and the Company and certain of its officers and directors have been named as defendants in complaints filed and consolidated in the United States District Court for the Southern District of New York demanding the issuance of additional disclosures in connection with the merger. The specific complaints, all of which have been consolidated, have the following filing dates: *Macmillan v. Ideanomics, Inc.et al.*¸ December 2, 2021; *Saee v. Ideanomics, et al.*, December 7, 2021; and *Foran v. Ideanomics, Inc., et al.*, January 11, 2022. In those complaints, Plaintiffs allege that the Company's Registration Statement on Form S-4 initially filed with the SEC on November 5, 2021, is false and misleading and purportedly omits material information regarding the Company's acquisition of VIA. The Company believes that its disclosures comply fully with applicable law and that the demand letters and complaints are without merit. Nevertheless, in order to moot the purported deficiencies alleged in the demand letters and the complaints, avoid the risk of delaying the consummation of the merger, and minimize the costs, risks, and uncertainties inherent in litigation, the Company, without admitting any liability or wrongdoing, voluntarily provided certain supplemental disclosures. Nothing in those supplemental disclosures should be considered an admission of the legal necessity or materiality under applicable laws of any of the disclosures included. To the contrary, the Company denies all of the allegations in the demand letters and the complaints that any additional disclosures are required.

SEC Investigation

As previously reported, the Company is subject to an investigation by the Division of Enforcement of the United States Securities and Exchange Commission. The Company is cooperating with the investigation and has responded to requests for documents, testimony and information regarding various transactions and disclosures going back to 2017. At this point, we are unable to predict what the timing or the outcome of the SEC investigation may be or what, if any, consequences the SEC investigation may have with respect to the Company. However, the SEC investigation could result in additional legal expenses and divert management's attention from other business concerns and harm our business. If the SEC were to determine that legal violations occurred, we could be required to pay civil penalties or other amounts, and remedies or conditions could be imposed as part of any resolution.

Ideanomics Audit Committee Investigation

On March 14, 2022, BDO informed the company that information related to the company's operations in China indicated that an illegal act may have occurred. In response, the company's Audit Committee engaged an Am Law 100 law firm and a nationally recognized forensics accounting firm to conduct a complete and thorough investigation and such investigation was completed by such parties to the Audit Committee's satisfaction on July 17, 2022. The investigation concluded with no findings of improper or fraudulent actions or practices by the Company or any of its officers or employees with respect to any matters, including those raised by BDO.

Ideanomics, Inc. v. Silk EV Cayman LP

Silk executed a convertible promissory note in favor of Ideanomics on January 28, 2021, in the amount of $15.0 million plus interest. Payment of the original principal amount plus interest was due on January 28, 2022. Silk did not pay on the convertible promissory note when it became due. On April 27, 2022, Ideanomics filed suit against Silk in the Supreme Court of the State of New York, New York County, Index No 51668/2022 for non-payment of the convertible promissory note. Silk was timely served with the Summons and Notice of Motion for Summary Judgment in Lieu of Complaint.

On June 1, 2022, Ideanomics agreed to dismiss the lawsuit without prejudice in exchange for Silk's execution of a Confession of Judgment wherein Silk, through its Chairman, acknowledged its debt obligation under the convertible promissory note and agreed to a payment schedule, with interest continuing to run until payment in full at the rate of 6.0% per annum.

Following this agreement, Silk did not remit payment according to the payment schedule. On August 16, 2022, Ideanomics obtained a judgment against Silk for $16.4 million including prejudgment interest of 6.0%, which will accrue post-judgment interest of 9% until paid. It has not been paid.

Note 22. Concentration, Credit and Other Risks

a. Major Customers and Referring Financial Institutions

For the year ended December 31, 2021, no customer individually accounted for more than 10.0% of the Company's revenue. Two customers individually accounted for more than 10.0% of the Company's net accounts receivable as of December 31, 2021 (37.9% of accounts receivable).

Timios generates much of its revenue through referring financial institutions. For the year ended December 31, 2021, no individual referring financial institution accounted for more than 10.0% of the Company's revenue.

For the year ended December 31, 2020, three customers individually accounted for more than 10.0% of the Company's revenue (77.0% of revenue.) Three customers individually accounted for more than 10.0% of the Company's net accounts receivable as of December 31, 2020 (98.2% of accounts receivable.)

For the year ended December 31, 2019, one customer individually accounted for more than 10.0% of the Company's revenue (91.3% of revenue.)

Major Suppliers

For the year ended December 31, 2021, no suppliers individually accounted for more than 10.0% of the Company's cost of revenues. No suppliers individually accounted for more than 10.0% of the Company's accounts payable as of December 31, 2021.

For the year ended December 31, 2020, four suppliers individually accounted for more than 10.0% of the Company's cost of revenues (73.70% of cost of revenue.) Two suppliers individually accounted for more than 10.0% of the Company's accounts payable as of December 31, 2020 (61.10% of accounts payable.)

For the year ended December 31, 2019, no suppliers individually accounted for more than 10.0% of the Company's cost of revenues.

Concentration of Credit Risks

Financial instruments that potentially subject the Company to significant concentration of credit risk primarily consist of cash, cash equivalents, and accounts receivable. As of December 31, 2021 and 2020, the Company’s cash and cash equivalents were held by financial institutions (located in the PRC, Hong Kong, Malaysia, the U.S. and Singapore) that management believes have acceptable credit. Accounts receivable are typically unsecured. The risk with respect to accounts receivable is mitigated by regular credit evaluations that the Company performs on its distribution partners and its ongoing monitoring of outstanding balances.

b. Foreign Currency Risks, Currency Concentrations, and Capital Requirements

A portion of the Company’s operating transactions are denominated in RMB. RMB is not freely convertible into foreign currencies. The value of the RMB is subject to changes in the central government policies and to international economic and political developments. In the PRC, certain foreign exchange transactions are required by laws to be transacted only by authorized financial institutions at exchange rates set by the PBOC. Remittances in currencies other than RMB by the Company in China must be processed through PBOC or other China foreign exchange regulatory bodies which require certain supporting documentation in order to complete the remittance.

As of December 31, 2021, the Company had cash and cash equivalents of $269.9 million. Approximately $241.9 million was held in U.S. entities and $27.9 million was held in Hong Kong, Singapore, Malaysia, and the PRC entities.

Timios holds various regulatory licenses related to its business as a title insurance agency and is required to hold a minimum cash balance of $2.0 million. As a broker-dealer, JUSTLY has minimum capital requirements. JUSTLY had cash of $0.2 million as of December 31, 2021, which was necessary for JUSTLY to meet its minimum capital requirements.

As of December 31, 2021 and 2020, deposits of $4.7 million and $1.3 million were insured, respectively. To limit exposure to credit risk relating to bank deposits, the Company primarily places bank deposits only with large financial institutions in the PRC, HK, U.S., Singapore and Cayman with acceptable credit ratings.

c. Cybersecurity Incident

The Company’s real estate services subsidiary, Timios, experienced a systems outage that was caused by a cybersecurity incident. Timios has engaged leading forensic information technology firms and legal counsel to assist its investigation into the incident. The systems outage caused a delay or disruption to parts of Timios’ business, including its ability to perform its mortgage title, closing and escrow services offerings during the year ended December 31, 2021. The cybersecurity incident had a material adverse impact on Timios’ revenues. Timios promptly notified third-parties who may have been affected by this incident, and its insurer has offered a one year credit monitoring service to those who may have been affected.

Timios has since recovered their operational capabilities, and has implemented multiple safeguards against future incidents, including but not limited to the establishment of a Chief Information Security Officer and a Security Operations Center that monitors the system against cyber threats twenty four hours a day. Timios still has yet to recover a significant portion of business lost as a result of the incident. Timios is uncertain to what degree any further revenue will be recovered. A class action lawsuit was filed against Timios as a result of the systems outage, which was settled within the limits of its insurance coverage. Timios has filed a claim with its insurer to recover a portion of the lost revenues and profits for the period from July 26, 2021 through January 27, 2022. The amount of the insurance recovery, if any, is not yet known.

Note 23. Defined Contribution Plans

For U.S. employees, the Company began sponsoring a 401(k) plan that provides for a 100.0% employer matching contribution of the first 4.0% of eligible pay that the employee contributed to the plan. Employees are immediately 100.0% vested in the Company's non-discretionary contribution to the 401(k) plan.

Timios sponsors a 401(k) plan that provides for discretionary non-matching employer contributions. Employees of Timios are immediately 100.0% vested in Timios's discretionary contribution to the 401(k) plan so long as they are employed on the last day of the plan year. Exceptions to the last day requirement are made for those who leave employment due to retirement, disability, authorized leave of absence, or death.

The Company paid total matching and discretionary 401(k) contributions of $0.1 million, $0.1 million and $0.0 million in the years ended December 31, 2021, 2020 and 2019, respectively.

Full time employees in the PRC and Malaysia participate in government-mandated defined contribution plans pursuant to which certain pension benefits, medical care, unemployment insurance, employee housing fund and other welfare benefits are provided to employees. PRC labor regulations require the Company to make contributions based on certain percentages of the employees' basic salaries. Other than such contributions, there is no further obligation under these plans. The total contributions for such PRC and Malaysia employee benefits were $0.7 million, $0.4 million and $0.4 million in the years ended December 31, 2021, 2020 and 2019, respectively.

Note 24. Geographic Areas

The following table summarizes geographic information for long-lived assets (in thousands):

	December 31, 2021	December 31, 2020
United States	$ 1,997	$ 8,965
Malaysia	26,870	28,185
Other	728	135
Total	$ 29,595	$ 37,285

Note 25. Contingent Consideration

The following table summarizes information about the Company's contingent consideration arrangements measured at fair value on a recurring basis, grouped into Level 1 to 3 based on the degree to which the input to fair value is observable (in thousands):

	December 31, 2021			
	Level 1	Level 2	Level 3	Total
DBOT - Contingent Consideration[a]	$ —	$ —	$ 649	$ 649
Tree Technology - Contingent Consideration[b]	—	—	250	250
Solectrac - Contingent Consideration[c]	—	—	100	100
Total	$ —	$ —	$ 999	$ 999

	December 31, 2020			
	Level 1	Level 2	Level 3	Total
DBOT - Contingent Consideration[a]	$ —	$ —	$ 649	$ 649
Tree Technology - Contingent Consideration[b]	—	—	250	250
Total	$ —	$ —	$ 899	$ 899

Note

a. This represents the liability incurred in connection with the acquisition of DBOT shares during the three months ended September 30, 2019 and as remeasured as of April 17, 2020. The contractual period which required periodic remeasurement has expired, and therefore the Company will not remeasure this liability in the future. The fair value of DBOT contingent consideration was valued using the Black-Scholes Merton method. The Company issued 13.1 million shares during the year ended December 31, 2020 and partially satisfied this liability. No shares have been issued in the year ended December 31, 2021.

b. This represents the liability incurred in connection with the acquisition of Tree Technologies during the three months ended December 31, 2019 and as subsequently remeasured as of December 31, 2021 and 2020. The fair value of the Tree Technology contingent consideration was valued using a probability-weighted discounted cash flow approach.

c. This represents the liability incurred in connection with the acquisition of Solectrac. The liability represents the fair value of the three contingent considerations that were entered into at closing. The fair value was determined using Monte-Carlo simulations.

DBOT Contingent Consideration

The fair value of the DBOT contingent consideration as of March 31, 2020 and December 31, 2019, was valued using the Black-Scholes Merton model.

The significant unobservable inputs used in the fair value measurement of the contingent consideration includes the risk-free interest rate, expected volatility, expected term and expected dividend yield. The following table summarizes the significant inputs and assumptions used in the model:

	March 31, 2020	December 31, 2019
Risk-free interest rate	0.1%	1.6 %
Expected volatility	30%	30 %
Expected term (years)	0.08	0.25
Expected dividend yield	— %	— %

Tree Technologies Contingent Consideration

The fair value of the Tree Technologies contingent consideration as of December 31, 2021 and 2020, was valued using a probability-weighted discounted cash flow approach which incorporates various estimates, including projected gross revenue for the periods, probability estimates, discount rates and other factors. Significant increases or decreases in any of those inputs in isolation would result in a significantly different fair value measurement.

The following table summarizes the significant inputs and assumptions used in the probability-weighted discounted cash flow approach:

	December 31, 2021	December 31, 2020
Weighted-average cost of capital	15.0%	15.0%
Probability	5%-10%	20%-55%

Solectrac Contingent Consideration

The fair value of the Solectrac contingent consideration as of December 31, 2021, was valued using a Monte-Carlo simulation model. The significant unobservable inputs include volatility, discount rate and the risk free rate. Significant increases or decreases in any of those inputs in isolation would result in a significantly different fair value measurement. The following table summarizes the significant inputs and assumptions used in the model:

	December 31, 2021
Risk-free interest rate	3.4 %
Expected volatility	25.0 %
Expected discount rate	13.1 %

The following table summarizes the reconciliation of contingent consideration measured using Level 3 inputs (in thousands):

	Contingent Consideration
January 1, 2019	$ —
Addition	19,562
Measurement period adjustment	5,094
December 31, 2020	24,656
Measurement period adjustment	(1,990)
Settlement	(8,203)
Remeasurement loss/(gain) recognized in the income statement	(5,503)
December 31, 2020	8,960
Addition	1,639
Net remeasurement loss/(gain) recognized in the income statement	(9,600)
December 31, 2021	$ 999

Note 26. Subsequent Events

VIA Promissory Notes

As of December 31, 2021, the company had invested $42.5 million in VIA, in the form of convertible promissory note. As of August 31, 2022, the company has invested an additional $24.6 million in VIA, in the form of the 2021 convertible promissory note ($12.9 million) and a new promissory note issued in May 2022 ($11.7 million). Both promissory notes bear interest at an annual rate of 4.0% and the new promissory note is due and payable in the event of the termination of the merger agreement on the twelve month anniversary date of such termination.

Energica Loan Agreement

On January 7, 2022, the Company entered into a loan agreement with Energica. Pursuant to this loan agreement, the Company may advance up to €5.0 million ($5.7 million), in installments of €250,000 ($284,075), at an annual interest rate of Euribor plus 2.0%. The purpose of the loan is to provide working capital during the motorcycle manufacturing and purchasing season. The loan is unsecured, with interest payable semi-annually, on June 30 and December 31 of each year. The outstanding principal is due and payable in two installments, on June 30, 2024 and December 31, 2024.

Disposition of Seven Stars Energy Pte. Ltd.

On February 9, 2022, the Company transferred its 51.0% interest in Seven Stars Energy Pte. Ltd. for a nominal amount. The Company expects to record a loss resulting from the disposition of $0.5 million.

Energica Tender Offer

On September 15, 2021, the Company announced it had entered into an agreement to launch a voluntary conditional tender offer in concert with the founders of Energica for shares of Energica, pursuant to which Ideanomics plans to increase its investment from 20.0% in Energica to approximately 70.0%. The Energica founders shall continue to own 29.0% of Energica.

On February 9, 2022, the Company wired €52.5 million (approximately $60.3 million) to an escrow account in order to facilitate and fund the conditional tender offer. On March, 7, 2022 the Company announced that it had achieved the 90.0% threshold for the conditional tender offer. The transaction received final approval from Italian regulatory authorities and closed on March 14, 2022.

Timios Investment in Orangegrid

On May 20, 2022, Timios purchased 6.6 million Series A-1 preferred share units in Orangegrid for a total investment of $3 million. Orangegrid is a developer and vendor of software technologies which improve the operational efficiency and effectiveness of financial institutions and their service providers. Timios and Orangegrid also entered into a strategic partnership making Timios the preferred provider of title, escrow, valuation and asset management services within OrangeGrid's GridReady default management ecosystem.

US Hybrid Escrow Shares

On July 12, 2022, the Company received 6.6 million shares of common stock back from the escrow agent pursuant to the triggering of a legal condition that permitted the Company to reclaim 100% of the shares held in escrow. The Company has concluded that the return of these shares do not constitute a change in the purchase consideration of US Hybrid and will account for this transaction as a Treasury Stock transaction in the third quarter is 2022.

Convertible Debenture Amendment

On August 30, 2022, the Company and YA II PN agreed to amend the terms of the outstanding convertible note and entered into an amendment agreement dated August 29, 2022. As of August 29, 2022, the outstanding principal balance of the Original Debenture was $16.7 million. The amendments to the Original Debenture amended the principal amount to reflect the outstanding balance as of August 29, 2022, change the maturity date to January 29, 2023 and adjust the conversion price to the lower of $1.50 or 85.0% of the lowest daily VWAP during the 7 consecutive Trading Days immediately preceding the Conversion Date or other date of determination, but not lower than $0.20 per share of common stock. The Company shall not have the right to prepay any amounts due under the Amended Debenture prior to the Maturity Date without the Investor’s prior written consent.

Standby Equity Purchase Agreement

On September 1, 2022, the company entered into a SEPA with YA II PN. The Company will be able to sell up to sixty million of the Company’s shares of common stock, par value $0.001 per share (the at the Company’s request any time during the 36 months following the date of the SEPA’s entrance into force. The shares would be purchased at 95.0% of the Market Price (as defined below) and would be subject to certain limitations, including that YA could not purchase any shares that would result in it owning more than 5.0% of the Company’s common stock. Market Price is the lowest daily VWAP of the Common Shares during the three consecutive trading days commencing on the advance notice date, other than the daily VWAP on any excluded days. VWAP means, for any trading day, the daily volume weighted average price of the Common Shares for such trading day on the principal market during regular trading hours as reported by Bloomberg L.P.

Pursuant to the SEPA, the Company is required to register all shares which YA may acquire. The Company agreed to file with the SEC a Registration Statement (as defined in the SEPA) registering all of the shares of common stock that are to be offered and sold to YA pursuant to the SEPA. The Company is required to have a Registration Statement declared effective by the SEC before it can raise any funds using the SEPA.

Unless earlier terminated as provided under the SEPA, the SEPA shall terminate automatically on the earliest of (i) the first day of the month next following the 36-month anniversary of the Effective Date or (ii) the date on which the YA shall have made payment of Advances (as defined in the SEPA) pursuant to the SEPA for the Common Shares equal to the Commitment Amount (as defined in the SEPA).

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

The information required by this Item 9 was "previously reported" as such term is defined in Rule 12b-2 of the Exchange Act.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We conducted an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. The term “disclosure controls and procedures”, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities and Exchange Act of 1934, as amended (“Exchange Act”), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by the company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission’s rules and forms. Disclosure controls and procedures also include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded as of December 31, 2021 that our disclosure controls and procedures were not effective.

Management’s Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. The Exchange Act defines internal control over financial reporting as a process designed by, or under the supervision of, our principal executive and principal financial officers and effected by our Board, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America and includes those policies and procedures that:

- Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company;

- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America, and that our receipts and expenditures are being made only in accordance with authorizations of our management and Directors;

- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we assessed the effectiveness of our internal control over financial reporting as of December 31, 2021, using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control — Integrated Framework (2013). Based on our assessment, we have concluded that our internal control over financial reporting was not effective as of December 31, 2021 due to the material weaknesses described below.

Our evaluation excluded Timios, WAVE, Solectrac and US Hybrid which were acquired in the year ended December 31, 2021, and were not integrated with Ideanomics’ business units as of that date. As of and for the year ended December 31, 2021, Timios represented 8.6% of total assets and 63.7% of revenue, WAVE represented 2.1% of total assets and 6.1% of revenue, Solectrac represented 2.3% of total assets and 1.5% of revenue, and US Hybrid represented 2.2% of total assets and 2.3% of revenue. In accordance with guidance issued by the SEC, we have excluded the acquisitions from our assessment of internal controls over financial reporting during the first year following the acquisition.

Material Weaknesses

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of a company's annual or interim financial statements will not be prevented or detected on a timely basis.

As disclosed in our Form 10-Q as of September 30, 2021, the matters involving internal controls and procedures that our management considered to be material weaknesses as of September 30, 2021, were:

- The design and implementation of internal controls over the review of management's inputs into valuation models and associated valuation outputs from third party valuation specialists.
- The design and implementation of internal controls over the revenue recognition process, specifically the failure to properly evaluate whether the Company was to be considered the principal or the agent in contracts with customers.
- There is a lack of sufficient personnel in accounting and financial reporting functions with sufficient experience and expertise with respect to the application of U.S. GAAP and SEC disclosure requirements.
- Operating effectiveness of internal controls to identify and evaluate the accounting implications of non-routine transactions.

In addition to the material weaknesses disclosed in our Form 10-Q as of September 30, 2021, Management has determined that the Company has the following material weaknesses in its internal control over financial reporting as of December 31, 2021:

- There is a lack of controls designed to address risk of material misstatement for various financial statement areas and related assertions.
- There is a lack of validation of completeness and accuracy of internally prepared data, including key reports generated from systems, utilized in the operations of controls.
- There is a lack of evidence to support the effective review in the operations of controls.
- There is a lack of controls at the entity level, particularly over the review of subsidiary financial information, including analysis of balance sheet data, operating results, non-routine transactions, litigation accruals and income tax matters.
- Controls are not designed with a sufficient level of precision to prevent or detect a material misstatement.
- An inventory of service organizations utilized to process transactions was not maintained throughout the reporting period. There is a lack of review over service organization reports. In instances in which service organization reports are not available, the Company does not have adequate complementary controls.
- There is a lack of segregation of duties that exists in the information technology environments and payroll and procure to pay cycles at the Company.
- There is a lack of documented compliance related to controls to evaluate potential risk of dealing with inappropriate vendors and/or customers.
- The Company's information technology general controls over certain information technology systems were not designed properly and therefore did not operate effectively.

On July 26, 2022, subsequent to the dismissal of BDO as the company's auditor, BDO informed the company of their belief that the Company also had the following material weaknesses as of December 31, 2021:

- There is ineffective oversight from the Company's Audit Committee.
- There is a lack of documented compliance-related controls to evaluate transactions in accordance with the FCPA.

Management's Plan for Remediation

Management has discussed the material weaknesses described above with the Audit Committee and is in the process of identifying the steps necessary to design a remediation plan in order to remediate the material weaknesses. We anticipate that such plan will include the addition of accounting resources, the implementation of the Company's ERP system throughout the organization and the design and implementation of new internal controls that address the material weaknesses noted above.

As to the two material weaknesses communicated by BDO following their dismissal, management has discussed the related observations with the Audit Committee:

FCPA

On March 14, 2022, BDO informed the company that information related to the company's operations in China indicated that an illegal act may have occurred. In response, the company's Audit Committee engaged an Am Law 100 law firm and a nationally recognized forensics accounting firm to conduct a complete and thorough investigation and such investigation was completed by such parties to the Audit Committee's satisfaction on July 17, 2022. The investigation concluded with no findings of improper or fraudulent actions or practices by the Company or any of its officers or employees with respect to any matters, including those raised by BDO.

In addition, management believes that the current FCPA compliance program, as designed and currently in operation, is consistent with standard industry policies and practices related to FCPA compliance, which include amongst other activities regular updates to compliance policies as posted on the company's website, standard procedures for vetting new customers, vendors and contractual counterparties supported by recognized external vendors for KYC and training for employees on the FCPA compliance program.

Following the conclusion of the investigation, the Audit Committee has requested management to conduct an assessment of the effectiveness of the current FCPA compliance program in the fourth quarter of 2022 with the objective of ensuring optimization of the program.

Audit Committee Oversight

Prior to the June 30, 2021 testing date, the company was a smaller reporting company and as of the testing date became a large accelerated filer. Throughout 2021 the Company completed multiple acquisitions and investments into early stage technology growth companies. The Audit Committee discussed with management the implications related to assessment activities for internal control over financial reporting. The change in the plan for the assessment of internal control over financial reporting for 2021 comprehended the risks associated with the change in reporting status and the financial accounting and reporting associated with the acquisitions, including but not limited to purchase price accounting, tax accounting and consolidation.

The response to these risks included amongst other items, the engagement of additional external resources to document and test controls, the engagement of external qualified valuation and tax resources to support financial accounting and reporting related to the acquisitions and the hiring of internal resources to collaborate with the external advisors. The plan was implemented in the first quarter of 2021, concurrent with the operational integration of the acquired businesses.

Management believes that the number and nature of material weaknesses noted above result in a presumption of ineffective oversight and management of the internal control over financial reporting activities. In developing remediation plans to address this presumption, management is evaluating all existing and necessary oversight and operational administration activities associated with internal control over financial reporting.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during our most recent fiscal year that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Directors and Executive Officers.

The following sets forth the name and position of each of our current executive officers and directors as of the filing date of this Annual Report.

NAME	AGE	POSITION
Shane McMahon	52	Executive Chairman
Alfred P. Poor	52	Chief Executive Officer and Director
Conor McCarthy	64	Chief Financial Officer
James S. Cassano	76	Director
Jerry Fan	56	Director
Harry Edelson	89	Director

Mr. Shane McMahon. Mr. McMahon was appointed Executive Chairman as of July 23, 2021, previously he was Vice Chairman from January 12, 2016 to the date of his appointment as Executive Chairman and was previously our Chairman from July 2010 to January 2016. Prior to joining us, from 2000 to December 31, 2009, Mr. McMahon served in various executive level positions with World Wrestling Entertainment, Inc. (NYSE: WWE). Mr. McMahon also sits on the Boards of Directors of International Sports Management (USA) Inc., a Delaware corporation, and Global Power of Literacy, a New York not-for-profit corporation.

Mr. Alfred P. Poor. Our Chief Executive Officer is a former Chief Operating Officer at Global Data Sentinel, a cybersecurity company that specializes in identity management, file access control, protected sharing, reporting and tracking, AI and thread response, and backup and recovery. He is the former President and Chief Operating Officer of Agendize Services Inc., a company with an integrated suite of applications that help businesses generate higher quality leads, improve business efficiency and customer engagement. Mr. Poor is a client-focused and profitability-driven management executive with a track record of success at both rapidly-growing technology companies and large, multi-national, organizations.

Mr. Conor McCarthy. Mr. McCarthy was appointed as our Chief Financial Officer on September 9, 2019. Mr. McCarthy has over 30 years of experience as a Chief Financial Officer in areas such as corporate strategy and corporate finance including capital raising and Mergers and Acquisitions. Mr. McCarthy most recently served as the Chief Financial Officer of OS33, a private equity backed FinTech SaaS platform for compliance and productivity enablement for the wealth management industry with 200 employee from July 2018 to May 2019. Prior to that, Mr. McCarthy served as the (i) Chief Financial Officer of Intent from May 2016 to July 2018; (ii) the Chief Financial Officer of Convergex Group from June 2014 to July 2015 and (iii) the Chief Financial Officer and Finance Director of the Americas for GFI Group, Inc., a NYSE-listed fintech wholesale money broker with revenues of almost $1 billion (now part of BGC Partners, Nasdaq: BGCP), from March 2005 to June 2014. Mr. McCarthy, holds a CA from the Institute of Chartered Accountants in Ireland. Mr. McCarthy started his career as an auditor with KPMG in Ireland. Mr. McCarthy then transitioned into financial services, working as CFO, Treasurer, and in other executive finance roles, with trading and brokerage firms, as well as high growth fintech partners supporting the financial services industry.

Mr. James S. Cassano. Mr. Cassano was appointed Vice Chairman of the Company effective as of July 23, 2021 and has been a director since January 11, 2008. Mr. Cassano is currently a Partner and Chief Financial Officer of CoActive Health Solutions, LLC, a worldwide contract research organization, supporting the pharmaceutical and biotechnology industries. Mr. Cassano has served as executive vice president, chief financial officer, secretary and director of Jaguar Acquisition Corporation a Delaware corporation (OTCBB: JGAC), a blank check company, since its formation in June 2005. Mr. Cassano has served as a managing director of Katalyst LLC, a company which provides certain administrative services to Jaguar Acquisition Corporation, since January 2005. In June 1998, Mr. Cassano founded New Forum Publishers, an electronic publisher of educational material for secondary schools, and served as its chairman of the Board and chief executive officer until it was sold to Apex Learning, Inc., a company controlled by Warburg Pincus, in August 2003. He remained with Apex until November 2003 in transition as vice president business development and served as a consultant to the company through February 2004. In June 1995, Mr. Cassano co-founded Advantix, Inc., a high volume electronic ticketing software and transaction services company which handled event related client and customer payments, that was renamed Tickets.com and went public through an IPO in 1999. From March

1987 to June 1995, Mr. Cassano served as senior vice president and chief financial officer of the Hill Group, Inc., a privately-held engineering and consulting organization, and from February 1986 to March 1987, Mr. Cassano served as vice president of investments and acquisitions for Safeguard Scientifics, Inc., a public venture development company. From May 1973 to February 1986, Mr. Cassano served as partner and director of strategic management services (Europe) for the strategic management group of Hay Associates. Mr. Cassano received a B.S. in Aeronautics and Astronautics from Purdue University and an M.B.A. from Wharton Graduate School at the University of Pennsylvania.

Mr. Jerry Fan. Mr. Fan was appointed as director of the Company on January 12, 2016. Mr. Fan is the Corporate Vice President responsible for managing Analog Devices, Inc. (NASDAQ: ADI) Asia Pacific business and was previously Managing Director and Country Manager for the Greater China region at Analog Devices, Inc. (NASDAQ: ADI), a global semiconductor company since November, 2012. Prior to ADI, Mr. Fan worked for Cisco Systems, Inc. (NASDAQ: CSCO) for 15 years between 1997 and 2012 in a number of senior management roles, including Sales Managing Director for Cisco China, Sale Director for Cisco Australia and Senior Manager for Operations and Strategy for the Cisco Service Provider business based in Hong Kong. Mr. Fan started his career in 1998 working at Fudan University as a faculty member in both teaching and research roles. He graduated from Fudan University with a Computer Science Bachelor degree and an Executive MBA degree from CEIBS (China European International Business School) in 1999.

Mr. Harry Edelson. Mr. Edelson was appointed as director of the Company effective as of September 15, 2019, CFA, CCP, CDP, is the Founder of Edelson Technology Partners, and President since 1980 of Edelson Technology, Inc., a company involved in consulting, fundraising, Mergers and Acquisitions, and investments. From 1984 until 2005 Mr. Edelson was an advisor and consultant for 10 multinational corporations (AT&T, Viacom, 3M, Ford Motor, Cincinnati Bell, Colgate-Palmolive, Reed Elsevier, Imation, Asea Brown Boveri and UPS). During this time he managed four technology-oriented strategic venture capital funds for the aforementioned 10 companies using corporate rather than pension money. He has served on over 150 boards of directors, 12 as chairman. At some time in the past five years, Harry Edelson served as a director of four private companies, Airwire, PogoTec, eChinaCash, Pathway Genomics, and one public company, China Gerui. Executive positions in industry include Senior Systems Computer Engineer for Unisys, Transmission Engineer for AT&T (1962-1967), CTO for Cities Service (1967-1970) and Director of Marketing for a terminal manufacturer serving the nascent internet industry (1971-1973). His experience in technology led him to a 12 year career as a securities analyst on Wall Street covering telecommunications, computers, and office equipment for three leading investment banking firms in the 1970s and 1980s. Harry obtained a BS in Physics from Brooklyn College in 1962, MBA from New York University Graduate School of Business in 1965, and completed a Graduate Program in Telecommunications Engineering at the Cornell Graduate School of Electrical Engineering in 1966. In 2007, Harry served as Chairman and Chief Executive Officer for China Opportunity Acquisition Corp., a SPAC that raised $40 million and merged with China Gerui in 2009. Mr. Edelson was a Council member of The Julliard School of Music, Dance and Drama, and is the founder and still Chairman of the China Investment Group; and the founder and current member of the Chinese Cultural Foundation. Harry's qualifications to serve as a director include decades of experience on Wall Street and various venture capital ventures. He has SPAC experience, vast board experience, and participated in numerous Mergers and Acquisitions transactions.

There are no agreements or understandings between any of our executive officers or directors and any other persons to resign at the request of another such other person and to act on behalf of or at the direction of any such other person.

Directors are elected for one-year term and until their successors are duly elected and qualified.

Corporate Governance

Our current corporate governance practices and policies are designed to promote shareholder value and we are committed to the highest standards of corporate ethics and diligent compliance with financial accounting and reporting rules. Our Board provides independent leadership in the exercise of its responsibilities. Our management oversees a system of internal controls and compliance with corporate policies and applicable laws and regulations, and our employees operate in a climate of responsibility, candor and integrity.

Corporate Governance Guidelines

We and our Board are committed to high standards of corporate governance as an important component in building and maintaining shareholder value. To this end, we regularly review our corporate governance policies and practices to ensure that they are consistent with the high standards of other companies. We also closely monitor guidance issued or proposed by the SEC and the provisions of the Sarbanes-Oxley Act, as well as the emerging best practices of other companies. The current corporate governance guidelines are available on the Company's website www.ideanomics.com. Printed copies of our corporate governance guidelines may be obtained, without charge, by contacting our Corporate Secretary at 1441 Broadway, Suite 5116, New York, NY 10018.

The Board and Committees of the Board

The Company is governed by the Board that currently consists of five members: Shane McMahon, Alfred Poor, James S. Cassano, Jerry Fan, and Harry Edelson. The Board has established three Committees: the Audit Committee, the Compensation Committee and the Nominating and Governance Committee. Each of the Audit Committee, Compensation Committee and Nominating and Governance Committee are comprised entirely of independent directors. From time to time, the Board may establish other committees. The Board has adopted a written charter for each of the Committees which are available on the Company's website www.ideanomics.com. Printed copies of these charters may be obtained, without charge, by contacting our Corporate Secretary at 1441 Broadway, Suite 5116, New York, NY 10018.

Governance Structure

Our Board of Directors is responsible for corporate governance in compliance with reporting laws and for representing the interests of our shareholders. As of the date of this Annual report, the Board was composed of five members, four of whom are considered independent, non-executive directors. Details on Board membership, oversight and activity are reported below.

We encourage our shareholders to learn more about our Company's governance practices at our website, www.ideanomics.com.

The Board's Role in Risk Oversight

The Board oversees that the assets of the Company are properly safeguarded, that the appropriate financial and other controls are maintained, and that the Company's business is conducted wisely and in compliance with applicable laws and regulations and proper governance. Included in these responsibilities is the Board of Directors' oversight of the various risks facing the Company. In this regard, the Board seeks to understand and oversee critical business risks. The Board does not view risk in isolation. Risks are considered in virtually every business decision and as part of the Company's business strategy. The Board recognizes that it is neither possible nor prudent to eliminate all risk. Indeed, purposeful and appropriate risk-taking is essential for the Company to be competitive on a global basis and to achieve its objectives.

While the Board oversees risk management, Company management is charged with managing risk. The Company has robust internal processes and a strong internal control environment to identify and manage risks and to communicate with the Board. The Board and the Audit Committee monitor and evaluate the effectiveness of the internal controls and the risk management program at least annually. Management communicates routinely with the Board, Board committees and individual directors on the significant risks identified and how they are being managed. Directors are free to, and indeed often do, communicate directly with senior management.

The Board implements its risk oversight function both as a whole and through Committees. Much of the work is delegated to various Committees, which meet regularly and report back to the full Board. All Committees play significant roles in carrying out the risk oversight function. In particular:

- The Audit Committee oversees risks related to the Company's financial statements, the financial reporting process, accounting and legal matters. The Audit Committee members meet separately with representatives of the independent auditing firm.

- The Compensation Committee evaluates the risks and rewards associated with the Company's compensation philosophy and programs. The Compensation Committee reviews and approves compensation programs with features that mitigate risk without diminishing the incentive nature of the compensation. Management discusses with the Compensation Committee the procedures that have been put in place to identify and mitigate potential risks in compensation.

Independent Directors

In considering and making decisions as to the independence of each of the directors of the Company, the Board considered transactions and relationships between the Company (and its subsidiaries) and each director (and each member of such director's immediate family and any entity with which the director or family member has an affiliation such that the director or family member may have a material direct or indirect interest in a transaction or relationship with such entity). The Board has determined that James S. Cassano, Shane McMahon, Jerry Fan, and Harry Edelson are independent as defined in applicable SEC and NASDAQ rules and regulations, and that each constitutes an "Independent Director" as defined in NASDAQ Listing Rule 5605.

Audit Committee

Our Audit Committee consists of James S. Cassano, Harry Edelson and Jerry Fan with Mr. Cassano acting as Chair. The Audit Committee oversees our accounting and financial reporting processes and the audits of the financial statements of our company. Mr. Cassano serves as our Audit Committee financial experts as that term is defined by the applicable SEC rules. The Audit Committee is responsible for, among other things:

- selecting our independent auditors and pre-approving all auditing and non-auditing services permitted to be performed by our independent auditors;
- reviewing with our independent auditors any audit problems or difficulties and management's response;
- reviewing and approving all proposed related-party transactions, as defined in Item 404 of Regulation S-K under the Securities Act of 1933, as amended;
- discussing the annual audited financial statements with management and our independent auditors;
- reviewing major issues as to the adequacy of our internal controls and any special audit steps adopted in light of significant internal control deficiencies;
- annually reviewing and reassessing the adequacy of our Audit Committee charter;
- overseeing the work of our independent auditor, including resolution of disagreements between management and the independent auditor regarding financial reporting;
- reporting regularly to and reviewing with the full Board any issues that arise with respect to the quality or integrity of the Company's financial statements, the performance and independence of the independent auditors and any other matters that the Audit Committee deems appropriate or is requested to review for the benefit of the Board.

The Audit Committee may engage independent counsel and such other advisors it deems necessary to carry out its responsibilities and powers, and, if such counsel or other advisors are engaged, shall determine the compensation or fees payable to such counsel or other advisors. The Audit Committee may form and delegate authority to subcommittees consisting of one or more of its members as the Audit Committee deems appropriate to carry out its responsibilities and exercise its powers.

Compensation Committee

Our Compensation Committee consists of James S. Cassano, Harry Edelson and Jerry Fan with Mr. Cassano acting as Chair. Our Compensation Committee assists the Board in reviewing and approving the compensation structure of our directors and executive officers, including all forms of compensation to be provided to our directors and executive officers. The Compensation Committee is responsible for, among other things:

- reviewing and approving corporate goals and objectives relevant to the compensation of our chief executive officer, evaluating the performance of our chief executive officer in light of those goals and objectives, and setting the compensation level of our chief executive officer based on this evaluation;
- reviewing and making recommendations to the Board with regard to the compensation of other executive officers;
- reviewing and making recommendations to the Board with respect to the compensation of our directors; and
- reviewing and making recommendations to the Board regarding all incentive-based compensation plans and equity-based plans.

The Compensation Committee has sole authority to retain and terminate any consulting firm or other outside advisor to assist the committee in the evaluation of director, chief executive officer or senior executive compensation and other compensation-related matters, including sole authority to approve the firms' fees and other retention terms. The Compensation Committee may also form and delegate authority to subcommittees consisting of one or more members of the Compensation Committee.

Governance and Nominating Committee

Our Governance and Nominating Committee consists of Harry Edelson, James S. Cassano and Jerry Fan with Harry Edelson acting as Chair. The Governance and Nominating Committee assists the Board of Directors in identifying individuals qualified to become our directors and in determining the composition of the Board and its committees. The Governance and Nominating Committee is responsible for, among other things:

- identifying and recommending to the Board nominees for election or re-election to the Board, or for appointment to fill any vacancy;
- selecting directors for appointment to committees of the Board; and
- overseeing annual evaluation of the Board and its committees for the prior fiscal year.

The Governance and Nominating Committee has sole authority to retain and terminate any search firm that is to be used by the Company to assist in identifying director candidates, including sole authority to approve the firms' fees and other retention terms. The Governance and Nominating Committee may also form and delegate authority to subcommittees consisting of one or more members of the Governance and Nominating Committee.

Director Qualifications

Directors are responsible for overseeing the Company's business consistent with their fiduciary duty to shareholders. This significant responsibility requires highly-skilled individuals with various qualities, attributes and professional experience. The Board believes that there are general requirements for service on the Company's Board of Directors that are applicable to all directors and that there are other skills and experience that should be represented on the Board as a whole but not necessarily by each director. The Board and the Governance and Nominating Committee of the Board consider the qualifications of directors and director candidates individually and in the broader context of the Board's overall composition and the Company's current and future needs.

Qualifications for All Directors

In its assessment of each potential director candidate, including those recommended by shareholders, the Governance and Nominating Committee considers the nominee's judgment, integrity, experience, independence, understanding of the Company's business or other related industries and such other factors the Governance and Nominating Committee determines are pertinent in light of the current needs of the Board. The Governance and Nominating Committee also takes into account the ability of a director to devote the time and effort necessary to fulfill his or her responsibilities to the Company.

The Board and the Governance and Nominating Committee require that each director be a recognized person of high integrity with a proven record of success in his or her field. Each director must demonstrate innovative thinking, familiarity with and respect for corporate governance requirements and practices, an appreciation of multiple cultures and a commitment to sustainability and to dealing responsibly with social issues. In addition to the qualifications required of all directors, the Board assesses intangible qualities including the individual's ability to ask difficult questions and, simultaneously, to work collegially.
The Board does not have a specific diversity policy, but considers diversity of race, ethnicity, gender, age, cultural background and professional experiences in evaluating candidates for Board membership. Diversity is important because a variety of points of view contribute to a more effective decision-making process.

Qualifications, Attributes, Skills and Experience to be represented on the Board as a Whole

The Board has identified particular qualifications, attributes, skills and experience that are important to be represented on the Board as a whole, in light of the Company's current needs and business priorities. The Company's services are performed in areas of future growth located outside of the United States. Accordingly, the Board believes that international experience or specific knowledge of key geographic growth areas and diversity of professional experiences should be represented on the Board. In addition, the Company's business is multifaceted and involves complex financial transactions. Therefore, the Board believes that the Board should include some directors with a high level of financial literacy and some directors who possess relevant business experience as a Chief Executive Officer or President. Our business involves complex technologies in a highly specialized industry. Therefore, the Board believes that extensive knowledge of the Company's business and industry should be represented on the Board.

Summary of Qualifications of Current Directors

Set forth below is a narrative disclosure that summarizes some of the specific qualifications, attributes, skills and experiences of our directors. For more detailed information, please refer to the biographical information for each director set forth above.

Mr. Shane McMahon. Mr. McMahon has significant marketing and promotion experience and has been instrumental in exploiting pay-per-view programming on a global basis. In light of our business and structure, Mr. McMahon's extensive executive and industry experience led us to the conclusion that he should serve as a director of our Company.

Mr. Alfred P. Poor. Mr. Poor is a client-focused and profitability-driven management executive with a track record of success at both rapidly-growing technology companies and large, multi-national, organizations. In light of our business and structure, Mr. Poor's extensive executive experience and his educational background led us to the conclusion that he should serve as a director of our Company.

Mr. James S. Cassano. Mr. Cassano has substantial experience as a senior executive in management consulting, corporate development, mergers and acquisitions and start up enterprises across a numerous different industries. In light of our business and structure, Mr. Cassano's extensive executive experience and his educational background led us to the conclusion that he should serve as a director of our Company.

Mr. Harry Edelson. Mr. Edelson is the Founder of Edelson Technology Partners, and President since 1980 of Edelson Technology, Inc., a company involved in consulting, fundraising, Mergers and Acquisitions, and investments. In light of our business and structure, Mr. Edelson's extensive executive experience and his educational background led us to the conclusion that he should serve as a director of our Company.

Mr. Jerry Fan. Mr. Fan has more than 20 years of experience in top management positions in China and the Asia Pacific region, working for several multinational technology companies. He also has served in senior management positions of several U.S. public companies. In light of our business and structure, Mr. Fan's extensive industry and business experience and his educational background led us to the conclusion that he should serve as a director of our Company.

Family Relationships

There are no family relationships among our directors and officers.

Involvement in Certain Legal Proceedings

To the best of our knowledge, none of our directors or executive officers has, during the past ten years:

- been convicted in a criminal proceeding or been subject to a pending criminal proceeding (excluding traffic violations and other minor offenses);
- had any bankruptcy petition filed by or against the business or property of the person, or of any partnership, corporation or business association of which he was a general partner or executive officer, either at the time of the bankruptcy filing or within two years prior to that time;
- been subject to any order, judgment, or decree, not subsequently reversed, suspended or vacated, of any court of competent jurisdiction or federal or state authority, permanently or temporarily enjoining, barring, suspending or otherwise limiting, his involvement in any type of business, securities, futures, commodities, investment, banking, savings and loan, or insurance activities, or to be associated with persons engaged in any such activity;
- been found by a court of competent jurisdiction in a civil action or by the Securities and Exchange Commission or the Commodity Futures Trading Commission to have violated a federal or state securities or commodities law, and the judgment has not been reversed, suspended, or vacated;
- been the subject of, or a party to, any federal or state judicial or administrative order, judgment, decree, or finding, not subsequently reversed, suspended or vacated (not including any settlement of a civil proceeding among private litigants), relating to an alleged violation of any federal or state securities or commodities law or regulation, any law or regulation respecting financial institutions or insurance companies including, but not limited to, a temporary or permanent injunction, order of disgorgement or restitution, civil money penalty or temporary or permanent cease-and-desist order, or removal or prohibition order, or any law or regulation prohibiting mail or wire fraud or fraud in connection with any business entity; or
- been the subject of, or a party to, any sanction or order, not subsequently reversed, suspended or vacated, of any self-regulatory organization (as defined in Section 3(a)(26) of the Exchange Act (15 U.S.C. 78c(a)(26))), any registered entity (as defined in Section 1(a)(29) of the Commodity Exchange Act (7 U.S.C. 1(a)(29))), or any equivalent exchange, association, entity or organization that has disciplinary authority over its members or persons associated with a member.

Except as set forth in our discussion below in Item 13 - Certain Relationships and Related Transactions, and Director Independence - Transactions with Related Persons, none of our directors, director nominees or executive officers has been involved in any transactions with us or any of our directors, executive officers, affiliates or associates which are required to be disclosed pursuant to the rules and regulations of the SEC.

Promoters and Certain Control Persons

We did not have any promoters at any time during the past five fiscal years.

Delinquent Section 16(a) Reports

Section 16(a) of the Exchange Act requires that our executive officers and directors and other persons who beneficially own more than 10% of a registered class of our equity securities file with the SEC reports of ownership and reports of changes in ownership of shares and other equity securities. Such executive officers and directors and other persons who beneficially own more than 10% of a registered class of our equity securities are required by the SEC to furnish us with copies of all Section 16(a) filed by such reporting persons.

Based solely on our review of such forms furnished to us or written representations provided to us by the reporting persons, we believe that all filing requirements applicable to our executive officers, directors and other persons who beneficially own more than 10% of a registered class of our equity securities were complied with in the year ended December 31, 2021, except that one Form 4, covering one delinquent transactions, was filed late by Shane McMahon.

Code of Ethics

Our board of directors adopted a code of business conduct and ethics that applies to our directors, officers, employees, subsidiaries, agents, contractors and consultants, which became effective in January 2016 and was updated in December 2021. We have posted a copy of our code of business conduct and ethics on our website at https://investors.ideanomics.com/corporate-governance.

ITEM 11. EXECUTIVE COMPENSATION

Summary Compensation Table (2021 and 2020)

The following table sets forth information concerning all cash and non-cash compensation awarded to, earned by or paid to the named persons (our "named executive officers") for services rendered in all capacities during the noted periods.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock awards ($) (3)	Option awards (#)	Nonequity incentive plan compensation ($)	Nonqualified deferred compensation earnings ($)	All other compensation ($)	Total ($)
Shane McMahon (*Executive Chairman) (1)*	2021	133,334	0	823,333	0	—	—	—	**956,667**
Alfred P. Poor *(Chief Executive Officer)*	2020	383,333	500,000	0	0	—	—	—	**883,333**
	2021	645,833	500,000	5,535,000	2,000,000	—	—	—	**6,680,833**
Conor McCarthy *(Chief Financial Officer)*	2020	291,666	350,000	0	1,500,000	—	—	—	**641,666**
	2021	422,915	350,000	1,537,500	750,000	—	—	—	**2,310,415**
Anthony Sklar (*SVP, Investor Relations*)	2021	364,755	350,000	3,075,000	500,000	—	—	—	**3,789,755**
Carla Oiong Zhou *(Chief Revenue Officer)*	2020	250,000	0	0	0	—	—	—	**250,000**
Bruno Wu (2)	2020	250,000	0	0	0	—	—	—	**250,000**

(1) Mr. McMahon was appointed Executive Chairman of the Company on July 23, 2021, and prior to this date Mr. McMahon was Vice-Chairman of the Company. Included in Mr. McMahon's salary is $29,167 for directors' fees paid to him in his capacity as Vice-Chairman of the Company. The stock awards of $823,833 includes a RSU grant with immediate vesting with a value of $615,000 and stock compensation paid to him for the period August 1, 2021 to December 31, 2021 with a value of $208,333.

(2) On December 31, 2020 Bruno Wu resigned from his position as Executive Chairman.

(3) Reflects the aggregate grant date fair value of option or restricted stock units determined in accordance with FASB ASC Topic 718.

Employment Agreements

Alfred P. Poor

Effective on July 31, 2020, we entered into employment agreement with Mr. Poor for a term of 2 years pursuant to which Mr. Poor will receive an annual base salary of $500,000, a bonus of $300,000 earned on July 21, 2020, the date the employment contract became effective, and will be entitled to participate in all employment benefit plan and policies of the Company generally available. Mr. Poor will be entitled to stock options of up to 2,000,000 shares in 2021. Effective July 23, 2021, Mr. Poor's salary was increased to $800,000.

Conor McCarthy

Effective on July 31, 2020, we entered into an employment agreement with Mr. McCarthy for a term of 2 years pursuant to which Mr. McCarthy will receive an annual salary of $350,000 and will be entitled to participate in all employment benefit plan and policies of the Company. Mr. McCarthy will be entitled to stock options of up to 750,000 shares in 2021. Effective July 23, 2021, Mr. McCarthy's salary was increased to $525,000.

We have not provided retirement benefits (other than a state pension scheme in which all of our employees in China participate) or change of control benefits to our named executive officers.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth the equity awards of our named executive officers outstanding at December 31, 2021.

	Option awards				
Name	**Number of securities underlying unexercised options (#) exercisable**	**Number of securities underlying unexercised options (#) unexercisable**	**Equity incentive plan awards: Number of securities underlying unexercised unearned options (#)**	**Option exercise price ($)**	**Option expiration date**
Shane McMahon	75,800	—	—	5.57	November 17, 2027
	500,000	—	—	0.53	February 22, 2029
	266,664	266,669	—	1.84	December 10, 2030
Alfred P. Poor	2,000,000	—	—	1.98	February 20, 2029
	541,671	208,329	—	0.53	May 8, 2030
	416,669	1,583,331	—	2.37	July 31, 2031
Conor McCarthy	1,500,000	—	—	0.53	September 20, 2029
	156,250	593750	—	2.37	July 31, 2031

Anthony Sklar	250,000	—	—	—	February 22, 2029
	650,000	—	—	—	May 8, 2030
	104,165	395,835	—	—	July 31, 2031

Compensation of Directors

The following table sets forth certain information concerning the compensation paid to our directors for services rendered to us during the fiscal year ended December 31, 2021.

Name	Fees earned or paid in cash ($)	Stock awards(1) ($)	Option awards(2) (#)	Non-equity incentive plan compensation ($)	Nonqualified deferred compensation earnings ($)	All other compensation ($)	Total ($)
James S. Cassano	131,250	1,107,000	—	—	—	—	1,238,250
Jerry Fan	77,084	246,000	—	—	—	—	323,084
Harry Edelson	110,416	246,000	—	—	—	—	356,416

(1) Reflects the aggregate grant date fair value of restricted stock determined in accordance with FASB ASC Topic 718.

(2) Reflects the number of stock options granted in 2021.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth information regarding beneficial ownership of our common stock as of August 29, 2022 (i) by each person who is known by us to beneficially own more than 5% of our common stock; (ii) by each of our executive officers and directors as a group; and (iii) by all of our executive officers and directors as a group. Unless otherwise specified, the address of each of the persons set forth below is in care of Ideanomics, Inc., at 1441 Broadway, Suite 5116, New York, NY 10018.

		Common Stock(2)			Series A Preferred Stock		Combined Common Stock and Series A(3)	
Name and Address of Beneficial Owner	Office, If Any	Shares		% of Class	Shares	% of Class	Votes	Percentage
Directors and Officers								
Shane McMahon	Executive Chairman	6,532,764	(4)	1.3 %	0	*	6,532,764	1.3 %
Alfred P. Poor	CEO	5,323,041	(5)	1.1 %	0	*	5,323,041	1.1 %
James S. Cassano	` Director	1,355,758	(6)	*	0	*	1,355,758	*
Harry Edelson	Director	600,000	(7)	*	0	*	600,000	*
Jerry Fan	Director	775,800	(8)	*	0	*	775,800	*
Conor McCarthy	CFO	2,227,562	(9)	*	0	*	2,227,562	*
All officers and directors as a group (6 persons named above)		16,814,925		3.4 %			16,814,925	3.4 %

5% Securities Holders									
Bruno Wu	20,999,416	(10)	4.3	%	7,000,000	(11)	100	%	9333333	6.1 %
*Less than 1%.									

(1) Beneficial Ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Each of the beneficial owners listed above has direct ownership of and sole voting power and investment power with respect to our securities. For each beneficial owner above, any options exercisable within 60 days have been included in the denominator.

(2) Applicable percentage ownership is based on 491,849,892 shares of common stock outstanding as of August 29, 2022 and the number of convertible securities held by each beneficial owner that has the right to acquire stock through the exercise of such convertible securities within 60 days from August 29, 2022.

(3) Represents total voting power with respect to all shares of our Common Stock and Series A Preferred Stock.

(4) Includes (i) 5,468,080 shares of Common Stock, (ii) 488,884 shares of Common Stock underlying options exercisable within 60 days at $1.84 per share, (iii) 500,000 shares of Common Stock underlying options exercisable within 60 days at $1.98 per share; (v) 75,800 shares of Common Stock underlying options exercisable within 60 days at $5.57 per share.

(5) Includes (i) 1,406,375 shares of Common Stock, (ii) 750,000 shares underlying options exercisable within 60 days at $0.53 per share, (iii) 2,000,000 shares underlying options exercisable within 60 days at $1.98 per share, and 1,166,666 shares underlying options exercisable within 60 days at $2.37 per share.

(6) Includes (i) 509,308 shares of Common Stock, (ii) 11,676 shares underlying options exercisable within 60 days at $1.84 per share, (iii) 8,974 shares underlying options exercisable within 60 days at $2.91 per share, (iv)75,800 shares underlying options exercisable within 60 days at $5.57, (v) 500,000 shares underlying options exercisable within 60 days at $1.98 per shares, and(vi) 250,000 shares underlying options exercisable with 60 days at $0.53 per share.

(7) Includes (i) 100,000 shares of common stock and (ii) 500,000 shares underlying options exercisable within 60 days at $0.53.

(8) Includes (i) 200,000 shares of Common Stock, (ii) 250,000 shares underlying options exercisable within 60 days at $1.98(iii) 75,800 shares underlying options exercisable withing 60 days at $5.57 per share, and (iv) 250,000 shares underlying options exercisable withing 60 days at $0.53 per share.

(9) Includes (i) 290,062 shares of Common Stock, (ii) 1,500,000 shares underlying options exercisable within 60 days at $0.53, and (iii) 437,500 shares underlying options exercisable within 60 days at $2.37 per share.

(10) Represents 20,999,416 shares of Common Stock.

(11) Based on 7,000,000 shares of Series A Preferred Stock issued and outstanding as of August 29, 2022, with the holders thereof being entitled to cast ten (10) votes for every share of Common Stock that is issuable upon conversion of a share of Series A Preferred Stock (each share of Series A Preferred Stock is convertible into 0.1333333 shares of Common Stock), or a total of 9,333,331 votes.

Changes in Control

There are no arrangements known to us, including any pledge by any person of our securities, the operation of which may at a subsequent date result in a change in control of the Company.

Securities Authorized for Issuance under Equity Compensation Plans

The following table includes the information as of December 31, 2021 for each category of our equity compensation plan:

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders (1)	22,943,781	$ 1.74	17,350,746
Equity compensation plans not approved by security holders	—	—	—
Total	22,943,781	$ 1.74	17,350,746

(1) On August 3, 2018, our Board of Directors approved and on August 28, 2018 our shareholders approved the Ideanomics Amended and Restated 2010 Equity Incentive Plan to increase the number of shares authorized for issuance under the plan to 31,500,000 pursuant to which incentive stock options, non-statutory stock options, restricted stock, restricted stock units, stock appreciation rights, performance units and performance shares may be granted to employees, directors and consultants of the Company and its subsidiaries. On October 22, 2020 our shareholders at our Annual General Meeting approved an increase of 25,300,000 in the number of shares authorized for issuance under the Plan to 56,800,000.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Review and Approval of Related Party Transactions

We have adopted a written policy with respect to the review, approval and ratification of related person transactions. The Audit Committee has primary responsibility for reviewing all related party transactions involving the Company's directors, officers and directors' and officers' immediate family members. The Board may determine to permit or prohibit the Related Party Transaction. For any ongoing relationships, the Board shall annually review and assess the relationships with the Related Party and whether the Related Party Transaction should continue.

Under the policy, a "related party transaction" means any transaction directly or indirectly involving any Related Party that would need to be disclosed under Item 404 of Regulation S-K. Under Item 404, the Company is required to disclose any transaction occurring since the beginning of the Company's last fiscal year, or any currently proposed transaction, in which the Company was or is a participant and the amount involved exceeds $120,000, and in which any related party had or will have a direct or indirect material interest. "Related Party Transaction" also includes any material amendment or modification to an existing Related Party Transaction. For the purposes of this policy, a "Related Party" means (A) a director, including any director nominee, (B) an executive officer; (C) a person known by the Company to be the beneficial owner of more than 5% of the Company's common stock; or (D) a person known by the Company to be an immediate family member of any of the foregoing. "Immediate family member" means a child, stepchild, parent, stepparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law of such director, executive officer, nominee for director, or beneficial owner, and any person (other than a tenant or employee) sharing the household of such director, executive officer, nominee for director, or beneficial owner.

The following is a summary of transactions since the beginning of the 2018 fiscal year, or any currently proposed transaction, in which we were or are to be a participant and the amount involved exceeded or exceeds the lesser of $120,000 or one percent of the average of our total assets at year-end for the last two completed years, and in which any related person had or will have a direct or indirect material interest (other than compensation described under Item 11—"Executive Compensation"). We believe the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described below were comparable to terms available or the amounts that would be paid or received, as applicable, in arm's-length transactions.

Related Party Transactions with Dr. Wu, former Executive Chairman

In June 2020, the Company entered a service agreement with SSSIG for the period from July 1, 2020 through June 30, 2021 for $1.4 million in exchange for consulting services from SSSIG, the services include but are not limited to human resources, finance and legal advice. The Company recorded the service charges of $0.7 million in "professional fess" for the year ended December 31 2020, and $0.2 million in "Amount due to related parties" as of December 31 2020. The Company is currently in process of negotiating the agreement with SSSIG.

Except as set forth in our discussion above, none of our directors or executive officers has been involved in any transactions with us or any of our directors, executive officers, affiliates or associates which are required to be disclosed pursuant to the rules and regulations of the SEC.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Independent Auditor's Fees

The following is a summary of the fees billed to the Company by its principal accountants for professional services rendered for the years ended December 31, 2021 and 2020 (in thousands):

	Year Ended December 31,	
	2021	2020
Audit Fees:		
BF Borgers (BFB)	$ 1,365	$ 850
Grassi	1,439	—
TOTAL	$ 2,804	$ 850

"Audit Fees" consisted of the aggregate fees billed for professional services rendered for the audit of our annual consolidated financial statements and the reviews of the interim condensed consolidated financial statements included in our Quarterly Reports on Form 10-Q and for any other services that were normally provided in connection with our statutory and regulatory filings or engagements.

Pre-Approval Policies and Procedures

Under the Sarbanes-Oxley Act, all audit and non-audit services performed by our auditors must be approved in advance by our Audit Committee to assure that such services do not impair the auditors' independence from us. In accordance with its policies and procedures, our Audit Committee pre-approved the audit services performed by BFB and Grassi for our consolidated financial statements as of and for the year ended December 31, 2021 and 2020.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

Financial Statements and Schedules

The financial statements are set forth under Item 8 of this Annual Report on Form 10-K. Financial statement schedules have been omitted since they are either not required, not applicable, or the information is otherwise included.

Exhibit List

See the Exhibit Index immediately preceding the signature page of this Annual Report on Form 10-K, which is incorporated by reference here.

ITEM 16. FORM 10-K SUMMARY

None.

Exhibit Index

Exhibit No.	Description
2.1	Agreement and Plan of Merger by and among Ideanomics, Inc. and the stockholders of Wireless Advanced Vehicle Electrification, Inc. [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on January 19, 2021]

2.2	Agreement and Plan of Merger by and among the Company, US Hybrid Corporation, USH Merger Corp. and Dr. Gordon Abas Goodarzi [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on May 14, 2021]
2.3	Agreement and Plan of Merger by and among the Company, Solectrac, SolectracMerger Corp. and certain other securityholders [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on June 17, 2021]
2.4	Agreement and Plan of Merger, dated August 30, 2021. by and among Ideanomics, Inc., Longboard Merger Corp., Via Motors International, Inc. and Shareholder Representative Services LLC [incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on September 3, 2021]
3.1	Articles of Incorporation of the Company, as amended to date [incorporated by reference to Exhibit 3.1 to the Company's Annual Report on Form 10-K (File No. 001-35561) filed on March 30, 2012]
3.2	Second Amended and Restated Bylaws, adopted on January 31, 2014 [incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on February 6, 2014]
3.3	Amendment No. 1 to the Second Amended and Restated Bylaws, adopted on March 26, 2015 [incorporated by reference to Exhibit 3.3 to the Company's Annual Report on Form 10-K (File No. 001-35561) filed on March 30, 2015]
3.4	Amendment No. 2 to the Second Amended and Restated Bylaws, adopted on November 20, 2015. [incorporated by reference to Exhibit 3.3 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on November 24, 2015]
3.5	Amendment No. 3 to the Second Amended and Restated Bylaws, adopted November 10, 2021 [incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-35561) filed on November 23, 2021]
3.6	Certificate of Designation of Series A Preferred Stock [incorporated by reference to Exhibit 3.2 to the Company's Quarterly Report on Form 10-Q (File No. 001-35561) filed on August 23, 2010]
3.7 *	Certificate of Designation of Series B Preferred Stock, as corrected by Certificate of Correction
3.8	Certificate of Designation of Series C Preferred Stock [incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on August 31, 2012]
3.9	Certificate of Designation of Series D 4% Convertible Preferred Stock [incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on July 11, 2013]
3.10	Certificate of Designation of Series E Convertible Preferred Stock [incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on February 6, 2014]
4.1 *	Description of registrant's securities
10.1 †*	Amended and Restated 2010 Equity Incentive Plan, dated August 28, 2018
10.2 †	Forms of Stock Option Agreement [Incorporated by reference to Exhibit 4.9 to the Company's Registration Statement on Form S-8 (File No. 001-35561) filed on January 28, 2020]
10.3 †	Form of Restricted Stock Grant Agreement [Incorporated by reference to Exhibit 4.10 to the Company's Registration Statement on Form S-8 (File No. 001-35561) filed on January 28, 2020]
10.4	Strategic Cooperation agreement between Qingdao Chengyang Xingyang Development and Investment Co., Ltd., Beijing Seven Star Global Culture Development Co., Ltd. and Ideanomics [incorporated by reference to Exhibit 10.2 to the Company's Report on Form 10-Q (File No. 001-35561) filed on May 11, 2020]
10.5	Standby Equity Distribution Agreement, dated as of September 4, 2020, by and between Ideanomics, Inc. and YA II PN, Ltd [incorporated by reference to Exhibit 10.1 to the Company's Report on Form 8-K (File No. 001-35561) filed on September 10, 2020]
10.6†	Employment Agreement, dated August 5, 2020, by and between the Company and Mr. Conor J. McCarthy [incorporated by reference to Exhibit 10.6 to the Company's Report on Form 10-Q (File No. 001-35561) filed on August 11, 2020]
10.7†	Employment Agreement, dated July 31, 2020, by and between the Company and Mr. Alfred P. Poor [incorporated by reference to Exhibit 10.7 to the Company's Report on Form 10-Q (File No. 001-35561) filed on August 11, 2020]
10.8	Stock Purchase Agreement, by and among Ideanomics, Timios Holding Corp. and the stockholders of Timios Holding Corp [incorporated by reference to Exhibit 10.1 to the Company's Report on Form 8-K (File No. 001-35561) filed on November 12, 2020]

10.9	An automobile sales contract between the Company and Meihao Travel (Hangzhou) Automobile Technology Co., Ltd. [incorporated by reference to Exhibit 10.142 to the Company's Annual Report on Form 10-K (File No. 001-35561) filed on March 31, 2021]
10.10	Payment agreement among the Company, Meihao Travel (Hangzhou) Automobile Technology Co., and BYD (HK) Co., Ltd. [incorporated by reference to Exhibit 10.143 to the Company's Annual Report on Form 10-K (File No. 001-35561) filed on March 31, 2021]
10.11	Stock purchase agreement, dated October 2, 2020, between the Company and Solectrac, Inc. [incorporated by reference to Exhibit 10.144 to the Company's Annual Report on Form 10-K (File No. 001-35561) filed on March 31, 2021]
10.12	Shareholder agreement, dated October 20, 2020, by and among Solectrac, Inc. and each of the shareholders [incorporated by reference to Exhibit 10.145 to the Company's Annual Report on Form 10-K (File No. 001-35561) filed on March 31, 2021]
10.13	Convertible Debenture between the Company and YA II PN, Ltd, dated January 4, 2021 in the principal amount of $37,500,000 [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on January 8, 2021]
10.14	Convertible Debenture between the Company and YA II PN, Ltd, dated January 15, 2021 in the principal amount of $37,500,000 [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on January 22, 2021]
10.15	Convertible Promissory Note between the Company and Slk EV Cayman LP, dated January 28, 2021 in the principal amount of $15,000,000 [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on February 1, 2021]
10.16	Convertible Debenture between the Company and YA II PN, Ltd, dated January 28, 2021 in the principal amount of $65,000,000 [incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on February 1, 2021]
10.17	Simple Agreement for Future Equity between the Company and Technology Metals Market Limited, dated January 28, 2021 in the principal amount of £1,500,000 [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on February 3, 2021]
10.18	Convertible Debenture between the Company and YA II PN, Ltd, dated February 8, 2021 in the principal amount of $80,000,000 [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on February 12, 2021]
10.19	Sales Agreement by and between Ideanomics, Inc. and Roth Capital Partners, LLC, dated as of February 26, 2021 [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on March 1, 2021]
10.20	Investment Agreement between the Company and Energica Motor Company, dated March 3, 2021 [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on March 4, 2021]
10.21 †	Employment Agreement, effective April 5, 2021, with Kristin Helsel [incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on April 5, 2021]
10.22	Agent Agreement between Tree Technologies SDN BHD and PT Pasifik Sakti Enjinring, dated April 14, 2021 [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on April 14, 2021]
10.23	Stock Purchase Agreement between the Company and FNL Technologies, Inc., dated April 20, 2021 [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on April 26, 2021]
10.24	Standby Equity Distribution Agreement, dated as of June 11, 2021, by and between Ideanomics, Inc. and YA II PN, Ltd. [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on June 11, 2021]
10.25	Controlled Equity Offering Sales Agreement by and between Ideanomics, Inc. and Cantor Fitzgerald & Co. dated as of August 12, 2021 [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on August 13, 2021]
10.26	Form of Voting and Support Agreement, dated August 30, 2021 [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on September 3, 2021]

10.27	Secured Convertible Promissory Note issued by VIA Motors International, Inc. to Ideanomics, Inc. [incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on September 3, 2021]
10.28	Convertible Debenture between the Company and YA II PN, Ltd, dated October 25, 2021 in the principal amount of $75,000,000 [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on October 29, 2021]
10.29	Framework Agreement, dated September 15, 2021 [incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 001-35561) filed on November 23, 2021]
10.30	Shareholders Agreement, dated September 15, 2021 [incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q (File No. 001-35561) filed on November 23, 2021]
10.31 †	Employment Agreement of Robin Mackie, dated as of August 29, 2021 [incorporated by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q (File No. 001-35561) filed on November 23, 2021]
10.32	Subscription Agreement dated as of July 26, 2021, and entered into between the Company and the MDI Keeper's Fund, L.P. [incorporated by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q (File No. 001-35561) filed on November 23, 2021]
10.33	Investment Agreement relating to PRETTL Electronics Automotive GmbH [incorporated by reference to Exhibit 10.8 to the Company's Quarterly Report on Form 10-Q (File No. 001-35561) filed on November 23, 2021]
10.34	Shareholders' Agreement relating to PRETTL Electronics Automotive GmbH [incorporated by reference to Exhibit 10.9 to the Company's Quarterly Report on Form 10-Q (File No. 001-35561) filed on November 23, 2021]
10.35	Shareholders Agreement, dated December 29, 2021 [incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-35561) filed on December 29, 2021]
21*	List of subsidiaries of the registrant
23.1*	Consent of BF Borgers CPA PC
23.2*	Consent of Grassi & Co, CPAs, P.C., Independent Registered Public Accounting Firm
31.1*	Certifications of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certifications of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1**	Certification of Principal Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2**	Certification of Principal Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
99.1*	Risk Factors in connection with VIA Merger
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definitions Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101)

*	Filed herewith.
**	Furnished herewith.
†	Indicates management contract or compensatory plan, contract, or agreement.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereto duly authorized.

		IDEANOMICS, INC. (Registrant)
Date: September 2, 2022	By	*/s/ Alfred P. Poor*
		Alfred P. Poor Chief Executive Officer *(Principal Executive Officer)*

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

Date: September 2, 2022	By	*/s/ Alfred P. Poor*
		Alfred P. Poor Chief Executive Officer and Director *(Principal Executive Officer)*
Date: September 2, 2022	By	*/s/ Conor McCarthy*
		Conor McCarthy Chief Financial Officer *(Principal Financial and Accounting Officer)*
Date: September 2, 2022	By	*/s/ Shane McMahon*
		Shane McMahon Director
Date: September 2, 2022	By	*/s/ James S. Cassano*
		James S. Cassano Director
Date: September 2, 2022	By	*/s/ Jerry Fan*
		Jerry Fan Director
Date: September 2, 2022	By	*/s/ Harry Edelson*
		Harry Edelson Director

150101

ROSS MILLER
Secretary of State
204 North Carson Street, Suite 1
Carson City, Nevada 89701-4520
(775) 684-5708
Website: www.nvsos.gov

Filed in the office of	Document Number 20100567726-06
Ross Miller Secretary of State State of Nevada	Filing Date and Time 07/30/2010 8:20 AM
	Entity Number C28405-2004

Certificate of Designation
(PURSUANT TO NRS 78.1955)

USE BLACK INK ONLY - DO NOT HIGHLIGHT

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Certificate of Designation For Nevada Profit Corporations (Pursuant to NRS 78.1955)

1. Name of corporation:

China Broadband, Inc.

2. By resolution of the board of directors pursuant to a provision in the articles of incorporation this certificate establishes the following regarding the voting powers, designations, preferences, limitations, restrictions and relative rights of the following class or series of stock.

A Series of Preferred Stock to be designated "Series B Preferred Stock," which series will consist of 6,000,000 shares of the Preferred Stock, par value $0.001 per share, of the corporation and have the voting powers, designations, preferences and relative, participating, optional or other rights and the qualifications, limitations and restrictions that are set forth in the exhibit attached hereto and incorporated herein.

3. Effective date of filing: (optional)

(must not be later than 90 days after the certificate is filed)

4. Signature: (required)

X

Signature of Officer

Filing Fee: $175.00

IMPORTANT: Failure to include any of the above information and submit with the proper fees may cause this filing to be rejected.

This form must be accompanied by appropriate fees.

Nevada Secretary of State Stock Designation
Revised: 3-6-09

CERTIFICATE OF DESIGNATION

OF

SERIES B PREFERRED STOCK

OF

CHINA BROADBAND, INC.

---

1. Designation. This series of Preferred Stock shall be designated as the "Series B Preferred Stock."

2. Authorization. China Broadband, Inc. (the "**Company**") shall have the authority to issue 6,000,000 shares of the Series B Preferred Stock, par value US$0.001 per share, of the Company (the "**Series B Preferred Stock**"). Such number of shares may be increased or decreased, but not to a number less than the number of shares of Series B Preferred Stock then issued and outstanding, by resolution adopted by the full Board of Directors (the "**Board**") of the Company.

3. Rank. The Series B Preferred Stock shall, with respect to dividend rights and rights on liquidation, winding up and dissolution, rank (a) on a parity with any other series of Preferred Stock hereafter established by the Board, and (b) prior to the Company's Common Stock, par value $0.001 per share ("**Common Stock**").

4. Dividend Provisions. The Series B Preferred Stock is only entitled to receive dividends when and if declared by the Board.

5. Liquidation Preference.

(a) Upon the occurrence of a Liquidation Event (as defined below), the holders of shares of Series B Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Company available for distribution to its stockholders, whether from capital, surplus or earnings, an amount per share (the "**Liquidation Preference**") equal to $0.50, as may be adjusted from time to time plus all accrued, but unpaid dividends, whether declared or not.

(b) If, upon the occurrence of a Liquidation Event, the assets and funds of the Company legally available for distribution to stockholders by reason of their ownership of stock of the Company shall be insufficient to permit the payment to such holders of Series B Preferred Stock, of the full aforementioned Liquidation Preference, then the entire assets and funds of the Company legally available for distribution to stockholders by reason of their ownership of stock of the Company shall be distributed ratably among the holders of Series B Preferred Stock.

(c) For purposes of this Section 4, a "**Liquidation Event**" is any liquidation, dissolution or winding up of the Company, either voluntary or involuntary, and upon the election of the holders of a majority of the then outstanding Series B Preferred Stock shall be deemed to be occasioned by, or to include, (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any reorganization, merger, consolidation, or other transaction in which control of the Company is transferred, but, excluding any merger effected exclusively for the purpose of changing the domicile of the Company) unless the Company's stockholders of record as constituted immediately prior to such acquisition or sale will, immediately after such acquisition or sale (by virtue of securities issued as consideration for the Company's acquisition or sale or otherwise) hold at least 50% of the voting power of the surviving or acquiring entity or (ii) a sale of all or substantially all of the assets of the Company.

6. Conversion. The holders of the Series B Preferred Stock shall have conversion rights as follows (the "**Conversion Rights**"):

(a) Right to Convert. Each share of Series B Preferred Stock shall be convertible, at the option of the holder thereof, at any time, at the office of the Company or any transfer agent for such stock, into ten (10) fully paid and nonassessable shares of Common Stock.

(b) Mechanics of Conversion. Before any holder of Series B Preferred Stock shall be entitled to convert the same into shares of Common Stock, he, she or it shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Company or of any transfer agent, and shall give written notice to the Company at its principal corporate office, of the election to convert the same and shall state therein the name or names in which the certificate or certificates for shares of Common Stock are to be issued. The Company shall, as soon as practicable thereafter and in any event within three business days after such notice, issue and deliver at such office to such holder of Series B Preferred Stock, or to the nominee or nominees of such holder, a certificate or certificates for the number of shares of Common Stock to which such holder shall be entitled as aforesaid. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of Series B Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock as of such date. If the conversion is in connection with an underwritten public offering of the Company's Common Stock, the conversion may, at the option of any holder tendering Series B Preferred Stock for conversion, be conditioned upon the closing with the underwriters of the sale of the Company's Common Stock pursuant to such offering, in which event the persons entitled to receive the Common Stock upon conversion of the Series B Preferred Stock shall not be deemed to have converted such Series B Preferred Stock until immediately prior to the closing of such public offering.

(c) Conversion Adjustments. The number of shares issuable upon conversion of Series B Preferred Stock shall be subject to adjustment from time to time as follows:

(i) Adjustments for Subdivisions or Combinations of Common Stock. In the event the outstanding shares of Common Stock shall be subdivided by stock split, stock dividend or otherwise, into a greater number of shares of Common Stock, the number of shares of Common Stock issuable upon conversion of Series B Preferred Stock shall, concurrently with the effectiveness of such subdivision, be proportionately increased. In the event the outstanding shares of Common Stock shall be combined or consolidated into a lesser number of shares of Common Stock, the number of shares of Common Stock issuable upon conversion of Series B Preferred Stock shall, concurrently with the effectiveness of such combination or consolidation, be proportionately decreased.

(ii) Adjustments for Stock Dividends and Other Distributions. In the event the Company makes, or fixes a record date for the determination of holders of Common Stock entitled to receive, any distribution (excluding repurchases of securities by the Company not made on a pro rata basis) payable in property or in securities of the Company other than shares of Common Stock, and other than as otherwise adjusted for in this Section 6 in connection with a dividend, then and in each such event the holders of Series B Preferred Stock shall receive, at the time of such distribution, the amount of property or the number of securities of the Company that they would have received had their Series B Preferred Stock been converted into Common Stock on the date of such event.

(iii) Adjustments for Reorganizations, Reclassifications or Similar Events. If the Common Stock shall be changed into the same or a different number of shares of any other class or classes of stock or other securities or property, whether by capital reorganization, reclassification or otherwise, then each share of Series B Preferred Stock shall thereafter be convertible into the number of shares of stock or other securities or property to which a holder of the number of shares of Common Stock of the Company deliverable upon conversion of such shares of Series B Preferred Stock shall have been entitled upon such reorganization, reclassification or other event.

(iv) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment pursuant to this Section 6, the Company at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Series B Preferred Stock to which such adjustment pertains a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall, upon the written request at any time of any holder of Series B Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, and (iii) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of such holder's Series B Preferred Stock.

(d) No Impairment. The Company will not go through any reorganization, recapitalization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, or avoid or seek to avoid the observance or performance of any of the terms to be observed or performed by the Company pursuant to this Section 6, but will at all times in good faith assist in the carrying out of all the provisions of this Section 6 and in the taking of all such action as may be necessary or appropriate in order to protect the conversion rights of the holders of Series B Preferred Stock against impairment.

(e) Reservation of Stock Issuable Upon Conversion. The Company shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely for the purpose of effecting the conversion of the shares of Series B Preferred Stock such number of shares of its Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Series B Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of Series B Preferred Stock, the Company will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

(f) Status of Converted or Contributed Shares. In case any shares of Series B Preferred Stock are converted into Common Stock pursuant to this Section 6 or are contributed back to the Company (through repurchase or otherwise) after the date such shares of Series B Preferred Stock were first issued, all such shares so converted or contributed shall, upon such conversion or contribution, be cancelled and shall not be issuable by the Company. The Company may from time to time take such appropriate corporate action as may be necessary to reduce accordingly the number of authorized shares of the Company's Series B Preferred Stock

(g) Limitations and Restrictions on Conversion. The Company shall not effect any conversion of Series B Preferred Stock, and no holder of Series B Preferred Stock shall have the right to convert any portion of their Series B Preferred Stock, pursuant to Section 6(a) or otherwise, to the extent that after giving effect to such conversion, such holder (together with such holder's affiliates) would beneficially own in excess of 4.99% of the number of shares of Common Stock outstanding immediately after giving effect to such conversion unless such holder shall have, in its sole discretion, elected to increase such amount to 9.99% of the number of shares of Common Stock outstanding immediately after giving effect to such conversion. For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by a holder of Series B Preferred Stock (together with such holder's affiliates) shall include the number of shares of Common Stock issuable upon conversion of the Series B Preferred Stock with respect to which the determination of such sentence is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (A) conversion of the remaining, nonconverted portion of the holder's Series B Preferred Stock beneficially owned by such holder or any of its affiliates and (B) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by such holder of Series B Preferred Stock or any of its affiliates. Except as set forth in the preceding sentence, for purposes of this Section 6(h), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act. To the extent that the limitation contained in this section applies, the determination of whether the Series B Preferred Stock is convertible (in relation to other securities owned by such holder of Series B Preferred Stock) and of which a portion of such holder's Series B Preferred Stock is convertible shall be in the sole discretion of such holder. To ensure compliance with this restriction, such holder will be deemed to represent to the Company each time it delivers written notice the Company in accordance with Section 6(b) with respect to the conversion of Series B Preferred Stock that such holder has not violated the restrictions set forth in this paragraph, and the Company shall have no obligation to verify or confirm the accuracy of such determination. For purposes of this Section 6(g), in determining the number of outstanding shares of Common Stock, a holder of Series B Preferred Stock may rely on the number of outstanding shares of Common Stock as reflected in a Company filing with the U.S. Securities and Exchange Commission, a public announcement by the Company, or any other notice by the Company or the Company's transfer agent setting forth the number of shares of Common Stock outstanding. The provisions of this Section 6(g) may be waived by a holder with respect to the Series B Preferred Stock held by such holder, upon not less than sixty-one (61) days' prior notice to the Company, and the provisions of this Section 6(g) shall continue to apply until such 61st day (or such later date, as determined by such holder).

7. Voting Rights. Except as provided in Section 8 hereof, and except for any other matters brought before the holders of Series B Preferred Stock for a vote of the holders of Series B Preferred Stock as a separate class, the holders of Series B Preferred Stock shall not be entitled to vote on matters submitted to a vote of the shareholders of the Company. Without limiting the generality of the foregoing, the holders of the Series B Preferred Stock shall not be entitled to vote on an as converted basis with the holders of the Company's Common Stock.

8. Amendments. The terms, conditions, rights and preferences contained in this Certificate of Designation may be amended, modified, waived, amended and restated or replaced in its entirety upon the approval of the Board with the consent of at least a majority of the then outstanding shares of Series B Preferred Stock voting as a separate class.

* * * * *

IN WITNESS WHEREOF, the foregoing Certificate of Designation has been duly executed on behalf of the Company by the undersigned on July 30, 2010.

China Broadband, Inc.

By: ______________
Marc Urbach
President

SIGNATURE PAGE TO CERTIFICATE OF DESIGNATION

090401

ROSS MILLER
Secretary of State
204 North Carson Street, Suite 1
Carson City, Nevada 89701-4520
(775) 684-5708
Website: www.nvsos.gov

Filed in the office of	Document Number 20100876054-23
Ross Miller Secretary of State State of Nevada	Filing Date and Time 11/22/2010 4:15 PM
	Entity Number C28405-2004

Certificate of Correction

(PURSUANT TO NRS CHAPTERS 78, 78A, 80, 81, 82, 84, 86, 87, 87A, 88, 88A, 89 AND 92A)

USE BLACK INK ONLY - DO NOT HIGHLIGHT

ABOVE SPACE IS FOR OFFICE USE ONLY

Certificate of Correction

(Pursuant to NRS Chapters 78, 78A, 80, 81, 82, 84, 86, 87, 87A, 88, 88A, 89 and 92A)

1. The name of the **entity** for which correction is being made:

China Broadband, Inc.

2. Description of the original document for which correction is being made:

Certificate of Designation of Series B Preferred Stock of China Broadband, Inc.

3. Filing date of the original document for which correction is being made: July 30, 2010

4. Description of the inaccuracy or defect:

Section 2 "Authorization" inadvertently states that China Broadband, Inc. "shall have the authority to issue 6,000,000 shares of the Series B Preferred Stock, par value US$0.001 per share, of the Company". When the Board of Directors approved the Certificate of Designations of Series B Stock, the number of shares of Series B Preferred Stock authorized was 11,000,000, not 6,000,000.

5. Correction of the inaccuracy or defect:

Section 2 is hereby amended and restated in its entirety as follows:

2. Authorization. China Broadband, Inc. (the "Company") shall have the authority to issue 11,000,000 shares of the Series B Preferred Stock, par value US$0.001 per share, of the Company (the "Series B Preferred Stock"). Such number of shares may be increased or decreased, but not to a number less than the number of shares of Series B Preferred Stock then issued and outstanding, by resolution adopted by the full Board of Directors (the "Board") of the Company.

6. Signature:

X ______________________

Authorized Signature	President **Title** *	November 22, 2010 **Date**

* If entity is a corporation, it must be signed by an officer if stock has been issued, OR an incorporator or director if stock has not been issued; a limited-liability company, by a manager or managing members; a limited partnership or limited-liability limited partnership, by a general partner; a limited-liability partnership, by a managing partner; a business trust, by a trustee.

IMPORTANT: Failure to include any of the above information and submit with the proper fees may cause this filing to be rejected.

This form must be accompanied by appropriate fees.

Exhibit 4.1

IDEANOMICS, INC.
Description of the Securities Registered Pursuant to
Section 12 of the Securities Exchange Act of 1934

The following description is a summary of the terms of our common stock, which is registered under Section 12(b) of the Securities Exchange Act of 1934, as amended.

The following description of our common stock is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Articles of Incorporation, as amended (“Articles of Incorporation”), and Bylaws, as amended (“Bylaws”), each of which is incorporated herein by reference as an exhibit to the Annual Report on Form 10-K filed with the Securities and Exchange Commission of which this exhibit is a part, and certain applicable provisions of the Nevada Revised Statutes.

General

Our authorized capital stock consists of 1,500,000,000 shares of common stock, par value $0.001 per share, and 50,000,000 shares of preferred stock, par value $0.001 per share, of which:

(i) 7,000,000 shares are designated as Series A Preferred Stock;

(ii) 11,000,000 shares are designated as Series B Preferred Stock;

(iii) 250,000 shares are designated as Series C Preferred Stock;

(iv) 2,500,000 shares are designated as Series D 4% Convertible Preferred Stock; and

(v) 16,500,000 shares are designated as Series E Convertible Preferred Stock.

Common Stock

Dividend Rights. Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of our common stock may, pursuant to our Bylaws, receive dividends out of funds legally available if our board, in its discretion, determines to issue dividends and then only at the times and in the amounts that our board may determine. We have not paid any dividends on our common stock and do not contemplate doing so in the foreseeable future.

Voting Rights. In accordance with Nevada Revised Statutes Section 78.350, holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders. We have not provided for cumulative voting for the election of directors in our Articles of Incorporation.

No Preemptive or Similar Rights. In accordance with Nevada Revised Statutes Section 78.267, our common stock is not entitled to preemptive rights and is not subject to conversion, redemption, or sinking fund provisions.

Right to Receive Liquidation Distribution. In accordance with Nevada Revised Statutes Sections 78.565 to 78.620, if we become subject to a liquidation, dissolution, or winding-up, the assets legally available for distribution to our stockholders would be distributable among the holders of our common stock and our participating preferred stock outstanding at that time, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights and payment of liquidation preferences on any outstanding shares of preferred stock.

Fully Paid and Non-Assessable. In accordance with NRS Sections 78.195 and 78.211 and the assessment of our board, all of the outstanding shares of our common stock are fully paid and nonassessable.

Nasdaq Capital Market. Our shares of common stock trade on The Nasdaq Capital Market under the symbol “IDEX.”

Transfer Agent and Registrar. The transfer agent and registrar for our common stock is TransferOnline.

Blank Check Preferred Stock

We are authorized to issue 50,000,000 shares of preferred stock, par value $0.001 per share. Pursuant to our Articles of Incorporation, our board is authorized to authorize and issue preferred stock and to fix the designations, preferences and rights of the preferred stock pursuant to a board resolution. Our board may designate the rights, preferences, privileges and restrictions of the preferred stock, including dividend rights, conversion rights, voting rights, redemption rights, liquidation preference, sinking fund terms and the number of shares constituting any series or the designation of any series.

Anti-Takeover Effects of Nevada Law and Our Articles of Incorporation and Bylaws

Provisions of the Nevada Revised Statutes and our Articles of Incorporation and Bylaws could make it more difficult to acquire us by means of a tender offer, a proxy contest or otherwise, or to remove incumbent officers and directors. These provisions, summarized below, would be expected to discourage certain types of takeover practices and takeover bids our board may consider inadequate and to encourage persons seeking to acquire control of us to first negotiate with us. We believe that the benefits of increased protection of our ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us will outweigh the disadvantages of discouraging takeover or acquisition proposals because, among other things, negotiation of these proposals could result in an improvement of their terms.

Blank Check Preferred. Our Articles of Incorporation permit our board to issue preferred stock with voting, conversion and exchange rights that could negatively affect the voting power or other rights of our common stockholders. The issuance of our preferred stock could delay or prevent a change of control of our company.

Board Vacancies to be filled by Remaining Directors. Our Bylaws provide that casual vacancies on the board may be filled by the remaining directors then in office.

Removal of Directors by Stockholders. Our Bylaws and the Nevada Revised Statutes provide that directors may be removed with or without cause at any time by a vote of two-thirds of the stockholders entitled to vote thereon, at a special meeting of the stockholders called for that purpose.

Stockholder Action. Our Bylaws provide that special meetings of the stockholders may be called by the board or such person or persons authorized by the board.

Amendments to our Articles of Incorporation and Bylaws. Under the Nevada Revised Statutes, our Articles of Incorporation may not be amended by stockholder action alone. Amendments to our Articles of Incorporation require a board resolution approved by the majority of the outstanding capital stock entitled to vote. Our Bylaws may only be amended by a majority vote of the stockholders at any annual meeting or special meeting called for that purpose. Subject to the right of stockholders as described in the immediately preceding sentence, the board has the power to make, adopt, alter, amend and repeal, from time to time, our Bylaws.

Nevada Anti-Takeover Statute. We may be subject to Nevada's Combination with Interested Stockholders Statute (Nevada Revised Statutes Sections 78.411 to 78.444) which prohibits an "interested stockholder" from entering into a "combination" with the corporation, unless certain conditions are met. An "interested stockholder" is a person who, together with affiliates and associates, beneficially owns (or within the prior two years, did beneficially own) 10% or more of the corporation's capital stock entitled to vote.

Limitations on Liability and Indemnification of Officers and Directors. The Nevada Revised Statutes limit or eliminate the personal liability of directors to corporations and their stockholders for monetary damages for breaches of directors' fiduciary duties as directors. Our Bylaws include provisions that require the company to indemnify our directors or officers against monetary damages for actions taken as a director or officer of our company. We are also expressly authorized to carry directors' and officers' insurance to protect our directors, officers, employees, and agents from certain liabilities. Our Articles of Incorporation do not contain any limiting language regarding director immunity from liability.

The limitation of liability and indemnification provisions under Nevada Revised Statutes and in our Articles of Incorporation and Bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. However, these provisions do not limit or eliminate our rights, or those of any stockholder, to seek non-monetary relief such as injunction or rescission in the event of a breach of a director's fiduciary duties. Moreover, the provisions do not alter the liability of directors under the federal securities laws. In addition, your investment may be adversely affected to the extent that, in a class action or direct suit, we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Authorized but Unissued Shares. Our authorized but unissued shares of common stock and preferred stock will be available for future issuance without stockholder approval, except as may be required under the listing rules of any stock exchange on which our common stock is then listed. We may use additional shares for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of common stock and preferred stock could render more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

IDEANOMICS, INC.
AMENDED AND RESTATED 2010 EQUITY INCENTIVE PLAN

1. Purposes of the Plan. YOU on Demand Holdings, Inc., a Nevada corporation (the "Company") hereby establishes the Seven Stars Cloud Group, Inc. Amended and Restated 2010 Equity Incentive Plan (the "Plan"). The purposes of this Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Employees, Directors and Consultants, and to promote the long-term growth and profitability of the Company. The Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Restricted Stock, Restricted Stock Units, Stock Appreciation Rights, Performance Units and Performance Shares as the Administrator may determine.

2. Definitions. The following definitions will apply to the terms in the Plan:

"Administrator" means the Board or any of its Committees as will be administering the Plan, in accordance with Section 4.

"Applicable Laws" means the requirements relating to the administration of equity-based awards under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any foreign country or jurisdiction where Awards are, or will be, granted under the Plan.

"Award" means, individually or collectively, a grant under the Plan of Options, SARs, Restricted Stock, Restricted Stock Units, Performance Units or Performance Shares.

"Award Agreement" means the written or electronic agreement setting forth the terms and provisions applicable to each Award granted under the Plan. The Award Agreement is subject to the terms and conditions of the Plan.

"Board" means the Board of Directors of the Company.

"Change in Control" means the occurrence of any of the following events:

(i) Any "person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the "beneficial owner" (as defined in Rule 13d-3 of the Exchange Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the total voting power represented by the Company's then outstanding voting securities; provided however, that for purposes of this subsection (i) any acquisition of securities directly from the Company shall not constitute a Change in Control; or

(ii) The consummation of the sale or disposition by the Company of all or substantially all of the Company's assets;

(iii) A change in the composition of the Board occurring within a two-year period, as a result of which fewer than a majority of the directors are Incumbent Directors. "Incumbent Directors" means directors who either (A) are Directors as of the effective date of the Plan, or (B) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Incumbent Directors at the time of such election or nomination (but will not include an individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of directors to the Company); or

(iv) The consummation of a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or its parent) at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity or its parent outstanding immediately after such merger or consolidation.

For avoidance of doubt, a transaction will not constitute a Change in Control if: (i) its sole purpose is the change the state of the Company's incorporation, or (ii) its sole purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

"Code" means the Internal Revenue Code of 1986, as amended. Any reference in the Plan to a section of the Code will be a reference to any successor or amended section of the Code.

"Committee" means a committee of Directors or of other individuals satisfying Applicable Laws appointed by the Board in accordance with Section 4 hereof.

"Common Stock" means the common stock of the Company.

"Company" means YOU on Demand Holdings, Inc., a Nevada corporation, or any successor thereto.

"Consultant" means any person, including an advisor, engaged by the Company or a Parent or Subsidiary to render services to such entity.

"Director" means a member of the Board.

"Disability" means total and permanent disability as determined by the Administrator in its discretion in accordance with uniform and non-discriminatory standards adopted by the Administrator from time to time.

"Employee" means any person, including Officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. Neither service as a Director nor payment of a director's fee by the Company will be sufficient to constitute "employment" by the Company.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Exchange Program" means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for Awards of the same type (which may have lower exercise prices and different terms), Awards of a different type and/or cash, and/or (ii) the exercise price of an outstanding Award is reduced.

"Fair Market Value" means, as of any date, the value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation any division or subdivision of the Nasdaq Stock Market, its Fair Market Value will be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, as reported in The Wall Street Journal or such other source as the Administrator deems reliable;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, including without limitation quotation through the over the counter bulletin board ("OTCBB") quotation service administered by the Financial Industry Regulatory Authority ("FINRA") , the Fair Market Value of a Share will be the mean between the high bid and low asked prices for the Common Stock on the day of determination, as reported in The Wall Street Journal or such other source as the Administrator deems reliable; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value will be determined in good faith by the Administrator, and to the extent Section 15 applies (a) with respect to ISOs, the Fair Market Value shall be determined in a manner consistent with Code section 422 or (b) with respect to NSOs or SARs, the Fair Market Value shall be determined in a manner consistent with Code section 409A.

"Fiscal Year" means the fiscal year of the Company.

"Grant Date" means, for all purposes, the date on which the Administrator determines to grant an Award, or such other later date as is determined by the Administrator, provided that the Administrator cannot grant an Award prior to the date the material terms of the Award are established. Notice of the Administrator's determination to grant an Award will be provided to each Participant within a reasonable time after the Grant Date.

"Incentive Stock Option" or "ISO" means an Option that by its terms qualifies and is otherwise intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.

"Nonstatutory Stock Option" or "NSO" means an Option that by its terms does not qualify or is not intended to qualify as an ISO.

"Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

"Option" means a stock option granted pursuant to the Plan.

"Optioned Shares" means the Common Stock subject to an Option.

"Optionee" means the holder of an outstanding Option.

"Parent" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code.

"Participant" means the holder of an outstanding Award.

"Performance Share" means an Award denominated in Shares which may vest in whole or in part upon attainment of performance goals or other vesting criteria as the Administrator may determine pursuant to Section 10.

"Performance Unit" means an Award which may vest in whole or in part upon attainment of performance goals or other vesting criteria as the Administrator may determine and which may be settled for cash, Shares or other securities or a combination of the foregoing pursuant to Section 10.

"Period of Restriction" means the period during which Shares of Restricted Stock are subject to forfeiture or restrictions on transfer pursuant to Section 7.

"Plan" means this 2010 Equity Incentive Plan.

"Restricted Stock" means Shares awarded to a Participant which are subject to forfeiture and restrictions on transferability in accordance with Section 7.

"Restricted Stock Unit" means the right to receive one Share at the end of a specified period of time, which right is subject to forfeiture in accordance with Section 8 of the Plan.

"Rule 16b-3" means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3.

"Section" means a paragraph or section of this Plan.

"Section 16(b)" means Section 16(b) of the Exchange Act.

"Service Provider" means an Employee, Director or Consultant.

"Share" means a share of the Common Stock, as adjusted in accordance with Section 13.

"Stock Appreciation Right" or "SAR" means the right to receive payment from the Company in an amount no greater than the excess of the Fair Market Value of a Share at the date the SAR is exercised over a specified price fixed by the Administrator in the Award Agreement, which shall not be less than the Fair Market Value of a Share on the Grant Date. In the case of a SAR which is granted in connection with an Option, the specified price shall be the Option exercise price.

"Subsidiary" means a "subsidiary corporation", whether now or hereafter existing, as defined in Section 424(f) of the Code.

"Ten Percent Owner" means any Service Provider who is, on the grant date of an ISO, the owner of Shares (determined with application of ownership attribution rules of Code Section 424(d)) possessing more than 10% of the total combined voting power of all classes of stock of the Company or any of its Subsidiaries.

3. Stock Subject to the Plan.

a. Stock Subject to the Plan. Subject to the provisions of Section 13, the maximum aggregate number of Shares that may be issued under the Plan is thirty one million five hundred thousand (56,800,000) Shares. The Shares may be authorized but unissued, or reacquired Common Stock.

b. Lapsed Awards. If an Award expires or becomes unexercisable without having been exercised in full or, with respect to Restricted Stock, Restricted Stock Units, Performance Shares or Performance Units, is forfeited in whole or in part to the Company, the unpurchased Shares (or for Awards other than Options and SARs, the forfeited or unissued Shares) which were subject to the Award will become available for future grant or sale under the Plan (unless the Plan has terminated). With respect to SARs, only Shares actually issued pursuant to a SAR will cease to be available under the Plan; all remaining Shares subject to the SARs will remain available for future grant or sale under the Plan (unless the Plan has terminated). Shares that have actually been issued under the Plan under any Award will not be returned to the Plan and will not become available for future distribution under the Plan; provided, however, that if Shares issued pursuant to Awards of Restricted Stock, Restricted Stock Units, Performance Shares or Performance Units are forfeited to the Company, such Shares will become available for future grant under the Plan. Shares withheld by the Company to pay the exercise price of an Award or to satisfy tax withholding obligations with respect to an Award will become available for future grant or sale under the Plan. To the extent an Award under the Plan is paid out in cash rather than Shares, such cash payment will not result in reducing the number of Shares available for issuance under the Plan.

c. Share Reserve. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as will be sufficient to satisfy the requirements of the Plan.

4. Administration of the Plan.

a. Procedure. The Plan shall be administered by the Board or a Committee (or Committees) appointed by the Board, which Committee shall be constituted to comply with Applicable Laws. If and so long as the Common Stock is registered under Section 12(b) or 12(g) of the Exchange Act, the Board shall consider in selecting the Administrator and the membership of any committee acting as Administrator the requirements regarding (i) “nonemployee directors” within the meaning of Rule 16b-3 under the Exchange Act; (ii) “independent directors” as described in the listing requirements for any stock exchange on which Shares are listed; and (iii) Section 15(b)(i) of the Plan if the Company pays salaries for which it claims deductions that are subject to the Code section 162(m) limitation on its U.S. tax returns. The Board may delegate the responsibility for administering the Plan with respect to designated classes of eligible Participants to different committees consisting of two or more members of the Board, subject to such limitations as the Board or the Administrator deems appropriate. Committee members shall serve for such term as the Board may determine, subject to removal by the Board at any time.

b. Powers of the Administrator. Subject to the provisions of the Plan and the approval of any relevant authorities, and in the case of a Committee, subject to the specific duties delegated by the Board to such Committee, the Administrator will have the authority, in its discretion:

i. to determine the Fair Market Value;

ii. to select the Service Providers to whom Awards may be granted hereunder;

iii. to determine the number of Shares to be covered by each Award granted hereunder;

iv. to approve forms of agreement for use under the Plan;

v. to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when Awards may be exercised (which may be based on continued employment, continued service or performance criteria), any vesting acceleration (whether by reason of a Change of Control or otherwise) or waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Administrator, in its sole discretion, will determine;

vi. subject to Section 15(c) of the Plan, to reduce, without prior stockholder approval, the exercise price of any Award to the then current Fair Market Value of the Common Stock covered by such Award if the Fair Market Value has declined since the Grant Date;

vii. to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan, including the right to construe disputed or doubtful Plan and Award provisions;

viii. to prescribe, amend and rescind rules and regulations relating to the Plan;

ix. to modify or amend each Award (subject to Section 19(c)) to the extent any modification or amendment is consistent with the terms of the Plan. The Administrator shall have the discretion to extend the exercise period of Options generally provided the exercise period is not extended beyond the earlier of the original term of the Option or 10 years from the original grant date, or specifically (1) if the exercise period of an Option is extended (but to no more than 10 years from the original grant date) at a time when the exercise price equals or exceeds the fair market value of the Optioned Shares or (2) an Option cannot be exercised because such exercise would violate Applicable Laws, provided that the exercise period is not extended more than 30 days after the exercise of the Option would no longer violate Applicable Laws.

x. to allow Participants to satisfy withholding tax obligations in such manner as prescribed in Section 14;

xi. to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;

xii. to delay issuance of Shares or suspend Participant’s right to exercise an Award as deemed necessary to comply with Applicable Laws; and

xiii. to make all other determinations deemed necessary or advisable for administering the Plan.

c. <u>Effect of Administrator's Decision</u>. The Administrator’s decisions, determinations and interpretations will be final and binding on all Participants and any other holders of Awards. Any decision or action taken or to be taken by the Administrator, arising out of or in connection with the construction, administration, interpretation and effect of the Plan and of its rules and regulations, shall, to the maximum extent permitted by Applicable Laws, be within its absolute discretion (except as otherwise specifically provided in the Plan) and shall be final, binding and conclusive upon the Company, all Participants and any person claiming under or through any Participant.

5. <u>Eligibility</u>. NSOs, Restricted Stock, Restricted Stock Units, SARs, Performance Units and Performance Shares may be granted to Service Providers. ISOs may be granted as specified in Section 15(a).

6. <u>Stock Options</u>.

a. Grant of Options. Subject to the terms and conditions of the Plan, the Administrator, at any time and from time to time, may grant Options to Service Providers in such amounts as the Administrator will determine in its sole discretion. For purposes of the foregoing sentence, Service Providers shall include prospective employees or consultants to whom Options are granted in connection with written offers of employment or engagement of services, respectively, with the Company; provided that no Option granted to a prospective employee or consultant may be exercised prior to the commencement of employment or services with the Company. The Administrator may grant NSOs, ISOs, or any combination of the two. ISOs shall be granted in accordance with Section 15(a) of the Plan.

b. Option Award Agreement. Each Option shall be evidenced by an Award Agreement that shall specify the type of Option granted, the Option price, the exercise date, the term of the Option, the number of Shares to which the Option pertains, and such other terms and conditions (which need not be identical among Participants) as the Administrator shall determine in its sole discretion. If the Award Agreement does not specify that the Option is to be treated as an ISO, the Option shall be deemed a NSO.

c. Exercise Price. The per Share exercise price for the Shares to be issued pursuant to exercise of an Option will be no less than the Fair Market Value per Share on the Grant Date.

d. Term of Options. The term of each Option will be stated in the Award Agreement. Unless terminated sooner in accordance with the remaining provisions of this Section 6, each Option shall expire either ten (10) years after the Grant Date, or after a shorter term as may be fixed by the Board.

e. Time and Form of Payment.

i. Exercise Date. Each Award Agreement shall specify how and when Shares covered by an Option may be purchased. The Award Agreement may specify waiting periods, the dates on which Options become exercisable or "vested" and, subject to the termination provisions of this section, exercise periods. The Administrator may accelerate the exercisability of any Option or portion thereof.

ii. Exercise of Option. Any Option granted hereunder will be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Award Agreement. An Option may not be exercised for a fraction of a Share. An Option will be deemed exercised when the Company receives: (1) notice of exercise (in such form as the Administrator specify from time to time) from the person entitled to exercise the Option, and (2) full payment for the Shares with respect to which the Option is exercised (together with all applicable withholding taxes). Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Award Agreement and the Plan (together with all applicable withholding taxes). Shares issued upon exercise of an Option will be issued in the name of the Optionee or, if requested by the Optionee, in the name of the Optionee and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Optioned Shares, notwithstanding the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 13.

iii. Payment. The Administrator will determine the acceptable form of consideration for exercising an Option, including the method of payment. Such consideration may consist entirely of:

(1) cash;
(2) check;
(3) to the extent not prohibited by Section 402 of the Sarbanes-Oxley Act of 2002, a promissory note;
(4) other Shares, provided Shares have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Option will be exercised;

(5) to the extent not prohibited by Section 402 of the Sarbanes-Oxley Act of 2002, in accordance with any broker-assisted cashless exercise procedures approved by the Company and as in effect from time to time;
(6) by asking the Company to withhold Shares from the total Shares to be delivered upon exercise equal to the number of Shares having a value equal to the aggregate Exercise Price of the Shares being acquired;
(7) any combination of the foregoing methods of payment; or
(8) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws.

f. Forfeiture of Options. All unexercised Options shall be forfeited to the Company in accordance with the terms and conditions set forth in the Award Agreement and again will become available for grant under the Plan.

7. Restricted Stock.

a. Grant of Restricted Stock. Subject to the terms and conditions of the Plan, the Administrator, at any time and from time to time, may grant Shares of Restricted Stock to Service Providers in such amounts as the Administrator will determine in its sole discretion.

b. Restricted Stock Award Agreement. Each Award of Restricted Stock will be evidenced by an Award Agreement that will specify the Period of Restriction, the number of Shares granted, and such other terms and conditions (which need not be identical among Participants) as the Administrator will determine in its sole discretion. Unless the Administrator determines otherwise, the Company as escrow agent will hold Shares of Restricted Stock until the restrictions on such Shares have lapsed.

c. Vesting Conditions and Other Terms.

i. Vesting Conditions. The Administrator, in its sole discretion, may impose such conditions on the vesting of Shares of Restricted Stock as it may deem advisable or appropriate, including but not limited to, achievement of Company- wide, business unit, or individual goals (including, but not limited to, continued employment or service), or any other basis determined by the Administrator in its discretion. The Administrator, in its discretion, may accelerate the time at which any restrictions will lapse or be removed. The Administrator may, in its discretion, also provide for such complete or partial exceptions to an employment or service restriction as it deems equitable.

ii. Voting Rights. During the Period of Restriction, Service Providers holding Shares of Restricted Stock granted hereunder may exercise full voting rights with respect to those Shares, unless the Administrator determines otherwise.

iii. Dividends and Other Distributions. During the Period of Restriction, Service Providers holding Shares of Restricted Stock will be entitled to receive all dividends and other distributions paid with respect to such Shares, unless the Administrator determines otherwise. If any such dividends or distributions are paid in Shares, the Shares will be subject to the same restrictions on transferability and forfeitability as the Shares of Restricted Stock with respect to which they were paid.

iv. Transferability. Except as provided in this Section, Shares of Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of the applicable Period of Restriction.

d. Removal of Restrictions. All restrictions imposed on Shares of Restricted Stock shall lapse and the Period of Restriction shall end upon the satisfaction of the vesting conditions imposed by the Administrator. Vested Shares of Restricted Stock will be released from escrow as soon as practicable after the last day of the Period of Restriction or at such other time as the Administrator may determine, but in no event later than the 15th day of the third month following the end of the year in which vesting occurred.

e. Forfeiture of Restricted Stock. On the date set forth in the Award Agreement, the Shares of Restricted Stock for which restrictions have not lapsed will be forfeited and revert to the Company and again will become available for grant under the Plan.

8. Restricted Stock Units.

a. Grant of Restricted Stock Units. Subject to the terms and conditions of the Plan, the Administrator, at any time and from time to time, may grant Restricted Stock Units to Service Providers in such amounts as the Administrator will determine in its sole discretion.

b. Restricted Stock Units Award Agreement. Each Award of Restricted Stock Units will be evidenced by an Award Agreement that will specify the number of Restricted Stock Units granted, vesting criteria, form of payout, and such other terms and conditions (which need not be identical among Participants) as the Administrator will determine in its sole discretion.

c. Vesting Conditions. The Administrator shall set vesting criteria in its discretion, which, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units that will be paid out to the Participant. The Administrator may set vesting criteria based upon the achievement of Company-wide, business unit, or individual goals (including, but not limited to, continued employment or service), or any other basis determined by the Administrator in its discretion. At any time after the grant of Restricted Stock Units, the Administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout.

d. Time and Form of Payment. Upon satisfaction of the applicable vesting conditions, payment of vested Restricted Stock Units shall occur in the manner and at the time provided in the Award Agreement, but in no event later than the 15th day of the third month following the end of the year in which vesting occurred. Except as otherwise provided in the Award Agreement, Restricted Stock Units may be paid in cash, Shares, or a combination thereof at the sole discretion of the Administrator. Restricted Stock Units that are fully paid in cash will not reduce the number of Shares available for issuance under the Plan.

e. Forfeiture of Restricted Stock Units. All unvested Restricted Stock Units shall be forfeited to the Company on the date set forth in the Award Agreement and again will become available for grant under the Plan.

9. Stock Appreciation Rights.

a. Grant of SARs. Subject to the terms and conditions of the Plan, the Administrator, at any time and from time to time, may grant SARs to Service Providers in such amounts as the Administrator will determine in its sole discretion.

b. Award Agreement. Each SAR grant will be evidenced by an Award Agreement that will specify the exercise price, the number of Shares underlying the SAR grant, the term of the SAR, the conditions of exercise, and such other terms and conditions (which need not be identical among Participants) as the Administrator will determine in its sole discretion.

c. Exercise Price and Other Terms. The per Share exercise price for the exercise of an SAR will be no less than the Fair Market Value per Share on the Grant Date.

d. Time and Form of Payment of SAR Amount. Upon exercise of a SAR, a Participant will be entitled to receive payment from the Company in an amount no greater than: (i) the difference between the Fair Market Value of a Share on the date of exercise over the exercise price; times (ii) the number of Shares with respect to which the SAR is exercised. An Award Agreement may provide for a SAR to be paid in cash, Shares of equivalent value, or a combination thereof.

e. Forfeiture of SARs. All unexercised SARs shall be forfeited to the Company in accordance with the terms and conditions set forth in the Award Agreement and again will become available for grant under the Plan.

10. Performance Units and Performance Shares.

a. Grant of Performance Units and Performance Shares. Performance Units or Performance Shares may be granted to Service Providers at any time and from time to time, as will be determined by the Administrator, in its sole discretion. The Administrator will have complete discretion in determining the number of Performance Units and Performance Shares granted to each Participant.

b. Award Agreement. Each Award of Performance Units and Shares will be evidenced by an Award Agreement that will specify the initial value, the Performance Period, the number of Performance Units or Performance Shares granted, and such other terms and conditions (which need not be identical among Participants) as the Administrator will determine in its sole discretion.

c. Value of Performance Units and Performance Shares. Each Performance Unit will have an initial value that is established by the Administrator on or before the Grant Date. Each Performance Share will have an initial value equal to the Fair Market Value of a Share on the Grant Date.

d. Vesting Conditions and Performance Period. The Administrator will set performance objectives or other vesting provisions (including, without limitation, continued status as a Service Provider) in its discretion which, depending on the extent to which they are met, will determine the number or value of Performance Units or Performance Shares that will be paid out to the Service Providers. The time period during which the performance objectives or other vesting provisions must be met will be called the “Performance Period.” The Administrator may set performance objectives based upon the achievement of Company-wide, divisional, or individual goals or any other basis determined by the Administrator in its discretion.

e. Time and Form of Payment. After the applicable Performance Period has ended, the holder of Performance Units or Performance Shares will be entitled to receive a payout of the number of vested Performance Units or Performance Shares by the Participant over the Performance Period, to be determined as a function of the extent to which the corresponding performance objectives or other vesting provisions have been achieved. Vested Performance Units or Performance Shares will be paid as soon as practicable after the expiration of the applicable Performance Period, but in no event later than the 15th day of the third month following the end of the year the applicable Performance Period expired. An Award Agreement may provide for the satisfaction of Performance Unit or Performance Share Awards in cash or Shares (which have an aggregate Fair Market Value equal to the value of the vested Performance Units or Performance Shares at the close of the applicable Performance Period) or in a combination thereof.

f. Forfeiture of Performance Units and Performance Shares. All unvested Performance Units or Performance Shares will be forfeited to the Company on the date set forth in the Award Agreement, and again will become available for grant under the Plan.

11. Leaves of Absence/Transfer Between Locations. Unless the Administrator provides otherwise or as required by Applicable Laws, vesting of Awards will be suspended during any unpaid leave of absence. An Employee will not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or between the Company, its Parent, or any Subsidiary.

12. Transferability of Awards. Unless determined otherwise by the Administrator, an Award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, such Award will contain such additional terms and conditions as the Administrator deems appropriate.

13. Adjustments; Dissolution or Liquidation; Merger or Change in Control.

a. Adjustments. In the event that any dividend or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs, the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, shall appropriately adjust the number and class of Shares that may be delivered under the Plan and/or the number, class, and price of Shares covered by each outstanding Award.

b. Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator will notify each Participant as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.

c. Change in Control. In the event of a merger or Change in Control, any or all outstanding Awards may be assumed by the successor corporation, which assumption shall be binding on all Participants. In the alternative, the successor corporation may substitute equivalent Awards (after taking into account the existing provisions of the Awards). The successor corporation may also issue, in place of outstanding Shares of the Company held by the Participant, substantially similar shares or other property subject to vesting requirements and repurchase restrictions no less favorable to the Participant than those in effect prior to the merger or Change in Control.

In the event that the successor corporation does not assume or substitute for the Award, unless the Administrator provides otherwise, the Participant will fully vest in and have the right to exercise all of his or her outstanding Options and SARs, including Shares as to which such Awards would not otherwise be vested or exercisable, all restrictions on Restricted Stock and Restricted Stock Units will lapse, and, with respect to Performance Shares and Performance Units, all Performance Goals or other vesting criteria will be deemed achieved at target levels and all other terms and conditions met. In addition, if an Option or SAR is not assumed or substituted in the event of a Change in Control, the Administrator will notify the Participant in writing or electronically that the Option or SAR will be exercisable for a period of time determined by the Administrator in its sole discretion, and the Option or SAR will terminate upon the expiration of such period.

For the purposes of this Section 13(c), an Award will be considered assumed if, following the Change in Control, the Award confers the right to purchase or receive, for each Share subject to the Award immediately prior to the Change in Control, the consideration (whether stock, cash, or other securities or property) or, in the case of a SAR upon the exercise of which the Administrator determines to pay cash or a Performance Share or Performance Unit which the Administrator can determine to pay in cash, the fair market value of the consideration received in the merger or Change in Control by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the Change in Control is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of an Option or

SAR or upon the payout of a Restricted Stock Unit, Performance Share or Performance Unit, for each Share subject to such Award (or in the case of Restricted Stock Units and Performance Units, the number of implied shares determined by dividing the value of the Restricted Stock Units and Performance Units, as applicable, by the per share consideration received by holders of Common Stock in the Change in Control), to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Common Stock in the Change in Control.

Notwithstanding anything in this Section 13(c) to the contrary, an Award that vests, is earned or paid-out upon the satisfaction of one or more performance goals will not be considered assumed if the Company or its successor modifies any of such performance goals without the Participant's consent; provided, however, a modification to such performance goals only to reflect the successor corporation's post-Change in Control corporate structure will not be deemed to invalidate an otherwise valid Award assumption.

14. Tax Withholding.

a. Withholding Requirements. Prior to the delivery of any Shares or cash pursuant to an Award (or exercise thereof), the Company will have the power and the right to deduct or withhold, or require a Participant to remit to the Company, an amount sufficient to satisfy federal, state, local, foreign or other taxes required by Applicable Laws to be withheld with respect to such Award (or exercise thereof).

b. Withholding Arrangements. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit a Participant to satisfy such tax withholding obligation, in whole or in part by (without limitation) (i) paying cash, (ii) electing to have the Company withhold otherwise deliverable Shares having a Fair Market Value equal to the amount required to be withheld, or (iii) delivering to the Company already-owned Shares having a Fair Market Value equal to the amount required to be withheld. The amount of the withholding requirement will be deemed to include any amount which the Administrator agrees may be withheld at the time the election is made. The Fair Market Value of the Shares to be withheld or delivered will be determined as of the date that the taxes are required to be withheld.

15. Provisions Applicable in the Event the Company or the Service Provider is Subject to U.S. Taxation.

a. Grant of Incentive Stock Options. If the Administrator grants Options to Employees subject to U.S. taxation, the Administrator may grant such Employee an ISO and the following terms shall also apply:

i. Maximum Amount. Subject to the provisions of Section 13, to the extent consistent with Section 422 of the Code, not more than an aggregate of thirty one million five hundred thousand (31,500,000) Shares may be issued as ISOs under the Plan.

ii. General Rule. Only Employees shall be eligible for the grant of ISOs.

iii. Continuous Employment. The Optionee must remain in the continuous employ of the Company or its Subsidiaries from the date the ISO is granted until not more than three months before the date on which it is exercised. A leave of absence approved by the Company may exceed ninety (90) days if reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then three (3) months following the ninety-first (91st) day of such leave any ISO held by the Optionee will cease to be treated as an ISO.

iv. Award Agreement.

(1) The Administrator shall designate Options granted as ISOs in the Award Agreement. Notwithstanding such designation, to the extent that the aggregate Fair Market Value of the Shares with respect to which ISOs are exercisable for the first time by the Optionee during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds one hundred thousand dollars ($100,000), Options will not qualify as an ISO. For

purposes of this section, ISOs will be taken into account in the order in which they were granted. The Fair Market Value of the Shares will be determined as of the time the Option with respect to such Shares is granted.
(2) The Award Agreement shall specify the term of the ISO. The term shall not exceed ten (10) years from the Grant Date or five (5) years from the Grant Date for Ten Percent Owners.
(3) The Award Agreement shall specify an exercise price of not less than the Fair Market Value per Share on the Grant Date or one hundred ten percent (110%) of the Fair Market Value per Share on the Grant Date for Ten Percent Owners.
(4) The Award Agreement shall specify that an ISO is not transferable except by will, beneficiary designation or the laws of descent and distribution.

v. Form of Payment. The consideration to be paid for the Shares to be issued upon exercise of an ISO, including the method of payment, shall be determined by the Administrator at the time of grant in accordance with Section 6(e)(iii).

vi. "Disability", for purposes of an ISO, means total and permanent disability as defined in Section 22(e)(3) of the Code.

vii. Notice. In the event of any disposition of the Shares acquired pursuant to the exercise of an ISO within two years from the Grant Date or one year from the exercise date, the Optionee will notify the Company thereof in writing within thirty (30) days after such disposition. In addition, the Optionee shall provide the Company with such information as the Company shall reasonably request in connection with determining the amount and character of Optionee's income, the Company's deduction, and the Company's obligation to withhold taxes or other amounts incurred by reason of a disqualifying disposition, including the amount thereof.

b. Performance-based Compensation. If the Company pays salaries for which it claims deductions that are subject to the Code section 162(m) limitation on its U.S. tax returns, then the following terms shall be applied in a manner consistent with the requirements of, and only to the extent required for compliance with, the exclusion from the limitation on deductibility of compensation under Code Section 162(m):

i. Outside Directors. The Board shall consider in selecting the Administrator and the membership of any committee acting as Administrator the provisions regarding "outside directors" within the meaning of Code Section 162(m).

ii. Maximum Amount.

(1) Subject to the provisions of Section 13, the maximum number of Shares that can be awarded to any individual Participant in the aggregate in any one fiscal year of the Company is one hundred million (100,000,000) Shares;
(2) For Awards denominated in Shares and satisfied in cash, the maximum Award to any individual Participant in the aggregate in any one fiscal year of the Company is the Fair Market Value of fifty million (50,000,000) Shares on the Grant Date; and
(3) The maximum amount payable pursuant to any cash Awards to any individual Participant in the aggregate in any one fiscal year of the Company is the Fair Market Value of fifty million (50,000,000) Shares on the Grant Date.

iii. Performance Criteria. All performance criteria must be objective and be established in writing prior to the beginning of the performance period or at later time as permitted by Code Section 162(m). Performance criteria may include alternative and multiple performance goals and may be based on one or more business and/or financial criteria. In establishing the performance goals, the Committee in its discretion may include one or any combination of the following criteria in either absolute or relative terms, for the Company or any Subsidiary:

(1) Increased revenue;
(2) Net income measures (including but not limited to income after capital costs and income before or after taxes);

(3) Stock price measures (including but not limited to growth measures and total stockholder return);
(4) Market share;
(5) Earnings per Share (actual or targeted growth);
(6) Earnings before interest, taxes, depreciation, and amortization (“EBITDA”);
(7) Cash flow measures (including but not limited to net cash flow and net cash flow before financing activities);
(8) Return measures (including but not limited to return on equity, return on average assets, return on capital, risk-adjusted return on capital, return on investors’ capital and return on average equity);
(9) Operating measures (including operating income, funds from operations, cash from operations, after-tax operating income, sales volumes, production volumes, and production efficiency);
(10) Expense measures (including but not limited to overhead cost and general and administrative expense);
(11) Margins;
(12) Stockholder value;
(13) Total stockholder return;
(14) Proceeds from dispositions;
(15) Production volumes;
(16) Total market value; and
(17) Corporate values measures (including but not limited to ethics compliance, environmental, and safety).

c. Stock Options and SARs Exempt from Code section 409A. If the Administrator grants Options or SARs to Employees subject to U.S. taxation the Administrator may not modify or amend the Options or SARs to the extent that the modification or amendment adds a feature allowing for additional deferral within the meaning of Code section 409A.

16. <u>No Effect on Employment or Service</u>. Neither the Plan nor any Award will confer upon any Participant any right with respect to continuing the Participant's relationship as a Service Provider with the Company or any Parent or Subsidiary of the Company, nor will they interfere in any way with the Participant's right or the Company's or its Parent’s or Subsidiary’s right to terminate such relationship at any time, with or without cause, to the extent permitted by Applicable Laws.

17. Effective Date. The Plan's effective date is the date on which it is adopted by the Board, so long as it is approved by the Company's stockholders at any time within 12 months of such adoption. Upon approval of the Plan by the stockholders of the Company, all Awards issued pursuant to the Plan on or after the Effective Date shall be fully effective as if the stockholders of the Company had approved the Plan on the Effective Date. If the stockholders fail to approve the Plan within one year before or after the Effective Date, any Awards made hereunder shall be null and void and of no effect.

18. Term of Plan. The Plan will terminate on the earlier of (i) August 31, 2030, or (ii) the date it is terminated by the Board pursuant to Section 19.

19. Amendment and Termination of the Plan.

a. Amendment and Termination. The Board may at any time amend, alter, suspend or terminate the Plan.

b. Stockholder Approval. The Company will obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.

c. Effect of Amendment or Termination. No amendment, alteration, suspension or termination of the Plan will impair the rights of any Participant, unless mutually agreed otherwise between the Participant and the Administrator, which agreement must be in writing and signed by the Participant and the Company. Termination of the Plan will not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan prior to the date of such termination.

20. Conditions Upon Issuance of Shares.

a. Legal Compliance. The Administrator may delay or suspend the issuance and delivery of Shares, suspend the exercise of Options or SARs, or suspend the Plan as necessary to comply with Applicable Laws. Shares will not be issued pursuant to the exercise of an Award unless the exercise of such Award and the issuance and delivery of such Shares will comply with Applicable Laws and will be further subject to the approval of counsel for the Company with respect to such compliance.

b. Investment Representations. As a condition to the exercise of an Award, the Company may require the person exercising such Award to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

21. Inability to Obtain Authority. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, will relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority will not have been obtained.

22. Exchange Programs. The Administrator may authorize the Company, without prior stockholder approval, to institute one or more Exchange Programs. An Exchange Program may, at the discretion of the Administrator, be offered to individual Participants selected by the Administrator on a case-by-case basis, or to a class of Participants identified by the Administrator. The terms and conditions of any Exchange Program will be determined by the Administrator in its sole discretion, not inconsistent with the terms of the Plan, including without limitation, Section 15(c); provided however, that no Exchange Program may adversely affect the rights of a Participant under an outstanding Award unless the Participant consents in writing to be bound by the terms and conditions of the Exchange Program.

23. <u>Substitution and Assumption of Awards</u>. The Administrator may make Awards under the Plan that assume, substitute or replace performance shares, phantom shares, stock awards, stock options, stock appreciation rights or similar awards granted by another entity (including a Parent or Subsidiary), if such assumption, substitution or replacement is in connection with an asset acquisition, stock acquisition, merger, consolidation or similar transaction involving the Company (and/or its Parent or Subsidiary) and such other entity (and/or its affiliate). The Administrator may also cause the Plan to assume an equity-based award granted by the Company prior to the adoption and approval of the Plan or substitute or replace such prior award with a similar type of Award under this Plan. Notwithstanding any provision of the Plan (other than the maximum number of shares of Common Stock that may be issued under the Plan), ,(i) in the case of an Award that assumes, substitutes or replaces an award of another entity pursuant to a corporate transaction, such Award shall be subject to the same terms and conditions as the original award, with such adjustments or modifications as the Administrator deems necessary and appropriate to give effect to the relevant provisions of any agreement entered into in connection with the such corporate transaction or (ii) in the case of an Award that assumes, substitutes or replaces a prior Company award, such Award shall be subject to the same terms and conditions as the original award, except to the extent that any such term or condition is inconsistent with the Plan, in which event the terms of the Plan shall control. Notwithstanding the foregoing, in no event may the assumption, substitution or replacement of a prior Company award with an Award under the Plan adversely affect the Participant's rights under the prior Company award unless the Participant consents in writing to such assumption, substitution or replacement. Shares issued pursuant to assumed, substituted or replaced awards shall count against the total number of shares authorized to be issued under the Plan pursuant to Section 3.

24. <u>Governing Law</u>. The Plan and all Agreements shall be construed in accordance with and governed by the laws of the State of Nevada.

Exhibit 21

Subsidiaries of Ideanomics, Inc.

Name of Subsidiary	Jurisdiction of Incorporation or Organization
Ideanomics Capital, Inc.	Delaware, USA
US Hybrid Corporation	Delaware, USA
Solectrac, Inc.	California, USA
Justly Holdings, Inc.	Delaware, USA
Justly Markets, LLC	Delaware, USA
Wireless Advanced Vehicle Electrification, LLC	Delaware, USA
Medici Motor Works Holdings	Delaware, USA
Medici Motor Works Inc	Delaware, USA
FNL Technologies, Inc.	Delaware, USA
The MDI Keeper’s Fund L.P.	Delaware, USA
Cyvolve	United Kingdom
Fintech Village LLC	Connecticut, USA
Blackhorse Ventures	Cayman
Intelligenta Ltd.	New York, USA
Yong Jin Financial Services Pte. Ltd.	Singapore
Ideanomics Svcs Ltd.	England and Wales
Ideanomics Spain, S.L.U.	Spain
Tree Technologies Sdn. Bhd.	Malaysia
Glory Connection Sdn. Bhd.	Malaysia
Tree Manufacturing Sdn. Bhd.	Malaysia
Prettl Electronics Automotive Gmbh	Germany
Energica Motor Company SpA	Italy
Technology Metals Market Ltd	England and Wales
Mobile Energy Global Limited	Cayman
Medici Operation Limited	Hong Kong
YOU On Demand (Beijing) Technology Co., Ltd.	China
Ideanomics (Beijing) New Energy Co., Ltd.	China
Ideanomics Shengtong (Shandong) New Energy Technology Co., Ltd.	China
Ideanomics (Zhejiang) New Energy Technology Co., Ltd	China
Ideanomics (Shanghai) New Energy Technology Co., Ltd	China
Qingdao Medici New Energy Automobile Co., Ltd.	China
Qingdao Zhongsen Tower Communication Co., Ltd.	China
Qingdao Chengyang Medici Zhixing New Energy Automobile Co., Ltd.	China
Sichuan Shenma Zhixing Technology Co., Ltd.	China
Guizhou Qianxi	China
Mobile Energy Operation Group Limited	British Virgin Islands
MEG Technology Services Group Limited	Hong Kong

M.Y. Products Global Limited	British Virgin Islands
M.Y. Products Global Holdings Limited	British Virgin Islands
Frequency Networks, Inc.	Delaware, USA
Shanghai Ainengju Investment Management Consulting Co., Ltd.	China
Qingdao Ainengju Automobile Trading Market Co. Ltd.	China
Shanghai Wecast Supply Chain Management Co., Ltd	China
M.Y. Products, LLC	Indiana, USA
Guizhou Wide Angel Holding	China
Qinglong Wide Angel New Media	China
Shanghai Yiyoukong New Energy Development Co., Ltd.	China
Timios Holdings Corp.	Delaware, USA
Fiducia Real Estate Solutions, Inc.	Delaware, USA
Crestview Asset Management, LLC	Utah, USA
Timios Appraisal Management, Inc.	Delaware, USA
Timios, Inc.	Delaware, USA
Timios Title, a California Corporation	California, USA
Timios Agency of Alabama, Inc.	Alabama, USA
Timios Agency of Nevada, Inc.	Nevada, USA
Timios Agency of Utah Inc.	Utah, USA
Timios Agency of Arkansas Inc.	Arkansas, USA
Timios Hawaii, Inc.	Hawaii, USA
Celer Escrow Company	California, USA
Celer Settlements, LLC	Delaware, USA
OrangeGrid LLC	California, USA

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation in the Registration Statement ((Form S-3 Nos. 333-253061, 333-252230, 333-237251 and 333-239371; and Form S-8 Nos. 333-236108, 333-253059 and 333-205043) of our report dated March 31, 2021, relating to the consolidated financial statements of Ideanomics, Inc. as of and for the year ended December 31, 2020 and to all references to our firm included in the December 31, 2021 annual report on Form 10-K of Ideanomics, Inc. filed with the U.S. Securities and Exchange Commission (the "SEC") on September 2, 2022.

B F Borgers CPA PC

Certified Public Accountants
Lakewood, CO
September 2, 2022

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation in the Registration Statement (Form S-8 Nos. 333-205043, 333-236108 and 333-253059) of our report dated September 2, 2022, relating to the consolidated financial statements of Ideanomics, Inc. as of and for the year ended December 31, 2021. Our report included an explanatory paragraph regarding the Company’s ability to continue as a going concern.

Grassi & Co., CPAs, P.C.
September 2, 2022

Exhibit 31.1

CERTIFICATIONS

I, Alfred P. Poor, certify that:

1. I have reviewed this Annual Report on Form 10-K of Ideanomics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

    (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

    (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: September 2, 2022

/s/ *Alfred P. Poor*

Alfred P. Poor
Chief Executive Officer
(*Principal Executive Officer*)

Exhibit 31.2

CERTIFICATIONS

I, Conor McCarthy, certify that:

1. I have reviewed this Annual Report on Form 10-K of Ideanomics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: September 2, 2022

/s/ *Conor McCarthy*

Conor McCarthy
Chief Financial Officer
(*Principal Financial and Accounting Officer*)

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, Alfred P. Poor, Chief Executive Officer of Ideanomics, Inc. (the "Company"), hereby certify, that, to my knowledge:

1. The Annual Report on Form 10-K of the Company for the annual period ended December 31, 2021 (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. Information contained in the Report fairly presents, in all material respects, the financial condition and results of operation of the Company.

Date: September 2, 2022.

/s/ *Alfred P. Poor*
Alfred P. Poor
Chief Executive Officer
(*Principal Executive Officer*)

A signed original of this written statement required by Section 906 has been provided to Ideanomics, Inc. and will be retained by Ideanomics, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, Conor McCarthy, Chief Financial Officer of Ideanomics, Inc. (the “Company”), hereby certify, that, to my knowledge:

1. The Annual Report on Form 10-K of the Company for the annual period ended December 31, 2021 (the “Report”), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. Information contained in the Report fairly presents, in all material respects, the financial condition and results of operation of the Company.

Date: September 2, 2022.

/s/ *Conor McCarthy*
Conor McCarthy
Chief Financial Officer
(*Principal Financial and Accounting Officer*)

A signed original of this written statement required by Section 906 has been provided to Ideanomics, Inc. and will be retained by Ideanomics, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 99.1

EXPLANATORY NOTE

These risk factors appear on pages 23 through 59 of the Registration Statement on Form S-4 filed by Ideanomics, Inc. with the Securities and Exchange Commission on February 1, 2022 (File No. 333-260843) (the "Registration Statement"). Capitalized terms not otherwise defined herein shall have the meaning as set forth in the Registration Statement. Cross references to page numbers or exhibits in this Exhibit 99.1 refer to other pages or exhibits of the Registration Statement referenced above. Cross-referenced sections of the Registration Statement are incorporated by reference into this Exhibit 99.1.

RISK FACTORS

In addition to the other information included and incorporated by reference into this proxy statement/prospectus, including the matters addressed in the section titled "Cautionary Statement Regarding Forward-Looking Statements," you should carefully consider the following risks before deciding whether to vote for the issuance of shares of Ideanomics common stock in connection with the merger. In addition, you should read and consider the risks associated with each of the businesses of Ideanomics and VIA because these risks will also affect the combined company. For Ideanomics, these risks can be found in its Annual Report on Form 10-K for the fiscal year ended December 31, 2020, as updated by subsequent Quarterly Reports on Form 10-Q, including Ideanomics' Quarterly Report on Form 10-Q for the three months ended September 30, 2021, and Current Reports on Form 8-K, which are filed with the SEC and incorporated by reference into this proxy statement/prospectus. You should also read and consider the other information in this proxy statement/prospectus and the other documents incorporated by reference into this proxy statement/prospectus. See the section titled "Where You Can Find More Information," beginning on page 157 of this proxy statement/prospectus.

The risks described below and in the documents incorporated by reference into this proxy statement/prospectus are certain material risks, although not the only risks, relating to the transaction and each of Ideanomics, VIA and the combined company. Such risks are not the only risks that Ideanomics or the combined company will face after the completion of the merger. Additional risks and uncertainties not currently known or that are currently expected to be immaterial may also materially and adversely affect the business, financial condition and results of operations of Ideanomics or the surviving company or the market price of Ideanomics common stock following the completion of the merger.

Risk Factors Relating to the Merger

The merger may not be completed on the terms or timeline currently contemplated, or at all.

The consummation of the merger is subject to numerous conditions, including the approval by Ideanomics stockholders of the Ideanomics stock issuance proposal and VIA stockholders of the merger agreement proposal, obtaining any third-party and regulatory consents and approvals and other customary closing conditions. See the section titled "*The Merger Agreement - Conditions to Completion of the Merger*" beginning on page 80.

If the merger is not completed for any reason, including the failure to complete the merger by March 31, 2022 (or such later date to which such date may be extended in accordance with the terms of the merger agreement), the price of Ideanomics common stock may decline to the extent that the market price of Ideanomics common stock reflects or previously reflected positive market assumptions that the merger would be completed and the related benefits would be realized. In addition, Ideanomics and VIA have expended and will continue to expend significant management time and resources and have incurred and will continue to incur significant expenses due to legal, advisory, printing and financial services fees related to the merger. These expenses must be paid regardless of whether the merger is consummated. There is no assurance that the merger will be consummated. See the section titled "*The Merger Agreement*" beginning on page 70 of this proxy statement/prospectus.

Because the purchase price is subject to adjustments pursuant to the merger agreement, and the earnout is subject to conditions that may not be satisfied, we cannot determine the actual number of shares that will be issued in the merger until after the closing date of the merger and the expiration of the earnout period ending December 31, 2026.

The value of the merger consideration and the resulting number of shares of Ideanomics common stock VIA stockholders will be entitled to receive in the merger is subject to adjustments under the merger agreement for cash, indebtedness, net working capital, transaction expenses and certain deductions for the escrows, each to be determined at closing and subject to certain post-closing adjustments. *See* "*The Merger Agreement*" beginning on page 70 of this proxy statement/prospectus.

In addition, VIA stockholders are entitled to Earnout Consideration subject to the satisfaction of the conditions thereto, in an amount up to $180,000,000 in additional shares of Ideanomics common stock valued based on the 30-day volume-weighted average price at the time of the earnout payment. There can

be no assurance the conditions to the Earnout Consideration will be satisfied or that VIA stockholders will receive any consideration under the earnout provision of the merger agreement.

Failure to complete the merger could negatively affect the stock price of Ideanomics and the future business and financial results of Ideanomics and VIA.

If the merger is not completed, the ongoing businesses of VIA or Ideanomics may be adversely affected and Ideanomics and VIA will be subject to several risks, including the following:

- the incurrence of costs and expenses relating to the proposed merger, such as financing, legal, accounting, financial advisor, filing, printing and mailing fees and expenses, including the potential expense reimbursement obligations described above;

- the possibility of a change in the trading price of Ideanomics common stock to the extent current trading prices reflect a market assumption that the merger will be completed;

- the possibility that Ideanomics or VIA could suffer potential negative reactions from their respective employees, enterprise clients, patients, members, vendors or partners; and

- the possibility that Ideanomics or VIA could suffer adverse consequences associated with their respective management's focus on the merger instead of on pursuing other opportunities that could have been beneficial to each company, in each case, without realizing any of the benefits contemplated by the merger.

In addition, if the merger is not completed, Ideanomics or VIA could be subject to litigation related to any failure to complete the merger or to perform their respective obligations under the merger agreement.

If the merger is not completed, Ideanomics and VIA cannot assure their stockholders that these risks will not materialize and will not materially affect the business and financial results of Ideanomics or VIA or Ideanomics' stock price.

Ideanomics stockholders will not be entitled to appraisal rights in connection with the merger.

Appraisal rights are statutory rights that, if applicable under law, enable stockholders to dissent from an extraordinary transaction, such as a merger, and to demand that the corporation pay the fair value for their shares as determined by a court in a judicial proceeding instead of receiving the consideration offered to stockholders in connection with the extraordinary transaction.

Under Nevada law, the Ideanomics stockholders are not entitled to payment of fair value in connection with the issuance of shares of Ideanomics common stock in the merger.

Current Ideanomics stockholders will have a reduced ownership and voting power in the combined company after the merger and current VIA stockholders will exercise significantly less influence over the policies of the combined company than they now have on policies of VIA.

Ideanomics expects to issue or reserve for issuance approximately 160,604,245 shares of Ideanomics common stock to VIA stockholders in connection with the merger (including shares of Ideanomics common stock to be issued in connection with outstanding VIA options). Based on the number of shares of Ideanomics common stock and VIA capital stock outstanding on , the record date for the Ideanomics special meeting, and assuming no further issuances of VIA capital stock or Ideanomics common stock, upon the completion of the merger, current Ideanomics stockholders and former VIA stockholders are expected to own approximately % and % of the total voting power of Ideanomics, respectively at closing (prior to the payment of any earnout). Ideanomics also expects to issue or reserve for issuance approximately 77,028,415 additional shares of Ideanomics common stock pursuant to the earnout (assuming a price per share of $2.3368, which is the Signing VWAP stock for the thirty (30)-day period ending on . Based on the number of shares of Ideanomics common stock and VIA capital stock outstanding on , the record date for the Ideanomics special meeting, and assuming no further issuances of VIA capital stock or Ideanomics common stock, upon the completion of the merger and full payment of the earnout, current Ideanomics stockholders and former VIA stockholders are expected to own approximately % and % of the total voting power of Ideanomics, respectively.

Please note that the actual number of shares of Ideanomics common stock issued at closing will depend on certain purchase price adjustments described in the enclosed proxy statement/prospectus, and the actual number of shares of Ideanomics common stock issued pursuant to the earnout will depend on whether VIA meets certain sales targets prior to December 31, 2026 and the actual VWAP of the Ideanomics common stock at the time of any payment of the earnout.

Ideanomics stockholders and VIA stockholders currently have the right to vote for their respective directors and on certain other matters affecting their company. If and when the merger occurs, each Ideanomics stockholder will remain a stockholder of Ideanomics with a percentage ownership of Ideanomics that will be smaller than the stockholder’s percentage of Ideanomics prior to the merger (without considering such stockholder’s current ownership of VIA capital stock, if any). Correspondingly, each VIA stockholder who receives shares of Ideanomics common stock will become a holder of Ideanomics common stock with a percentage ownership of Ideanomics that will be smaller than the stockholder’s percentage ownership of VIA (without considering such stockholder’s current ownership of Ideanomics common stock). As a result, Ideanomics stockholders will have less voting power in Ideanomics than they currently have, and former VIA stockholders will have less voting power in Ideanomics than they now have with respect to VIA. Each of Ideanomics and VIA’s pre-merger stockholders respectively, as a group, will be able to exercise less influence over the management and policies of the combined company following the consummation of the merger than immediately prior to the consummation of the merger.

The shares of Ideanomics common stock to be received by VIA stockholders upon completion of the merger will have different rights from VIA common stock.

Upon completion of the merger, VIA stockholders will no longer be stockholders of VIA, but will instead become stockholders of Ideanomics, and their rights as Ideanomics stockholders will be governed by the terms of the Ideanomics articles and the Ideanomics bylaws. The terms of the Ideanomics articles and Ideanomics bylaws are in some respects materially different from the terms of the VIA charter and the VIA bylaws, which currently govern the rights of VIA stockholders. See the section titled "*Comparison of Rights of Ideanomics Stockholders and VIA Stockholders*" beginning on page 144 of this proxy statement/prospectus for a discussion of the different rights associated with shares of Ideanomics common stock and shares of VIA common stock.

Following the merger, the market price of Ideanomics stock may be affected by factors different from those affecting the shares of Ideanomics stock or VIA stock currently, and VIA stockholders will hold an interest in a company with a different mix of assets, risks and liabilities, and a different financial profile and other characteristics, than the company in which they currently hold an interest.

The market price of Ideanomics common stock after the merger may be affected by factors different from those affecting the shares of Ideanomics common stock or VIA stock currently. Following the merger, holders of VIA stock will become holders of Ideanomics common stock. Ideanomics' business and financial position differs from that of VIA in important respects. Accordingly, the results of operations of Ideanomics, including the surviving company, and the market price of Ideanomics common stock after the completion of the merger may be affected by factors different from those currently affecting the results of operations of each of Ideanomics and VIA or the shares of Ideanomics common stock or VIA stock on a standalone basis, and VIA stockholders will hold an interest in a company with a different mix of assets, risks and liabilities, and a different financial profile and other characteristics, than the company in which they currently hold an interest. For a discussion of the business of Ideanomics and of certain factors to consider in connection with that business, see the documents incorporated by reference in this proxy statement/prospectus and referred to under "*Where You Can Find More Information*."

Directors and executive officers of VIA have interests in the merger that may be different from, or in addition to, those of other VIA stockholders, which could have influenced their decisions to support or approve the merger.

In considering whether to approve the proposals by the VIA written consent, VIA stockholders should recognize that directors and executive officers of VIA have interests in the merger that may differ from, or that are in addition to, their interests as stockholders of VIA. The VIA Board was aware of these interests at the time it approved the merger agreement. These interests may cause VIA's directors and executive officers to view the merger differently than you may view it as a stockholder. See the section titled "*The Merger - Interests of VIA's Directors and Executive Officers in the Merger*" beginning on page 106 of this proxy statement/prospectus.

There has been no public market for VIA capital stock and the lack of a public market makes it more difficult to determine the fair market value of VIA than if there were such a public market.

The outstanding VIA capital stock is privately held and is not traded on any public market. The lack of a public market may make it more difficult to determine the fair market value of VIA than if VIA capital stock were traded publicly. The value ascribed to VIA's securities in other contexts may not be indicative of the price at which VIA capital stock may have traded if it were traded on a public market. Because the consideration to be paid to VIA stockholders was determined based on negotiations between the parties, it may not be indicative of the price at which VIA capital stock may have traded if it were traded on a public market, and it is possible that the value of the Ideanomics stock to be received by VIA stockholders will be less than the fair market value of VIA, or Ideanomics may pay more than the aggregate fair market value for VIA**.**

The opinion obtained by the Ideanomics Board from its financial advisor does not and will not reflect changes in circumstances after the date of such opinions.

The Ideanomics Board received a written opinion dated August 29, 2021 from Morgan Stanley, Ideanomics' financial advisor, that as of such date, and based upon and subject to the assumptions made, procedures followed, matters considered and qualifications and limitations on the scope of review undertaken by Morgan Stanley, as set forth in Morgan Stanley's written opinion, the Aggregate Consideration to be paid by Ideanomics pursuant to the merger agreement was fair from a financial point of view to Ideanomics. Changes in the operations or prospects of Ideanomics or VIA, general market and economic conditions and other factors that may be beyond the control of Ideanomics and VIA, and on which the above-described opinion was based, may alter the value of Ideanomics or VIA or the prices of shares of Ideanomics common stock or VIA capital stock by the time the merger is completed. Ideanomics has not obtained, and does not expect to request, an updated opinion from its financial advisor. The above-mentioned opinion does not speak to any date other than the date of the opinion. For a more complete description of the above-described opinion, see the section titled "*The Merger - Opinion of Financial Advisor to Ideanomics, Morgan Stanley & Co. LLC*."

If the merger does not qualify as a "reorganization" for U.S. federal income tax purposes, U.S. holders will be required to recognize gain or loss for U.S. federal income tax purposes at the time of the exchange of their VIA common stock for the Merger Consideration in the merger.

The U.S. federal income tax consequences of the merger to U.S. holders will depend on whether the merger qualifies as a "reorganization" within the meaning of Section 368(a) of the Code for U.S. federal income tax purposes.

As set forth in more detail in the section titled "*Certain U.S. Federal Income Tax Consequences,*" it is intended that, for U.S. federal income tax purposes, the merger will qualify as a "reorganization" within the meaning of Section 368(a) of the Code. Counsel to each of the parties has opined that the merger will qualify as a reorganization, subject to the representations, assumptions and exclusions in such tax opinion, and assuming that the statements and facts concerning the merger set forth in this proxy statement/prospectus, in the merger agreement, and in certain tax representation letters provided to counsel by VIA, Ideanomics and Merger Sub, are accurate.

However, there can be no assurance, that the Internal Revenue Service, which we refer to as the IRS, will not take a contrary position to the views expressed herein and the opinion of counsel or that a court will not agree with a contrary position of the IRS. If the merger fails to qualify as a reorganization or if any requirement for the merger to qualify as a "reorganization" within the meaning of Section 368(a) of the Code is not satisfied, U.S. holders of VIA common stock would recognize gain or loss for U.S. federal income tax purposes on each share of VIA common stock surrendered in the merger in an amount equal to the difference between (1) the fair market value of the Merger Consideration received in exchange for such surrendered share upon completion of the merger and (2) the holder's tax basis in the share of VIA common stock surrendered in the merger. Any gain or loss recognized would be long-term capital gain or loss if the U.S. holder's holding period in a particular block of VIA common stock exceeds one year at the effective time of the merger. Under current law, long-term capital gain of non-corporate U.S. holders (including individuals) is taxed at reduced U.S. federal income tax rates. The deductibility of capital losses is subject to limitations. For a more complete discussion of certain material U.S. federal income tax consequences of the merger, please carefully review the information set forth in the section titled "*Certain U.S. Federal Income Tax Consequences*."

Due to the merger, the ability of Ideanomics to use VIA's net operating losses to offset future taxable income may be restricted and these net operating losses could expire or otherwise be unavailable.

As of September 30, 2021, VIA had federal and state net operating loss carryforwards, which we refer to as NOLs, of approximately $213,652,000. In general, under Section 382 of the Code, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its pre-ownership change NOLs to offset future taxable income. As of December 31, 2020, VIA has not completed a Section 382 limitation study. If the merger is completed, VIA's existing NOLs may be subject to limitations and Ideanomics may not be able to fully use NOLs generated prior to 2021 to offset future taxable income. In addition, if Ideanomics undergoes any subsequent ownership change, its ability to utilize NOLs would be limited.

Ideanomics and VIA may be targets of securities class action and derivative lawsuits which could result in substantial costs and may delay or prevent the merger from being completed.

Securities class action lawsuits and derivative lawsuits are often brought against public companies that have entered into merger agreements. Even if the lawsuits are without merit, defending against these claims could result in substantial costs and divert management time and resources. An adverse judgment could result in monetary damages, which could have a negative impact on Ideanomics' and VIA's respective liquidity and financial condition. Additionally, if a plaintiff is successful in obtaining an injunction prohibiting completion of the merger, then that injunction may delay or prevent the merger from being completed, which may adversely affect Ideanomics' and VIA's respective business, financial position and results of operations.

In the event the merger is not consummated, VIA's existing capital resources may not be sufficient to repay the Note and to fund its operations and if the Note is converted into VIA's common stock, the market for such shares of VIA's common stock may never exist.

On August 30, 2021, and contemporaneously with the execution of the merger agreement, Ideanomics loaned VIA $42.5 million pursuant to the Note, a secured convertible promissory note with a principal amount of $42.5 million and simple interest on the outstanding principal at the rate of four percent (4%) per annum. Although the Note is secured by the first priority security interest in substantially all of VIA's assets, in the event, the merger is not consummated, VIA's existing capital resources may not be sufficient to repay the Note and to fund its operations, and the Note may never be repaid. Alternatively, any conversion of the Note without the merger being consummated may result in our ownership of VIA's common stock. There can be no assurance that the market for VIA's common stock will ever exist. Ideanomics will have no control over the price it will eventually receive as a result of the disposition of VIA's common stock and may be unable to sell the aforementioned securities at favorable prices quickly or when desired.

Risk Factors Relating to Ideanomics Following the Merger

Investing in Ideanomics' securities involves a high degree of risk. Before making an investment decision, you should consider carefully the risks, uncertainties and other factors described in Ideanomics' most recent Annual Report on Form 10-K, as supplemented and updated by subsequent quarterly reports on Form 10-Q and current reports on Form 8-K that we have filed or will file with the SEC, which are incorporated by reference into this prospectus supplement.

Ideanomics' business, affairs, prospects, assets, financial condition, results of operations and cash flows could be materially and adversely affected by these risks. For more information about our SEC filings, please see "*Where You Can Find More Information*."

Ideanomics is currently, and may in the future be, subject to substantial litigation, investigations and proceedings that could cause it to incur significant legal expenses and result in harm to our business.

From time to time, we may become involved in various lawsuits and legal proceedings which arise in the ordinary course of business. However, litigation is subject to inherent uncertainties, and an adverse result in these or other matters may arise from time to time that may harm our business.

We and certain of our former officers and directors are defendants in a class action captioned *Rudani v. Ideanomics, Inc., et al.*, pending in the United States District Court for the Southern District of New York against us. The Amended Complaint alleges violations of Section 10(b) and 20(a) of the Securities Exchange Act of 1934. Among other things, the Amended Complaint alleges purported misstatements made by us in 2017 and 2018. The Court has preliminarily approved the settlement and the settlement is pending final approval by the Court. We and certain of our current and former officers and directors are also defendants in a consolidated purported securities class action captioned *In Re Ideanomics, Inc. Securities Litigation*, pending in the United States District Court for the Southern District of New York, which alleges violations of Section 10(b) and 20(a) of the Exchange Act arising from certain purported misstatements by us beginning in March 2020 regarding its MEG division. The Company denies the allegations in the Amended Complaint and filed a motion to dismiss on May 6, 2021. The motion to dismiss remains pending before the Court. We cannot currently estimate the possible loss or range of losses, if any, that we may experience in connection with this litigation. We are also a nominal defendant, and certain of our former officers and directors are named as defendants, in a consolidated shareholder derivative action pending in the United States District Court for the Southern District of New York, captioned In re Ideanomics, Inc. Derivative Litigation which alleges violations of violations of Section 14(a) of the Exchange Act, breach of fiduciary duties, unjust enrichment, abuse of control, gross mismanagement, and corporate waste and seeks monetary damages and other relief on behalf of Ideanomics. On December 14, 2020, the United States District Court for the Southern District of New York (the “Court”) issued an order (the “Preliminary Approval Order”) providing for preliminary approval of the proposed settlement of the claims asserted nominally on behalf of the Company against the individual defendants named in the previously disclosed stockholder derivative action entitled In re Ideanomics, Inc. Derivative Litigation. We were also named as a nominal defendant, and certain of our former officers and directors were named as defendants, in a shareholder derivative action filed in the United States District Court for the District of Nevada, captioned Zare v. Ideanomics, et al, alleging similar violations and allegations. We and certain of the defendants, including us, have reached a settlement in which we have agreed to certain corporate governance and internal procedure reforms and the settlement is not expected to have a material financial impact on us. The Court has preliminarily approved the settlement.

Merger-related Litigation and Demand Letters

Following the announcement of the Company’s agreement to acquire VIA, the Company has received four demand letters on behalf of purported stockholders of the Company and the Company and certain of its officers and directors have been named as defendants in two complaints filed, which have not yet been served, in the United States District Court for the Southern District of New York demanding the issuance of additional disclosures in connection with the merger and alleging that the Company’s Registration Statement on Form S-4 initially filed with the SEC on November 5, 2021, is false and misleading and omits material information regarding the Company’s acquisition of VIA. The Company believes that its disclosures comply fully with applicable law and that the demand letters and complaints are without merit. Nevertheless, in order to moot the purported deficiencies alleged in the demand letters and the complaints, avoid the risk of delaying the consummation of the merger, and minimize the costs, risks and uncertainties inherent in litigation, the Company, without admitting any liability or wrongdoing, has determined to voluntarily provide certain supplemental disclosures that are included herein. Nothing in the supplemental disclosures herein should be considered an admission of the legal necessity or materiality under applicable laws of any of the disclosures included. To the contrary, the Company vehemently denies all of the allegations in the demand letters and the complaints that any additional disclosures are required.

SEC Investigation

As previously reported by us, we are subject to an investigation by the SEC and we continue to respond to various information and requests from the SEC. We are fully cooperating with the SEC’s requests and cannot predict the outcome of this investigation.

Ideanomics expects to incur substantial expenses related to the merger.

Ideanomics expects to incur substantial expenses in connection with completing the merger and integrating the business, operations, networks, systems, technologies, policies and procedures of VIA with those of Ideanomics. While Ideanomics has assumed that a certain level of transaction and integration expenses would be incurred, there are a number of factors beyond its control that could affect the total amount or the timing of its integration expenses. Many of the expenses that will be incurred, by their nature, are difficult to estimate accurately at the present time. Due to these factors, the transaction and integration expenses could be greater or could be incurred over a longer period of time than Ideanomics currently expects.

The combined company will require additional capital, and there is no assurance that any debt or equity financing will be available on acceptable terms, if at all.

The design, production, sale and servicing of electric commercial vehicles is capital intensive. The combined company will require substantial additional capital to fund ongoing operations, continue research, development and design efforts and improve infrastructure. Ideanomics cannot be certain that additional funds will be available to it on favorable terms when required, or at all. If the combined company cannot acquire additional funds when it needs them, its business, prospects, financial condition and operating results could be materially adversely affected. If the combined company issues additional capital stock in the future in connection with financing activities, stockholders will experience dilution of their ownership interests and the per share value of the combined company's common stock may decline.

Following the merger, Ideanomics and VIA may be unable to successfully integrate their businesses and realize the anticipated benefits of the merger.

The proposed transaction involves the merger of two companies which currently operate as independent companies. The combined company will be required to devote significant management attention and resources to integrating the business practices and operations of Ideanomics and VIA in order to effectively realize synergies as a combined company, including opportunities to reduce combined costs, and reduce combined capital expenditures compared to both companies' standalone plans. Potential difficulties the combined company may encounter in the integration process include the following:

- the inability to successfully combine the businesses of Ideanomics and VIA in a manner that permits the combined company to realize the growth, operations and cost synergies anticipated to result from the merger, which would result in the anticipated benefits of the merger, including projected financial targets, not being realized in the time frames currently anticipated or previously disclosed or at all;
- the additional complexities of combining two companies with different histories, regulatory restrictions, operating structures and markets;
- the failure to retain key employees of either of the two companies;
- potential unknown liabilities and unforeseen increased expenses, delays or regulatory conditions associated with the merger; and
- performance shortfalls at one or both of the two companies as a result of the diversion of management's attention caused by completing the merger and integrating the companies' operations.

For all these reasons, you should be aware that it is possible that the integration process could result in the distraction of the combined company's management, the disruption of the combined company's ongoing business or inconsistencies in the combined company's services, standards, controls, procedures and policies, any of which could adversely affect the ability of the combined company to achieve the anticipated benefits of the merger, or could otherwise adversely affect the business and financial results of the combined company.

The COVID-19 pandemic and the impact of actions taken to mitigate the pandemic has adversely affected the businesses, financial condition and results of operations of each of Ideanomics and VIA, and may continue to adversely affect the businesses, financial condition and results of operations of Ideanomics and the surviving company following the completion of the transaction.

In December 2019, a novel strain of coronavirus, termed COVID-19, was reported to have surfaced in Wuhan, China, which has and is continuing to spread throughout China and other parts of the world, including the United States. In March 2020 the World Health Organization characterized the outbreak as a "pandemic," and the pandemic has been declared a National Emergency by the United States Government. The growth of the COVID-19 pandemic has created significant volatility and uncertainty and economic disruption. The extent to which the COVID-19 pandemic impacts our business, operations, financial results and financial condition will depend on numerous evolving factors that are uncertain and cannot be predicted, including: an economic downturn that could affect demand for electric vehicle supply equipment and related services; the duration and scope of the pandemic; government, business and individuals' actions taken in response; the effect on our partners, customers and the demand for Ideanomics' services and products; disruptions to the global supply chain; our ability to sell and provide our services and products, including as a result of travel restrictions and people working from home; disruptions to Ideanomics' operations resulting from the illness of any of our employees; restrictions or disruptions to transportation, including reduced availability of ground or air transport; the ability of its customers to pay for its services and products; and any closures of its and its partners', suppliers' and customers' facilities. In addition, the impact of COVID-19 on macroeconomic conditions may impact the proper functioning of financial and capital markets, foreign currency exchange rates, commodity and energy prices, and interest rates.

The COVID-19 pandemic caused by the SARS-CoV-2 virus and international efforts to control its spread have significantly curtailed the movement of people, goods and services worldwide, including in the regions in which each of Ideanomics and VIA conduct its business operations. It is not possible to accurately predict the full impact of the COVID-19 pandemic on the business, financial condition and results of operations of Ideanomics, VIA or the surviving company due to the evolving nature of the COVID-19 pandemic and the extent of its impact across industries and geographies and numerous other uncertainties, including the duration and spread of the outbreak, additional actions that may be taken by governmental entities, and other factors. A recession or market correction resulting from the spread of COVID-19 may negatively impact the business, financial condition and results of operations of Ideanomics, VIA or the surviving company. There can be no assurance that any efforts taken by Ideanomics, VIA or the surviving company to address the adverse impacts of the COVID-19 pandemic or actions taken to contain the COVID-19 pandemic or its impact will be effective or will not result in significant additional costs. If Ideanomics or VIA is unable to recover from a business disruption on a timely basis or otherwise mitigate the adverse effects of the COVID-19 pandemic, the businesses, financial condition and results of operations of Ideanomics, VIA and the surviving company following the completion of the transaction could be materially and adversely affected, and the transaction and efforts to integrate the businesses of the two companies may be delayed or become more costly or difficult.

Uncertainties associated with the merger may cause a loss of management personnel and other key employees, and Ideanomics and the surviving company may have difficulty attracting and motivating management personnel and other key employees, which could adversely affect the future businesses and operations of Ideanomics and the surviving company.

Ideanomics and VIA are dependent on the experience and industry knowledge of their respective management personnel and other key employees to execute their business plans. Ideanomics' success after the completion of the merger will depend in part upon the ability of Ideanomics to attract, motivate and retain key management personnel and other key employees of VIA. Prior to completion of the merger, current and prospective employees of Ideanomics and VIA may experience uncertainty about their roles following the completion of the merger, which may have an adverse effect on the ability of each of Ideanomics and VIA to attract, motivate or retain management personnel and other key employees. In addition, no assurance can be given that Ideanomics will be able to attract, motivate or retain management personnel and other key employees of VIA to the same extent that VIA have previously been able to attract or retain their respective employees. If management personnel or other key employees terminate their employment, Ideanomics' and the surviving company's business activities may be adversely affected and management's attention may be diverted from successfully integrating Ideanomics and VIA to hiring suitable replacements, all of which may cause Ideanomics' and the surviving company's businesses and operations following the completion of the merger to suffer.

The market price of Ideanomics common stock may decline as a result of the merger and the issuance of shares of Ideanomics common stock to VIA stockholders in the merger may have a negative impact on Ideanomics' financial results, including earnings per share.

The market price of Ideanomics common stock may decline as a result of the merger, and holders of Ideanomics common stock (including holders of VIA common stock who receive Ideanomics common stock in the merger) could see a decrease in the value of their investment in Ideanomics common stock, if, among other things, Ideanomics and the surviving company are unable to achieve the expected growth in earnings, or if the anticipated benefits, including synergies, cost savings, innovation and operational efficiencies, from the merger are not realized, or if the merger and integration-related costs related to the merger are greater than expected. The market price of Ideanomics common stock may also decline if Ideanomics does not achieve the anticipated benefits of the merger as rapidly or to the extent expected by financial or industry analysts or if the effects of the merger on Ideanomics' financial position, results of operations or cash flows are not otherwise consistent with the expectations of financial or industry analysts. The issuance of shares of Ideanomics common stock in the merger could on its own have the effect of depressing the market price for Ideanomics common stock. In addition, some VIA stockholders may decide not to continue to hold the shares of Ideanomics common stock they receive as a result of the merger, and any such sales of Ideanomics common stock could have the effect of depressing the market price for Ideanomics common stock. Moreover, general fluctuations in stock markets could have a material adverse effect on the market for, or liquidity of, Ideanomics common stock, regardless of the actual operating performance of Ideanomics or the surviving company following the completion of the merger.

If the merger is completed, Ideanomics estimates that it may issue up to approximately 160,604,245 shares of its common stock to VIA stockholders at the closing of the merger pursuant to the merger agreement (which does not include any payment of the earnout), which represents approximately % of the number of shares of Ideanomics common stock outstanding as of , 2021. If the earnout is paid in full, Ideanomics estimates that it may issue up to approximately 77,028,415 additional shares of its common stock (assuming a price per share equal to the Signing VWAP. Please note that the actual number of shares of Ideanomics common stock issued at closing will depend on certain purchase price adjustments described in this proxy statement/prospectus, and the actual number of shares of Ideanomics common stock issued pursuant to the earnout will depend on whether VIA meets certain sales targets prior to December 31, 2026 and the actual VWAP of the Ideanomics common stock at the time of any payment of the earnout.

Following the issuance of shares of Ideanomics common stock in the merger, Ideanomics' earnings per share may be lower than would have been reported by Ideanomics in the absence of the merger. There can be no assurance that any increase in Ideanomics' earnings per share as compared to Ideanomics' earnings per share prior to the merger, will occur, even in the long term. Any increase in Ideanomics' earnings per share as a result of the merger requires, among other things, Ideanomics to successfully manage the operations of VIA and increase the consolidated earnings of Ideanomics after the merger, which is subject to significant risks and uncertainties, as described elsewhere in "*Risk Factors*."

You may experience future dilution as a result of this or future equity offerings, and the issuance Ideanomics common stock pursuant to the merger may depress our stock price.

Shares of Ideanomics common stock issued pursuant to the merger agreement will have a dilutive impact on our existing stockholders. In order to raise additional capital, Ideanomics may in the future offer additional shares of its common stock or other securities convertible into or exchangeable for its common stock at prices that may not be the same as the price per share under the merger agreement. Ideanomics may sell shares of its common stock or other securities convertible or exchangeable into its common stock in any other offering at a price per share that is less than the price per share indicated in the merger agreement, and investors purchasing shares of Ideanomics common stock or other securities convertible or exchangeable into its common stock in the future could have rights superior to existing stockholders. The price per share at which Ideanomics sells additional shares of its common stock, or securities convertible or exchangeable into common stock in future transactions may be higher or lower than the price per share under the merger agreement. Additionally, such sales could cause the market price of Ideanomics common stock to decline. If Ideanomics obtain funds through a credit facility or through the issuance of debt or preferred securities, these securities would likely have rights senior to the rights of Ideanomics common stockholders, which could impair the value of Ideanomics common stock.

Ideanomics has never paid dividends on its capital stock and Ideanomics does not anticipate paying dividends in the foreseeable future.

The Ideanomics Board has never declared a dividend and does not anticipate declaring a dividend in the foreseeable future. Any determination to pay dividends in the future will be at the discretion of the Ideanomics Board and will depend on Ideanomics' financial condition, operating results, capital requirements, general business conditions and other factors that the board of directors may deem relevant. As a result, capital appreciation, if any, of Ideanomics common stock will be the sole source of gain for the foreseeable future.

Sales of a substantial number of shares of Ideanomics common stock in the public market could cause Ideanomics' stock price to fall.

Sales of a substantial number of shares of Ideanomics common stock in the public market or the perception that these sales might occur could depress the market price of Ideanomics common stock and could impair Ideanomics' ability to raise capital through the sale of additional equity securities. Ideanomics is unable to predict the effect that sales may have on the prevailing market price of Ideanomics' common stock. In addition, the sale of substantial amounts of Ideanomics common stock could adversely impact its price. The sale or the availability for sale of a large number of shares of Ideanomics common stock in the public market could cause the price of our common stock to decline.

The combined company operates in a highly competitive market against a large number of both established competitors and new market entrants, and many market participants have substantially greater resources than the combined company.

Both the automobile industry generally, and the electric vehicle ("EV") segment in particular, are highly competitive, and the combined company will be competing for sales with both internal combustion engine ("ICE") vehicles and EVs. Many of the combined company's current and potential competitors have significantly greater financial, technical, manufacturing, marketing and other resources than the combined company does and may be able to devote greater resources to the design, development, manufacturing, distribution, promotion, sale and support of their products. The combined company expects competition for EVs to intensify due to increased demand and a regulatory push for alternative fuel vehicles, continuing globalization, and consolidation in the worldwide automotive industry. Factors affecting competition include product quality and features, innovation and development time, pricing, reliability, safety, fuel economy, customer service, and financing terms. Increased competition may lead to lower vehicle unit sales and increased inventory, which may result in downward price pressure and adversely affect the combined company's business, financial condition, operating results, and prospects.

The combined company's EV products will compete for market share with vehicles powered by other vehicle technologies that may prove to be more attractive than that of the combined company's. Such competition may ultimately impair the combined company's business and revenue.

The combined company's target market for EV products is serviced by manufacturers with existing customers and suppliers using proven and widely accepted fuel technologies. Additionally, its competitors are working on developing technologies that may be introduced in its target market. If any of these alternative technology vehicles can provide lower fuel costs, greater efficiencies, greater reliability or otherwise benefit from other factors resulting in an overall lower total cost of ownership, this may negatively affect the commercial success of the combined company's products or make its products uncompetitive or obsolete.

The combined company may not be able to compete successfully in the market as a result of rapid changes in EV technology and the entrance of new and existing, larger manufacturers into the EV space.

The combined company's products will be designed for use with, and depend upon, existing vehicle technology. As new companies and larger, existing vehicle manufacturers enter the EV space, the combined company may lose any technological advantage it may have had in the marketplace and suffer a decline in its position in the market. As technologies change, the combined company plans to upgrade or adapt its products to continue to provide products with the latest technology. However, the combined company's products may become obsolete or the combined company's research and development efforts may not be sufficient to adapt to changes in or to create the necessary technology to effectively compete. As a result, the combined company's potential inability to adapt and develop the necessary technology may harm the combined company's competitive position.

The combined company intends to target potential customers that are large corporations with substantial negotiating power, exacting product, quality and warranty standards and potentially competitive internal solutions.

Many of the combined company's potential customers are large, multinational corporations with substantial negotiating power relative to it and, in some instances, that may have internal solutions that are competitive to the combined company's products. These large, multinational corporations also have significant development resources, which may allow them to acquire or develop independently, or in partnership with others, competitive technologies. Meeting the technical requirements and securing design wins with any of these companies will require a substantial investment of the combined company's time and resources. The combined company cannot assure you that its products will secure design wins from these or other companies or that it will generate meaningful revenue from the sales of its products to these key potential customers. If the combined company's products are not selected by these large corporations or if these corporations develop or acquire competitive technology, it will have an adverse effect on the combined company's business. In addition, if the combined company is unable to sell its products to such potential customers on certain terms, its prospects and results of operations may be adversely affected.

If the market for EVs does not develop as the combined company expects or develops more slowly than it expects, the combined company's business, prospects, financial condition and operating results will be adversely affected.

The combined company's growth is highly dependent upon the adoption by consumers of EVs. The target demographics for the combined company's EVs are highly competitive. If the market for EVs does not develop at the rate or in the manner or to the extent that the combined company expects, our business, prospects, financial condition and operating results will be harmed. The market for alternative fuels, hybrid and EVs is new and untested and is characterized by rapidly changing technologies, price competition, numerous competitors, evolving government regulation and industry standards and uncertain customer demands and behaviors.

The market for alternative fuel vehicles is rapidly evolving and as a result, the market for the combined company's EVs could be affected by numerous factors, such as:

- perceptions about EV features, quality, safety, performance and cost;
- perceptions about the limited range over which EVs may be driven on a single battery charge;
- competition, including from other types of alternative fuel vehicles, plug-in hybrid EVs and high fuel-economy internal combustion engine vehicles;
- fuel prices, including volatility in the cost of fossil fuels;
- the timing of adoption and implementation of fully autonomous vehicles;
- government regulations and economic incentives;
- access to charging facilities and related infrastructure costs and standardization of EV charging systems;
- electric grid capacity and reliability; and
- macroeconomic factors.

The automotive industry and the combined company's technology are rapidly evolving and may be subject to unforeseen changes which could adversely affect the demand for our EVs.

The combined company may be unable to keep up with changes in EV technology or alternatives to electricity as a fuel source and, as a result, our competitiveness may suffer. Developments in alternative technologies, such as advanced diesel, ethanol, hybrids, fuel cells, including liquid hydrogen, or compressed natural gas, improvements in battery technologies utilized by its competitors or improvements in the fuel economy of the internal combustion engine, may materially and adversely affect our business and prospects in ways it does not currently anticipate. Any failure by the combined company to successfully react to changes in existing technologies could materially harm our competitive position and growth prospects.

Other Risks

The historical and unaudited pro forma condensed combined financial information included elsewhere in this proxy statement/prospectus may not be representative of Ideanomics' results after the merger, and accordingly, you have limited financial information on which to evaluate the combined company.

Ideanomics and VIA will continue to operate as separate companies prior to the merger. Ideanomics and VIA have no prior history as a combined company. The historical financial statements of VIA may be different from those that would have resulted had VIA been operated as part of Ideanomics. The unaudited pro forma condensed combined financial information appearing elsewhere herein has been presented for informational purposes only and is not necessarily indicative of the financial position or results of operations that actually would have occurred had the merger been completed as of the dates indicated, nor is it indicative of the future operating results or financial position of the combined company. The unaudited pro forma condensed combined financial information reflects adjustments, which are based upon preliminary estimates, to allocate the aggregate consideration to VIA assets and liabilities. The aggregate consideration allocation reflected in the unaudited pro forma condensed combined financial information included in this proxy statement/prospectus is preliminary, and the final allocation of the aggregate consideration will be based upon the actual aggregate consideration and the fair value of the assets and liabilities of VIA as of the date of the completion of the merger. The unaudited pro forma condensed combined financial information does not (i) reflect future events that may occur after the merger, including the incurrence of costs related to the planned integration of VIA, any future non-recurring charges resulting from the merger and any termination of contracts as a direct result of the merger, and (ii) consider potential effects of future market conditions on revenues or expense efficiencies. The unaudited pro forma financial information presented in this proxy statement/prospectus is based in part on certain assumptions regarding the merger that Ideanomics believes are reasonable under the circumstances. Ideanomics cannot assure you that the assumptions will prove to be accurate over time.

If Ideanomics' goodwill or other intangible assets become impaired, it may be required to record a significant charge to earnings.

As of September 30, 2021, a portion of Ideanomics' total consolidated assets reflected on the consolidated balance sheet incorporated by reference into this proxy statement/prospectus consisted of goodwill and intangible assets. Consummation of the merger is expected to result in Ideanomics recognizing additional goodwill and intangible assets on its consolidated balance sheet. See the section titled "*Accounting Treatment*" beginning on page 115 of this proxy statement/prospectus. Intangible assets with finite lives will be amortized using the method that best reflects how their economic benefits are utilized or, if a pattern of economic benefits cannot be reliably determined, on a straight-line basis over their estimated useful lives. Goodwill will not be amortized, but instead tested for potential impairment at least annually whenever events or changes in circumstances indicate that the carrying value may not be recoverable. If Ideanomics' goodwill or other intangible assets are determined to be impaired in the future, it may be required to record additional significant, non-cash charges to earnings during the period in which the impairment is determined to have occurred.

The Ideanomics and VIA prospective financial information is inherently subject to uncertainties.

While presented with numeric specificity, the Ideanomics and VIA prospective financial information provided in this document was prepared by Ideanomics' management based on numerous variables and assumptions (including, but not limited to, those related to industry performance and competition and general business, economic, market and financial conditions and additional matters specific to Ideanomics' or VIA's business, as applicable) that are inherently subjective and uncertain and are largely beyond the control of the respective management of each. As a result, actual results may differ from the prospective financial information. Important factors that may affect actual results and cause these projected financial forecasts to not be achieved include, but are not limited to, risks and uncertainties relating to Ideanomics' or VIA's business, as applicable (including each company's ability to achieve strategic goals, objectives and targets over applicable periods) and general industry, business, competitive, technological and economic conditions. For more information, see the section titled "*The Merger - Unaudited Financial Information*" beginning on page 94.

Ideanomics and VIA are subject to various uncertainties, including litigation and contractual restrictions and requirements while the merger is pending, that could adversely affect their businesses, financial condition and results of operations.

During the pendency of the merger, it is possible that customers, vendors and/or other persons with whom Ideanomics or VIA has a business relationship may elect to use the products and services of other providers, delay or defer certain business decisions or decide to seek to terminate, change or renegotiate their relationships with Ideanomics or VIA, as the case may be, as a result of the merger, which could significantly reduce the expected benefits of the merger and/or negatively affect Ideanomics' or VIA's revenues, earnings and cash flows, as well as the market price of Ideanomics common stock, regardless of whether the merger is completed. Uncertainty about the effects of the merger on employees may impair the ability to attract, retain and motivate key personnel during the pendency of the merger and, if the merger is completed, for a period of time thereafter. If key employees depart because of issues related to the uncertainty and difficulty of integration or a desire not to remain with Ideanomics following the completion of the merger, Ideanomics and VIA may have to incur significant costs in identifying, hiring and retaining replacements for departing employees and may lose significant expertise and talent. Ideanomics and VIA will also incur significant costs related to the merger, some of which must be paid even if the merger is not completed. These costs are substantial and include financial advisory, legal and accounting costs.

Under the terms of the merger agreement, VIA is also subject to certain restrictions on the conduct of its business prior to the completion of the merger, which may adversely affect its ability to execute certain of its business strategies, including, among other things, the ability in certain cases to incur indebtedness, make investments or capital expenditures, enter into, amend or terminate material contracts, commence or settle litigation, acquire or dispose of assets or make changes with respect to employee matters, including compensation and benefits matters. Such limitations could adversely affect VIA's business, strategy, operations and prospects prior to the completion of the merger. Ideanomics is also subject to certain restrictions on the conduct of its business prior to the completion of the merger, including its ability to enter into certain transactions involving mergers, acquisitions or investments.

In addition, Ideanomics, VIA and their respective affiliates are involved in various disputes, governmental and/or regulatory inspections, investigations and proceedings and litigation matters that arise from time to time. Each of the risks described above may be exacerbated by delays or other adverse developments with respect to the completion of the transaction.

Risks Related to VIA

VIA is an early-stage company with a history of losses, and expects to incur significant expenses and continuing losses for the foreseeable future.

VIA has incurred losses in the operation of its business related to research and development activities since its inception. VIA anticipates that its expenses will increase and that it will continue to incur losses in the future until at least the time it begins significant deliveries of its vehicles, which is not expected to occur before late 2023. Even if VIA is able to successfully develop and sell or lease its vehicles, there can be no assurance that they will be commercially successful and achieve or sustain profitability.

VIA expects the rate at which it will incur losses to be significantly higher in future periods as it, among other things, designs, develops and manufactures its vehicles; builds up inventories of parts and components for its vehicles; increases its sales and marketing activities, develops its distribution infrastructure; and increases its general and administrative functions to support its growing operations. VIA may find that these efforts are more expensive than it currently anticipates or that these efforts may not result in revenue, which would further increase VIA's losses.

VIA has a limited operating history and has manufactured and sold a minimal number of lighter duty production vehicles to customers and may never develop or manufacture any future vehicles.

VIA was incorporated in 2010 and has a limited operating history in the automobile industry, which is continuously evolving, and has generated minimal revenue to date. VIA's vehicles are in the development stage and VIA does not expect to begin significant deliveries of its vehicles until at least late 2023, if at all. VIA has no experience as an organization in high-volume manufacturing of the planned electric commercial vehicles.

As VIA attempts to transition from research and development activities to commercial production and sales, it is difficult, if not impossible, to forecast VIA's future results, and VIA has limited insight into trends that may emerge and affect VIA's business. The estimated costs and timelines that VIA has developed to reach full-scale commercial production are subject to inherent risks and uncertainties involved in the transition from a start-up company focused on research and development activities to the large-scale manufacture and sale of vehicles. There can be no assurance that VIA's estimates related to the costs and timing necessary to complete design and engineering of its electric commercial vehicles and to tool its factories will prove accurate. These are complex processes that may be subject to delays, cost overruns and other unforeseen issues. For example, VIA may experience higher raw material waste in the composite process than it expects, resulting in higher operating costs and hampering its ability to be profitable.

VIA cannot assure you that it or its partners will be able to develop efficient, automated, cost-efficient manufacturing capability and processes, and reliable sources of component supplies that will enable VIA to meet the quality, price, engineering, design and production standards, as well as the production volumes, required to successfully mass market its electric commercial vehicles. You should consider VIA's business and prospects in light of the risks and significant challenges it faces as a new entrant into its industry, including, among other things, with respect to its ability to:

- design and produce safe, reliable and quality vehicles on an ongoing basis;
- obtain the necessary regulatory approvals in a timely manner;
- build a well-recognized and respected brand;
- establish and expand its customer base;
- successfully market not just VIA's vehicles but also the other services it intends to or may provide;
- successfully service its vehicles after sales and maintain a good flow of spare parts and customer goodwill;
- improve and maintain its operational efficiency;
- execute and maintain a reliable, secure, high-performance and scalable technology infrastructure;
- predict its future revenues and appropriately budget for its expenses;
- attract, retain and motivate talented employees;
- anticipate trends that may emerge and affect its business;

- anticipate and adapt to changing market conditions, including technological developments and changes in competitive landscape; and
- navigate an evolving and complex regulatory environment.

If VIA fails to adequately address any or all of these risks and challenges, its business may be materially and adversely affected.

In addition, VIA has engaged in limited marketing activities to date, so even if VIA is able to bring its electric commercial vehicles to market on time and on budget, there can be no assurance that fleet customers will embrace VIA's products in significant numbers. Market conditions, many of which are outside of VIA's control and subject to change, including general economic conditions, the availability and terms of financing, the impacts and ongoing uncertainties created by the COVID-19 pandemic, fuel and energy prices, regulatory requirements and incentives, competition and the pace and extent of vehicle electrification generally, will impact demand for VIA's electric commercial vehicles, and ultimately VIA's success.

VIA does not currently have any binding orders, and there is no assurance that its non-binding pre-orders will be converted into binding orders or sales.

VIA's business model is focused on building relationships with fleet customers, fleet management companies and dealers. To date, VIA has engaged in limited marketing activities and does not have any binding contracts with customers. The non-binding pre-orders may not be converted into binding orders or sales. Until such time that the design and development of VIA's vehicles are complete, VIA's vehicles are commercially available for purchase and VIA is able to scale up its marketing function to support sales, there will be uncertainty as to customer demand for VIA's vehicles. A long wait time from the time a pre-order is made until the delivery of VIA's vehicles is possible, and any delays beyond expected wait times could adversely impact user decisions on whether to ultimately make a purchase. Even if VIA is able to obtain binding orders, customers may limit their volume of purchases initially as they assess VIA's vehicles and whether to make a broader transition to electric vehicles. This may be a long process and will depend on the safety, reliability, efficiency and quality of VIA's vehicles. It will also depend on factors outside of VIA's control, such as general market conditions and broader trends in fleet management and vehicle electrification that could impact customer buying decisions. As a result, there is significant uncertainty regarding demand for VIA's vehicles and the sales that it will be able to achieve.

Certain of VIA's strategic, development and deployment arrangements could be terminated or may not materialize into long-term contract arrangements and may restrict or limit VIA from developing electric commercial vehicles with other strategic partners.

VIA has arrangements with strategic, development and deployment partners and collaborators. Some of these arrangements are evidenced by memorandums of understanding, non-binding letters of intent, early stage agreements that are used for design and development purposes but will require renegotiation at later stages of development or production or master agreements that have yet to be implemented under separately negotiated statements of work, each of which could be terminated or may not materialize into next-stage or binding contracts or long-term contract arrangements. In addition, VIA does not currently have arrangements in place that will allow it to fully execute its business plan, including, without limitation, final supply and manufacturing agreements and fleet service and management agreements. Moreover, existing or future arrangements may contain limitations on VIA's ability to enter into strategic, development and deployment arrangements with other partners. If VIA is unable to maintain such arrangements and agreements, or if such agreements or arrangements contain other restrictions from or limitations on developing electric commercial vehicles with other strategic partners, its business, prospects, financial condition and operating results may be materially and adversely affected.

VIA's growth is dependent upon the willingness of operators of vehicle fleets and small to medium sized businesses to adopt electric commercial vehicles, as well as VIA's ability to produce, sell and service vehicles that meet their needs. If the development of the market for commercial electric vehicles does not develop as VIA expects, its business, prospects, financial condition and operating results will be adversely affected.

VIA's growth is dependent upon the adoption of electric commercial vehicles by operators of commercial vehicle fleets and on VIA's ability to produce, sell and service vehicles that meet their needs. The entry of electric commercial vehicles into the medium-duty commercial vehicle market is a relatively new development, particularly in the United States, and is characterized by rapidly changing technologies and evolving government regulation, industry standards and customer views of the merits of using electric commercial vehicles in their businesses. This process has been slow to date. As part of VIA's sales efforts, VIA must educate fleet managers as to what VIA believes are the economical savings during the life of the vehicle and the lower "total cost of ownership" of VIA's vehicles. As such, VIA believes that operators of commercial vehicle fleets will consider many factors when deciding whether to purchase VIA's commercial electric vehicles (or electric commercial vehicles generally) or vehicles powered by internal combustion engines. VIA believes these factors include:

- the difference in the initial purchase prices of electric vehicles with comparable vehicles powered by internal combustion engines, both including and excluding the effect of government and other subsidies and incentives designed to promote the purchase of electric commercial vehicles;
- the total cost of ownership of the vehicle over its expected life, which includes the initial purchase price and ongoing operating and maintenance costs;
- the availability and terms of financing options for purchases of vehicles and, for electric commercial vehicles, financing options for battery systems;
- the availability of tax and other governmental incentives to purchase and operate electric commercial vehicles and future regulations requiring increased use of nonpolluting vehicles;
- government regulations and economic incentives promoting fuel efficiency and alternate forms of energy;
- fuel prices, including volatility in the cost of fuel or a prolonged period of low gasoline and natural gas costs that could decrease incentives to transition to electric commercial vehicles;
- the cost and availability of other alternatives to internal combustion vehicles, such as vehicles powered by natural gas or hydrogen;
- corporate sustainability initiatives;
- commercial electric vehicle quality, performance and safety (particularly with respect to lithium-ion battery packs);

- the quality and availability of service for the vehicle, including the availability of replacement parts;
- the anxiety of some potential customers regarding the limited range over which electric commercial vehicles may be driven on a single battery charge;
- access to charging stations and related infrastructure costs, and standardization of electric vehicle charging systems;
- the concerns of some potential customers regarding the degradation of the cells used in lithium battery modules and its negative impact on the estimated range of electric vehicles over time;
- electric grid capacity and reliability; and
- macroeconomic factors.

If, in weighing these factors, operators of commercial vehicle fleets determine that there is not a compelling business justification for purchasing commercial electric vehicles, particularly those that VIA will produce and sell, then the market for commercial electric vehicles may not develop as VIA expects or may develop more slowly than VIA expects, which would adversely affect VIA's business, prospects, financial condition and operating results.

In addition, any reduction, elimination or selective application of tax and other governmental incentives and subsidies because of policy changes, the reduced need for such subsidies and incentives due to the perceived success of electric vehicles, fiscal tightening or other reasons may result in the diminished competitiveness of the electric vehicle industry generally or VIA's electric commercial vehicles in particular, which would adversely affect VIA's business, prospects, financial condition and operating results. Further, VIA cannot assure that the current governmental incentives and subsidies available for purchasers of electric commercial vehicles will remain available.

VIA may encounter obstacles outside of its control that slow market adoption of electric commercial vehicles, such as regulatory requirements or infrastructure limitations.

VIA's growth is highly dependent upon the adoption of electric commercial vehicles by the commercial and municipal fleet industry. The target demographics for VIA's electric commercial vehicles are highly competitive. If the market for electric commercial vehicles does not develop at the rate or in the manner or to the extent that VIA expects, or if critical assumptions VIA has made regarding the efficiency of its electric commercial vehicles are incorrect or incomplete, VIA's business, prospects, financial condition and operating results could be harmed. The fleet market for electric commercial vehicles is new and untested and is characterized by rapidly changing technologies, price competition, numerous competitors, evolving government regulation and industry standards and uncertain customer demands and behaviors.

VIA's growth depends upon its ability to maintain its relationships with existing suppliers and to source new suppliers for its supply chain, while effectively managing the risks stemming from such relationships.

VIA's growth is partially dependent upon its ability to enter into supplier agreements and maintain its relationships with suppliers who are critical and necessary to the output and production of VIA's vehicles.

The supply agreements VIA has or may enter into with key suppliers in the future may have provisions where such agreements can be terminated in various circumstances, including potentially without cause. If these suppliers become unable to provide or experience delays in providing components or the supply agreements are terminated, it may be difficult to find replacement components. Changes in business conditions, pandemics, governmental changes, and other factors beyond VIA's control or that VIA does not presently anticipate could affect VIA's ability to receive components from VIA's suppliers.

VIA also relies on a small group of suppliers to provide VIA with the components for VIA's vehicles. While VIA seeks to obtain raw materials and components from multiple sources whenever possible, some of the raw materials and components used in its vehicles will be purchased by VIA from a single or limited source. VIA may be unable to obtain or engineer replacement raw materials and components for its single or limited source raw materials and components in the short term, or at all, at prices or quality levels that are acceptable to it, leaving VIA susceptible to supply shortages, long lead times for components and cancellations and supply changes. In addition, VIA could experience delays if its suppliers do not meet agreed upon timelines or experience capacity constraints.

VIA has not secured supply agreements for its components. VIA may be at a disadvantage in negotiating supply agreements for the production of its vehicles due to its limited operating history. In addition, there is the possibility that finalizing the supply agreements for the parts and components of VIA's vehicles will cause significant disruption to VIA's operations, or such supply agreements could be at costs that make it difficult for VIA to operate profitably.

If VIA does not enter into long-term supply agreements with guaranteed pricing for critical parts or components, VIA may be exposed to fluctuations in components, materials and equipment prices. Substantial increases in the prices for such components, materials and equipment would increase VIA's operating costs and could reduce VIA's margins if VIA cannot recoup the increased costs. Any attempts to increase the announced or expected prices of VIA's vehicles in response to increased costs could be viewed negatively by VIA's potential customers and could adversely affect VIA's business, prospects, financial condition or operating results.

Increases in costs, disruption of supply or shortage of materials, in particular for lithium-ion battery cells, could harm VIA's business.

VIA and its suppliers may experience increases in the cost of or a sustained interruption in the supply or shortage of materials. Any such increase, supply interruption or shortage could materially and negatively impact VIA's business, prospects, financial condition and operating results. VIA and its suppliers use various materials in their businesses and products, including for example lithium-ion battery cells and steel, and the prices for these materials fluctuate. The available supply of these materials may be unstable, depending on market conditions and global demand, including as a result of increased production of electric commercial vehicles by VIA's competitors, and could adversely affect VIA's business and operating results. For instance, VIA is exposed to multiple risks relating to lithium-ion battery cells. These risks include:

- an increase in the cost, or decrease in the available supply, of materials used in the cells;
- disruption in the supply of cells due to quality issues or recalls by battery cell manufacturers; and
- fluctuations in the value of any foreign currencies in which battery cell and related raw material purchases are or may be denominated against the purchasing entity's operating currency.

VIA's business is dependent on the continued supply of battery cells for the battery packs used in VIA's electric commercial vehicles. VIA may have limited flexibility in changing its supplier in the event of any disruption in the supply of battery cells which could disrupt production of VIA's electric commercial vehicles. Furthermore, fluctuations or shortages in petroleum and other economic conditions may cause VIA to experience significant increases in freight charges and material costs. Substantial increases in the prices for VIA's materials or prices charged to VIA, such as those charged by battery cell suppliers, would increase VIA's operating costs, and could reduce its margins if the increased costs cannot be recouped through increased commercial vehicle sales prices. Any attempts to increase product prices in response to increased material costs could result in cancellations of orders and therefore materially and adversely affect VIA's brand, image, business, prospects and operating results.

VIA currently targets many customers, suppliers and partners that are large corporations with substantial negotiating power, exacting product, quality and warranty standards and potentially competitive internal solutions. If VIA is unable to sell its products to these customers or is unable to enter into agreements with suppliers and partners on satisfactory terms, its prospects and results of operations may be adversely affected.

Many of VIA's current and potential customers, suppliers and partners are large, multinational corporations with substantial negotiating power relative to it and, in some instances, may have internal solutions that are competitive to VIA's products. These large, multinational corporations also have significant development resources, which may allow them to acquire or develop independently, or in partnership with others, competitive technologies. Meeting the technical requirements and securing design wins with any of these companies could require a substantial investment of VIA's time and resources. VIA cannot assure you that its products will secure design wins from these or other companies or that it will generate meaningful revenue from the sales of its products to these key potential customers. If VIA's products are not selected by these large corporations or if these corporations develop or acquire competitive technology, it may have an adverse effect on VIA's business.

As VIA expands into new territories, it may encounter stronger market resistance than it currently expects, including from incumbent competitors in those territories.

VIA will face risks associated with any potential expansion of its operations into new territories, including possible unfavorable regulatory, political, tax and labor conditions, which could harm its business. In addition, in certain of these markets, VIA may encounter incumbent competitors with established technologies and customer bases, lower prices or costs, and greater brand recognition. VIA anticipates having international operations and subsidiaries that are subject to the legal, political, regulatory and social requirements and economic conditions in these jurisdictions. However, VIA has no experience to date selling or leasing and servicing its vehicles internationally, and such expansion would require VIA to make significant expenditures, including the hiring of local employees and establishing facilities, in advance of generating any revenue. These risks include:

- conforming VIA's electric commercial vehicles to various international regulatory requirements where its electric commercial vehicles are sold, which requirements may change over time;
- difficulties in obtaining or complying with various licenses, approvals, certifications and other governmental authorizations necessary to manufacture, sell or service its electric commercial vehicles in any of these jurisdictions;
- difficulty in staffing and managing foreign operations;
- difficulties attracting customers in new jurisdictions;

- foreign government taxes, regulations and permit requirements, including foreign taxes that VIA may not be able to offset against taxes imposed upon VIA in the U.S.;
- a heightened risk of failure to comply with corporation and employment tax laws
- fluctuations in foreign currency exchange rates and interest rates, including risks related to any interest rate swap or other hedging activities VIA undertakes;
- U.S. and foreign government trade restrictions, tariffs and price or exchange controls;
- foreign labor laws, regulations and restrictions;
- changes in diplomatic and trade relationships;
- political instability, natural disasters, global health concerns, including health pandemics such as the COVID-19 pandemic, war or events of terrorism; and
- the strength of international economies.

If VIA fails to successfully address these risks, VIA's business, prospects, financial condition and operating results could be materially harmed.

VIA has grown its business rapidly, and expects to continue to expand its operations significantly. Any failure to manage its growth effectively could adversely affect its business, prospects, operating results and financial condition.

Any failure to manage VIA's growth effectively could materially and adversely affect VIA's business, prospects, operating results and financial condition. VIA intends to expand its operations significantly. VIA expects its future expansion to include:

- expanding the management team;
- hiring and training new personnel;
- leveraging consultants to assist with company growth and development;
- forecasting production and revenue;
- controlling expenses and investments in anticipation of expanded operations;
- establishing or expanding design, production, sales and service facilities;
- implementing and enhancing administrative infrastructure, systems and processes; and

expanding into new markets.

VIA intends to continue to hire a significant number of additional personnel, including software engineers, design and production personnel and service technicians for its electric commercial vehicles. Because VIA's electric commercial vehicles are based on a different technology platform than traditional internal combustion engines, individuals with sufficient training in electric commercial vehicles may not be available to hire, and as a result, VIA will need to expend significant time and expense training any newly hired employees. Competition for individuals with experience designing, producing and servicing electric commercial vehicles and their software is intense, and VIA may not be able to attract, integrate, train, motivate or retain additional highly qualified personnel. The failure to attract, integrate, train, motivate and retain these additional employees could seriously harm VIA's business, prospects, financial condition and operating results.

VIA's business may be adversely affected by labor and union activities.

Although none of VIA's employees are currently represented by a labor union, it is common throughout the automobile industry generally for many employees at automobile companies to belong to a union, which can result in higher employee costs and increased risk of work stoppages. VIA may also directly and indirectly depend upon other companies with unionized work forces, such as parts suppliers and trucking and freight companies, and work stoppages or strikes organized by such unions could have a material adverse impact on VIA's business, financial condition or operating results.

There are complex software and technology systems that need to be developed in coordination with vendors and suppliers in order to reach production for VIA's electric commercial vehicles, and there can be no assurance such systems will be successfully developed.

VIA's vehicles will use a substantial amount of third-party and in-house software codes and complex hardware to operate. The development of such advanced technologies is inherently complex, and VIA will need to coordinate with its vendors and suppliers in order to reach production for its electric commercial vehicles. Defects and errors may be revealed over time and VIA's control over the performance of third-party services and systems may be limited. Thus, VIA's potential inability to develop the necessary software and technology systems may harm its competitive position.

VIA relies on third-party suppliers to develop a number of emerging technologies for use in its products, including lithium-ion battery technology. These technologies are not currently, and may not ever be, commercially viable. There can be no assurances that VIA's suppliers will be able to meet the technological requirements, production timing, and volume requirements to support its business plan. In addition, the technology may not comply with the cost, performance useful life and warranty characteristics VIA anticipates

in its business plan. As a result, VIA's business plan could be significantly impacted, and VIA may incur significant liabilities under warranty claims which could adversely affect its business, prospects and results of operations.

The discovery of defects in VIA's vehicles may result in delays in new model launches, recall campaigns or increased warranty costs. Additionally, discovery of such defects may result in a decrease in the residual value of its vehicles, which may materially harm its business.

VIA's electric commercial vehicles may contain defects in design and production that may cause them not to perform as expected or may require repair. Vehicle manufacturers are required to remedy defects related to vehicle safety and emissions through recall campaigns, and must recall vehicles if they determine that they do not comply with any applicable Federal Motor Vehicle Safety Standards ("FMVSS"). In addition, if a vehicle manufacturer determines that a safety or emissions defect or a non-compliance exists with respect to certain of its vehicles prior to the start of production, the launch of such vehicle could be delayed until the manufacturer remedies the defect or non-compliance. The costs associated with any protracted delay in new model launches necessary to remedy such defect, and the cost of providing a free remedy for such defects or non-compliance in vehicles that have been sold, could be substantial. VIA will also be obligated under the terms of its vehicle warranty to make repairs or replace parts in its vehicles at its expense for a specified period of time. Therefore, any failure rate that exceeds VIA's assumptions may result in unanticipated losses.

VIA's products (including vehicles and components) have not completed testing and VIA currently has a limited frame of reference by which to evaluate the performance of its electric commercial vehicles upon which its business prospects depend. There can be no assurance that VIA will be able to detect and fix any defects in its electric commercial vehicles. VIA may experience recalls in the future, which could adversely affect VIA's brand and could adversely affect its business, prospects, financial condition and operating results. VIA's electric commercial vehicles may not perform consistent with customers' expectations or consistent with other vehicles which may become available. Any product defects or any other failure of VIA's electric commercial vehicles and software to perform as expected could harm VIA's reputation and result in a significant cost due to warranty replacement and other expenses, a loss of customer goodwill due to failing to meet maintenance targets in VIA's total cost of ownership calculations, adverse publicity, lost revenue, delivery delays, product recalls and product liability claims and could have a material adverse impact on VIA's business, prospects, financial condition and operating results. Additionally, discovery of such defects may result in a decrease in the residual value of VIA's vehicles, which may materially harm its business. Moreover, problems and defects experienced by other electric vehicle companies could by association have a negative impact on perception and customer demand for VIA's electric commercial vehicles.

VIA may become subject to product liability claims, which could harm its financial condition and liquidity if it is not able to successfully defend or insure against such claims.

Product liability claims, even those without merit or those that do not involve VIA's products, could harm VIA's business, prospects, financial condition and operating results. The automobile industry in particular experiences significant product liability claims, and VIA faces inherent risk of exposure to claims in the event VIA's electric commercial vehicles do not perform or are claimed to not have performed as expected. As is true for other commercial vehicle suppliers, VIA expects in the future that its electric commercial vehicles may be involved in crashes resulting in death or personal injury. Additionally, product liability claims that affect VIA's competitors may cause indirect adverse publicity for VIA and its products. A successful product liability claim against VIA could require VIA to pay a substantial monetary award. VIA's risks in this area are particularly pronounced given the stage of development. Moreover, a product liability claim against VIA or its competitors could generate substantial negative publicity about VIA's products and business and could have a material adverse effect on VIA's brand, business, prospects, financial condition and operating results.

If VIA is sued for infringing or misappropriating intellectual property rights of third parties, litigation could be costly and time consuming and could prevent VIA from developing or commercializing its future products.

Companies, organizations or individuals, including VIA's competitors, may hold or obtain patents, trademarks or other proprietary rights that would prevent, limit or interfere with VIA's ability to make, use, develop, sell or market its vehicles or components, which could make it more difficult for VIA to operate its business. From time to time, VIA may receive communications from holders of patents or trademarks regarding their proprietary rights. Companies holding patents or other intellectual property rights may bring suits alleging infringement of such rights or otherwise assert their rights and urge VIA to take licenses. VIA's applications and uses of trademarks relating to its design, software or technologies could be found to infringe upon existing trademark ownership and rights. In addition, if VIA is determined to have infringed upon a third party's intellectual property rights, it may be required to do one or more of the following:

- cease selling, incorporating certain components into, or using vehicles or offering goods or services that incorporate or use the challenged intellectual property;
- pay substantial damages;
- seek a license from the holder of the infringed intellectual property right, which license may not be available on reasonable terms, or at all;
- redesign its vehicles or other goods or services; or
- establish and maintain alternative branding for its products and services.

In the event of a successful claim of infringement against VIA and VIA's failure or inability to obtain a license to the infringed technology or other intellectual property right, VIA's business, prospects, operating results and financial condition could be materially and adversely affected. In addition, any litigation or claims, whether or not valid, could result in substantial costs, negative publicity and diversion of resources and management attention.

VIA may incur significant costs and expenses in connection with protecting and enforcing its intellectual property rights, including through litigation. Additionally, even if VIA is able to take measures to protect its intellectual property, third parties may independently develop technologies that are the same or similar to VIA.

VIA may not be able to prevent others from unauthorized use of its intellectual property, which could harm its business and competitive position. VIA relies on a combination of trade secrets (including know-how), employee and third-party nondisclosure agreements, copyrights, trademarks, intellectual property licenses, and other contractual rights to establish and protect its rights in its technology. Despite VIA's efforts to protect its proprietary rights, third parties may attempt to copy or otherwise obtain and use VIA's intellectual property or seek court declarations that they do not infringe upon its intellectual property rights. Monitoring unauthorized use of VIA's intellectual property is difficult and costly, and the steps VIA has taken or will take may not prevent misappropriation. From time to time, VIA may have to resort to litigation to enforce its intellectual property rights, which could result in substantial costs and diversion of its resources.

Patent, trademark and trade secret laws vary significantly throughout the world. A number of foreign countries do not protect intellectual property rights to the same extent as do the laws of the United States. Therefore, VIA's intellectual property rights may not be as strong or as easily enforced outside of the United States. Failure to adequately protect VIA's intellectual property rights could result in its competitors offering similar products, potentially resulting in the loss of some of VIA's competitive advantage and a decrease in its revenue which, would adversely affect its business, prospects, financial condition and operating results.

VIA's vehicles will make use of lithium-ion battery cells, which can be dangerous under certain circumstances, including the possibility that such cells catch fire or vent smoke and flame.

The battery packs within VIA's electric commercial vehicles will make use of lithium-ion cells. On rare occasions, lithium-ion cells can rapidly release the energy they contain by venting smoke and flames in a manner that can ignite nearby materials as well as other lithium-ion cells. While the battery pack is designed to contain any single cell's release of energy without spreading to neighboring cells, a field or testing failure of VIA's vehicles or other battery packs that it produces could occur, which could subject VIA to lawsuits, product recalls, or redesign efforts, all of which would be time consuming and expensive. Also, negative public perceptions regarding the suitability of lithium-ion cells for automotive applications or any future incident involving lithium-ion cells, such as a vehicle or other fire, even if such incident does not involve VIA's vehicles, could seriously harm its business and reputation.

In addition, VIA intends to store its battery packs in its factories prior to installation in its electric commercial vehicles. Any mishandling of battery cells may cause disruption to the operation of VIA's factories. While VIA has implemented safety procedures related to the handling of the cells, a safety issue or fire related to the cells could disrupt its operations. Such damage or injury could lead to adverse publicity and potentially a safety recall. Moreover, any failure of a competitor's electric vehicle or energy storage product may cause indirect adverse publicity for VIA and its products. Such adverse publicity could negatively affect VIA's brand and harm its business, prospects, financial condition and operating results.

VIA may not succeed in establishing, maintaining and strengthening its brand, which would materially and adversely affect customer acceptance of its vehicles and components and its business, revenues and prospects.

VIA's business and prospects heavily depend on its ability to develop, maintain and strengthen the VIA brand. If VIA is not able to establish, maintain and strengthen its brand, it may lose the opportunity to build a critical mass of customers. VIA's ability to develop, maintain and strengthen the VIA brand will depend heavily on the success of its marketing efforts. The electric vehicle industry is intensely competitive, and VIA may not be successful in building, maintaining and strengthening its brand. VIA's current and potential competitors, particularly electric vehicle manufacturers headquartered in the United States, Japan, the European Union and China, have greater name recognition, broader customer relationships and substantially greater marketing resources than VIA does. If VIA does not develop and maintain a strong brand, its business, prospects, financial condition and operating results will be materially and adversely impacted.

VIA is likely to face competition from a number of sources, which may impair its revenues, increase its costs to acquire new customers, and hinder its ability to acquire new customers.

The vehicle electrification market has expanded significantly since VIA was founded. The commercial vehicle electrification market in which VIA operates features direct competition which includes traditional vehicle manufacturers producing electric commercial vehicles that have historically focused on the consumer market, including but not limited to Daimler AG, Volkswagen, Fiat, Ford and General Motors and electrification solution providers such as Rivian, Hyliion, Workhorse Group Inc., Nikola, Proterra, Arrival and Evobus, possibly expanding into the commercial markets. If these companies or other vehicle manufacturers or providers of electrification solutions expand into the commercial markets, VIA will face increased direct competition, which may impair VIA's revenue, increase its costs to acquire new customers, hinder its ability to acquire new customers, have a material adverse effect on VIA's product prices, market share, revenue and profitability.

VIA may not be able to accurately estimate the supply and demand for its vehicles, which could result in a variety of inefficiencies in its business and hinder its ability to generate revenue. If it does fail to accurately predict its manufacturing requirements, it could incur additional costs or experience delays.

It is difficult to predict VIA's future revenues and appropriately budget for its expenses, and VIA may have limited insight into trends that may emerge and affect its business. VIA will be required to provide forecasts of its demand to its suppliers several months prior to the scheduled delivery of products to its prospective customers. Currently, there is no historical basis for making judgments on the demand for VIA's vehicles or its ability to develop, manufacture, and deliver vehicles, or VIA's profitability in the future. If VIA overestimates its requirements, its suppliers may have excess inventory, which indirectly would increase VIA's costs. If VIA underestimates its requirements, its suppliers may have inadequate inventory, which could interrupt manufacturing of its products and result in delays in shipments and revenues. In addition, lead times for materials and components that VIA's suppliers order may vary significantly and depend on factors such as the specific supplier, contract terms and demand for each component at a given time. If VIA fails to order sufficient quantities of product components in a timely manner, the delivery of vehicles to its customers could be delayed, which would harm VIA's business, financial condition and operating results.

VIA's electric commercial vehicles will compete for market share with vehicles powered by other vehicle technologies that may prove to be more attractive than VIA's vehicle technologies.

VIA's target market currently is serviced by manufacturers with existing customers and suppliers using proven and widely accepted fuel technologies. Additionally, VIA's competitors are working on developing technologies that may be introduced in VIA's target market. Similarly, improvement in competitor performance or technology may result in the infrastructure required to operate VIA vehicles, such as for charging, becoming comparatively expensive and reducing the economic attractiveness of its vehicles. If any of these alternative technology vehicles can provide lower fuel costs, greater efficiencies, greater reliability or otherwise benefit from other factors resulting in an overall lower total cost of ownership, this may negatively affect the commercial success of VIA's vehicles or make VIA's vehicles uncompetitive or obsolete.

If any of VIA's suppliers become economically distressed or go bankrupt, VIA may be required to provide substantial financial support or take other measures to ensure supplies of components or materials, which could increase its costs, affect its liquidity or cause production disruptions.

VIA expects to purchase various types of equipment, raw materials and manufactured component parts from its suppliers. If these suppliers experience substantial financial difficulties, cease operations, or otherwise face business disruptions, VIA may be required to provide substantial financial support to ensure supply continuity or would have to take other measures to ensure components and materials remain available. Any disruption could affect VIA's ability to deliver vehicles and could increase VIA's costs and negatively affect its liquidity and financial performance.

VIA is subject to governmental export and import control laws and regulations. VIA's failure to comply with these laws and regulations could have an adverse effect on its business, prospects, financial condition and operating results.

VIA's products and solutions are subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations and various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Control. U.S. export control laws and regulations and economic sanctions prohibit the shipment of certain products and services to U.S. embargoed or sanctioned countries, governments and persons. In addition, complying with export control and sanctions regulations for a particular sale may be time-consuming and result in the delay or loss of sales opportunities.

Exports of VIA's products and technology must be made in compliance with these laws and regulations. For example, VIA may require one or more licenses to import or export certain vehicles, components or technologies to its research and development teams in various countries and may experience delays in obtaining the requisite licenses to do so. Audits in connection with the application for licenses may increase areas of noncompliance that could result in delays or additional costs. If VIA fails to comply with these laws and regulations, VIA and certain of its employees could be subject to additional audits, substantial civil or criminal penalties, including the possible loss of export or import privileges, fines, which may be imposed on VIA and responsible employees or managers and, in extreme cases, the incarceration of responsible employees or managers.

As VIA expands, it may encounter unforeseen import/export charges, which could increase its costs and hamper its profitability. In addition, changes in VIA's products or solutions or changes in applicable export or import laws and regulations may create delays in the introduction and sale of VIA's products and solutions in new territories, increase costs due to changes in import and export duties and taxes, prevent VIA's customers from deploying VIA's products and solutions or, in some cases, prevent the export or import of VIA's products and solutions to certain countries, governments or persons altogether. Any change in export or import laws and regulations, shift in the enforcement or scope of existing laws and regulations, or change in the countries, governments, persons or technologies targeted by such laws and regulations, could also result in decreased use of VIA's products and solutions or in VIA's decreased ability to export or sell its products and solutions to customers.

Any decreased use of VIA's products and solutions or limitation on its ability to export or sell its products and solutions would likely adversely affect VIA's business, prospects, financial condition and operating results.

VIA is subject to risks related to health epidemics and pandemics, including the ongoing COVID-19 pandemic, which could adversely affect VIA's business and operating results.

VIA faces various risks related to public health issues, including epidemics, pandemics, and other outbreaks, including the ongoing COVID-19 pandemic. The effects and potential effects of COVID-19, including, but not limited to, its impact on general economic conditions, trade and financing markets, changes in customer behavior and continuity in business operations creates significant uncertainty. The spread of COVID-19 also disrupted the manufacturing, delivery and overall supply chain of vehicle manufacturers and suppliers, and has led to a global decrease in vehicle sales in markets around the world. In particular, the COVID-19 crisis may cause a decrease in demand for VIA's vehicles if fleet operators delay purchases of vehicles or if fuel prices for internal combustion engine vehicles remain low, an increase in costs resulting from VIA's efforts to mitigate the effects of COVID-19, delays in VIA's schedule to full commercial production of electric commercial vehicles and disruptions to VIA's supply chain, among other negative effects.

The pandemic has resulted in government authorities implementing many measures to contain the spread of COVID-19, including travel bans and restrictions, quarantines, shelter-in-place and stay-at-home orders, and business shutdowns. These measures may be in place for a significant period of time and may be reinstituted if conditions deteriorate, which could adversely affect VIA's start-up and manufacturing plans. Measures that have been relaxed may be re-implemented if COVID-19 continues to spread. If, as a result of these measures, VIA has to limit its number of employees and contractors at a given time, it could cause a delay in tooling efforts or in the production schedule of its electric commercial vehicles. Further, VIA's sales and marketing activities may be adversely affected due to the cancellation or reduction of in-person sales activities, meetings, events and conferences. If VIA's workforce is unable to work effectively, including due to illness, quarantines, government actions or other restrictions in connection with COVID-19, VIA's operations will be adversely affected.

The extent to which the COVID-19 pandemic may continue to affect VIA's business will depend on continued developments, which are uncertain and cannot be predicted. Even after the COVID-19 pandemic has subsided, VIA may continue to suffer an adverse effect to VIA's business due to its global economic effect, including any economic recession. If the immediate or prolonged effects of the COVID-19 pandemic have a significant adverse impact on government finances, it would create uncertainty as to the continuing availability of incentives related to electric vehicle purchases and other governmental support programs.

VIA is highly dependent on the services of its senior management team and key employees, and if VIA is unable to retain some or all of this team, its ability to compete could be harmed.

VIA's success depends, in part, on its ability to retain its key personnel. VIA is highly dependent on the services of its senior management team and key employees. If members of the senior management team were to discontinue their service to VIA due to death, disability or any other reason, VIA could be materially disadvantaged in the event VIA was unable to appoint suitable replacements in a timely manner. The unexpected loss of or failure to retain one or more of VIA's key employees could adversely affect VIA's business. VIA will evaluate whether to obtain key man life insurance policies. Any failure by VIA's management team and VIA's employees to perform as expected may have a material adverse effect on VIA's business, prospects, financial condition and operating results.

VIA's success depends, in part, on its ability to attract and recruit key personnel. If VIA is unable to attract key employees and hire qualified management, technical and vehicle engineering personnel, its ability to compete could be harmed.

VIA's success depends, in part, on its continuing ability to identify, hire, attract, train and develop other highly qualified personnel. Experienced and highly skilled employees are in high demand and competition for these employees can be intense. VIA may not be able to attract, assimilate, develop or retain qualified personnel in the future, and its failure to do so could adversely affect VIA's business, including the execution of its global business strategy.

VIA may be subject to damages resulting from claims that it or its employees have wrongfully used or disclosed alleged trade secrets of its employees' former employers.

Many of VIA's employees were previously employed by other automotive companies or by suppliers to automotive companies. VIA may be subject to claims that it or these employees have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. If VIA fails in defending such claims, in addition to paying monetary damages, it may lose valuable intellectual property rights or personnel. A loss of key personnel or their work product could hamper or prevent VIA's ability to commercialize its products, which could severely harm its business. Even if VIA is successful in defending against these claims, litigation could result in substantial costs and demand on management resources.

VIA is subject to stringent and changing privacy laws, regulations and standards, information security policies and contractual obligations related to data privacy and security. VIA's actual or perceived failure to comply with such obligations could harm its business.

VIA is subject to or affected by a number of federal, state, local and international laws and regulations, as well as contractual obligations and industry standards, that impose certain obligations and restrictions with respect to data privacy and security. The regulatory framework for privacy and security issues worldwide is rapidly evolving and, as a result, implementation standards and enforcement practices are likely to remain uncertain for the foreseeable future. VIA may not be able to monitor and react to all developments in a timely manner as laws in this area are also complex and developing rapidly. For example, the European Union adopted the General Data Protection Regulation ("GDPR"), which became effective on May 25, 2018, and California adopted the California Consumer Privacy Act of 2018 ("CCPA"), which became effective in January 2020. Both the GDPR and the CCPA impose additional obligations on companies regarding the handling of personal data and provides certain individual privacy rights to persons whose data is collected. Other states have begun to propose similar laws. These laws, regulations and standards may be interpreted and applied differently over time and from jurisdiction to jurisdiction, and it is possible that they will be interpreted and applied in ways that are inconsistent with VIA's existing data management practices or the features of its products and product capabilities, and may have a material and adverse impact on VIA's business, financial condition and results of operations.

Compliance with applicable privacy and data security laws and regulations is a rigorous and time-intensive process, and VIA may be required to put in place additional mechanisms to comply with such laws and regulations, which could cause it to incur substantial costs or require it to change its business practices, including its data practices, in a manner adverse to its business. Additionally, any inability to adequately address privacy and security concerns, even if unfounded, or comply with applicable privacy and data security laws, regulations and policies, could result in additional cost and liability to VIA, damage its reputation, inhibit sales and adversely affect its business. Privacy and data security concerns, whether valid or not valid, may inhibit market adoption of its products, particularly in certain industries and foreign countries. If VIA is not able to adjust to changing laws, regulations and standards related to the internet, its business may be harmed.

VIA, its partners and its suppliers are or may be subject to substantial regulation and unfavorable changes to, or failure by VIA, its partners or its suppliers to comply with, these regulations could substantially harm VIA's business and operating results.

VIA's electric commercial vehicles, and the sale of motor vehicles in general, its partners and its suppliers are or may be subject to substantial regulation under federal, state and local laws. VIA's vehicles will be required to comply with the applicable safety, product and other standards and regulations in VIA's targeted markets. For example, VIA's vehicles in the United States will be subject to numerous regulatory requirements established by the National Highway Traffic Safety Administration, including any applicable FMVSS. Rigorous testing and the use of approved materials and equipment are among the requirements for achieving federal certification. VIA may fail to obtain or renew the required certification or regulatory approval for its vehicles, which may prevent VIA from delivering, selling and/or importing/exporting its vehicles.

VIA continues to evaluate requirements for licenses, approvals, certificates and governmental authorizations necessary to manufacture, sell or service its electric commercial vehicles in the jurisdictions in which it plans to operate and intends to take such actions necessary to comply. VIA may experience difficulties in obtaining or complying with various licenses, approvals, certifications and other governmental authorizations necessary to manufacture, sell, transport or service their electric commercial vehicles in any of these jurisdictions. If VIA, its partners or its suppliers are unable to obtain or comply with any of the licenses, approvals, certifications or other governmental authorizations necessary to carry out its operations in the jurisdictions in which they currently operate, or those jurisdictions in which they plan to operate in the future, VIA's business, prospects, financial condition and operating results could be materially adversely affected. VIA expects to incur significant costs in complying with these regulations. For example, if the battery packs installed in VIA's electric commercial vehicles are deemed to be transported, they will need to comply with the mandatory regulations governing the transport of "dangerous goods," and any deficiency in compliance may result in VIA being prohibited from selling its electric commercial vehicles until compliant batteries are installed. Any such required changes to VIA's battery packs will require additional expenditures and may delay the shipment of vehicles.

In addition, regulations related to the electric and alternative energy vehicle industry are evolving and VIA faces risks associated with changes to these regulations, including but not limited to:

- increased subsidies for corn and ethanol production, which could reduce the operating cost of vehicles that use ethanol or a combination of ethanol and gasoline;
- increased support for other alternative fuel systems, which could have an impact on the acceptance of VIA's electric powertrain system; and
- increased sensitivity by regulators to the needs of established automobile manufacturers with large employment bases, high fixed costs and business models based on the internal combustion engine, which could lead them to pass regulations that could reduce the compliance costs of such established manufacturers or mitigate the effects of government efforts to promote alternative fuel vehicles.

To the extent the laws change, VIA's electric commercial vehicles and its suppliers' products may not comply with applicable international, federal, state or local laws, which would have an adverse effect on VIA's business. Compliance with changing regulations could be burdensome, time consuming and expensive. To the extent compliance with new regulations is cost prohibitive, VIA's business, prospects, financial condition and operating results would be adversely affected.

Increased safety, emissions, fuel economy or other regulations may result in higher costs, cash expenditures and/or sales restrictions.

The motorized vehicle industry is governed by a substantial amount of government regulation, which often differs by state and region. Government regulation has arisen, and proposals for additional regulation are advanced, primarily out of concern for the environment, vehicle safety and energy independence. In addition, many governments regulate local product content and/or impose import requirements as a means of creating jobs, protecting domestic producers and influencing the balance of payments. The cost to comply with existing government regulations is substantial, and future, additional regulations could have a substantial adverse impact on VIA's financial condition. For example, VIA is, and will be, subject to extensive vehicle safety and testing and environmental regulations in the United States, Canada, Mexico and other jurisdictions in which it may sell its vehicles.

VIA is subject to cybersecurity risks to its various systems and software and any material failure, weakness, interruption, cyber event, incident or breach of security could prevent VIA from effectively operating its business.

VIA is potentially at risk for interruptions, outages and breaches of: (i) operational systems, including business, financial, accounting, product development, data processing or production processes, owned by VIA or its third-party vendors or suppliers; (ii) facility security systems, whether owned by VIA or its third-party vendors or suppliers; (iii) in-product technology, whether owned by VIA or its third-party vendors or suppliers; (iv) the integrated software in VIA's electric commercial vehicles; or (v) customer or driver data that VIA processes or its third-party vendors or suppliers process on its behalf. Such cyber incidents could: materially disrupt operational systems; result in loss of intellectual property, trade secrets or other proprietary or competitively sensitive information; compromise certain information of customers, employees, suppliers, drivers or others; jeopardize the security of VIA's factories; or affect the performance of any in-product technology or integrated software in VIA's electric commercial vehicles. A cyber incident could be caused by disasters, insiders (through inadvertence or with malicious intent) or malicious third parties (including nation-states or nation-state supported actors) using sophisticated, targeted methods to circumvent firewalls, encryption and other security defenses, including hacking, fraud, trickery or other forms of deception. The techniques used by cyber attackers change frequently and may be difficult to detect for long periods of time. Although VIA maintains information technology measures designed to protect itself against intellectual property theft, data breaches and other cyber incidents, such measures will require updates and improvements, and VIA cannot guarantee that such measures will be adequate to detect, prevent or mitigate cyber incidents. The implementation, maintenance, segregation and improvement of these systems requires significant management time, support and cost. Moreover, there are inherent risks associated with developing, improving, expanding and updating current systems, including the disruption of VIA's data management, procurement, production execution, finance, supply chain and sales and service processes. These risks may affect VIA's ability to manage its data and inventory, procure parts or supplies or produce, sell, deliver and service its electric powertrain solutions, adequately protect its intellectual property or achieve and maintain compliance with, or realize available benefits under, applicable laws, regulations and contracts. VIA cannot be sure that these systems upon which it relies, including those of its third-party vendors or suppliers, will be effectively implemented, maintained or expanded as planned. If VIA does not successfully implement, maintain or expand these systems as planned, its operations may be disrupted, its ability to accurately and timely report its financial results could be impaired, and deficiencies may arise in its internal control over financial reporting, which may impact VIA's ability to certify its financial results. Moreover, VIA's proprietary information or intellectual property could be compromised or misappropriated and its reputation may be adversely affected. If these systems do not operate as VIA expects them to, VIA may be required to expend significant resources to make corrections or find alternative sources for performing these functions.

A significant cyber incident could impact production capability, harm VIA's reputation, cause VIA to breach its contracts with other parties or subject VIA to regulatory actions or litigation, any of which could materially affect

VIA's business, prospects, financial condition and operating results. In addition, VIA's insurance coverage for cyberattacks may not be sufficient to cover all the losses it may experience as a result of a cyber incident.

VIA also collects, stores, transmits and otherwise processes customer, driver and employee and others' data as part of its business and operations, which may include personal data or confidential or proprietary information.

VIA also works with partners and third-party service providers or vendors that collect, store and process such data on its behalf and in connection with its products and services. There can be no assurance that any security measures that VIA or its third-party service providers or vendors have implemented will be effective against current or future security threats. While VIA has developed systems and processes designed to protect the availability, integrity, confidentiality and security of its and its customers', drivers', employees' and others' data, VIA's security measures or those of its third-party service providers or vendors could fail and result in unauthorized access to or disclosure, acquisition, encryption, modification, misuse, loss, destruction or other compromise of such data. If a compromise of such data were to occur, VIA may become liable under its contracts with other parties and under applicable law for damages and incur penalties and other costs to respond to, investigate and remedy such an incident. Laws in all 50 states require VIA to provide notice to customers, regulators, credit reporting agencies and others when certain sensitive information has been compromised as a result of a security breach. Such laws are inconsistent and compliance in the event of a widespread data breach could be costly. Depending on the facts and circumstances of such an incident, these damages, penalties, fines and costs could be significant. Such an event could harm VIA's reputation and result in litigation against VIA. Any of these results could materially adversely affect VIA's business, prospects, financial condition and operating results.

Any unauthorized control or manipulation of the information technology systems in VIA's electric commercial vehicles could result in loss of confidence in VIA and its electric commercial vehicles and harm VIA's business.

VIA's electric commercial vehicles contain complex information technology systems and built-in data connectivity to accept and install periodic remote updates to improve or update functionality. VIA has designed, implemented and tested security measures intended to prevent unauthorized access to its information technology networks, its electric commercial vehicles and related systems. However, hackers may attempt to gain unauthorized access to modify, alter and use such networks, trucks and systems to gain control of or to change VIA's electric commercial vehicles' functionality, user interface and performance characteristics, or to gain access to data stored in or generated by the vehicles. Future vulnerabilities could be identified and VIA's efforts to remediate such vulnerabilities may not be successful. Any unauthorized access to or control of VIA's electric commercial vehicles, or any loss of customer data, could result in legal claims or proceedings and remediation of such problems could result in significant, unplanned capital expenditures. In addition, regardless of their veracity, reports of unauthorized access to VIA's electric commercial vehicles or data, as well as other factors that may result in the perception that VIA's electric commercial vehicles or data are capable of being "hacked," could negatively affect VIA's brand and harm its business, prospects, financial condition and operating results.

VIA does not currently have a third-party retail product distribution network.

Third-party dealer networks are the traditional method of vehicle sales distribution. However, VIA does not currently have a traditional third-party retail product distribution network and may sell directly to commercial fleet operators and fleet management companies. If VIA does not engage a traditional third-party retail product distribution network, it will have to build an in-house sales and marketing function at VIA, which may be expensive and time consuming. In addition, if VIA does not engage a traditional third-party retail product distribution network, the lack of such network may result in lost opportunities to generate sales and could limit VIA's ability to grow. If VIA uses only an in-house sales and marketing team and such team is not effective, VIA's results of operations and financial conditions could be adversely affected.

VIA's insurance strategy may not be adequate to protect itself from all business risks.

In the ordinary course of business, VIA may be subject to losses resulting from product liability, accidents, acts of God and other claims against VIA, for which VIA may have limited or no insurance coverage. VIA may not maintain as much insurance coverage as other original equipment manufacturers ("OEMs") do, and in some cases, VIA may not maintain any at all. Additionally, the policies that VIA does have may include significant deductibles, and VIA cannot be certain that its insurance coverage will be sufficient to cover all future claims against VIA. A loss that is uninsured or exceeds policy limits may require VIA to pay substantial amounts, which could adversely affect VIA's business, prospects, financial condition and operating results.

VIA does not currently offer leasing and financing options for its vehicles, and it may be unable to offer attractive leasing and financing options in the future, which would adversely affect consumer demand for its vehicles. In addition, offering leasing and financing options to customers in the future could expose VIA to credit risk.

VIA currently does not have any arrangements in place to provide leasing and financing options for the purchases of its vehicles and cannot provide any assurance that may have leasing and financing options available for its potential customers in the future. VIA believes that the ability to offer attractive leasing and financing options is particularly relevant to customers in the vehicle market in which it competes, and if it is unable to offer its customers an attractive option to finance the purchase of or lease its future vehicles, such failure could substantially reduce the population of potential customers and decrease demand for its vehicles and adversely affect its results of operation and financial condition.

If there is inadequate access to charging stations, VIA's business could be materially and adversely affected.

Demand for VIA's vehicles will depend in part on the availability of charging infrastructure as its vehicles will require the use of charging stations to recharge its batteries. VIA has not built, and currently does not plan to build, any commercial charging infrastructure, and VIA's customers will have to rely on self-owned and publicly accessible charging infrastructure. While the prevalence of public charging stations has been increasing, they are significantly less widespread than gas stations. In addition, many of VIA's potential customers do not currently have a sufficient self-owned charging infrastructure in place to meet their individual needs or expectations. As a result, some potential customers may choose not to purchase VIA's vehicles because of the lack of a more widespread public charging infrastructure at the time of sale or the cost of installing a sufficient self-owned charging infrastructure, adversely affecting VIA's growth, results of operation and financial condition.

Risks Associated with Acquiring and Operating a Business Outside of the United States and in China

The Chinese government may exert substantial interventions and influence at any time over the manner in which our post-merger company must conduct its business activities in the PRC, which could result in a material adverse change in its operations, significantly limit or completely hinder Ideanomics' or the post-merger company's ability to offer or continue to offer securities to investors, and cause the value of Ideanomics' or the post-merger company's shares of common stock to significantly decline or be worthless.

The Chinese government has exercised and continues to exercise substantial control over virtually every sector of the Chinese economy through regulation and state ownership. Ideanomics' or the post-merger company's ability to operate in China may be harmed by changes in PRC laws and regulations, including those relating to listing companies offshore, taxation, environmental regulations, land use rights, property and other matters. The central or local governments of these jurisdictions may impose new, stricter regulations, or stricter interpretations of existing regulations, that would require additional expenditures and efforts on Ideanomics or the post-merger company to ensure our compliance with such regulations or interpretations. Accordingly, government actions in the future, including any decision not to continue to support recent economic reforms and to return to a more centrally planned economy or regional or local variations in the implementation of economic policies, could have a significant effect on economic conditions in China or particular regions thereof, and could require Ideanomics or the post-merger company to divest any interest we then hold in Chinese properties.

For example, the Chinese cybersecurity regulator announced on July 2, 2021, that it had begun an investigation of Didi Global Inc. (NYSE: DIDI) and two days later ordered that the company's app be removed from smartphone app stores. On July 24, 2021, the General Office of the Communist Party of China Central Committee and the General Office of the State Council jointly released the Guidelines for Further Easing the Burden of Excessive Homework and Off-campus Tutoring for Students at the Stage of Compulsory Education (which were immediately effective upon being released), pursuant to which foreign investment in curriculum-based tutoring institutions via mergers and acquisitions, entrusted operations, franchise development, and variable interest entities became prohibited.

As such, at any time, the business of Ideanomics or the post-merger company may be subject to various government and regulatory interferences. Ideanomics or the post-merger company could be subject to regulation by various different political and regulatory entities, including various local and municipal agencies and government sub-divisions. In addition to additional expenditures and efforts on compliance, the operations of Ideanomics or the post-merger company could be adversely affected, directly or indirectly, by existing or future laws and regulations relating to its business or industry, which could result in a material adverse change in their operations and the value of Ideanomics' or the post-merger company's shares of common stock.

Furthermore, as of the date of this proxy statement/prospectus, given recent draft rules by the CSRC indicating an intent to exert more oversight and control over offerings that are conducted overseas (for more details, see the section titled "*The approval of the CSRC, CAC or other Chinese regulatory agencies may be required in connection with this Offering under Chinese law in the future*", beginning on page 52. Although neither Ideanomics nor the post-merger company is currently required to obtain any permissions from the PRC central government or its local departments and agencies, and even though neither Ideanomics nor the post-merger company has been prohibited from continuing to list on a U.S. exchange, this offering would be adversely affected by such extended control if the PRC government sought to enforce its rules beyond what has been provided under written laws and regulations (or any laws or regulations adopted in the future) or there is change to the interpretation of such rules. Ideanomics cannot assure investors that any permission that might in the future be required from the PRC government will ultimately be granted to Ideanomics or the post-merger company, and even if such permission is granted, we cannot guarantee that such permission will not later be denied or rescinded, any of which could significantly limit or completely hinder Ideanomics' or the post-merger company's ability to offer or continue to offer its securities to investors and cause the value of Ideanomics' or the post-merger company's securities to significantly decline or be worthless.

Uncertainties with respect to the PRC legal system and changes in laws and regulations in China could adversely affect our operations in China.

The activities of the post-merger company's subsidiaries in China are governed by PRC laws and regulations. The PRC legal system is a civil law system based primarily on written statutes. Unlike in the common law system, prior court decisions and government actions under the civil law system may be cited for reference, but have limited precedential value. In addition, any new PRC laws and regulations or changes to existing PRC laws and regulations related to foreign investment in China could affect the specific business activities of the post-merger company's subsidiaries in China or the general business environment in China, either of which could adversely impact our business.

From time to time, the post-merger company's Chinese subsidiaries have had to resort to administrative and court proceedings to enforce its legal rights. Any administrative and court proceedings in China may be protracted, resulting in substantial costs and diversion of resources and management attention. Since Chinese administrative and court authorities have significant discretion in interpreting and implementing statutory provisions and contractual terms, it may be more difficult to evaluate the probable outcome of administrative and court proceedings and the level of legal protection enjoyed our subsidiaries in China than in more developed legal systems. These uncertainties may impede the ability of the post-merger company's Chinese subsidiaries to enforce the contracts they have entered into, and could materially and adversely affect their business and results of operations.

Furthermore, the PRC legal system is based, in part, on government policies and internal rules, some of which are not published on a timely basis or at all, and which may have retroactive effect. As a result, the post-merger company's subsidiaries in China may not be aware of a potential violation of any of these policies and rules until some time after such violation has already occurred. Such unpredictability towards the post-merger company's Chinese subsidiaries' contractual, property and procedural rights could adversely affect their business and impede their ability to continue operations.

The approval of the CSRC, CAC or other Chinese regulatory agencies may be required in connection with this Offering under Chinese law in the future.

On December 24, 2021, the CSRC released two new regulations in draft form: the Provisions of the State Council on the Administration of Overseas Securities Offering and Listing by Domestic Companies (for Public Comments) ("Draft CSRC Provisions") and the Administrative Measures for the Filing of Overseas Securities Offering and Listing by Domestic Companies (for Public Comments) (together with the Draft CSRC Provisions, the "New Rules for Overseas Securities Offering and Listing"). The New Rules for Overseas Securities Offering and Listing requires companies incorporated in Mainland China and so-called "red-chip" companies (i.e., companies not incorporated in Mainland China but whose assets and management are primarily in or of Mainland China) who intend to list or offer securities on overseas exchanges (i.e., in the case of mainland Chinese companies, those seeking a "Direct Offering," or in the case of "red-chip" companies, those seeking an "Indirect Offering" on exchanges outside of Mainland China) to complete a filing with the CSRC within three business days upon filing for such Direct/Indirect Offering with the foreign stock market. Specifically, the New Rules for Overseas Securities Offering and Listing provide that if any of the following conditions are met, the listing or offering will be deemed an Indirect Offering for purposes of this regulation: (i) the total assets, net assets, revenues or profits of the domestic Chinese operating entities of the issuer in the most recent accounting year account for more than 50% of the corresponding figure in the issuer's audited consolidated financial statements for the same period; and/or (ii) the senior managers in charge of the business operations and management of the issuer are mostly Chinese citizens or are domiciled in China, and the main places of business are located in China or main business activities are conducted in China.

Currently, the New Rules for Overseas Securities Offering and Listing are technically only draft regulations, which are still subject to public comments and which are not yet legally binding. However, if the New Rules for Overseas Securities Offering and Listing were to be enacted as they are currently drafted, we understand that we would not be required to complete a CSRC filing in connection with this offering, given that our offering does not fall into the regulatory definitions of either a Direct Offering or an Indirect Offering. Specifically, as the post-merger company is not incorporated in Mainland China, this offering will not be deemed a Direct Offering. Likewise, although a material component of our overall business operations are located in China, (i) the total assets, net assets, revenues or profits of our PRC subsidiaries in the most recent fiscal year account for less than 50% of our audited consolidated financial statements from the same period; and (ii) all senior managers in charge of business operations and management of the post-merger company and reporting to the CEO are US citizens, and are located outside of China, and our major business is carried on outside of China. Accordingly, we understand that this offering is unlikely to be deemed an Indirect Offering.

Additionally, on December 28, 2021, the CAC and certain other regulatory authorities jointly promogulated the revised Cybersecurity Review Measures, taking effect on February 15, 2022. Per the revised Cybersecurity Review Measures, any company incorporated in the PRC that applies to list its securities outside of the PRC would be required to apply to the Cybersecurity Review Office of the CAC to conduct certain cybersecurity review procedures, if such company is in possession of the personal information of more than 1,000,000 users. Prior to this development, on November 14, 2021, the draft Administrative Regulations on Network Data Security issued by the CAC had previously proposed this same proposed requirement and specified that cybersecurity review procedures would be required if any merger, restructuring or spin-off affects or might affect state security and that involves an Internet platform operator that controls a "large amount of data resources" concerning state security, economic development or public interests.

After the revised Cybersecurity Review Measures take effect on February 15, 2022, and if the draft Administrative Regulations on Network Data Security were to be enacted as currently drafted, then we understand that we would not be subject to cybersecurity review procedures with China's CAC in connection with this offering, given that: (i) our products and services are offered to institutional customers, and not directly to individual users; (ii) the personal information of individuals that we process in the course of our business operations involves much less than 1,000,000 users; and (iii) the data that is processed in the course of our business operations does not implicate state security, economic development or public interests, and therefore would be unlikely to be deemed as important data to the CAC and other PRC government authorities.

Taken together, even if recently proposed draft Chinese regulations were to be officially implemented in their current form, we understand that we would not be impacted by their proposed CSRC or CAC approval requirements in connection with this offering. However, there remains significant uncertainties as to the enactment, interpretation and implementation of regulatory requirements related to the CSRC filing, data security in China and consent, approval and license requirements, which could possibly be imposed by PRC authorities, including but not limited to the CSRC and CAC, which could potentially be implicated by the operations of our Chinese subsidiaries or the issuance of securities to non-PRC investors.

Furthermore, if any potential consent, approval and license requirements are implicated under future changes to applicable laws, regulations, or interpretations, Ideanomics, the post-merger company or our PRC subsidiaries might be required to obtain such consents, approvals and licenses from PRC authorities in the future. Failing to comply with any such requirements could result in sanctions from competent PRC regulatory authorities. In such circumstances, these PRC regulatory authorities could impose fines and penalties on our PRC subsidiaries, limit our operations in China, or take other actions that could have a material adverse effect on our business, financial condition, results of operations and prospects, as well as the trading price of our ordinary shares. The PRC regulatory agencies also may take actions requiring Ideanomics or the post-merger company, or making it advisable for Ideanomics or the post-merger company, to halt this offering before settlement and delivery of the securities we are registering for sale. Consequently, if any investors engage in market trading or other activities in anticipation of and prior to settlement and delivery, such investors do so at the risk that settlement and delivery may not occur. Any uncertainties and/or negative publicity regarding such an approval requirement could have a material adverse effect on the trading price of the post-merger company's shares of common stock. Uncertainties concerning future actions by the Chinese government could cause the value of the post-merger company's shares of common stock to significantly decline or become worthless, which could result in substantial losses to investors.

Foreign exchange regulations and governmental control of currency conversion may limit our ability to utilize cash balances effectively and affect the value of our investment.

The PRC government imposes controls on the convertibility of the Renminbi into foreign currencies and, in certain cases, the remittance of currency out of China. Under existing PRC foreign exchange regulations, payments of current account items, including profit distributions, interest payments and trade and service-related foreign exchange transactions, can be made in foreign currencies without the prior approval of SAFE by completing certain procedural requirements. Specifically, under China's existing exchange restrictions, without the prior approval of SAFE, cash generated from the operations of the post-merger company's PRC subsidiaries in China may be used to pay dividends to their shareholders (including the post-merger company). However, approval from or registration with appropriate government authorities is required where Renminbi is to be converted into foreign currency and remitted out of China to pay capital expenses such as the repayment of loans denominated in foreign currencies. As a result, we are required to obtain SAFE approval to use cash generated from the operations of our PRC subsidiaries to pay off their respective debts in currencies other than Renminbi owed to entities outside China, or to make other capital expenditure payments outside China in a currency other than Renminbi. The PRC government could potentially, at its discretion, restrict access to foreign currencies for current account transactions in the future. If the PRC government's foreign exchange control system prevents us from obtaining sufficient foreign currencies to satisfy our foreign currency demands, we may not be able to pay dividends in foreign currencies to relevant shareholders of such PRC subsidiaries.

PRC regulations relating to dividends may restrict the ability of our PRC subsidiaries to make payments to us, which may have adverse effect on our ability to conduct our business.

Under PRC laws and regulations, our PRC subsidiaries (which are each "wholly foreign-owned enterprises" incorporated in Mainland China) are only permitted to pay dividends out of their respective accumulated profits, as determined in accordance with PRC accounting standards and regulations. In addition, prior to distribution of any dividends, the post-merger company's subsidiaries in China are each required to compensate their past losses with after-tax profits each year, if any, and then set aside at least 10% of their after-tax profits each year to fund a statutory reserve until such reserve reaches 50% of the subsidiary's total registered capital. Additionally, if our PRC subsidiaries incur debt on their own behalf in the future, the instruments governing their debt may restrict their ability to pay dividends or make other distributions to us.

Any limitation on the ability of our PRC subsidiaries to pay dividends or make other distributions to us could adversely limit our ability to grow, make investments or acquisitions that could be beneficial to our business, pay dividends, or otherwise fund and conduct our business.

We might be subject to the National Security Law in the future, in light of the PRC government's current and rapidly changing policies regarding PRC and Hong Kong businesses operations.

On June 30, 2020, the PRC government's National People's Congress Standing Committee passed a national security law (the "National Security Law") for the Hong Kong Special Administrative Region ("Hong Kong"). The National Security Law criminalizes, and otherwise gives the PRC government broad powers to find unlawful, a broad variety of political crimes, including separatism and collusion with a foreign country or with external elements to endanger national security in relation to Hong Kong. Under the National Security Law, the PRC government can, at its own discretion or the Hong Kong government's discretion, exercise jurisdiction over alleged violations of the law and prosecute and adjudicate cases in mainland China. The law can apply to alleged violations committed by anyone, anywhere in the world, including in the United States.

We do not believe that Ideanomics or the post-merger company violate or have violated the National Security Law, but in light of the PRC government's current and rapidly changing policies regarding PRC and Hong Kong businesses operations, Ideanomics' or the post-merger company's business operations could be subject to the National Security Law in the future, if the PRC or Hong Kong government desires this outcome.

We are subject to a variety of laws and regulations in the PRC regarding privacy, data security, cybersecurity, and data protection. We may be liable for improper use or appropriation of personal information provided by our customers.

We are subject to a variety of laws and regulations in the PRC regarding privacy, data security, cybersecurity, and data protection. These laws and regulations are continuously evolving and developing. The scope and interpretation of the laws that are or may be applicable to us are often uncertain and may be conflicting, particularly with respect to foreign laws. In particular, there are numerous laws and regulations regarding privacy and the collection, sharing, use, processing, disclosure, and protection of personal information and other user data. Such laws and regulations often vary in scope, may be subject to differing interpretations, and may be inconsistent among different jurisdictions.

We expect to obtain information about various aspects of our operations as well as regarding our employees and third parties. We also maintain information about various aspects of our operations as well as regarding our employees. The integrity and protection of our customer, employee and company data is critical to our business. Our customers and employees expect that we will adequately protect their personal information. We are required by applicable laws to keep strictly confidential the personal information that we collect, and to take adequate security measures to safeguard such information.

The PRC Criminal Law, as amended by its Amendment 7 (effective on February 28, 2009) and Amendment 9 (effective on November 1, 2015), prohibits institutions, companies and their employees from selling or otherwise illegally disclosing a citizen's personal information obtained during the course of performing duties or providing services or obtaining such information through theft or other illegal ways.

The PRC regulatory requirements regarding cybersecurity are constantly evolving. For instance, various regulatory bodies in China, including the CAC, the Ministry of Public Security and the SAMR, have enforced data privacy and protection laws and regulations with varying and evolving standards and interpretations.

In November 2016, the Standing Committee of China's National People's Congress passed China's first Cybersecurity Law ("CSL"), which became effective in June 2017. The CSL is the first PRC law that systematically lays out the regulatory requirements on cybersecurity and data protection, subjecting many previously under-regulated or unregulated activities in cyberspace to government scrutiny. The legal consequences of violation of the CSL include penalties of warning, confiscation of illegal income, suspension of related business, winding up for rectification, shutting down the websites, and revocation of business license or relevant permits. Additionally, the latest version of the Civil Code of the PRC (issued by the PRC National People's Congress on May 28, 2020 and effective from January 1, 2021) provides the primary legal basis for privacy and personal information infringement claims under Chinese civil laws. PRC regulators, including the CAC, MIIT, and the Ministry of Public Security have been increasingly focused on regulation in the areas of data security and data protection. On June 10, 2021, the Standing Committee of the NPC promulgated the PRC Data Security Law, which took effect on September 1, 2021. The Data Security Law also sets forth the data security protection obligations for entities and individuals handling personal data, including that no entity or individual may acquire such data by stealing or other illegal means, and the collection and use of such data should not exceed the necessary limits.

The Standing Committee of the NPC issued the Personal Information Protection Law in August 2021, which became effective in November 2021. The Personal Information Protection Law imposes stringent compliance management requirements on personal information processors, including but not limited to (1) adopting security measures such as internal management systems, encryption and anonymization techniques, etc.; (2) in the case of personal information processors handling personal information that exceeds certain amounts prescribed by the CAC, a specially appointed responsible person for personal information processing is required; (3) conducting periodic compliance audits; and (4) conducting risk evaluations and recording relevant results prior to processing any sensitive personal information or transferring personal information outside of China. Where PRC authorities identify any unlawful personal information processing, they are authorized to issue warnings, order "corrections" (i.e., mandatory rectification measures aimed at bringing the unlawful processing in line with PRC law or to cease such processing), confiscate any unlawful gains, and/or order suspension or cessation of relevant activities that illegally process personal information.

These laws and regulations evolve frequently, and their scope may continually change, through new legislation, amendments to existing legislation and changes in enforcement practices. Ideanomics or the post-merger company have incurred, and will continue to incur, expenses in an effort to comply with privacy, data protection and information security standards and protocols imposed by laws, regulations, industry standards or contractual obligations. Changes in laws or regulations relating to privacy, data protection and information security, particularly any new or modified laws or regulations that require enhanced protection of certain types of data or new obligations with regard to data retention, transfer or disclosure, could greatly increase the cost to Ideanomics or the post-merger company and PRC subsidiaries of providing offerings, require significant changes to their operations or even prevent them from providing certain offerings in jurisdictions in which Ideanomics or the post-merger company and PRC subsidiaries currently operate or may operate in the future.

In April 2020, the CAC and certain other PRC regulatory authorities promulgated the Cybersecurity Review Measures, which became effective in June 2020. Pursuant to the Cybersecurity Review Measures, operators of critical information infrastructure ("CIIOs") must pass a cybersecurity review when purchasing network products and services which do or may affect national security. On December 28, 2021, the CAC and other regulatory authorities published the revised Cybersecurity Review Measures, which will take effect on February 15, 2022 and replace the current Cybersecurity Review Measures. Under the revised Cybersecurity Review Measures, the so-called "cybersecurity review" procedure no longer applies only to CIIOs but also to: (a) any party whose data processing activities affect or may affect issues of national security, even if such party is not a CIIO; and (b) any company that possesses the personal information of more than 1,000,000 mainland China users and intends to conduct a stock listing outside of the PRC. Prior to this development, on November 14, 2021, the draft Administrative Regulations on Network Data Security issued by CAC had already proposed that cybersecurity review procedures would be required in cases where: (a) any merger, restructuring or spin-off affects or might affect state security and involves an Internet platform operator that controls a "large amount of data resources" concerning state security, economic development or public interest; (b) any listing outside the country involving a company with personal information of more than 1 million users.

As of the date of this proxy statement/prospectus, we understand that once the revised Cybersecurity Review Measures take effect and if the draft Administrative Regulations on Network Data Security were to be enacted as currently drafted, Ideanomics or the post-merger company would not be subject to cybersecurity review procedures with China's CAC in connection with this offering, given that: (i) our products and services are offered to institutional customers, and not directly to individual users; (ii) the personal information of individuals that we process in the course of our business operations involves much less than 1,000,000 users; and (iii) the data that is processed in the course of our business operations does not have implicate state security, economic development or public interests, and therefore would be unlikely to be deemed as important data to the CAC and other PRC government authorities.

On October 29, 2021, the CAC released a draft of the Measures concerning the Security Assessment for Cross-Border Data Transfer ("Draft Security Assessment Measures"). The Draft Security Assessment Measures set out a relatively broad applicability of the need to conduct certain "Security Assessment" procedures under PRC law. In particular, any data processor who: (a) transfers important data offshore; (b) processes personal information of more than one million data subjects and transfers any personal information offshore; (c) transfers abroad, on a cumulative basis, personal information of more than 100,000 data subjects or sensitive personal information of more than 10,000 data subjects; or (d) other situations when the CAC deems a Security Assessment is needed. Although currently only released in draft form, these envisioned requirements could become legally binding in the future. As of the date of this proxy statement/prospectus, we understand that if the Draft Security Assessment Measures were to be enacted as currently drafted, Ideanomics or the post-merger company would not be subject to Security

Assessment requirements with China's CAC, given that: (i) the data that is processed in the course of our business operations does not have implicate "important data"; (ii) our current business does not require transfer personal information of more than 100,000 data subjects or sensitive information of more than 10,000 data subjects offshore; and (iii) the personal information of individuals that we process in the course of our business operations involves much less than 1,000,000 users.

Notwithstanding the above, the interpretation and application of PRC laws and regulations involving data security, privacy protection, and cybersecurity are still subject to many uncertainties and are evolving. We cannot assure that relevant PRC governmental authorities will not interpret or implement the laws or regulations in ways that negatively affect Ideanomics or the post-merger company and PRC subsidiaries. Ideanomics or the post-merger company and PRC subsidiaries could also become subject to additional or new laws and regulations regarding data security, privacy protection, and cybersecurity matters in the future.

Further, if currents drafts and any interpretations of cybersecurity review and Security Assessment related PRC laws and regulations were to mandate the completion of cybersecurity review and/or Security Assessment procedures (or other specific actions that need to be completed by Ideanomics or the post-merger company or our PRC subsidiaries), we could face uncertainties as to whether such procedures could be completed in a timely manner, or at all. Any inability to complete such procedures when needed could make it unfeasible for Ideanomics or the post-merger company and PRC subsidiaries to continue business operations in China and even face sanctions by competent PRC regulatory authorities.

The M&A Rules and certain other PRC regulations establish complex procedures for some acquisitions of Chinese companies by foreign investors, which could make it more difficult for Ideanomics or the post-merger company to pursue growth through acquisitions in China.

The Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the "M&A Rules", adopted by six PRC regulatory agencies in 2006 and amended in 2009, and certain other regulations and rules concerning mergers and acquisitions established additional procedures and requirements that could make mergers and acquisition activities by foreign investors more time consuming and complex in China. Moreover, the Anti-Monopoly Law of the PRC requires that the Ministry of Commerce of the PRC (the "MOFCOM") be notified in advance of any mergers and acquisitions if certain thresholds are surpassed.

In addition, the Circular of the General Office of the State Council on the Establishment of Security Review System for the Merger and Acquisition of Domestic Enterprises by Foreign Investors, issued in February 2011 and effective in March 2011, and the Rules on Implementation of Security Review System for the Merger and Acquisition of Domestic Enterprises by Foreign Investors, issued by the MOFCOM in August 2011 and effective in September 2011, specify that mergers and acquisitions by foreign investors that raise "national defense and security" concerns and mergers and acquisitions through which foreign investors may acquire de facto control over domestic enterprises that raise "national security" concerns are subject to strict review by the MOFCOM, and the rules prohibit any activities attempting to bypass a security review, including by structuring the transaction through a proxy or contractual control arrangement. The Measures on Foreign Investment Security Review released by China's National Development and Reform Commission and the MOFCOM in December 2020 ("Measures"), which became effective in January 2021, further stated that foreign investors that consummate an investment prior to completing the security review may be ordered to unwind the investment, may receive a "bad credit" mark in China's developing "national credit rating system" and receive unspecified "other punishment implemented in accordance with relevant national regulations." Receiving a "bad credit" mark may adversely and materially affect Ideanomics' or the post-merger company's ability to conduct its operations and realize its plans for business expansion.

Ideanomics, the post-merger company and PRC subsidiaries may intend to grow their businesses by acquiring complementary businesses. Complying with the requirements of the above-mentioned regulations and other relevant rules to complete such transactions could be time consuming, and any required approval processes, including obtaining approval from the MOFCOM or its local counterparts, may delay or inhibit Ideanomics' or the post-merger company's ability to complete such transactions, which could affect the ability of Ideanomics, the post-merger company, and the PRC subsidiaries to expand or maintain its market share.

Although the audit report included in this proxy statement/prospectus by reference is prepared by auditors that are currently subject to inspections by the Public Company Accounting Oversight Board (the "PCAOB"), there is no guarantee that future audit reports will be prepared by auditors that are subject to inspections by the PCAOB and, as such, future investors may be deprived of such inspections, which could result in limitations or restrictions to our access of the U.S. capital markets. Furthermore, trading in our securities may be prohibited under the Holding Foreign Companies Accountable Act or the Accelerating Holding Foreign Companies Accountable Act if the SEC subsequently determines our audit work is performed by auditors that the PCAOB is unable to inspect or investigate completely, and as a result, U.S. national securities exchanges, such as the Nasdaq, may determine to delist our securities.

As an auditor of companies that are registered with the SEC and publicly traded in the United States and a firm registered with the PCAOB, our auditor is required under the laws of the United States to undergo regular inspections by the PCAOB to assess their compliance with the laws of the United States and professional standards. Although we have substantial operations within China, a jurisdiction where the PCAOB is currently unable to conduct inspections without the approval of the Chinese government authorities, our auditor is currently inspected fully by the PCAOB.

Inspections of other auditors conducted by the PCAOB outside China have at times identified deficiencies in those auditors' audit procedures and quality control procedures, which may be addressed as part of the inspection process to improve future audit quality. The lack of PCAOB inspections of audit work undertaken in China prevents the PCAOB from regularly evaluating auditors' audits and their quality control procedures. As a result, to the extent that any component of our auditor's work papers are or become located in China, such work papers will not be subject to inspection by the PCAOB. As a result, investors would be deprived of such PCAOB inspections, which could result in limitations or restrictions to our access of the U.S. capital markets.

As part of a continued regulatory focus in the United States on access to audit and other information currently protected by national law, in particular China's, in June 2019, a bipartisan group of lawmakers introduced bills in both houses of the U.S. Congress which, if passed, would require the SEC to maintain a list of issuers for which PCAOB is not able to inspect or investigate the audit work performed by a foreign public accounting firm completely. The proposed Ensuring Quality Information and Transparency for Abroad-Based Listings on our Exchanges ("EQUITABLE") Act prescribes increased disclosure requirements for these issuers and, beginning in 2025, the delisting from U.S. national securities exchanges such as the Nasdaq of issuers included on the SEC's list for three consecutive years. It is unclear if this proposed legislation will be enacted. On May 20, 2020, the U.S. Senate passed the Holding Foreign Companies Accountable Act (the "HFCA Act"), which includes requirements for the SEC to identify issuers whose audit work is performed by auditors that the PCAOB is unable to inspect or investigate completely because of a restriction imposed by a non-U.S. authority in the auditor's local jurisdiction. The U.S. House of Representatives passed the HFCA Act on December 2, 2020, and the HFCA Act was signed into law on December 18, 2020. Furthermore, on June 22, 2021, the U.S. Senate passed the Accelerating Holding Foreign Companies Accountable Act (the "AHFCA Act"), which, if enacted, would amend the HFCA Act and require the SEC to prohibit an issuer's securities from trading on any U.S. stock exchanges if its auditor is not subject to PCAOB inspections for two consecutive years instead of three. On September 22, 2021, the PCAOB adopted a final rule implementing the HFCA Act, which provides a framework for the PCAOB to use when determining, as contemplated under the HFCA Act, whether the PCAOB is unable to inspect or investigate completely registered public accounting firms located in a foreign jurisdiction because of a position taken by one or more authorities in that jurisdiction. The SEC adopted rules to implement the AHFCA Act and, pursuant to the AHFCA Act, the PCAOB has issued its report notifying the SEC of its determination that it is unable to inspect or investigate completely accounting firms headquartered in mainland China or Hong Kong.

Under the HFCA Act, our securities may be prohibited from trading on the Nasdaq or other U.S. stock exchanges if our auditor is not inspected by the PCAOB for three consecutive years, and this ultimately could result in our shares of common stock being delisted. While we understand that there has been dialogue among the CSRC, the SEC and the PCAOB regarding the inspection of PCAOB-registered accounting firms in China, there can be no assurance that we will be able to comply with requirements imposed by U.S. regulators. Delisting of our common stock would force holders of our shares of common stock to sell their shares. The market price of our shares of common stock could be adversely affected as a result of anticipated negative impacts of these executive or legislative actions upon, as well as negative investor sentiment towards, companies with operations in China that are listed in the United States, regardless of whether these executive or legislative actions are implemented and regardless of our actual operating performance.

Uncertainties with respect to the PRC legal system could adversely affect our liquidity.

The PRC legal system is based on statutes. Prior court decisions may be cited for reference but have limited precedential value. Since 1979, PRC legislation and regulations have significantly enhanced the protections afforded to various forms of foreign investments in China. However, China has not developed a fully integrated legal system and recently enacted laws and regulations may not sufficiently cover all aspects of economic activities in China. Because these laws and regulations are relatively new, and because of the limited volume of published decisions and their nonbinding nature, the interpretation and enforcement of these laws and regulations involve uncertainties. In addition, the PRC legal system is based in part on government policies and internal rules (some of which are not published on a timely basis or at all) that may have a retroactive effect. As a result, we may not be aware of our violation of these policies and rules until sometime after the violation. In addition, any litigation in China may be protracted and result in substantial costs and diversion of resources and management attention.

PRC regulation of loans and direct investment by offshore holding companies to PRC entities may delay or prevent us from using the proceeds of this offering to make loans or additional capital contributions to our PRC subsidiaries, which could materially and adversely affect our liquidity and our ability to fund and expand our business.

Governmental control of currency conversion may limit Ideanomics and post-merger company's ability to utilize their cash balance effectively and affect the results of operations of PRC subsidiaries.

The PRC government imposes controls on the convertibility of the Renminbi into foreign currencies and, in certain cases, the remittance of currency out of China. Ideanomics receives and the post-merger company may receive a substantial amount of their revenues in Renminbi or, alternatively, to finance their PRC subsidiaries in Renminbi. Under existing PRC foreign exchange regulations, payments of current account items, including profit distributions, interest payments, and trade and service-related foreign exchange transactions, can be made in foreign currencies without prior approval of SAFE by complying with certain procedural requirements. Specifically, under the existing exchange restrictions, without prior approval of SAFE, cash generated from the operations of its PRC subsidiaries in China may be used to pay dividends to its company. However, approval from or registration with appropriate government authorities is required where Renminbi is to be converted into foreign currency and remitted out of China to pay capital expenses such as the repayment of loans denominated in foreign currencies. As a result, Ideanomics or the post-merger company will need to obtain SAFE approval to use the cash generated from the operations of their PRC subsidiaries to pay off their respective debt in a currency other than Renminbi owed to entities outside China, or to make other capital expenditure payments outside China in a currency other than Renminbi. The PRC government may at its discretion restrict access to foreign currencies for current account transactions in the future. If the foreign exchange control system prevents Ideanomics or the post-merger from obtaining such approval or otherwise hinders efficient financial management of the PRC subsidiaries, it may substantially curtail our operations and cause the value of our securities significantly decline or become worthless.

The Chinese government may intervene or influence the operations of Ideanomics' business or the business of the combined company in the territory of PRC at any time, which could result in a material change in our operations and/or the value of our securities.

More than twenty percent of our revenues result from our operations in China. The Chinese government may intervene or influence the operations of Ideanomics' business or the business of the combined company in the territory of PRC at any time, which could result in a material change in our operations and/or the value of our securities. Also, recent statements by the Chinese government have indicated an intent to exert more oversight and control over offerings that are conducted overseas and/or over foreign investment in China-based and Hong Kong-based issuers. Any such action could significantly limit or completely hinder our ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or be worthless.

Other Risks Related to Ideanomics' Business

Ideanomics' business is, and following completion of the merger Ideanomics will continue to be, subject to the risks described above and in Ideanomics' Annual Report on Form 10-K for the fiscal year ended December 31, 2020, as updated by subsequent Quarterly Reports on Form 10-Q, including Ideanomics' Quarterly Report on Form 10-Q for the three months ended September 30, 2021, and Current Reports on Form 8-K, all of which are filed with the SEC and incorporated by reference into this proxy statement/prospectus. See the section titled "*Where You Can Find More Information*" beginning on page 157 for the location of information incorporated by reference in this proxy statement/prospectus.