UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 FORM 10-K

\checkmark	ANNUAL REPORT PURSUANT TO SECTION	N 13 OR 15(d) OF THE SECURITIE	ES EXCHANGE ACT OF 1934	
		For the fiscal year ended Decem		
	TRANSITION REPORT PURSUANT TO SEC			
	For the	ne transition period from	to	
		Commission file number 00: ENERGY FOCUS, IN	NC.	
		(Exact name of registrant as specifie		
	Delaware (State or other jurisdiction of incorporation or or	ganization)	94-3021850 (I.R.S. Employer Identification No.)	
		32000 Aurora Road, Suite Solon, Ohio 44139		
	(Address of principal executive offices, in	ncluding zip code)	
	Reg	istrant's telephone number, including area	ea code: 440.715.1300	
	<u>Title of each class</u> Common stock, par value \$0.0001 per share	Securities registered pursuant to Section Trading symbol(s) EFOI	12(b) of the Act: Name of each exchange on which registere The Nasdaq Stock Market LLC	<u>d</u>
	•	es registered pursuant to Section 12(g) of	-	
Ind	icate by check mark if the registrant is a well-known sea			
Ind	icate by check mark if the registrant is not required to fi	le reports pursuant to Section 13 or 15(d)) of the Act. Yes □ No ☑	
	months (or for such shorter period that the registrant was	1 1	n 13 or 15(d) of the Securities Exchange Act of 1934 during as been subject to such filing requirements for the past 90 o	, ,
	icate by check mark whether the registrant has submitted 32.405 of this chapter) during the preceding 12 months		ile required to be submitted pursuant to Rule 405 of Regula rant was required to submit such files). Yes $oxtime 2$ No $oxtime 2$	ntion S-T
	npany. See the definitions of "large accelerated filer," "a		accelerated filer, a smaller reporting company, or an emerg apany," and "emerging growth company" in Rule 12b-2 of t	
	ge accelerated filer □	Accelerated filer		
	n-accelerated filer	Smaller reporting c		
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	n emerging growth company, indicate by check mark if ounting standards provided pursuant to Section 13(a) of		extended transition period for complying with any new or re	evised financia
	9		t's assessment of the effectiveness of its internal control ov blic accounting firm that prepared or issued its audit report.	
Ind	icate by check mark whether the registrant is a shell con	npany (as defined in Rule 12b-2 of the A	.ct). Yes □ No ☑	
	e aggregate market value of the Company's common sto mpany's most recently completed second fiscal quarter,		y was approximately \$17.4 million as of June 30, 2020, the 6.92 per share.	last day of the
Nui	mber of the registrant's shares of common stock outstand	ding as of March 22, 2021: 3,682,728.		

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement Stockholders are incorporated by reference into Part II	t to be filed with the II of this Report.	Securities and Exchange	e Commission relative	to the registrant's 2021	l Annual Meeting of

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PART I

Forward-Looking Statements

Unless the context otherwise requires, all references to "Energy Focus," "we," "our," "our company," or "the Company" refer to Energy Focus, Inc., a Delaware corporation, and its consolidated subsidiary for the applicable periods, considered as a single enterprise.

This Annual Report on Form 10-K (this "Annual Report") includes statements that express our opinions, expectations, beliefs, plans, objectives, assumptions or projections regarding future events or future results and therefore are, or may be deemed to be, "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These forward-looking statements can generally be identified by the use of forward-looking terminology, including the terms "believes," "estimates," "anticipates," "expects," "feels," "seeks," "forecasts," "projects," "intends," "plans," "may," "will," "should," "could" or "would" or, in each case, their negative or other variations or comparable terminology. These forward-looking statements include all matters that are not historical facts. They appear in a number of places throughout this Annual Report and include statements regarding our intentions, beliefs, or current expectations concerning, among other things, our results of operations, financial condition, liquidity, prospects, growth, strategies, capital expenditures, and the industry in which we operate.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. Although we base these forward-looking statements on assumptions that we believe are reasonable when made in light of the information currently available to us, we caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and industry developments may differ materially from statements made in or suggested by the forward-looking statements contained in this Annual Report. In addition, even if our results of operations, financial condition and liquidity, and industry developments are consistent with the forward-looking statements contained in this Annual Report, those results or developments may not be indicative of results or developments in subsequent periods.

We believe that important factors that could cause our actual results to differ materially from forward-looking statements include, but are not limited to, the risks and uncertainties outlined under "Risk Factors" under Item 1A of this Annual Report and other matters described in this Annual Report and our other filings with the Securities and Exchange Commission (the "SEC") generally. Some of these factors include:

- disruptions and a slowing in the U.S. and global economy and business interruptions experienced by us, our customers and our suppliers as a
 result of the coronavirus ("COVID-19") pandemic and related stay-at-home orders, quarantine policies, school attendance restrictions and
 restrictions on travel, trade and business operations;
- our ability to realize the expected novelty, disinfection effectiveness, affordability and estimated delivery timing of our ultraviolet light disinfection ("UVCD") products and their performance and cost compared to other products;
- our ability to extend our product portfolio into commercial services and consumer products;
- market acceptance of our light-emitting diode ("LED") lighting, control and UVCD technologies and products;
- our need for additional financing in the near term to continue our operations;
- our ability to refinance or extend maturing debt on acceptable terms or at all;
- our ability to continue as a going concern for a reasonable period of time;
- our ability to implement plans to increase sales and control expenses;
- our reliance on a limited number of customers for a significant portion of our revenue, and our ability to maintain or grow such sales levels;
- our ability to add new customers to reduce customer concentration;
- our reliance on a limited number of third-party suppliers and research and development partners, our ability to manage third-party product
 development and obtain critical components and finished products from such suppliers on acceptable terms and of acceptable quality, and the
 impact of our fluctuating demand on the stability of such suppliers;
- our ability to timely and efficiently transport products from our third-party suppliers to our facility by ocean marine channels;
- our ability to increase demand in our targeted markets and to manage sales cycles that are difficult to predict and may span several quarters;
- the timing of large customer orders, significant expenses and fluctuations between demand and capacity as we invest in growth opportunities;

- our ability to compete effectively against companies with lower cost structures or greater resources, or more rapid development efforts, and new competitors in our target markets;
- our ability to successfully scale our network of sales representatives, agents, and distributors to match the sales reach of larger, established competitors:
- our ability to attract and retain qualified personnel, and to do so in a timely manner;
- the impact of any type of legal inquiry, claim or dispute;
- general economic conditions in the United States and in other markets in which we operate or secure products;
- our dependence on military maritime customers and on the levels and timing of government funding available to such customers, as well as the funding resources of our other customers in the public sector and commercial markets;
- business interruptions resulting from geopolitical actions, including war and terrorism, natural disasters, including earthquakes, typhoons, floods and fires, or from health epidemics or pandemics or other contagious outbreaks;
- our ability to respond to new lighting technologies and market trends, and fulfill our warranty obligations with safe and reliable products;
- any delays we may encounter in making new products available or fulfilling customer specifications;
- any flaws or defects in our products or in the manner in which they are used or installed;
- our ability to protect our intellectual property rights and other confidential information, and manage infringement claims by others;
- our compliance with government contracting laws and regulations, through both direct and indirect sale channels, as well as other laws, such as those relating to the environment and health and safety;
- risks inherent in international markets, such as economic and political uncertainty, changing regulatory and tax requirements and currency fluctuations, including tariffs and other potential barriers to international trade;
- our ability to maintain effective internal controls and otherwise comply with our obligations as a public company; and
- our ability to maintain compliance with the continued listing standards of The Nasdaq Stock Market ("Nasdaq").

In light of the foregoing, we caution you not to place undue reliance on our forward-looking statements. Any forward-looking statement that we make in this Annual Report speaks only as of the date of such statement, and we undertake no obligation to update any forward-looking statement or to publicly announce the results of any revision to any of those statements to reflect future events or developments, except as required by law. Comparisons of results for current and any prior periods are not intended to express any future trends or indications of future performance, unless specifically expressed as such, and should only be viewed as historical data. Furthermore, new risks and uncertainties arise from time to time, and it is impossible for us to predict those events or how they may affect us.

Energy Focus®, Intellitube®, Redcap®, EnFocus™, nUVo™, abUV™ and mUVe™ are our registered trademarks. We may also refer to trademarks of other corporations and organizations in this document.

ITEM 1. BUSINESS

Overview

The Company was founded in 1985 as Fiberstars, Inc., a California corporation, and reincorporated in Delaware in November 2006. In May 2007, Fiberstars, Inc. merged with and became Energy Focus, Inc., also a Delaware corporation. Our principal executive offices are located at 32000 Aurora Road, Suite B, Solon, Ohio 44139. Our telephone number is 440.715.1300. Our website address is www.energyfocus.com. Information on our website is not part of this Annual Report.

Energy Focus, Inc. engages primarily in the design, development, manufacturing, marketing and sale of energy-efficient LED lighting systems and controls. We develop, market and sell high quality energy-efficient LED lighting products and controls and have recently announced development of a range of UVCD products. We develop, market and sell high quality LED lighting products and UVCD products and controls in the commercial and military maritime markets ("MMM"). Our mission is to enable our customers to run their facilities and offices with greater energy efficiency, productivity, and human health through advanced LED retrofit and UVCD solutions. Our goal is to be the LED and human-centric lighting ("HCL") technology and market leader for the most demanding applications where performance, quality, value (high quality at an affordable price), environmental impact and health are considered paramount. We specialize in LED lighting retrofit by replacing fluorescent, high-intensity discharge ("HID") lighting and other types of lamps and fixtures in institutional buildings for primarily indoor lighting applications with our innovative, high-quality commercial and military tubular LED ("TLED"), and other LED, UVCD and lighting control products.

In 2020, we continued to build upon the transition and transformation activities started during 2019 in order to stabilize and regrow our business. This transition is exemplified by the following key and significant developments that occurred during 2020:

- We launched our EnFocus[™] platform during the second quarter of 2020 and continued to receive positive feedback from existing, new, and prospective customers. The EnFocus[™] platform offers two immediately available product lines: EnFocus[™] DM, which provides a dimmable lighting solution, and EnFocus[™] DCT, which provides both a dimmable and color tunable lighting solution. EnFocus[™] enables buildings to have dimmable, color tunable and circadian-ready lighting using existing wiring, without requiring any wireless communications, through a relatively simple upgrade with EnFocus[™] switches and tubular LEDs, a more environmentally sustainable solution compared with replacing each lighting fixture.
- In response to the COVID-19 pandemic and an anticipated increase in sanitation and hygiene demand for buildings, facilities and homes, we started developing advanced UVCD products for both consumer as well as the commercial and industrial markets in the first quarter of 2020. We announced three initial UVCD products in October 2020: abUV™ circadian lighting and UVCD air disinfection integrated troffers controlled by the EnFocus™ platform technology; the nUVo™ portable disinfection device for offices and homes; and the mUVe™ autonomous robot designed for surface disinfection.
- We continued to seek additional external funding alternatives and sources to support our growth strategies, plans and initiatives:
 - In January 2020, we completed a registered direct offering for the sale of 688,360 shares of our common stock to certain institutional investors and sold, to the same institutional investors, warrants to purchase up to 688,360 shares of common stock in a concurrent private placement. In addition, we issued warrants to the placement agent to purchase up to 48,185 shares of common stock. Net proceeds from the sale of common stock and warrants were approximately \$2.3 million;
 - In April 2020, we were granted a loan from KeyBank National Association in the amount of approximately \$795 thousand, pursuant to the Paycheck Protection Program under Division A of the Coronavirus Aid, Relief and Economic Security Act;
 - We effected a five-for-one reverse stock split of our common stock in June 2020, to increase the per share trading price of the Company's common stock to satisfy the \$1.00 minimum bid price requirement for continued listing on The Nasdaq Capital Market;
 - In August 2020, we refinanced our previous secured credit facility with new credit facilities secured by our inventory and receivables, which increased our borrowing capacity at a lower blended borrowing cost; and
 - In December 2020, we amended certain terms of our outstanding warrants, which are now reflected as a component of equity.
- Executive management growth James R. Warren joined the Company as Senior Vice President, General Counsel and Corporate Secretary. The addition of Mr. Warren furthers the Company's objectives of strengthening its operational foundation for the Company to be positioned for growth in the LED and UVCD markets.

During 2020, we significantly expanded our engineering capabilities and invested in our intellectual property portfolio for both lighting controls and UVCD products, and we continued to broaden our product distribution network by engaging with new lighting agencies and ESCOs as channel partners and becoming an approved supplier for GSA. We also streamlined our operations by continuing to closely manage all spending done throughout the Company, significantly reducing inventory purchases through more order driven methods, negotiating meaningful cost reductions through strategic sourcing initiatives for our products and services, while reinvesting in primarily sales driven initiatives and efforts.

As a result of these efforts, we were able to significantly reduce operating losses even throughout the COVID-19 pandemic. While commercial sales were down versus 2019 levels, primarily due to impacts of the COVID-19 pandemic, we were able to achieve a 32.5% increase in annual sales over 2019 primarily through MMM sales growth. During 2020, in particular after the pandemic started to impact economic activities and building occupancies, we experienced a slowdown and continuing weakness in commercial sales as customers in the healthcare, education, and commercial and industrial sectors put lighting retrofit projects on hold or delayed order placements in reaction to the impacts of the COVID-19 pandemic. We continue to monitor the impact of the COVID-19 pandemic on our customers, suppliers and logistics providers, and to evaluate governmental actions being taken to curtail and respond to the spread of the virus. Although the specific timing of business recovery from the impact of the COVID-19 pandemic is still difficult to predict, we remain optimistic that as the number of infected cases stabilizes or declines and the vaccinated population grows throughout 2021, facility capital budgets will start unfreezing and building occupancy will rise, and our relaunch and growth efforts will further impact our financial performance in a positive way.

We plan to achieve profitability through developing and launching new, innovative products such as EnFocusTM and our UVCD products, as well as executing on our multi-channel sales strategy that targets key verticals, such as government, healthcare, education and commercial and industrial, complemented by our marketing outreach campaigns and expanding channel

partnerships. We also plan to continue to develop advanced lighting and lighting control applications built upon the EnFocusTM platform and to expand our UVCD product portfolio. In addition, we intend to continue to apply rigorous financial discipline in our decision making, improve business processes and policies, continue strategic sourcing activities and consistently evolve supply chain practices to help accelerate our path towards profitability.

Our Industry

We develop advanced LED retrofit technologies and UVCD product solutions that enable our customers to run their facilities with greater energy efficiency, productivity and employee wellness. We aim to be an LED and HCL technology leader and help create a healthier and safer environment by providing high-quality, energy-efficient, "flicker-free", long-lived tubular and other LED lamps and fixture products, and lighting controls to replace existing linear fluorescent, incandescent, HID lamps and fixtures, as well as offering innovative and impactful UVCD product solutions.

We believe these applications represent a significant portion of the LED lighting market and energy savings potential for our targeted commercial, industrial and MMM markets. We believe that the UVCD market is a growing opportunity and that the focus on health and sanitation will remain even after the COVID-19 pandemic is brought under control.

LED lighting, and particularly LED retrofit of fluorescent and incandescent lights in existing buildings, represents a large and growing market. A 2020 report issued by the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy ("DOE"), entitled "Adoption of Light-Emitting Diodes in Common Lighting Applications" reports that from 2016 to 2018, installations of LED products have increased in all applications, increasing LED penetration to 30% of all general illumination lighting. In 2019, Navigant Research published a report that concluded that LED lighting had at least matched conventional lighting technologies on a range of features, including energy efficiency, lifetime, versatility and color quality, while becoming increasingly cost competitive. This same 2019 report forecasts that installed penetration of LED lamps and luminaires will increase dramatically through 2035, reaching about 84%. The increasing demand for LED lighting is being driven by energy and cost savings, environmental considerations and human health.

Energy consumption can be reduced by over 50% by replacing fluorescent tubes with LED tubes and by another 20-30% (70% to over 80% in total) by utilizing smart lighting technologies, including dimmable TLEDs with ambient light and occupancy sensors. For this reason, building codes are increasingly requiring not only LEDs, but dimmable LEDs. Governments around the world are implementing regulations and standards that incentivize the use of LED lighting, both smart and conventional, to reduce energy consumption and, therefore, carbon dioxide emissions. Our new product research and development investments since April 2019 have been focusing on advanced and smart lighting technologies to capitalize on these trends, and EnFocusTM represents such a control platform that we aim to expand in terms of functionalities, applications and intelligence, going forward.

There is also a growing awareness in the industry of the profound influence lighting can have on human health and well-being. Flicker, which is the modulation of the intensity of LED light at the frequency of the power supply, is well known to cause headaches, eye strain, fatigue, mood triggers and other health issues as well as interfering with electronic equipment such as barcode scanners. The DOE, which has been a leading advocate of the solid-state lighting ("SSL") revolution, presented a report at LightFair in May 2018, supporting these and other findings. For these reasons, there is growing demand for flicker-free LED lighting, particularly in healthcare and education where concentration, learning and wellness are imperative. Energy Focus tubes are UL-certified at less than 1% optical flicker, positioning us as a leading LED manufacturer to capitalize on this growing opportunity.

Smart, or connected, lighting is disrupting the LED industry and providing new opportunities for growth. The DOE defines connected lighting as an LED-based lighting system with integrated sensors and controllers that are networked (either wired or wireless), enabling lighting products within the system to communicate with each other and transmit data. In addition to enabling the intensity and correlated color temperature ("CCT") of lights to respond to ambient light, time of day and the activities of building occupants, connectivity enables building automation functions that extend well beyond lighting. The interference of blue light with human circadian rhythms is well known. This can be alleviated by circadian lighting, or controlled lighting that is able to change the intensity or CCT of the LEDs depending on the time of day in order to emulate natural light. Other examples of smart, or connected, lighting applications include asset tracking, indoor wayfinding, location-based services, air quality, humidity, smoke, fire and carbon monoxide detection, security and surveillance, and Internet-of-Things ("IoT"). Since lighting sockets are ubiquitous throughout buildings and have access to power, tubes, and controls fixtures are ideal vehicles to retrofit these capabilities into existing buildings. According to Market and Research, the global smart lighting market is estimated to grow from \$13.4 billion in 2020 and to \$30.6 billion by 2025, at a compound annual growth rate of 18%.

From the customer feedback we have been receiving, there is a great and growing interest in implementing technologies that assist with color-shift and various IoT applications and we believe that the overall smart lighting market is still largely underdeveloped due to the cost and complexity of installations of related technologies today in the marketplace, representing significant potential for solutions that could meet customer needs and that could also be affordable, easy to install and secure. Much of this interest and demand has been muted during 2020 as a result of the COVID-19 pandemic, which we believe has primarily delayed, rather than having reduced, our opportunity in the smart lighting marketplace. We believe our EnFocus™ lighting platform could effectively address the unmet needs for circadian and smart lighting, particularly for existing buildings that have limited economical options and/or IT expertise to implement otherwise complex lighting control systems.

Our patent-pending UVCD technologies and products aim to provide effective, reliable and affordable UVCD solutions for buildings, facilities and homes. As part of our expanding HCL offering, we are harnessing the power of UV-C light for surface and air disinfection currently via three distinct commercial and consumer products, nUVoTM, abUVTM and mUVeTM. These products are designed to achieve upwards of 99.9% disinfection of surface and airborne pathogens such as molds, bacteria and viruses, including influenza and coronaviruses.

While the LED lighting and smart lighting market is large, growing and underpenetrated, it has also been characterized in recent years by intensifying competition, market leadership changes and aggressive pricing tactics on commoditized products. Our strategy to overcome these challenges is to, first and foremost, develop advanced, impactful and customer-centric technologies and products. In addition, we focus on executing our multi-channel sales strategy and delivering active online educational campaigns combined with a strengthening and expanding sales representative network to ensure and enrich our effective and frequent communication with customers in order to better understand and serve their needs. By understanding the voice of the customer and by incorporating rapidly evolving technologies surrounding LED and smart lighting, be it hardware, software, sensor or cloud technologies, we believe that we will continue to be able to develop solutions that better address the customer's needs with unique and novel product offerings, such as EnFocusTM, our dimmable and tunable lighting and control platform, that deliver substantial value to our customers and accelerate LED and smart lighting adoptions.

Our Products

We design, develop, manufacture and market a wide variety of LED lighting technologies and UVCD products and solutions to serve our primary end user markets, including the following:

Commercial products to serve our targeted commercial markets:

- Direct-wire single-ended and double-ended TLED replacements for linear fluorescent lamps;
- RedCap[®] emergency battery backup TLEDs;
- EnFocus™ lighting platform including dimming ("DM") and color tuning ("DCT");
- LED fixtures for fluorescent replacement or HID replacement in low-bay, high-bay and office applications;
- LED downlights;
- LED dock lights;
- LED vapor tight lighting fixtures;
- · LED retrofit kits;
- During 2021 we plan to start selling and delivering the following UVCD products:
 - $\circ \quad nUVo^{TM}$ portable air disinfection tower for small offices and homes;
 - abUVTM integrated LED lighting and UV-C air disinfection troffer powered by the EnFocusTM lighting control platform; and
 - mUVeTM autonomous surface and floor disinfection robot.

MMM LED lighting products to serve the U.S. Navy and allied foreign navies:

- Military Intellitube®;
- Military globe lights;
- Military berth lights;
- Invisitube ultra-low EMI TLED;
- Military LED retrofit kits;
- Military fixtures;
- UVCD related products; and
- EnFocusTM lighting platform.

Our LED products are more energy-efficient than traditional lighting products, such as fluorescent, incandescent and HID lamps, and we believe they can improve the overall sustainability profile of our customers by providing financial, environmental and human health benefits, including achieving significant long-term energy and maintenance cost savings, reducing carbon emission, substantially reducing retrofit waste and enhancing the health and productivity of building occupants.

Leveraging and integrating a broad range of rapidly advancing technologies including LED lighting, UV-C disinfection, electronics, software, sensors, cloud and AI the Energy Focus UVCD solutions aim to provide impactful and affordable disinfection products for businesses and homes to effectively reduce infection risks for a broad range of pathogens, including, among others, influenza and coronaviruses amongst others. In addition to being ozone-free, the products are designed to guard against the risks of direct human exposure to UV-C rays. abUVTM and nUVoTM include enclosed, self-contained UV-C disinfection units that continuously inactivate viruses while reducing overall pathogen levels in the air. mUVeTM incorporates advanced sensor, machine vision and autonomous technologies to avoid human exposure during disinfection operations.

The key features of our products are as follows:

- Many of our products make use of proprietary or patented optical and electronics delivery systems that enable high efficiencies with superior lighting qualities, and proven records of extremely high product reliability;
- Our products have exceptionally long life, with the majority of our TLED sales providing a 10-year warranty;
- Our products have extremely low flicker. Our 500D series TLED products were the first in the lighting industry to be certified by Underwriters Laboratories ("UL®") as "low optical flicker, less than 1%";
- · Most of our products meet the lighting efficiency standards mandated by the Energy Independence and Security Act of 2007;
- Most of our products qualify for federal and state tax and rebate incentives for commercial consumers available in certain states; and
- Our UVCD surface and air disinfection product line is designed to inactivate more than 99.9% of airborne pathogens.

Our product development capabilities, which we believe provide a strategic competitive advantage, include the following:

- A long research, engineering, and market developmental history, with broad and intimate understanding of lighting technologies and LED lighting
 applications;
- Strong and growing team of experienced and cross-disciplinary engineers that forms the foundation of our engineering innovation and competency
 not only in lighting but also in electrical, electronics, optical, thermal, mechanical, communications, air flow and software technologies;
- Concentration on developing and providing high-quality, price competitive TLED lamps and the surrounding technologies to replace fluorescent and HID lamps and fixtures for commercial markets;
- Providing high quality and high performing LED lighting products with a proven history of reliability;
- · Emphasis on proprietary and patent-pending technologies surrounding LED lighting and UVCD products; and
- A deep understanding of the adoption dynamics and decision-making process for LED lighting products in existing MMM, government and commercial building markets.

As we seek to develop new connected lighting LED solutions, we have invested and expect to continue to expand our investments in smart, connected and HCL research and development activities and partnerships. Lighting controls, including dimming, sensor and daylighting technologies, can yield significant energy savings and human health benefits. We believe that the controllability of LED technology and our ability and plan to integrate more occupancy sensing, data processing and network interface hardware and software into our existing products will allow us to further differentiate our LED solutions and provide greater non-energy benefits to our customers.

Sales and Marketing

Due to our belief that our innovative technologies and high-quality performance associated with LED lighting are not well understood nor easy to communicate due to the nature of rapid technological evolution, we have been focusing on better educating our channel partners as well as end-users regarding the benefits and unique value propositions of our technologies and products. Our primary target customers are enterprise end-users, as well as contractors or energy service companies that could incorporate our products into their projects. We also sell through lighting agencies that represent our products as a complement to our direct sales effort. As of December 31, 2020, we have five in-house commercial sales personnel and seventeen sales agencies, each of which has, on average, approximately four agents representing Energy Focus products. We aim to continue to expand our in-house sales team, which now covers regions in the Midwest, Northeast, South, Southeast and Southwest, to eventually cover all geographic regions across the United States. Our MMM sales strategy leverages our brand and past performance and focuses on education about our products as well as ease of procurement.

We focus on industry verticals where the economic and non-economic benefits such as health and safety, as well as technical specifications, of our high-quality lighting product offerings are most compelling. Our LED and UVCD lighting products fall into two broad market categories, commercial markets, which tend to focus on quality, efficacy, total cost of ownership and return on investment, and MMM which require higher, more rigorous military specifications for durability and dependability. We also plan to enter consumer markets during fiscal year 2021, selling directly via e-commerce with digital marketing strategies that profile our UVCD technologies and products that aim to deliver effective and impactful disinfection for homes and small businesses. We expect that our multi-channel sales strategy will continue to evolve and expand in the future.

With the introduction of our military Intellitube[®] product in 2011, which replaced two-foot fluorescent lamps on U.S. Navy ships, military sales had represented the majority of our overall sales. Since our management change in April 2019, we have been focusing on improving the design of our MMM products to significantly reduce product costs while maintaining the required performance. Such efforts allowed us to win bids and proposals that helped grow our MMM sales during 2020, offsetting some of the weakness being experienced in our commercial business due to the impact of the COVID-19 pandemic. While we continue to aggressively pursue growth on the commercial side of our business due to its much larger potential and size, the MMM business does offer us continued sales, in addition to validating our product quality and strengthening our brand trust in the marketplace.

We launched our first commercial LED lighting products in 2010. Since then, we have been building and expanding our commercial and industrial market presence where the economic and non-energy benefits, and technical specifications of our high-quality lighting product offerings are compelling, particularly for mission-critical facilities in the enterprise verticals such as healthcare, education and the commercial and industrial space. For example:

- Given the 24/7 lighting requirements of hospital systems, we believe that our LED solutions offer the proven quality, performance, long lifetime, return on investment and low flicker lightning that is particularly attractive to this target market. Since 2015, we have been the primary LED lighting supplier and partner for a major northeast Ohio hospital system and, as a result of our continued success, we have been able to leverage this relationship to expand into more hospital systems across the country.
- As we advocate for the benefits of low-flicker LED lighting in schools, both in terms of energy-efficiency and in creating a healthy and effective learning environment, we continue to receive orders to retrofit school districts, colleges and universities. Our LED lighting products are now installed in over 100 school districts across the country and in an increasing number of colleges and universities.
- Low and high bay applications are generally used in commercial and industrial markets to provide light to large open areas like big-box retail stores, warehouses and manufacturing facilities. In the past few years, technological and cost improvements have allowed LED low and high bay applications to be more competitive against traditional low and high bay applications with fluorescent or metal halide light sources. In the industrial market in particular, due to the usage of metal halide lighting, the energy and maintenance savings that can be achieved by switching to our LED products could be substantial, and we believe we have attractive product offerings in this space.

In addition to our direct and indirect sales force, we have also launched our own e-commerce website that targets both commercial customers and retail consumers, while also offering financing options for customers. In addition, we believe that our renewed and continuing focus on multi-disciplinary technology innovation and engineering designs to both expand product features and benefits, while lowering product costs of ownership, will continue to enhance the overall competitiveness of our LED lighting and UVCD products and provide us with the strategic advantage and flexibility to expand our distribution channels.

Concentration of Sales

In 2020, two customers accounted for 62% of net sales, with sales to our primary distributor for the U.S. Navy accounting for approximately 49% of net sales, and sales to a regional commercial lighting retrofit company accounting for approximately 12% of net sales. When sales to our primary distributor for the U.S. Navy are combined with sales to shipbuilders for the U.S. Navy, total net sales of products for the U.S. Navy comprised approximately 53% of net sales for the same period. In 2019, two customers accounted for 45% of net sales and total sales to distributors to the U.S. Navy represented 23% of net sales.

Competition

Our LED lighting products compete against a variety of lighting products, including conventional light sources such as compact fluorescent lamps and HID lamps, as well as other TLEDs and full fixture lighting products. Our ability to compete depends

substantially upon the superior performance, incremental benefits and lower total cost of ownership of our products. Principal competitors in our markets include large lamp manufacturers and lighting fixture companies based in the United States, as well as TLED manufacturers mostly based in Asia, whose financial resources may substantially exceed ours and whose cost structure as a percentage of sales may be well below ours. These competitors may introduce new or improved products that may reduce or eliminate some of the competitive advantage of our products and may have substantially lower pricing. We anticipate that the competition for our products will also come from new technologies that offer increased energy efficiency, lower maintenance costs, and/or advanced features. We compete with LED systems produced by large lighting companies such as Philips Lighting, Osram Sylvania and GE Lighting, as well as smaller manufacturers or distributors such as LED Smart, Revolution Lighting Technologies, Orion Energy Systems, Green Creative and Keystone Technologies. Some of these competitors offer products with performance characteristics similar to those of our products.

For our UVCD products, we expect abUVTM to compete with both lighting companies that might expand into the UVCD market with integrated UV and lighting fixtures, such as Philips and Healthe, as well as HVAC air duct disinfection equipment providers, such as Honeywell, REKO Lighting and OdorStop. For nUVoTM, we expect to compete largely with air purifier brands in the market today, such as Dyson, Molekule and RxAir. We expect mUVeTM to compete with disinfection equipment and robot companies that use either UV or conventional chemical sprays, such as Xenex, UVD Robots and SmartGuardUV. We believe that our proprietary and patent-pending product designs in our UVCD products will enable our products to be more powerful and effective in inactivating virus in a more timely and energy efficient manner.

Manufacturing and Suppliers

We produce our lighting products and systems through a combination of internal manufacturing and assembly at our Solon, Ohio facility, and sourced finished goods, manufactured to our specifications. Our internal lighting system manufacturing consists primarily of final assembly, testing, and quality control. We have worked with several vendors to design custom components to meet our specific needs. Our quality assurance program provides for testing of all sub-assemblies at key stages in the assembly process, as well as testing of finished products produced both internally and sourced through third parties. Additionally, we are 9001-2015 ISO certified.

Manufacturing costs are managed through the balance of internal production and an outsourced production model for certain parts and components, as well as finished goods in specific product lines, to a small number of vendors in various locations throughout the world, primarily in the United States, Malaysia, Taiwan, and China. In some cases, we rely upon a single supplier to source certain components, sub-assemblies, or finished goods. We continually attempt to improve our global supply chain practices to satisfy client demands in terms of quality and volumes, while controlling our costs and achieving targeted gross margins, and this includes the evaluation of additional outsourcing or further insourcing of internal production where cost, quality and performance can be maintained or improved.

One offshore supplier and one domestic supplier accounted for approximately 21% and 12%, respectively, of our total expenditures for the twelve months ended December 31, 2020. At December 31, 2020, this same offshore supplier accounted for approximately 44% of our trade accounts payable balance.

For the twelve months ended December 31, 2019, one offshore supplier accounted for approximately 21% of our total expenditures. This same offshore supplier accounted for approximately 54% of our trade accounts payable balance at December 31, 2019.

Product Development

Product development has been a key area of operating focus and competitive differentiation for us in designing and developing industry leading LED lighting and UVCD products. Gross product development expenses for the years ended December 31, 2020 and 2019 were \$1.4 million and \$1.3 million, respectively. We believe that our customer-centric product development efforts represent a better leverage on our R&D investments and aim to continue to focus on developmental projects that could produce more impactful and differentiated products and solutions in a more timely manner for faster customer adoption.

Intellectual Property

We have a policy of seeking to protect our intellectual property through patents, license agreements, trademark registrations, confidential disclosure agreements, and trade secrets as management deems appropriate. Certain of our patents are key to our current product lines. Additionally, we have various pending U.S. patent applications, and various pending Patent Cooperation Treaty patent applications filed with the World Intellectual Property Organization that serve as the basis for national patent filings in countries of interest. Our issued patents expire at various times through April 2037. Generally, the term of patent

protection is twenty years from the earliest effective filing date of the patent application. There can be no assurance; however, that our issued patents are valid or that any patents applied for will be issued, and that our competitors or clients will not copy aspects of our lighting systems or obtain information that we regard as proprietary. There can also be no assurance that others will not independently develop products similar to ours. The laws of some foreign countries in which we manufacture, sell or may sell our products do not protect proprietary rights to products to the same extent as the laws of the United States.

Insurance

All of our properties and equipment are covered by insurance and we believe that such insurance is adequate. In addition, we maintain general liability and workers' compensation insurance in amounts we believe to be consistent with our risk of loss and industry practice.

Regulatory Compliance

We derive a significant portion of our revenues from direct and indirect sales to U.S., state, local and foreign governments and their respective agencies. Contracts with government customers are subject to various procurement laws and regulations, business prerequisites to qualify for such contracts, accounting procedures, intellectual property processes, and contract provisions relating to their formation, administration and performance, which may provide for various rights and remedies in favor of the governments that are not typically applicable to or found in commercial contracts. In addition, although not legally required to do so, we strive to obtain certification for substantially all our products. In the United States, we seek certification on substantially all of our products from UL®, Intertek Testing Services ("ETL®"), or DesignLights Consortium ("DLCTM"). Where appropriate in jurisdictions outside the United States, we seek to obtain other similar national or regional certifications for our products. Although we believe that our broad knowledge and experience with electrical codes and safety standards have facilitated certification approvals, we cannot ensure that we will be able to obtain any such certifications for our new products or that, if certification standards are amended, we will be able to maintain such certifications for our existing products.

Human Capital

At December 31, 2020, we had 57 full-time employees and two part-time employees, all of whom were based in the United States. We also had twelve temporary contract employees at December 31, 2020. None of our employees or contract employees are subject to collective bargaining agreements and we consider our relationship with our employees to be good. We encourage and support the growth and development of our employees. Continual learning and career development is advanced through ongoing performance and development conversations with employees and reimbursement is available to employees for seminars, conferences, formal education, and other training events employees attend in connection with their job duties.

Our core values of accountability, trust, extraordinariness, fun, openness, integrity and kindness underscore everything we do and drive our day-to-day interactions. The safety, health and wellness of our employees is a top priority. The COVID-19 pandemic has presented a unique challenge with regard to maintaining employee safety while continuing successful operations. Through teamwork and the adaptability of our management and staff, we were able to transition, over a short period of time, a majority of our corporate office employees to effectively working from remote locations on a full-time basis, with others working both remotely and in the office on a hybrid basis, and also to ensure a safely-distanced working environment for employees who remain in our facility.

Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our current and future employees. The principal purposes of our annual bonus plan and equity incentive plan are to attract, retain and motivate employees through the granting of long-term incentive compensation awards.

Business Segments

We currently operate in a single business segment that includes the marketing and sale of commercial and MMM lighting products and controls. Please refer to Note 13, "Product and Geographic Information," included in Item 8, "Financial Statements and Supplementary Data," of this Annual Report, for additional information.

Available Information

We maintain a website at *www.energyfocus.com*. We are providing the address to our website solely for the information of investors. The information on our website is not a part of, nor is it incorporated by reference into this Annual Report. Through our website, we make available, free of charge, our annual proxy statement, annual reports on Form 10-K, quarterly reports on

Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, as soon as reasonably practicable after we electronically file such material with, or furnish them to, the Securities and Exchange Commission, or the SEC. The SEC maintains a website that contains these reports at *www.sec.gov*.

ITEM 1A. RISK FACTORS

Risks Associated with Our Business

The COVID-19 pandemic could continue to have an adverse effect on our business.

The COVID-19 pandemic continues to have an unprecedented impact on the U.S. economy as federal, state and local governments react to this public health crisis, which continues to create significant uncertainties. These uncertainties include, but are not limited to, the adverse effect of the pandemic on the economy, our supply chain partners, transportation and logistics providers, our employees and customers. As the pandemic continues and infection rates oscillate, fear about becoming ill with the virus and recommendations and/or mandates from federal, state and local authorities to avoid large gatherings of people or self-quarantine may recur or continue to increase, which has already affected, and may continue to affect our supply chain, as well as our customer base. Continued impacts of the pandemic could materially adversely affect our near-term and long-term revenues, earnings, liquidity and cash flows, and may require significant actions in response, including, but not limited to, employee furloughs, workforce reductions, plant and operational shutdowns in Ohio, expense reductions or discounting of pricing of our products, all in an effort to mitigate such impacts. The extent of the ongoing impact of the pandemic on our business and financial results will depend largely on future developments, including the duration of the spread of the outbreak within the United States, the timing and success of vaccine programs, the impact on capital and financial markets and the related impact on consumer confidence and spending, all of which are highly uncertain and cannot be predicted. This situation is changing rapidly, and additional impacts may arise that we are not aware of currently.

We rely on equity and debt financing to operate our business and will require additional financing in the near term, which we may not be able to raise on favorable terms or at all, and our failure to obtain funding when needed may force us to delay, scale back or eliminate our business plan or even discontinue or curtail our operations.

For the year ended December 31, 2020, we reported a net loss of \$6.0 million and are dependent upon the availability of financing in order to continue our business.

On August 11, 2020, we entered into \$3,000,000 and \$2,500,000 revolving lines of credit with Crossroads Financial Group, LLC (the "Inventory Facility") and Factors Southwest L.L.C. (d/b/a FSW Funding) (the "Receivables Facility" and, together with the Inventory Facility, the "Credit Facilities"), respectively, which replaced our former revolving line of credit with Austin Financial Services, Inc. (the "Austin Facility"). As of December 31, 2020, we had cash of approximately \$1.8 million and had debt balances of \$1.3 million and \$1.0 million under the Inventory Facility and the Receivables Facility, respectively. In addition, our accounts receivable balance was \$2.0 million and our gross inventory balance was \$5.6 million on December 31, 2020. As of February 28, 2021, our cash was approximately \$0.8 million and our total outstanding net balance under the Credit Facilities was approximately \$2.6 million in the aggregate. Also, our accounts receivable balance was \$1.4 million and our gross inventory balance was \$7.3 million on February 28, 2021. Our ability to draw on the Receivables Facility is limited based on the amount of eligible accounts receivable, and our ability to draw on the Inventory Facility is limited based on the value of our eligible inventory. The repayment of outstanding advances and interest under the Credit Facilities may be accelerated upon an event of default, including, but not limited to, failure to make timely payments or breach of any terms set forth in the loan agreements. The Credit Facilities are secured by our assets and are subject to customary affirmative and negative operating covenants and defaults, restricting indebtedness, liens, corporate transactions, dividends, and affiliate transactions, among others. The maturity date of the Credit Facilities is August 11, 2022.

Even with access to borrowings under the Credit Facilities, we may not generate sufficient cash flows from our operations or be able to borrow sufficient funds to sustain our operations. As such, we will likely need additional external financing during 2021 and will continue to review and pursue external funding sources including, but not limited to, the following:

- · obtaining financing from traditional or non-traditional investment capital organizations or individuals;
- · obtaining funding from the sale of our common stock or other equity or debt instruments; and
- · obtaining debt financing with lending terms that more closely match our business model and capital needs.

There can be no assurance that we will obtain funding on acceptable terms, in a timely fashion, or at all. Obtaining additional financing contains risks, including:

- additional equity financing may not be available to us on satisfactory terms and any equity we are able to issue could lead to dilution for current stockholders and have rights, preferences and privileges senior to our common stock;
- loans or other debt instruments may have terms and/or conditions, such as interest rates, restrictive covenants and control or revocation provisions, which are not acceptable to management or our board of directors; and

• the current environment in the capital markets, as well as global health risks, combined with our capital constraints may prevent us from being able to obtain adequate debt financing.

If we fail to obtain required additional financing to sustain our business before we are able to produce levels of revenue to meet our financial needs, we will need to delay, scale back or eliminate our business plan and further reduce our operating costs and headcount, each of which would have a material adverse effect on our business, future prospects, and financial condition. A lack of additional financing could also result in our inability to continue as a going concern and force us to sell certain assets or discontinue or curtail our operations and, as a result, investors in the Company could lose their entire investment.

Our independent registered public accounting firm's opinion on our audited financial statements for the fiscal year ended December 31, 2020, included in this Annual Report, contains a modification relating to our ability to continue as a going concern.

Our independent registered public accounting firm's opinion on our audited financial statements for the year ended December 31, 2020 includes a modification stating that our losses and negative cash flows from operations and uncertainty in generating sufficient cash to meet our obligations and sustain our operations raise substantial doubt about our ability to continue as a going concern. In addition, Note 3 "Restructuring", to our financial statements included in Part II, Item 8 "Financial Statements and Supplementary Data," of this Annual Report includes disclosure describing the existence of conditions that raise substantial doubt about our ability to continue as a going concern for a reasonable period of time.

While we continue to pursue funding sources and transactions that could raise capital, there can be no assurances that we will be successful in these efforts or will be able to resolve our liquidity issues or eliminate our operating losses. If we are unable to generate enough cash or obtain sufficient additional funding, we would need to scale back or significantly adjust our business plan, further reduce our operating costs and headcount, or discontinue or curtail our operations. Accordingly, our business, prospects, financial condition and results of operations could be materially and adversely affected, and we may be unable to continue as a going concern. If we are unable to continue as a going concern, we may have to liquidate our assets and may receive less than the value at which those assets are carried on our audited consolidated financial statements, and it is likely that investors will lose all or a part of their investment. Our financial statements do not include any adjustments that might result from the outcome of this uncertainty.

We have a history of operating losses and will incur losses in the future as we continue our efforts to grow sales and streamline our operations at a profitable level.

We have incurred substantial losses in the past and reported net losses from operations of \$6.0 million and \$7.4 million for the years ended December 31, 2020 and 2019, respectively. As of December 31, 2020, we had an accumulated deficit of \$130.9 million and cash of approximately \$1.8 million, compared to an accumulated deficit of \$124.9 million and cash of approximately \$0.4 million as of December 31, 2019.

In order for us to operate our business profitably, we need to grow our sales, maintain cost control discipline while balancing development of our new product pipeline and potential long-term revenue growth, continue our efforts to reduce product cost, drive further operating efficiencies and develop and execute a strategic product pipeline for profitable and compelling LED lighting and control and UVCD products. There is a risk that our strategy to return to profitability may not be as successful as we envision, or occur as quickly as we expect. We might require additional financing in the near-term and, if our operations do not achieve, or we experience an unanticipated delay in achieving, our intended level and pace of profitability, we will continue to need additional funding, none of which may be available on favorable terms or at all and could require us to sell certain assets or discontinue or curtail our operations.

While we are attempting to diversify our customer base, we have historically derived a significant portion of our revenue from a few customers, and the loss of one of these customers, or a reduction in their demand for our products, could adversely affect our business, financial condition, results of operations, and prospects.

Historically our customer base has been highly concentrated and one or a few customers have represented a substantial portion of our net sales. In 2020, two customers accounted for 62% of net sales. Total sales to our primary distributor to the U.S. Navy, and a primary shipbuilder for the U.S. Navy represented 53% of net sales. In 2019, two customers accounted for 45% of net sales and total sales to distributors to the U.S. Navy represented 23% of net sales.

We generally do not have long-term contracts with our customers that commit them to purchase any minimum amount of our products or require them to continue to do business with us. We could lose business from any one of our significant customers for a variety of reasons, many of which are outside of our control, including changes in levels of government funding and rebate

programs, our inability to comply with government contracting laws and regulations, changes in customers' procurement strategies or their lighting retrofit plans, changes in product specifications, additional competitors entering particular markets, our failure to keep pace with technological advances and cost reductions, and damage to our professional reputation, among others.

We are attempting to expand and diversify our customer base and reduce the dependence on one or a few customers, through the addition of sales representatives and other potential marketing partnerships and our direct-to-customer sales strategy, as well as expanding our product offerings in the UVCD-space, but we cannot provide any assurance that our efforts will be successful. We anticipate that a limited number of customers could continue to comprise a substantial portion of our revenue for the foreseeable future. If we continue to do business with our significant customers, our concentration can cause variability in our results because we cannot control the timing or amounts of their purchases. A significant customer could cease to do or drastically reduce its business with us with little or no notice, which could adversely affect our results of operations and cash flows in particular periods.

Historically, we have experienced long sales-cycles, as well as slow ramp-up by new customers to purchase large amounts of LED products from us. Given the fiercely competitive lighting market in which we operate, we are constantly trying to balance pricing with the quality-premium our products command both in brand reputation and performance. As a result, adding new customers could generally be a slow process, and getting their sales increased to more significant levels usually takes a long period of time. As we continue to develop more customer-centric new products such as EnFocusTM, we hope to both add new customers more quickly and have our customers scale their purchasing levels more quickly. Our UVCD portfolio of products also expands our traditional government and commercial markets to include the consumer market and a potential services offering for the commercial market, increasing the scope and expense of our marketing efforts. However, there is no guarantee of faster customer acceptance or performance of these new products or any other that has been or is being developed.

If we are unable to implement plans to increase sales and control expenses to manage future growth effectively, our profitability goals and liquidity will be adversely affected.

Our ability to achieve our desired growth depends on the adoption of LEDs and related controls within the general lighting market, the adoption of our UVCD products within the healthy home and workspace markets, and our ability to affect and adapt to these rates of adoption. The pace of continued growth in these markets is uncertain, and in order to grow our sales, we may need to:

- manage organizational complexity and ensure effective and timely communication;
- expand the skills and capabilities of our current management, engineering and sales teams;
- add experienced senior level managers;
- attract, retain and adequately compensate qualified employees;
- adequately maintain and adjust the operational and financial controls that support our business;
- expand research and development, sales and marketing, technical support, distribution capabilities, manufacturing planning and administrative functions and capabilities;
- maintain or establish additional manufacturing facilities and equipment, as well as secure sufficient third-party manufacturing resources, to
 adequately meet customer demand and/or lower manufacturing costs; and
- manage an increasingly complex supply chain to maintain a sufficient supply of materials and deliver on time to our manufacturing facilities.

These efforts to grow our business, both in terms of size and in diversity of customer bases served, may put a significant strain on our resources. Over the past few years, we have implemented comprehensive cost-saving initiatives to reduce our net loss and mitigate doubt about our ability to continue as a going concern. These initiatives have improved efficiency and streamlined our operations, but we may need additional funding, further cost-cutting may be needed to manage liquidity and future growth may exceed our current capacity and require rapid expansion in certain functional areas.

We may lack sufficient funding to appropriately expand or incur significant expenses as we attempt to scale our resources and make investments in our business that we believe are necessary to achieve short-term and long-term growth goals. Such investments take time to become fully operational, and we may not be able to expand quickly enough to exploit targeted market opportunities. In addition to our own manufacturing capacity, we are increasingly utilizing contract manufacturers and original design manufacturers ("ODMs") to produce our products for us. There are also inherent execution risks in expanding product lines and production capacity, whether through our facilities or that of a third-party manufacturer, that could increase costs and reduce our operating results, including design and construction cost overruns, poor production process yields and reduced quality control. If we are unable to fund any necessary expansion or manage our growth effectively, we may not be able to

adequately meet demand, our expenses could increase without a proportionate increase in revenue, our margins could decrease, and our business and results of operations could be adversely affected.

Our results of operations, financial condition and business could be harmed if we are unable to balance customer demand and capacity.

As customer demand for our products changes and as we launch new products, we must be able to adjust our production capacity to meet demand. We are continually taking steps to address our manufacturing capacity needs for our products. If we are not able to increase or decrease our production capacity at our targeted rate or if there are unforeseen costs associated with adjusting our capacity levels or there are unanticipated interruptions in our supply chain from such possibilities as the COVID-19 pandemic, we may not be able to achieve our financial targets. In addition, as we introduce new products and further refine existing products, we must balance the production and inventory of prior generation products with the production and inventory of new products, whether manufactured by us or our contract manufacturers, to maintain a product mix that will satisfy customer demand and mitigate the risk of incurring cost write-downs on the previous generation products, related raw materials and tooling.

If customer demand does not materialize at the rate forecasted, we may not be able to scale back our manufacturing expenses or overhead costs to correspond to the demand. This could result in lower margins, write-downs of our inventory and adversely impact our business and results of operations. Additionally, if product demand decreases or we fail to forecast demand accurately, our results may be adversely impacted due to higher costs resulting from lower factory utilization, causing higher fixed costs per unit produced. In addition, our efforts to improve quoted delivery lead-time performance may result in corresponding reductions in order backlog. A decline in backlog levels could result in more variability and less predictability in our quarter-to-quarter net sales and operating results.

If we are not able to compete effectively against companies with lower cost structures or greater resources, or new competitors who enter our target markets, our sales will be adversely affected.

The lighting industry is highly competitive. In the high-performance lighting markets in which we sell our advanced lighting systems, our products compete with lighting products utilizing traditional lighting technology provided by many vendors. For sales of MMM products, we compete with a small number of qualified military lighting lamp and fixture suppliers. In certain commercial applications, we typically compete with LED systems produced by large lighting companies. Our primary competitors include Philips, Osram Sylvania, LED Smart, Revolution Lighting Technologies, Orion Energy Systems, Green Creative and Keystone Technologies. Some of these competitors offer products with performance characteristics similar to those of our products. Many of our competitors are larger, more established companies with greater resources to devote to research and development, manufacturing and marketing, as well as greater brand recognition. In addition, larger competitors who purchase greater unit volumes from component suppliers may be able to negotiate lower costs, thereby enabling them to offer lower pricing to end customers. Moreover, the relatively low barriers to entry into the lighting industry and the limited proprietary nature of many lighting products also permit new competitors to enter the industry easily and with lower costs.

In each of our markets, we also anticipate the possibility that LED component manufacturers, including those that currently supply us with LEDs, may seek to compete with us. Our competitors' lighting technologies and products may be more readily accepted by customers than our products will be. Moreover, if one or more of our competitors or suppliers were to merge, the change in the competitive landscape could adversely affect our competitive position. Additionally, to the extent that competition in our markets intensifies, we may be required to further reduce our prices in order to remain competitive. If we do not compete effectively, or if we reduce our prices without making commensurate reductions in our costs, our net sales, margins, and profitability and our future prospects for success may be harmed.

We work with independent agents and sales representatives for a portion of our net sales, and the failure to incentivize, retain and manage our relationships with these third parties, or the termination of these relationships, could cause our net sales to decline and harm our business.

In the past, we pursued an agency-driven sales channel strategy in order to expand our market presence throughout the United States. As a result, at that time, we had increased our reliance on independent sales agent channels to market and sell our products. In addition, these parties provide technical sales support to end-users. The current agreements with our agents are generally non-exclusive on the agents' product portfolio, meaning they can sell our competitors' products. Any such agreements we enter into in the future may be on similar terms. Our agents may not be motivated to or successfully pursue the sales opportunities available to them, or they may prefer to sell or be more familiar with the products of our competitors. If our agents do not achieve our sales objectives or these relationships take significant time to develop, our revenue may decline, fail to grow or not increase as rapidly as we intend in order to achieve profitability and grow our business. During 2019 and 2020,

we significantly reduced our reliance on agencies for a substantial portion of our sales, and refocused and expanded our agency relationships on those that were both mutually beneficial and strategically important. Thus far, direct sales using internal sales personnel still account for a substantial portion of our sales, although we believe that our agency expansion strategy will increase the role of independent agents and sales representatives over time.

Furthermore, our agency agreements are generally short-term and can be cancelled by either party without significant financial consequence. The termination of or the inability to negotiate extensions of these contracts on acceptable terms could adversely impact sales of our products. Additionally, we cannot be certain that we or end-users will be satisfied by their performance. If these agents significantly change their terms with us, or change their end-user relationships, there could be an impact on our net sales and profits.

If our LED lighting and control technology or UVCD products fail to gain widespread market acceptance or we are unable to respond effectively as new technologies and market trends emerge, our competitive position and our ability to generate revenue, and profits may be harmed.

To be successful in our LED lighting and control technology markets and with the introduction of our UVCD products, we depend on continued market acceptance of our existing LED lighting and control technology and our new UVCD products, including in the consumer and commercial markets. Although adoption of LED lighting and air and surface sanitation products continues to grow, including in response to the COVID-19 pandemic and increased awareness of sanitation, the use of LED lighting products for general illumination and the use of UVCD products for air and surface sanitation are in their early stages, are still limited, and face significant challenges. Potential customers may be reluctant to adopt LED lighting products as an alternative to traditional lighting technology or UVCD products as an alternative to traditional chemical-based sanitation because of their higher initial costs or perceived risks relating to their novelty, reliability, usefulness, quality and cost-effectiveness when compared to other established lighting sources and sanitation processes available in the market. Changes in economic and market conditions may also make traditional lighting and sanitation technologies more appealing. For example, declining energy prices in certain regions or countries may favor existing lighting technologies that are less energy-efficient, reducing the rate of adoption for LED lighting products in those areas. Notwithstanding continued performance improvements and cost reductions of LED lighting and UVCD technologies, limited customer awareness of the benefits of LED lighting and UVCD products, lack of widely accepted standards governing LED lighting and UVCD products and customer unwillingness to adopt LED lighting and UVCD products could significantly limit the demand for LED lighting and UVCD products. Even potential customers that are inclined to adopt energy-efficient lighting technological advances. Any of the foregoing could adversely impact our results of operations and limit our market opportunities.

In addition, we will need to keep pace with rapid changes in LED lighting and control technology and UVCD air and surface sanitation technology, changing customer requirements, new product introductions and cost reductions by competitors and evolving industry standards, any of which could render our existing products obsolete if we fail to respond in a timely manner. The development, introduction, and acceptance of new, re-designed or reduced cost products incorporating advanced technology is a complex process subject to numerous uncertainties, including:

- · available funding to sustain adequate development efforts;
- achievement of technology breakthroughs required to make commercially viable devices, and in turn, protecting those breakthroughs through intellectual property;
- the accuracy of our predictions for market requirements;
- our ability to predict, influence, and/or react to evolving standards;
- acceptance of our new product designs;
- acceptance of new technologies in certain markets;
- the combination of other desired technological advances with lighting products, such as controls;
- the availability of qualified research and development personnel;
- our timely completion of product designs and development;
- our ability to develop repeatable processes to manufacture new products in sufficient quantities, with the desired specifications, and at competitive costs;
- our ability to effectively transfer products and technology from development to manufacturing; and
- market acceptance of our products.

We could experience delays in the introduction of these products. We could also devote substantial resources to the development of new technologies or products that are ultimately not successful.

If effective new sources of light, other than LEDs, or effective new sanitation technologies, other than UVCD, are discovered and commercialized, our current products and technologies could become less competitive or obsolete. If others develop innovative proprietary lighting or sanitation technology that is superior to ours, or if we fail to accurately anticipate technology, pricing and market trends, address market saturation and customer confusion, respond on a timely basis with our own development of new and reliable products and enhancements to existing products, and achieve broad market acceptance of these products and enhancements, our competitive position may be harmed and we may not achieve sufficient growth in our net sales to attain or sustain profitability.

If we are unable to attract or retain qualified personnel, our business and product development efforts could be harmed.

We are highly dependent on our senior management and other key personnel due to our very lean organizational structure. Our future success will depend on our ability to attract, retain, develop and motivate qualified technical, sales, marketing, and management personnel, for whom competition is very intense. As we attempt to rapidly grow our business, it could be especially difficult to attract, retain and adequately compensate qualified personnel, especially in light of our lean cost-structure. The loss of, or failure to attract, hire, and retain any such persons could delay product development cycles, disrupt our operations, increase our costs, or otherwise harm our business or results of operations. We also do not maintain "key person" insurance policies on any of our officers or our other employees.

Our operating results may fluctuate due to factors that are difficult to forecast and not within our control.

Our past operating results may not be accurate indicators of future performance, and you should not rely on such results to predict our future performance. Our operating results have fluctuated significantly in the past and could fluctuate in the future. Factors that may contribute to fluctuations include:

- · changes in aggregate capital spending, cyclicality and other economic conditions, or domestic and international demand in the industries;
- the timing of large customer orders to which we may have limited visibility and cannot control;
- competition for our products, including the entry of new competitors and significant declines in competitive pricing;
- our ability to effectively manage our working capital;
- our ability to generate increased demand in our current and targeted markets, particularly those in which we have limited experience;
- our ability to satisfy customer demands in a timely and cost-effective manner;
- pricing and availability of labor and materials;
- quality testing and reliability of new products;
- our inability to adjust certain fixed costs and expenses for changes in demand and the timing and significance of expenditures that may be incurred to facilitate our growth;
- macroeconomic, geopolitical and health concerns, including the COVID-19 pandemic;
- seasonal fluctuations in demand and our revenue; and
- disruption in component supply from foreign vendors.

Depressed general economic conditions may adversely affect our operating results and financial condition.

Our business is sensitive to changes in general economic conditions, both inside and outside the United States. Slow growth in the economy or an economic downturn, particularly one affecting construction and building renovation, or that causes end-users to reduce or delay their purchases of lighting products, services, or retrofit activities, would have a material adverse effect on our business, cash flows, financial condition and results of operations. LED lighting retrofit projects, in particular, tend to require a significant capital commitment, which is offset by cost savings achieved over time. As such, a lack of available capital, whether due to economic factors or conditions in the equity or debt markets, could have the effect of reducing demand for our products. A decrease in demand could adversely affect our ability to meet our working capital requirements and growth objectives, or could otherwise adversely affect our business, financial condition, and results of operations.

Customers may be unable to obtain financing to make purchases from us.

Some of our customers require financing in order to purchase our products, and the initial investment is higher than that which is required with traditional lighting products. The potential inability of these customers to access the capital needed to finance purchases of our products and meet their payment obligations to us could adversely impact the appeal of our products relative to those with lower upfront costs and have a negative impact on our financial condition and results of operations. There can be no assurance that third-party finance companies will provide capital to our customers.

A significant portion of our business is dependent upon the existence of government funding, which may not be available into the future and could result in a reduction in sales and harm to our business.

Some of our customers are dependent on governmental funding, including U.S. and foreign allied navies and U.S. military bases. If any of these customers or potential customers abandon, curtail, or delay planned LED lighting retrofit projects as a result of the levels of funding available to them or changes in budget priorities, it would adversely affect our opportunities to generate product sales.

If critical components and finished products that we currently research and develop with and purchase from a small number of third-party development partners and suppliers become unavailable or increase in price, or if our development partners, suppliers or delivery channels fail to meet our requirements for quality, quantity, and timeliness, our revenue and reputation in the marketplace could be harmed, which would damage our business.

In an effort to reduce research and development and manufacturing costs, we have outsourced the research, development and production of certain parts and components, as well as finished goods in our product lines, to a small number of vendors in various locations throughout the world, primarily in the United States, Malaysia, Taiwan and China. We generally purchase these sole or limited source items with purchase orders, and we have limited guaranteed supply arrangements with such suppliers. While we believe alternative sources for these components and products are available, we have selected these particular suppliers based on their ability to provide quality products at a cost-effective price, to meet our specifications, and to deliver within scheduled time frames. We do not control the time and resources that these suppliers devote to our business, and we cannot be sure that these suppliers will perform their obligations to us. If our ability to manage third-party product development efforts are unsuccessful or our suppliers fail to perform their obligations in a timely manner or at satisfactory quality levels, we may suffer lost or delayed sales, increased costs of goods sold, reductions in revenue or margin, and damage to our reputation in the market, all of which would adversely affect our business. As demand for our products fluctuates, which fluctuations can be hard to predict, we may not need a sustained level of inventory, which may cause financial hardship for our suppliers or they may need to divert production capacity elsewhere. In the past, we have had to purchase quantities of certain components that are critical to our product manufacturing and were in excess of our estimated near-term requirements as a result of supplier delivery constraints and concerns over component availability, and we may need to do so in the future. As a result, we have had, and may need to continue, to devote additional working capital to support a large amount of component and raw material inventory that may not be used

We may be vulnerable to unanticipated product development delays, price increases and payment term changes. Significant increases in the prices of sourced components and products could cause our product prices to increase, which may reduce demand for our products or make us more susceptible to competition. Furthermore, in the event that we are unable to pass along increases in operating costs to our customers, margins and profitability may be adversely affected. Accordingly, the loss of all or one of these suppliers could have a material adverse effect on our operations until such time as an alternative supplier could be found.

Additionally, consolidation in the lighting industry could result in one or more current suppliers being acquired by a competitor, rendering us unable to continue purchasing key components and products at competitive prices.

We also may be subject to various import duties and tariffs applicable to materials manufactured in foreign countries and may be affected by various other import and export restrictions, as well as other considerations or developments impacting upon international trade, including economic or political instability, tariffs, shipping delays and product quotas. These international trade factors will, under certain circumstances, have an impact on the cost of components, which will have an impact on the cost to us of the manufactured product and the wholesale and retail prices of our products.

We rely on arrangements with independent shipping companies for the delivery of our products from vendors abroad. The failure or inability of these shipping companies to deliver products or the unavailability of shipping or port services, even temporarily, could have a material adverse effect on our business. We may also be adversely affected by an increase in freight surcharges due to rising fuel costs and added security costs.

Our products could contain defects, or they may be installed or operated incorrectly, which could reduce sales of those products or result in claims against us.

Despite product testing, defects may be found in our existing or future products. This could result in, among other things, a delay in the recognition or loss of net sales, the write-down or destruction of existing inventory, insurance recoveries that fail to

cover the full costs associated with product recalls, significant warranty, support, and repair costs, diversion of the attention of our engineering personnel from our product development efforts, and damage to our relationships with our customers. The occurrence of these problems could also result in reputational and brand damage or the delay or loss of market acceptance of our lighting products and would likely harm our business. In addition, our customers may specify quality, performance, and reliability standards that we must meet. If our products do not meet these standards, we may be required to replace or rework the products. In some cases, our products may contain undetected defects or flaws that only become evident after shipment. Even if our products meet standard specifications, our customers may attempt to use our products in applications for which they were not designed or in products that were not designed or manufactured properly, resulting in product failures and creating customer satisfaction issues.

Some of our products use line voltages (such as 120 or 240 volts AC), which involve enhanced risk of electrical shock, injury or death in the event of a short circuit or other malfunction. Defects, integration issues or other performance problems in our lighting products could result in personal injury or financial or other damages to end-users or could damage market acceptance of our products. Our customers and end-users could also seek damages from us for their losses. A product liability claim brought against us, even if unsuccessful, would likely be time consuming and costly to defend and the adverse publicity generated by such a claim against us or others in our industry could negatively impact our reputation.

We provide warranty periods generally ranging from one to ten years on our products. The standard warranty on nearly all of our new LED lighting products, which now represent the majority of our revenue, is either five or ten years. Although we believe our reserves are appropriate, we are making projections about the future reliability of new products and technologies, and we may experience increased variability in warranty claims. Increased warranty claims could result in significant losses due to a rise in warranty expense and costs associated with customer support.

Our industry is characterized by vigorous protection and pursuit of intellectual property rights and positions, which may result in protracted and expensive litigation. We have engaged in litigation in the past and litigation may be necessary in the future to enforce our intellectual property rights or to determine the validity and scope of the proprietary rights of others. Litigation may also be necessary to defend against claims of infringement or invalidity by others. Additionally, we could be required to defend against individuals and groups who have been purchasing intellectual property assets for the sole purpose of making claims of infringement and attempting to extract settlements from companies like ours. Litigation could delay development or sales efforts and an adverse outcome in litigation, or any similar proceedings, could subject us to significant liabilities, require us to license disputed rights from others or require us to cease marketing or using certain products or technologies. We may not be able to obtain any licenses on acceptable terms, if at all, and may attempt to redesign those products that contain allegedly infringing intellectual property, which may not be possible. We also may have to indemnify certain customers if it is determined that we have infringed upon or misappropriated another party's intellectual property. The costs of addressing any intellectual property litigation claim, including legal fees and expenses and the diversion of management resources, regardless of whether the claim is valid, could be significant and could materially harm our business, financial condition, and results of operations.

From time to time, we have been and may in the future be subject to claims or allegations that we infringe upon or have misappropriated the intellectual property of third parties. Defending against such claims is costly and intellectual property litigation often involves complex questions of fact and law, with unpredictable results. We may be forced to acquire rights to such third-party intellectual property on unfavorable terms (if rights are made available at all), pay damages, modify accused products to be non-infringing, or stop selling the applicable product altogether.

We may be subject to confidential information theft or misuse, which could harm our business and results of operations.

We face attempts by others to gain unauthorized access to our information technology systems on which we maintain proprietary and other confidential information. Our security measures may be breached as the result of industrial or other espionage actions of outside parties, employee error, malfeasance or otherwise, and as a result, an unauthorized party may obtain access to our systems. In addition, these same risks to our information technology systems also apply to the third-party service providers' information technology systems utilized by the Company. Additionally, outside parties may attempt to access our confidential information through other means, for example by fraudulently inducing our employees to disclose confidential information. We actively seek to prevent, detect and investigate any unauthorized access, which occasionally occurs despite our best efforts. We might be unaware of any such access or unable to determine its magnitude and effects. The theft, corruption and/or unauthorized use or publication of our trade secrets and other confidential business information as a result of such an incident could adversely affect our competitive position and the value of our investment in research and development could be reduced. Our business could be subject to significant disruption, widespread negative publicity and a loss of customers, and we could suffer legal liabilities and monetary or other losses.

We have international operations and are subject to risks associated with operating in international markets.

We outsource the production of certain parts and components, as well as finished goods in certain product lines, to a small number of vendors in various locations outside of the United States, including Malaysia, Taiwan and China. Although we do not currently generate significant sales from customers outside the United States, we are targeting foreign allied navies as a potential opportunity to generate additional sales of our MMM products as well as a limited number of foreign geographic markets which we expect to expand over time.

International business operations are subject to inherent risks, including, among others:

- difficulty in enforcing agreements and collecting receivables through foreign legal systems;
- · unexpected changes in regulatory requirements, tariffs, and other trade barriers, restrictions or disruptions;
- potentially adverse tax consequences;
- · localized impacts of epidemics, pandemics or other contagious outbreaks, such as the COVID-19 pandemic;
- the burdens of compliance with the U.S. Foreign Corrupt Practices Act, similar anti-bribery laws in other countries, and a wide variety of other laws:
- · import and export license requirements and restrictions of the United States and each other country in which we operate;
- · exposure to different legal standards and reduced protection for intellectual property rights in some countries;
- currency fluctuations and restrictions; and
- political, social, and economic instability, including war and the threat of war, acts of terrorism, pandemics, boycotts, curtailment of trade, or other business restrictions.

If we do not anticipate and effectively manage these risks, these factors may have a material adverse impact on our business operations.

Risks Associated with Legal and Regulatory Matters

We may be subject to legal claims against us or claims by us that could have a significant impact on our resulting financial performance.

At any given time, we may be subject to litigation or claims related to our products, intellectual property, suppliers, customers, employees, stockholders, distributors, sales representatives and sales of our assets, among other things, the disposition of which may have an adverse effect upon our business, financial condition, or results of operations. The outcome of litigation is difficult to assess or quantify. Lawsuits can result in the payment of substantial damages by defendants. If we are required to pay substantial damages and expenses as a result of these or other types of lawsuits, our business and results of operations would be adversely affected. Regardless of whether any claims against us are valid or whether we are liable, claims may be expensive to defend and may divert time and money away from our operations. Insurance may not be available at all or in sufficient amounts to cover any liabilities with respect to these or other matters. A judgment or other liability in excess of our insurance coverage for any claims could adversely affect our business and the results of our operations.

Our business may suffer if we fail to comply with government contracting laws and regulations.

We derive a significant portion of our revenues from direct and indirect sales to U.S., state, local and foreign governments and their respective agencies. Contracts with government customers are subject to various procurement laws and regulations, business prerequisites to qualify for such contracts, accounting procedures, intellectual property processes, and contract provisions relating to their formation, administration and performance, which may provide for various rights and remedies in favor of the governments that are not typically applicable to or found in commercial contracts. Failure to comply with these laws, regulations, or provisions in our government contracts could result in litigation, the imposition of various civil and criminal penalties, termination of contracts, forfeiture of profits, suspension of payments, or suspension from future government contracting. If our government contracts are terminated, if we are suspended from government work, or if our ability to compete for new contracts is adversely affected, our business could suffer due to, among other factors, lost sales, the costs of any government action or penalties, damages to our reputation and the inability to recover our investment in developing and marketing products for MMM use.

If we are unable to obtain and adequately protect our intellectual property rights or are subject to claims that our products infringe on the intellectual property rights of others, our ability to commercialize our products could be substantially limited.

We consider our technology and processes proprietary. If we are not able to adequately protect or enforce the proprietary aspects of our technology, competitors may utilize our proprietary technology. As a result, our business, financial condition, and results of operations could be adversely affected. We protect our technology through a combination of patent, copyright, trademark and trade secret laws, employee and third-party nondisclosure agreements, and similar means. Despite our efforts, other parties may attempt to disclose, obtain, or use our technologies. Our competitors may also be able to independently develop products that are substantially equivalent or superior to our products or slightly modify our products. In addition, the laws of some foreign countries do not protect our proprietary rights as fully as do the laws of the United States. As a result, we may not be able to protect our proprietary rights adequately in the United States or abroad. Furthermore, there can be no assurance that we will be issued patents for which we have applied or obtain additional patents, or that we will be able to obtain licenses to patents or other intellectual property rights of third parties that we may need to support our business in the future. The inability to obtain certain patents or rights to third-party patents and other intellectual property rights in the future could have a material adverse effect on our business.

The ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

We have significant U.S. net operating loss and tax credit carryforwards (the "Tax Attributes"). Under federal tax laws, we can carry forward and use our Tax Attributes to reduce our future U.S. taxable income and tax liabilities until such Tax Attributes expire in accordance with the Internal Revenue Code of 1986, as amended (the "IRC"). Section 382 and Section 383 of the IRC provide an annual limitation on our ability to utilize our Tax Attributes, as well as certain built-in-losses, against future U.S. taxable income in the event of a change in ownership, as defined under the IRC. Share issuances in connection with our past financing transactions or other future changes in our stock ownership, which may be beyond our control, could result in changes in ownership for purposes of the IRC. Such changes in ownership could further limit our ability to use our Tax Attributes. Accordingly, any such occurrences could adversely affect our financial condition, operating results and cash flows.

The cost of compliance with environmental, health, safety, and other laws and regulations could adversely affect our results of operations or financial condition.

We are subject to a broad range of environmental, health, safety, and other laws and regulations. These laws and regulations impose increasingly stringent environmental, health, and safety protection standards and permit requirements regarding, among other things, air emissions, wastewater storage, treatment, and discharges, the use and handling of hazardous or toxic materials, waste disposal practices, the remediation of environmental contamination, and working conditions for our employees. Some environmental laws, such as the Comprehensive Environmental Response, Compensation and Liability Act of 1980, the Clean Water Act, and comparable laws in U.S. states and other jurisdictions world-wide, impose joint and several liability for the cost of environmental remediation, natural resource damages, third-party claims, and other expenses, without regard to the fault or the legality of the original conduct, on those persons who contributed to the release of a hazardous substance into the environment. We may also be affected by future laws or regulations, including those imposed in response to energy, climate change, geopolitical, or similar concerns. These laws may impact the sourcing of raw materials and the manufacture and distribution of our products and place restrictions and other requirements on the products that we can sell in certain geographical locations.

Our net sales might be adversely impacted if our lighting systems do not meet certain certification and compliance standards.

We are required to comply with certain legal requirements governing the materials in our products. Although we are not aware of any efforts to amend any existing legal requirements or implement new legal requirements in a manner with which we cannot comply, our net sales might be adversely affected if such an amendment or implementation were to occur.

Moreover, although not legally required to do so, we strive to obtain certification for substantially all our products. In the United States, we seek certification on substantially all of our products from UL®, ETL®, or DLC™. Where appropriate in jurisdictions outside the United States, we seek to obtain other similar national or regional certifications for our products. Although we believe that our broad knowledge and experience with electrical codes and safety standards have facilitated certification approvals, we cannot ensure that we will be able to obtain any such certifications for our new products or that, if certification standards are amended, we will be able to maintain such certifications for our existing products. Moreover, although we are not aware of any effort to amend any existing certification standard or implement a new certification standard in a manner that would render us unable to maintain certification for our existing products or obtain ratification for new products, our net sales might be adversely affected if such an amendment or implementation were to occur.

We have in the past experienced a material weakness in our internal control over financial reporting, and if we experience additional material weaknesses in the future or fail to otherwise maintain effective financial reporting systems and processes, we may be unable to accurately and timely report our financial results or comply with the requirements of being a public

company, which could cause the price of our common stock to decline and harm our business.

As a public company reporting to the SEC, we are subject to the reporting requirements of the Exchange Act and the Sarbanes-Oxley Act of 2002, including Section 404(a) that requires that we annually evaluate and report on our systems of internal controls.

We previously identified a material weakness in our internal control over financial reporting as of March 31, 2019, which has been remediated. The material weakness was primarily due to the insufficiency of supervision and review by employees for non-routine accounting and related financial reporting matters. Moreover, we cannot be certain that we will not in the future have additional material weaknesses in our internal control over financial reporting, or that we will successfully remediate any that we find. In addition, the processes and systems of internal controls we have developed to date may not be adequate. Accordingly, there could continue to be a reasonable possibility that material weaknesses could result in a misstatement of our accounts or disclosures that would result in a material misstatement of our financial statements that would not be prevented or detected on a timely basis, or cause us to fail to meet our obligations to file periodic financial reports on a timely basis. Any of these failures could result in adverse consequences that could materially and adversely affect our business, including an adverse impact on the market price of our common stock, potential action by the SEC against us, possible defaults under our debt agreements, shareholder lawsuits, delisting of our stock, general damage to our reputation and the diversion of significant management and financial resources.

We rely heavily on information technology in our operations and any material failure, weakness, interruption or breach of security could prevent us from effectively operating our business, which could have a material adverse effect on our business, financial condition, and results of operations.

We rely heavily on our information technology systems, including our enterprise resource planning ("ERP") and customer relationship management ("CRM") software, across our operations and corporate functions, including for management of our supply chain, payment of obligations, data warehousing to support analytics, finance systems, accounting systems, and other various processes and procedures, some of which are handled by third parties, as well as lead generation, customer tracking, customer sourcing, etc. We also rely heavily on remote communication tools such as Microsoft Teams and Zoom to accommodate remote work environment and external meetings.

Our ability to efficiently and effectively manage our business depends significantly on the reliability and capacity of these systems. Our business and results of operations may be adversely affected if we experience system usage problems. The failure of these systems to operate effectively, maintenance problems, system conversions, back-up failures, problems or lack of resources for upgrading or transitioning to new platforms or damage or interruption from circumstances beyond our control, including, without limitation, fire, natural disasters, power outages, systems failure, security breaches, cyber-attacks, viruses or human error could result in, among other things, transaction errors, processing inefficiencies, loss of data, inability to generate timely SEC reports, loss of sales and customers and reduced efficiency in our operations. Additionally, we and our customers could suffer financial and reputational harm if customer or Company proprietary information is compromised by such events. Remediation of such problems could result in significant unplanned capital investments and any damage or interruption could have a material adverse effect on our business, financial condition, and results of operations.

Risks Associated with an Investment in Our Common Stock

As a "thinly-traded" stock with a relatively small public float, the market price of our common stock is highly volatile and may decline regardless of our operating performance.

Our common stock is "thinly-traded" and we have a relatively small public float, which increases volatility in the share price and makes it difficult for investors to buy or sell shares in the public market without materially affecting our share price. Since the beginning of 2020, our market price has ranged from a low of \$0.81 to a high of \$11.60 and continues to experience significant volatility. Broad market and industry factors also may adversely affect the market price of our common stock, regardless of our actual operating performance. Factors that could cause wide fluctuations in our stock price may include, among other things:

- actual or anticipated variations in our financial condition and operating results;
- general economic conditions and trends:
- addition or loss of significant customers and the timing of significant customer purchases;
- our ability to effectively implement our growth plans, including new products, and the significance and timing of associated expenses;
- unanticipated impairments and other changes that reduce our earnings;

- overall conditions or trends in our industry;
- the entry or exit of new competitors into our target markets;
- any litigation or legal claims;
- the terms and amount of any additional financing that we may obtain, if any;
- unfavorable publicity;
- additions or departures of key personnel;
- geopolitical changes, global health concerns and macroeconomic changes;
- changes in the estimates of our operating results or changes in recommendations by any securities or industry analysts that elect to follow our common stock;
- market expectations following periods of rapid growth;
- the potential impact of increased volatility due to elevated trading on the price of our stock;
- industry-wide news events that may affect market perceptions of the value of our stock; and
- · sales of our common stock by us or our stockholders, including sales by our directors and officers.

Because our common stock is thinly-traded, investors seeking to buy or sell a certain quantity of our shares in the public market may be unable to do so within one or more trading days and it may be difficult for stockholders to sell all of their shares in the market at any given time at prevailing prices. Any attempts to buy or sell a significant quantity of our shares could materially affect our share price. In addition, because our common stock is thinly-traded and we have a relatively small public float, the market price of our shares may be disproportionately affected by any news, commentary or rumors regarding us or our industry, regardless of the source or veracity, which could also result in increased volatility.

In addition, in the past, following periods of volatility in the market price of a company's securities, securities litigation has often been instituted against these companies. Volatility in the market price of our shares could also increase the likelihood of regulatory scrutiny. Securities litigation, if instituted against us, or any regulatory inquiries or actions that we face could result in substantial costs, diversion of our management's attention and resources and unfavorable publicity, regardless of the merits of any claims made against us or the ultimate outcome of any such litigation or action.

We could issue additional shares of common stock or preferred stock without stockholder approval, or new securities with terms or rights superior to those of our existing stockholders, which may adversely affect the market price of our common stock.

We expect to require additional financing to fund future operations, including our research, development, sales and marketing activities. We are authorized to issue 50,000,000 shares of common stock of which 3,682,728 shares were issued and outstanding as of March 22, 2021 and 5,000,000 shares of preferred stock, of which 2,597,470 were issued and outstanding as of March 22, 2021. Our board of directors has the authority, without action or vote of our stockholders, to issue authorized but unissued shares of common and preferred stock subject to Nasdaq's rules. Additionally, if we raise additional funds by issuing equity securities, the percentage ownership of our current stockholders will be reduced, and, if the equity securities issued are preferred shares, the holders of the new preferred shares may have rights superior to those of our existing stockholders, which could adversely affect rights of our existing stockholders and the market price of our common stock. In addition, in order to raise additional capital or acquire businesses in the future, we may need to issue securities that are convertible or exchangeable for shares of our common or preferred stock. If we raise additional funds by issuing debt securities, the holders of those debt securities would have some rights senior to those of our existing stockholders, and the terms of these debt securities could impose restrictions on operations and create a significant interest expense for us which could have a materially adverse effect on our business. Any such issuances could be made at a price that reflects a discount to the then-current trading price of our common stock. These issuances could be dilutive to our existing stockholders and cause the market price of our common stock to decline.

The exercise of outstanding warrants to purchase our common stock or the conversion of shares of our Series A Convertible Preferred Stock into shares of common stock may dilute the ownership interest of our common stockholders.

The exercise of some or all of the outstanding warrants to purchase our common stock or the conversion of some or all of the outstanding Series A Convertible Preferred Stock may dilute the ownership interests of our stockholders. Any sales of our common stock issuable upon the exercise of the warrants or conversion of the Series A Preferred Stock could adversely affect prevailing market prices of our common stock. In addition, the anticipated exercise of the warrants or conversion of the Series A Convertible Preferred Stock could depress the price of our common stock.

Our failure to comply with the continued listing requirements of Nasdag could adversely affect the price of our common stock and its liquidity.

Our common stock is currently listed on the Nasdaq Capital Market. We must comply with Nasdaq's continued listing requirements related to, among other things, stockholders' equity, market value, minimum bid price, and corporate governance in order to remain so listed. There can be no assurances that we will be able to comply with the applicable listing requirements.

We have in the past received notices from Nasdaq advising us that we were not in compliance with the continued listing requirements and, in each case, we were able to subsequently regain compliance. In January 2019, we received a letter from the Nasdaq Listing Qualifications Staff (the "Staff") notifying us that, for the prior 30 consecutive trading days, the closing bid price for our common stock was below the minimum \$1.00 per share required pursuant to Nasdaq Listing Rule 5550(a)(2) (the "Bid Price Rule"). In accordance with Nasdaq Listing Rule 5810(c)(3)(A), our common stock traded above \$1.00 for the required number of days within the 180-calendar day period immediately following our receipt of the notice to regain compliance with the Bid Price Rule.

On May 15, 2019, we received a letter from the Staff notifying us that our common stock had again fallen out of compliance with the Bid Price Rule. On October 15, 2019, the Company formally requested a 180-day extension beginning November 12, 2019 to regain compliance. On April 16, 2020, Nasdaq announced that, in response to the COVID-19 pandemic and related extraordinary market conditions, it had provided temporary relief through June 30, 2020 from compliance with, among other rules, the Bid Price Rule. As a result, we had until July 24, 2020 to regain compliance with the Bid Price Rule, which we accomplished by effecting a 1-for-5 reverse stock split on June 11, 2020, increasing the per share trading price of our common stock. Our common stock began trading on Nasdaq on a split-adjusted basis at the opening of trading on June 12, 2020.

On August 17, 2020, we received a letter from the Staff notifying us that we were no longer in compliance with Nasdaq Listing Rule 5550(b)(1), which requires listed companies to maintain stockholders' equity of at least \$2,500,000 if they do not meet the alternative compliance standards relating to the market value of listed securities or net income from continuing operations (the "Minimum Stockholders' Equity Rule"). Our Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2020, reflected that our stockholders' equity as of June 30, 2020 was \$1,714,000. In addition, as of August 13, 2020, we did not meet the alternative compliance standards relating to the market value of listed securities or net income from continuing operations. On October 5, 2020, based on our timely submission of our plan to regain compliance, Nasdaq granted us an extension through February 15, 2021 to regain compliance with the Minimum Stockholders' Equity Rule, subject to our compliance with certain terms of the extension. In accordance with one part of the plan submitted to the Staff, we have successfully modified our outstanding warrants and are able to now classify the warrants within equity. In December 2020, we reclassified \$1.4 million from warrant liability into equity. At December 31, 2020 our stockholders' equity was \$4,255,000. On January 20, 2021,we received a letter from the Staff notifying us that, on a conditional basis, Nasdaq has determined that we have regained compliance with the minimum stockholders' equity requirement for continued listing on the Nasdaq Capital Market.

If we do not remain compliant with Nasdaq's continued listing requirements, then we could be delisted from The Nasdaq Capital Market. If we were delisted, it would likely have a negative impact on the price of our common stock and our liquidity. If we are delisted from The Nasdaq Capital Market and we are not able to list our common stock on another exchange, our common stock could be quoted on the OTC Bulletin Board or in the "pink sheets." As a result, we could face significant adverse consequences including, among others:

- a limited availability of market quotations for our securities;
- a determination that our common stock is a "penny stock," which would require broker-dealers trading in our common stock to adhere to more stringent rules and possibly result in a reduced level of trading activity in the secondary trading market for our securities;
- a limited amount of news and little or no analyst coverage of the Company;
- we would no longer qualify for exemptions from state securities registration requirements, which may require us to comply with applicable state securities laws; and
- a decreased ability to issue additional securities (including pursuant to short-form registration statements on Form S-3) or obtain additional financing in the future.

As a result of these factors, the value of our common stock could decline significantly.

We have never paid dividends on our common stock, and we do not anticipate paying any cash dividends in the foreseeable future.

We have never declared or paid dividends on our common stock, nor do we anticipate paying any cash dividends for the foreseeable future. We currently intend to retain future earnings, if any, to finance the operations and expansion of our business. Any future determination to pay cash dividends will be at the discretion of our board of directors and will be dependent upon

our earnings, financial condition, operating results, capital requirements, a capital structure strategy and other factors as deemed necessary by our board of directors.

The elimination of monetary liability against our directors under Delaware law and the existence of indemnification rights held by our directors and officers may result in substantial expenditures by the Company and may discourage lawsuits against our directors and officers.

Our Certificate of Incorporation eliminates the personal liability of our directors to the Company and our stockholders for damages for breach of fiduciary duty as a director to the extent permissible under Delaware law. Further, our Bylaws provide that we are obligated to indemnify any of our directors or officers to the fullest extent authorized by Delaware law and, subject to certain conditions, advance the expenses incurred by any director or officer in defending any action, suit or proceeding prior to its final disposition. Those indemnification obligations could result in the Company incurring substantial expenditures to cover the cost of settlement or damage awards against our directors or officers, which we may be unable to recoup. These provisions and resultant costs may also discourage us from bringing a lawsuit against any of our current or former directors or officers for breaches of their fiduciary duties, and may similarly discourage the filing of derivative litigation by our stockholders against our directors and officers even though such actions, if successful, might otherwise benefit us or our stockholders.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our principal executive offices and our manufacturing facility are located in an approximately 117,000 square foot facility in Solon, Ohio, under a lease agreement expiring on June 30, 2022. We believe this facility is adequate to support our current and anticipated operations.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we may be involved in legal proceedings arising from the normal course of business. See Note 15, "Legal Matters," to our financial statements for the year ended December 31, 2020 included in Part II, Item 8, "Financial Statements and Supplementary Data," of this Annual Report.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

Market Information

Our common stock trades on The Nasdaq Capital Market under the symbol "EFOI."

Stockholders

There were approximately 46 holders of record of our common stock as of March 22, 2021, however, a large number of our stockholders hold their stock in "street name" in brokerage accounts. Therefore, they do not appear on the stockholder list maintained by our transfer agent.

Dividends

We have not declared or paid any cash dividends, and do not anticipate paying cash dividends in the near future.

ITEM 6. SELECTED FINANCIAL DATA

As a "smaller reporting company" as defined by Item 10 of Regulation S-K, 17 CFR § 229.10(f)(1), the Company is not required to provide this information.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our Consolidated Financial Statements ("financial statements") and related notes thereto, included in Part II, Item 8, "Financial Statements and Supplementary Data," of this Annual Report.

Overview

Energy Focus, Inc. engages primarily in the design, development, manufacturing, marketing and sale of energy-efficient LED lighting systems and controls and recently announced development of UVCD products. We develop, market and sell high quality LED lighting products and UVCD products and controls in the commercial market and MMM. Our mission is to enable our customers to run their facilities and offices with greater energy efficiency, productivity, and human health through advanced LED retrofit and UVCD solutions. Our goal is to be the LED and HCL technology and market leader for the most demanding applications where performance, quality, value (high quality at an affordable price), environmental impact and health are considered paramount. We specialize in LED lighting retrofit by replacing fluorescent, high-intensity discharge lighting and other types of lamps and fixtures in institutional buildings for primarily indoor lighting applications with our innovative, high-quality commercial and military TLED, as well as other LED and lighting control and UVCD products. On October 14, 2020, we announced the launch of our UVCD product portfolio.

The LED lighting industry has changed dramatically over the past several years due to increasing commoditization, competition and price erosion. We have been experiencing these industry forces in both our military business since 2016 and in our commercial segment, where we once commanded significant price premiums for our flicker-free TLEDs with primarily 10-year warranties. Since April 2019, we have focused on redesigning our products for lower costs and consolidating our supply chain for stronger purchasing power where appropriate in order to price our products more competitively. Despite these efforts, the pricing of our legacy products remains at a premium to the competitive range and we expect aggressive pricing actions and commoditization to continue to be a headwind until our more differentiated new products ramp in volume. These trends are not unique to Energy Focus as evidenced by the increasing number of industry peers facing challenges, exiting LED lighting, selling assets and even going out of business.

In addition to continuously pursuing scheduled cost reductions, our strategy to combat these trends it to move up the value chain, with more innovative and differentiated products and solutions that offer greater, distinct value to our customers. Two specific examples of these products we have developed include the RedCap®, our emergency backup battery integrated TLED, and EnFocus™, our new dimmable/color-tunable lighting and control platform that we launched in 2020. We believe our revamped go-to-market strategy that focuses more on direct-sales marketing, selectively expanding our channel partner network that covers territories across the country, and listens to the voice of the customer, has led to better and more impactful product development efforts that we believe will eventually translate into larger addressable markets and greater sales growth for us.

Leveraging and integrating a broad range of rapidly advancing technologies including LED lighting, UV-C disinfection, electronics, software, sensors, cloud and AI, the Energy Focus UVCD solutions aim to provide impactful and affordable disinfection products for businesses and homes to effectively reduce infection risks. In addition to being ozone-free, the products are designed to guard against the risks of direct human exposure to UV-C rays. abUVTM and nUVoTM include enclosed, self-contained UV-C disinfection units that continuously inactivate viruses while reducing overall pathogen levels in the air. mUVeTM incorporates advanced sensor, machine vision and autonomous technologies to avoid human exposure during disinfection operations. We believe Energy Focus UVCD solutions are capable of providing affordable continuous disinfection with optimal effectiveness and safety. We believe that the UVCD products will open up a new, emerging and sizable market for us and expand our sales and growth potential.

Since April 2019, we have experienced significant change at the Company. Prior to James Tu returning as Chief Executive Officer and Chairman at the beginning of April 2019, the Company had experienced significant sales declines, operating losses and increases in its inventory. Immediately upon Mr. Tu returning to the Company, significant additional restructuring efforts were undertaken. The Company has since then replaced the entire senior management team, significantly reduced non-critical expenses, minimized the amount of inventory the Company was purchasing, dramatically changed the composition of our board of directors, as well as adding very selectively to the executive team by hiring Tod Nestor as President and Chief Financial Officer at the beginning of July 2019, and James R. Warren as Senior Vice President, General Counsel and Corporate Secretary in September 2020, in addition to recruiting new departmental leaders across the Company. The cost savings efforts undertaken included the Company implementing phased actions to reduce costs to minimize cash usage. Our initial actions included the elimination of certain positions, restructuring of the sales organization and incentive plan, flattening of the senior management team, additional operational streamlining, management compensation reductions, and outsourcing of certain functions including

certain elements of supply chain and marketing. In connection with these actions, we recorded severance and related benefits charges of \$0.2 million during the first half of 2019. These additional restructuring charges primarily related to severance and related benefits charges as a result of eliminating three positions during the first quarter of 2019 and nine positions during the second quarter of 2019, as well as costs associated with closing our offices in San Jose, California and Taipei, Taiwan in the second quarter of 2019. With quarterly sales for the Company leveling off at its low point in the third quarter of 2019 at \$2.9 million, we began to see the impact of our relaunch efforts and restructuring of our sales organization in the fourth quarter of 2019 achieving sales of \$3.5 million, or a sequential quarter-over-quarter growth rate of 21.1%. In addition, losses were mitigated through the better cost management and a sharp focus on better managing pricing and inventory decisions for the last half of 2019.

During 2020, we continued to see the benefits from these relaunch efforts undertaken by the new management team, in addition to a number of strategic sourcing projects completed during 2020. It is our belief that the continued momentum of the efforts undertaken in 2019 and into 2020, along with the development and launch of new and innovative products as well as an expanded sales team and distribution network, will over time result in improved sales and bottom-line performance for the Company.

We launched our EnFocusTM platform during the second quarter of 2020 and continued to receive positive feedback from existing, new, and potential new customers. The EnFocusTM platform offers two immediately available product lines: EnFocusTM DM, which provides a dimmable lighting solution, and EnFocusTM DCT, which provides both a dimmable and color tunable lighting solution. EnFocusTM enables buildings to have dimmable, color tunable and circadian-ready lighting using existing wiring, without requiring laying additional data cables or any wireless communication systems, through a relatively simple upgrade with EnFocusTM switches and tubular LEDs, a far more affordable and environmentally sustainable solution compared with replacing entire lighting fixtures and incorporating additional wired or wireless communication.

In addition, in response to the COVID-19 pandemic and an anticipated increase in sanitation and hygiene demand for buildings, facilities and homes, we started developing advanced UVCD products for both consumer as well as the commercial and industrial markets beginning in the first quarter of 2020. We announced the following three UVCD products in October 2020: abUVTM circadian lighting and UVCD air disinfection integrated troffers controlled by the EnFocusTM platform technology; nUVoTM portable disinfection device for offices and homes; and mUVeTM autonomous robot designed for surface disinfection.

In our MMM business, significant efforts undertaken to reduce costs in our product offerings have positioned us to be more competitive in this segment. Such efforts allowed us to continue to win bids and proposals that helped grow our MMM sales during 2020, offsetting some of the weakness being experienced in our commercial business. In addition, during the fourth quarter of 2020, we became an approved supplier for the General Services Administration ("GSA") and our products are now listed in the GSA website for all federal and military agencies to view and order our products. While we continue to aggressively seek to increase sales of our commercial products, the MMM business offers us continued sales, in addition to validating our product quality and strengthening our brand trust in the marketplace.

Meanwhile, we continue to seek additional external funding alternatives and sources to support our growth strategies, plans and initiatives. We plan to achieve profitability through developing and launching new, innovative products such as EnFocusTM and our UVCD products, as well as executing on our multi-channel sales strategy that targets key verticals, such as government, healthcare, education and commercial and industrial, complemented by our marketing outreach campaigns and expanding channel partnerships. We also plan to continue to develop advanced lighting and lighting control applications built upon the EnFocusTM platform. In addition, we intend to continue to apply rigorous financial discipline in our organizational structure, business processes and policies, strategic sourcing activities and supply chain practices to help accelerate our path towards profitability.

Despite continuing progress throughout 2020 in reducing our operating losses significantly by 18.7% from December 31, 2019, the Company's results reflect the challenges due to long and unpredictable sales cycles, unexpected delays in customer retrofit budgets and project starts, and unexpected supply chain issues, all exacerbated by the COVID-19 pandemic since early 2020. There has also been continuing aggressive price competition in the lighting industry. We continued to incur losses and we have a substantial accumulated deficit, which continues to raise substantial doubt about our ability to continue as a going concern at December 31, 2020.

The COVID-19 pandemic in particular has, and may continue to have, a significant economic and business impact on our company. Following a slowdown in the second quarter of 2020, we have seen a continuing weakness in commercial sales as customers in the healthcare, education, and commercial and industrial sectors delayed order placements in reaction to the impacts of the COVID-19 pandemic.

We continue to monitor the impact of the COVID-19 pandemic on our customers, suppliers and logistics providers, and to evaluate governmental actions being taken to curtail and respond to the spread of the virus. The significance and duration of the ongoing impact on us is still uncertain. Material adverse effects of the COVID-19 pandemic on market drivers, our customers, suppliers or logistics providers could significantly impact our operating results. We also plan to continue to actively follow, assess and analyze the ongoing impact of the COVID-19 pandemic and stand ready to adjust our organizational structure, strategies, plans and processes to respond.

Because the situation continues to evolve, we cannot reasonably estimate the ultimate impact to our business, results of operations, cash flows and financial position that the COVID-19 pandemic may have. Continuation of the COVID-19 pandemic and government actions in response thereto could cause further disruptions to our operations and the operations of our customers, suppliers and logistics partners and could significantly adversely affect our near-term and long-term revenues, earnings, liquidity and cash flows. We aim to stay agile as an organization to respond to potential or continuing weakness in the macro environment and in the meantime expand sales channels and enter new markets such as UVCD that might be able to provide additional growth opportunities.

Results of operations

The following table sets forth the percentage of net sales represented by certain items reflected on our Consolidated Statements of Operations for the following periods:

	2020	2019
Net sales	100.0 %	100.0 %
Cost of sales	69.2	84.5
Gross profit	30.8	15.5
Operating expenses:		
Product development	8.4	10.1
Selling, general, and administrative	46.9	58.6
Restructuring	(0.4)	1.6
Total operating expenses	54.9	70.3
Operating loss	(24.1)	(54.7)
Other expenses:		
Interest expense	2.9	2.5
Loss on extinguishment of debt	1.6	_
Loss from change in fair value of warrants	6.5	_
Other expenses, net	0.4	0.7
Net loss before income taxes	(35.5)	(57.9)
Provision for income taxes		0.1
Net loss	(35.5)%	(58.0)%

Net sales

A further breakdown of our net sales by product line is as follows (in thousands):

	2020	2019
Commercial products	\$ 5,404	\$ 7,877
MMM products	11,424	4,828
Total net sales	\$ 16,828	\$ 12,705

Our net sales of \$16.8 million in 2020 increased 32.5% compared to 2019 mainly driven by an increase of 136.6% in MMM sales. MMM sales were lower in 2019 primarily due to two of our products that were pending evaluation by the Defense Logistics Agency, during which time the US Navy was not allowed to purchase these two products and also due to federal

government funding restrictions. In March 2020, we won a contract worth about \$3.5 million and throughout 2020, our sales from our in-house sales and inside sales accounts grew significantly. Net sales of our commercial products decreased 31.4% in 2020 as compared to 2019, reflecting fluctuations in the timing, pace, and size of commercial projects, including impacts of the COVID-19 pandemic.

International sales

We do not generate significant sales from customers outside the United States. International net sales accounted for approximately 1% of net sales in 2020 and 2019, respectively. Changes in currency exchange rates did not have an impact on net sales in 2020 or 2019, as our sales, including international sales, are denominated in U.S. dollars.

Gross profit

Gross profit was \$5.2 million in 2020, compared to \$2.0 million in 2019. The increase in gross profit was primarily driven by an increase in MMM sales as noted above, as well as improved efficiency in our plant operations. Our 2020 gross profit as a percent of net sales of 30.8% increased from our 2019 gross profit as a percent of net sales of 15.5%, primarily driven by product mix and margin impact from MMM sales. Gross margin for 2020 included favorable price and usage variances for material and labor of \$0.9 million or 5.5% of net sales and favorable inventory reserves recorded of \$0.6 million, or 3.7% of net sales, offsetting unexpected additional manufacturing cost due to supply chain challenges relating primarily to our MMM products.

Operating expenses

Product development

Product development expenses include salaries, including stock-based compensation and related benefits, contractor and consulting fees, legal fees, supplies and materials, as well as overhead items, such as depreciation and facilities costs. Product development costs are expensed as they are incurred. Cost recovery represents the combination of revenues and credits from government contracts.

Total gross and net product development spending, including credits from government contracts, is shown in the following table (in thousands):

	For the year end	led December 3	1,
	2020	2019	
Total gross product development expenses	\$ 1,415	\$	1,284

Gross product development expenses were \$1.4 million in 2020, an increase of 10.2%, compared to \$1.3 million in 2019. The increase primarily resulted from increased product development and testing costs of \$0.2 million associated with the development and launch of EnFocusTM and the development of our UVCD products.

Selling, general, and administrative

Selling, general, and administrative expenses were \$7.9 million, or 46.9%, of net sales in 2020, compared to \$7.4 million, or 58.6%, of net sales in 2019. Of the year-over-year \$0.5 million increase, approximately \$0.5 million is attributable to increased headcount and salaries, including stock-based compensation and related benefits, \$0.2 million to an increase in legal and professional fees, and a \$0.1 million increase in recruiting and relocation fees. These increases were offset by savings of \$0.2 million in sales commissions, \$0.1 million in travel and related expenses as a result of COVID-19 stay-at-home orders and \$0.1 million in reduced depreciation expense.

Restructuring

During 2019 and 2020, we recorded restructuring charges of approximately \$0.2 million and credits of approximately \$0.1 million, respectively, related to the cost and offsetting sub-lease income for the remaining lease obligation for our former New York, New York and Arlington, Virginia offices. The lease on our Arlington, Virginia office ended September 30, 2019.

During 2020, we recorded no restructuring-related severance and related benefits charges. During the first half of 2019, we recorded severance and related benefits charges of \$0.2 million with no material restructuring charges recorded during the second half of 2019.

As of December 31, 2020, we estimate that we will receive a total of approximately \$0.1 million in sublease payments to offset our remaining lease obligations of \$0.2 million, which extend until June 2021. We expect to incur insignificant additional costs over the remaining life of our lease obligations. Please refer to Note 3, "Restructuring," included in Item 8, "Financial Statements and Supplementary Data," of this Annual Report for further information.

Other expenses

Interest expense

We incurred \$481 thousand in interest expense in 2020, primarily related to interest on borrowings and non-cash amortization of fees related to the Austin Facility, the promissory note in the principal amount of \$1.3 million (the "Iliad Note") the Company sold and issued to Iliad Research and Trading, L.P. ("Iliad"), pursuant to a note purchase agreement (the "Iliad Note Purchase Agreement") with Iliad, and the interest on borrowings and non-cash amortization of fees related to the Credit Facilities.

We incurred \$317 thousand in interest expense in 2019, primarily related to interest on borrowings and non-cash amortization of fees related to the Austin Facility and under the Iliad Note.

Loss on extinguishment of debt

A loss of \$276 thousand on the extinguishment of debt was recognized during the year ended December 31, 2020, consisting of a \$100 thousand termination fee and the write-off of the remaining related debt acquisition costs of \$59 thousand from the Austin Facility and the write-off of the remaining debt acquisition costs of \$117 thousand relating to the Iliad Note.

Loss from change in fair value of warrants

A loss of \$1.1 million was recognized during the year ended December 31, 2020 for the market value change in our warrant liabilities. The loss recognized was a result of the revaluation of the warrant liability using the market price of the Company's common stock at December 22, 2020, versus the market price of the Company's common stock at the time of initial issuance of the warrants (January 13, 2020). On December 22, 2020, all warrant holders agreed to a modification of the terms of their warrants that qualified the warrants for equity accounting. At that time, the liability relating to the remaining 467,306 warrants was fair-valued with the offsetting adjustment recorded in income. The \$1.4 million warrant liability was then reclassified into equity and the warrants are no longer subject to re-measurement at each balance sheet date.

Other expenses, net

We recognized other expenses, net, of \$73 thousand in 2020, compared to other expenses, net, of \$91 thousand in 2019. Other expenses, net, in 2020 primarily consisted of bank and collateral management fees. Other expenses, net in 2019 primarily consisted of \$80 thousand of collateral management fees related to the Austin Facility and a net loss on the sale and disposal of fixed assets of \$24 thousand, partially offset by various refunds of \$12 thousand.

Income taxes

For the years ended December 31, 2020 and 2019, our effective tax rate was 0.1% and (0.1)%, respectively.

In 2020, our effective tax rate was lower than the statutory rate due to an increase in the valuation allowance as a result of the \$7.1 million additional federal net operating loss we recognized for the year. In 2019, our effective tax rate was lower than the statutory rate due to an increase in the valuation allowance as a result of the \$8.3 million additional federal net operating loss we recognized for the year.

Deferred income tax assets are reduced by a valuation allowance when it is more likely than not that some portion of the deferred income tax assets will not be realized. In considering the need for a valuation allowance, we assess all evidence, both positive and negative, available to determine whether all or some portion of the deferred tax assets will not be realized. Such evidence includes, but is not limited to, recent earnings history, projections of future income or loss, reversal patterns of existing taxable and deductible temporary differences, and tax planning strategies. We have recorded a full valuation allowance

against our deferred tax assets at December 31, 2020 and 2019, respectively. We had no net deferred liabilities at December 31, 2020 or 2019. We will continue to evaluate the need for a valuation allowance on a quarterly basis.

At December 31, 2020, we had net operating loss carry-forwards of approximately \$115.9 million for federal income tax purposes (\$72.3 million for state and local income tax purposes). However, due to changes in our capital structure, approximately \$61.5 million of the \$115.9 million is available after the application of IRC Section 382 limitations. As a result of the Tax Cuts and Jobs Act of 2017 (the "Tax Act"), net operating loss carry-forwards generated in tax years beginning after December 31, 2017 can only offset 80% of taxable income. These net operating loss carry-forwards can no longer be carried back, but they can be carried forward indefinitely. The \$7.1 million and \$8.3 million in federal net operating losses generated in 2020 and 2019 will be subject to the new limitations under the Tax Act. If not utilized, the carry-forwards generated prior to December 31, 2017 of \$37.3 million will begin to expire in 2021 for federal purposes and have begun to expire for state and local purposes. Please refer to Note 12, "Income Taxes," included in Item 8, "Financial Statements and Supplementary Data," of this Annual Report for further information.

Net loss

Our net loss from operations improved to \$6.0 million in 2020 compared to \$7.4 million in 2019. The improvement in our loss is primarily due to increased sales of \$4.1 million, or 32.5% over 2019 and our continued cost control initiatives, resulting in an increase in gross margin of 162.7% over 2019. These improvements were offset slightly by an increase in operating expenses of \$0.3 million over 2019.

Liquidity and capital resources

General

We generated a net loss of \$6.0 million in 2020, compared to net loss of \$7.4 million in 2019. We have incurred substantial losses in the past, and as of December 31, 2020, we had an accumulated deficit of \$130.9 million.

In order for us to operate our business profitably, we need to grow our sales, maintain cost control discipline while balancing development of our new products required for long-term competitiveness and revenue growth, continue our efforts to reduce product cost, and drive further operating efficiencies. There is a risk that our strategy to return to profitability may not be successful. We will likely require additional financing to achieve our strategic plan and, if our operations do not achieve, or we experience an unanticipated delay in achieving, our intended level and pace of profitability, we will continue to need additional funding, none of which may be available on favorable terms or at all and could require us to discontinue or curtail our operations.

Considering both quantitative and qualitative information, we continue to believe that the combination of our plan to continue to ensure appropriate levels of the availability of external financing, current financial position, liquid resources, obligations due or anticipated within the next year, executive and sales reorganization, and implementation of our product development and sales channel strategy, if adequately executed, will provide us with an ability to finance our operations through 2021 and will mitigate the substantial doubt about our ability to continue as a going concern.

Credit Facilities

On August 11, 2020, we entered into the Credit Facilities. The new Credit Facilities consist of the Inventory Facility, a two-year inventory financing facility for up to \$3.0 million, and the Receivables Facility, a two-year receivables financing facility for up to \$2.5 million. These facilities replaced our previous credit facility, the Austin Facility. As of December 31, 2020, our cash was approximately \$1.8 million and our total outstanding balance was approximately \$2.3 million under the Credit Facilities. As of December 31, 2020, our additional availability under the Credit Facilities was \$1.7 million.

Convertible Notes

On March 29, 2019, we issued \$1.7 million aggregate principal amount of subordinated convertible promissory notes (the "Convertible Notes") to certain investors in a private placement exempt from the registration requirements of the Securities Act of 1933, as amended. The Convertible Notes had a maturity date of December 31, 2021 and bore interest at a rate of 5% per annum until June 30, 2019 and at a rate of 10% thereafter. Pursuant to their terms, on January 16, 2020, following approval by our stockholders of certain amendments to the Certificate of Incorporation, the principal amount of all of the Convertible Notes, and the accumulated interest thereon (\$0.1 million), which totaled \$1.8 million, were converted at a conversion price of \$0.67 per share into an aggregate of 2,709,018 shares of the Company's Series A Convertible Preferred Stock, par value \$0.0001 per

share (the "Series A Preferred Stock"), which is convertible on a one-for-five basis into shares of our common stock. During 2020, 111,548 shares of the Series A Preferred Stock were converted into 22,310 shares of common stock.

Iliad Note

On November 25, 2019, we entered into the Iliad Note Purchase Agreement with Iliad pursuant to which the Company sold and issued to Iliad the Iliad Note in the principal amount of \$1.3 million. The Iliad Note was issued with an original issue discount of \$142 thousand and Iliad paid a purchase price of \$1.1 million for the issuance of the Iliad Note, after deduction of \$15 thousand of Iliad transaction expenses.

On December 1, 2020, we repaid the remaining outstanding balance of \$30 thousand on the Iliad Note prior to its maturity date of November 24, 2021. We wrote-off \$117 thousand in remaining debt and original issue discount costs at that time. The debt acquisition and original issue discount costs written-off are reflected as a loss on extinguishment of debt in our Consolidated Statements of Operations for the year ended December 31, 2020. The Iliad Note accrued interest at 8% per annum, compounded daily, on the outstanding balance. We were able to prepay the amounts outstanding under the Iliad Note at a premium, which was 15% during the first year and 10% during the second year. Beginning in May 2020, Iliad could have required us to redeem up to \$150 thousand of the Iliad Note in any calendar month. We had the right on three occasions to defer all redemptions that Iliad could otherwise require us to make during any calendar month. No such deferrals were exercised.

Pursuant to the Iliad Note Purchase Agreement and the Iliad Note, we had, among other things, agreed that, until the Iliad Note was repaid, 10% of gross proceeds the Company received from the sale of our common stock or other equity must be paid to Iliad and applied to reduce the outstanding balance of the Iliad Note.

January 2020 Equity Offering

In January 2020, we completed a registered direct offering for the sale of 688,360 shares of our common stock to certain institutional investors, at a purchase price of \$3.37 per share. We also sold, to the same institutional investors, warrants to purchase up to 688,360 shares of common stock at an exercise price of \$3.37 per share in a concurrent private placement for a purchase price of \$0.625 per warrant. We paid the placement agent commissions of \$193 thousand plus \$50 thousand in expenses in connection with the registered direct offering and the concurrent private placement and we also paid legal, accounting and other fees of \$231 thousand related to the offering. Proceeds to us, before expenses, from the sale of common stock and warrants (the "January 2020 Equity Offering") were approximately \$2.8 million. In accordance with the terms of the Iliad Note, 10% of the gross proceeds from the January 2020 Equity Offering (\$275 thousand) were used to make payments on the Iliad Note, a large portion of which was applied to reduce the outstanding principal amount.

Need for Additional Financing

Even with access to borrowings under the Credit Facilities, we may not generate sufficient cash flows from our operations or be able to borrow sufficient funds to sustain our operations. As such, we will likely need additional external financing during 2021 and will continue to review and pursue external funding sources including, but not limited to, the following:

- obtaining financing from traditional or non-traditional investment capital organizations or individuals;
- obtaining funding from the sale of our common stock or other equity or debt instruments; and
- obtaining debt financing with lending terms that more closely match our business model and capital needs.

There can be no assurance that we will obtain funding on acceptable terms, in a timely fashion, or at all. Obtaining additional financing contains risks, including:

- additional equity financing may not be available to us on satisfactory terms and any equity we are able to issue could lead to dilution for current stockholders and have rights, preferences and privileges senior to our common stock;
- loans or other debt instruments may have terms and/or conditions, such as interest rates, restrictive covenants and control or revocation provisions, which are not acceptable to management or our board of directors; and
- the current environment in the capital markets, as well as global health risks, combined with our capital constraints may prevent us from being able to obtain adequate debt financing.

If we fail to obtain additional financing to sustain our business before we are able to produce levels of revenue to meet our financial needs, we will need to delay, scale back or eliminate our business plan and further reduce our operating costs and headcount, each of which would have a material adverse effect on our business, future prospects, and financial condition. A lack of additional financing could also result in our inability to continue as a going concern and force us to sell certain assets or discontinue or curtail our operations and, as a result, investors in the Company could lose their entire investment.

Cash and debt

At December 31, 2020, our cash balance was \$1.8 million, compared to \$0.4 million at December 31, 2019.

The following is a summary of cash flows from operating, investing, and financing activities, as reflected in the Consolidated Statements of Cash Flows (in thousands):

	2020	2019
Net cash used in operating activities	\$ (2,451)	\$ (6,624)
Net cash used in investing activities	\$ (223)	\$ (129)
Proceeds from the issuance of common stock and warrants	\$ 2,749	\$ _
Proceeds from the exercise of warrants	918	_
Offering costs paid on the issuance of common stock and warrants	(510)	_
Proceeds from PPP loan	795	_
Principal payments under finance lease obligations	(3)	(3)
Proceeds from exercise of stock options and purchases through employee stock purchase plan	100	_
Common stock withheld in lieu of income tax withholding on vesting of restricted stock units	(3)	(110)
Payments for deferred financing costs & termination fees	(320)	(208)
Proceeds from the Iliad Note	_	1,115
Payments on the Iliad Note	(1,306)	_
Proceeds from convertible notes	_	1,700
Net proceeds from credit line borrowings - Credit Facilities	2,459	_
Net payments from credit line borrowings - Austin Facility	(719)	(1,400)
Net cash provided by financing activities	\$ 4,160	\$ 1,094

Cash used in operating activities

Net cash used in operating activities of \$2.5 million in 2020 resulted primarily from the net loss incurred of \$6.0 million, adjusted for non-cash items, including: depreciation and amortization of \$0.2 million and stock-based compensation, net of \$0.1 million, change in fair value of warrant liabilities of \$1.1 million and favorable provisions from inventory of \$0.6 million. We generated \$1.1 million in cash for an increase in accounts payable due to the timing of inventory receipts and payments, \$1.1 million from a net decrease in inventories primarily due to the timing of inventory receipts, \$0.4 million through the timing of collection of accounts receivable and \$0.3 million through an increase of other accrued liabilities, primarily related to accrued payroll and benefits and commissions. We used \$0.7 million for short-term deposits to our contract manufacturers for inventory for the new EnFocus™ platform.

Net cash used in operating activities of \$6.6 million in 2019 resulted primarily from the net loss incurred of \$7.4 million, adjusted for non-cash items, including: depreciation and amortization of \$0.3 million and stock-based compensation, net of \$0.6 million. Cash used by an increase in accounts receivable of \$0.1 million and a decrease in accounts payable mainly for inventory due to the timing of inventory receipts of \$2.2 million and a decrease in accrued expenses primarily for accrued payroll and benefits, severance and commissions of \$0.5 million further attributed to the cash impact of the net loss incurred. The cash used by these working capital changes was partially offset by cash generated by a net decrease in inventories of \$1.9 million as we sold existing inventory and reduced inventory purchasing and prepaid expenses of \$(0.1) million, as the inventory for which we paid deposits to our contract manufacturers in prior quarters was received in the first quarter of 2019.

Cash used in investing activities

Net cash used by investing activities was \$0.2 million in 2020 and \$0.1 million in 2019, respectively, and resulted primarily from the addition of property and equipment tooling to support production operations.

Cash provided by financing activities

Net cash provided by financing activities for the year ended December 31, 2020 of \$4.2 million primarily resulted from \$2.7 million in proceeds received from the January 2020 Equity Offering, partially offset by \$0.5 million in offering costs. Investors in the January 2020 Equity Offering received warrants to purchase shares of our common stock, of which warrants to purchase an aggregate of 467,306 shares remain outstanding at December 31, 2020 with a weighted average exercise price of \$3.51 per share. During the year ended December 31, 2020, 269,240 warrants were exercised resulting in \$0.9 million of proceeds. The exercise of the warrants remaining outstanding at December 31, 2020, could provide us with cash proceeds of up to \$1.6 million in the aggregate.

During the year ended December 31, 2020, we received \$0.8 million in proceeds from the PPP loan, \$1.4 million from borrowings under the Inventory Facility and \$1.1 million from borrowings under the Receivables Facility, and paid \$0.7 million, net, on the Austin Facility. Also during the year ended December 31, 2020, we paid \$0.2 million in deferred financing fees on the Credit Facilities. On August 11, 2020, we paid the outstanding balance of \$1.4 million to close out the Austin Facility, which included a \$100 thousand termination fee.

During the year ended December 31, 2020, we repaid \$1.3 million aggregate principal amount under the Iliad Note, which included a mandatory repayment pursuant to the terms of the Iliad Note in connection with the issuance of common stock in the January 2020 Equity Offering, of which \$0.2 million was allocated against principal. At December 31, 2020, we had additional availability for us to borrow of \$1.0 million under the Inventory Facility and \$0.6 million under the Receivables Facility.

Net cash provided by financing activities for the year ended December 31, 2019 of \$1.1 million primarily resulted from net proceeds from the Convertible Notes of \$1.7 million and the Iliad Note of \$1.1 million offset by payments to the Austin Facility of \$1.4 million.

Credit facilities

On August 11, 2020, we entered into the Credit Facilities, consisting of two debt financing arrangements. The new Credit Facilities consist of the Inventory Facility, a two-year inventory financing facility for up to \$3.0 million, and the Receivables Facility, a two-year receivables financing facility for up to \$2.5 million. These facilities replaced our previous credit facility, the Austin Facility, substantially increasing the Company's borrowing capacity and reducing its blended interest expense rate.

Borrowings under the Inventory Facility were \$1.3 million and borrowings under the Receivables Facility were \$1.0 million at December 31, 2020. These facilities are recorded in the Consolidated Balance Sheet as of December 31, 2020 as a current liability under the caption "Credit line borrowings, net or origination fees." Outstanding balances include unamortized net issuance costs totaling \$0.1 million for the Inventory Facility and \$40 thousand for the Receivables Facility as of December 31, 2020.

The Credit Facilities replaced the Austin Facility which was entered into on December 11, 2018 and was secured by a lien on our assets. The Austin Facility was a three year, \$5.0 million revolving line of credit. Borrowings under the Austin Facility were \$0.7 million at December 31, 2019 with total availability of \$1.6 million. On August 11, 2020, we paid \$1.4 million to close the Austin Facility which included a \$100 thousand termination fee. Additionally, we wrote off \$59 thousand of the remaining related debt acquisition costs. The termination fee and the write-off of debt acquisition costs are reflected as a loss on extinguishment of debt in our Consolidated Statements of Operations for the twelve months ended December 31, 2020.

For more information, see Note 9 "Debt" included in Item 8, "Financial Statements and Supplementary Data," of this Annual Report.

Off-balance sheet arrangements

We had no off-balance sheet arrangements at December 31, 2020 or 2019.

Critical accounting policies and estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States ("U.S. GAAP") requires that we make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingencies, and the reported amounts of net sales and expenses in the financial statements. Material differences may result in the amount and timing of net sales and expenses if different judgments or different estimates were utilized.

Critical accounting policies, judgments, and estimates that we believe have the most significant impact on our financial statements are set forth below:

- revenue recognition,
- allowances for doubtful accounts, returns and discounts,
- impairment of long-lived assets,
- valuation of inventories,
- · accounting for income taxes,
- share-based compensation, and
- · leases.

Revenue recognition

On January 1, 2018, we adopted Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, as amended by subsequently issued additional guidance (together, "ASC 606") using the modified retrospective method. The adoption of ASC 606 did not have a material impact on our consolidated financial position or results of operations, as our revenue arrangements generally consist of a single performance obligation to transfer promised goods at a fixed price.

Net sales include revenues from sales of products and shipping and handling charges, net of estimates for product returns. Revenue is measured at the amount of consideration we expect to receive in exchange for the transferred products. We recognize revenue at the point in time when we transfer the promised products to the customer and the customer obtains control over the products. Distributors' obligations to us are not contingent upon the resale of our products. We recognize revenue for shipping and handling charges at the time the goods are shipped to the customer, and the costs of outbound freight are included in cost of sales. We provide for product returns based on historical return rates. While we incur costs for sales commissions to our sales employees and outside agents, we recognize commission costs concurrent with the related revenue, as the amortization period is less than one year. We do not incur any other incremental costs to obtain contracts with our customers. Our product warranties are assurance-type warranties, which promise the customer that the products are as specified in the contract, therefore, the product warranties are not a separate performance obligation and are accounted for as described below. Sales taxes assessed by governmental authorities are accounted for on a net basis and are excluded from net sales.

A disaggregation of product net sales is presented in Note 13, "Product and Geographic Information," included in Item 8, "Financial Statements and Supplementary Data," of this Annual Report.

Accounts Receivable

Our trade accounts receivable consists of amounts billed to and currently due from customers. Our customers are concentrated in the United States. In the normal course of business, we extend unsecured credit to our customers related to the sale of our products. Credit is extended to customers based on an evaluation of the customer's financial condition and the amounts due are stated at their estimated net realizable value. During the first eleven months of 2019, we evaluated and monitored the creditworthiness of each customer on a case-by-case basis. However, during December 2019, we transitioned to an account receivable insurance program with a very high credit worthy insurance company where we have the large majority of the accounts receivable insured with a portion of self-retention. This third party also provides credit-worthiness ratings and metrics that significantly assists us in evaluating the credit worthiness of both existing and new customers. We maintain allowances for sales returns and doubtful accounts receivable to provide for the estimated number of account receivables that will not be collected. The allowance is based on an assessment of customer creditworthiness and historical payment experience, the age of outstanding receivables, and performance guarantees to the extent applicable. Past due amounts are written off when our internal collection efforts have been unsuccessful, and payments subsequently received on such receivables are credited to the allowance for doubtful accounts. We do not generally require collateral from our customers.

Our standard payment terms with customers are net 30 days from the date of shipment, and we do not generally offer extended payment terms to our customers, but exceptions are made in some cases to major customers or with particular orders. Accordingly, we do not adjust trade accounts receivable for the effects of financing, as we expect the period between the transfer of product to the customer and the receipt of payment from the customer to be in line with our standard payment terms.

Allowances for doubtful accounts, returns, and discounts

We establish allowances for doubtful accounts and returns for probable losses based on the customers' loss history with us, the

financial condition of the customer, the condition of the general economy and the industry as a whole, and the contractual terms established with the customer. The specific components are as follows:

- · allowance for doubtful accounts for accounts receivable, and
- allowance for sales returns and discounts.

In 2020 and 2019, the total allowance was \$8 thousand and \$28 thousand, respectively, which was all related to sales returns. We review these allowance accounts periodically and adjust them accordingly for current conditions.

Long-lived assets

Property and equipment are stated at cost and include expenditures for additions and major improvements. Expenditures for repairs and maintenance are charged to operations as incurred. We use the straight-line method of depreciation over the estimated useful lives of the related assets (generally two to fifteen years) for financial reporting purposes. Accelerated methods of depreciation are used for federal income tax purposes. When assets are sold or otherwise disposed of, the cost and accumulated depreciation are removed from the accounts and any gain or loss is reflected in the Consolidated Statement of Operations. Refer to Note 6, "Property and Equipment," included in Item 8, "Financial Statements and Supplementary Data," of this Annual Report for additional information.

Long-lived assets are reviewed for impairment whenever events or circumstances indicate the carrying amount may not be recoverable. Events or circumstances that would result in an impairment review primarily include operations reporting losses, a significant change in the use of an asset, or the planned disposal or sale of the asset. The asset would be considered impaired when the future net undiscounted cash flows generated by the asset are less than its carrying value. An impairment loss would be recognized based on the amount by which the carrying value of the asset exceeds its fair value, as determined by quoted market prices (if available) or the present value of expected future cash flows. Refer to Note 6, "Property and Equipment," included in Item 8, "Financial Statements and Supplementary Data," of this Annual Report for additional information.

Valuation of inventories

We state inventories at the lower of standard cost (which approximates actual cost determined using the first-in-first-out method) or net realizable value. We establish provisions for excess and obsolete inventories after evaluation of historical sales, current economic trends, forecasted sales, product lifecycles, and current inventory levels. During 2019, due to efforts to sell excess and obsolete inventory and better management of inventory orders, we realized a net reduction of our excess inventory reserves of \$0.6 million. During 2020, we continued to apply discipline in manufacturing and supply chain management, focusing on a reduction of lead time and inventory on hand which resulted in a net reduction of our gross inventory levels of \$1.2 million and excess inventory reserves of \$0.6 million compared to 2019. Adjustments to our estimates, such as forecasted sales and expected product lifecycles, could harm our operating results and financial position. Refer to Note 5, "Inventories," included in Item 8, "Financial Statements and Supplementary Data," of this Annual Report for additional information.

Accounting for income taxes

As part of the process of preparing the Consolidated Financial Statements, we are required to estimate our income tax liability in each of the jurisdictions in which we do business. This process involves estimating our actual current tax expense together with assessing temporary differences resulting from differing treatment of items, such as deferred revenues, for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included in our Consolidated Balance Sheets. We then assess the likelihood of the deferred tax assets being recovered from future taxable income and, to the extent we believe it is more likely than not that the deferred tax assets will not be recovered, or is unknown, we establish a valuation allowance.

Significant management judgment is required in determining our provision for income taxes, deferred tax assets and liabilities, and any valuation allowance recorded against our deferred tax assets. At December 31, 2020 and 2019, we have recorded a full valuation allowance against our deferred tax assets in the United States due to uncertainties related to our ability to utilize our deferred tax assets, primarily consisting of certain net operating losses carried forward. The valuation allowance is based upon our estimates of taxable income by jurisdiction and the period over which our deferred tax assets will be recoverable. In considering the need for a valuation allowance, we assess all evidence, both positive and negative, available to determine whether all or some portion of the deferred tax assets will not be realized. Such evidence includes, but is not limited to, recent earnings history, projections of future income or loss, reversal patterns of existing taxable and deductible temporary differences, and tax planning strategies. We continue to evaluate the need for a valuation allowance on a quarterly basis.

At December 31, 2020, we had net operating loss carry-forwards of approximately \$115.9 million for federal income tax purposes (\$72.3 million for state and local income tax purposes). However, due to changes in our capital structure, approximately \$61.5 million of the \$115.9 million is available to offset future taxable income after the application of IRC Section 382 limitations. As a result of the Tax Act, net operating loss carry-forwards generated in tax years beginning after December 31, 2017 can only offset 80% of taxable income. These net operating loss carry-forwards can no longer be carried back, but they can be carried forward indefinitely. The \$7.1 million and \$8.3 million in federal net operating losses generated in 2020 and 2019 will be subject to the new limitations under the Tax Act. If not utilized, the carry-forwards generated prior to December 31, 2017 of \$37.3 million will begin to expire in 2021 for federal purposes and have begun to expire for state and local purposes. Please refer to Note 12, "Income Taxes," included in Item 8, "Financial Statements and Supplementary Data," of this Annual Report for further information.

Share-based payments

The cost of employee and director stock options and restricted stock units, as well as other share-based compensation arrangements, is reflected in the Consolidated Financial Statements based on the estimated grant date fair value method under the authoritative guidance. Management applies the Black-Scholes option pricing model to options issued to employees and directors to determine the fair value of stock options and apply judgment in estimating key assumptions that are important elements of the model in expense recognition. These elements include the expected life of the option, the expected stock-price volatility, and expected forfeiture rates. The assumptions used in calculating the fair value of share-based awards under Black-Scholes represent our best estimates, but these estimates involve inherent uncertainties and the application of management judgment. Although we believe the assumptions and estimates we have made are reasonable and appropriate, changes in assumptions could materially impact our reported financial results. Restricted stock units and stock options issued to non-employees are valued based upon the intrinsic value of the award. See Note 11, "Stockholders' Equity," included in Item 8, "Financial Statements and Supplementary Data," of this Annual Report for additional information.

Leases

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, which supersedes the current lease accounting requirements. Additionally, in July 2018, the FASB issued ASU No. 2018-11, *Leases (Topic 842)*: *Targeted Improvements*, which simplifies adoption of Topic 842 by allowing an additional transition method that will not require restatement of prior periods and providing a new practical expedient for lessors to avoid separating lease and non-lease components within a contract if certain criteria are met (provisions of which must be elected upon adoption of Topic 842). The new standard requires a lessee to record on the balance sheet the assets and liabilities for the rights and obligations created by leases with lease terms of more than 12 months. It also requires lessees to disclose certain key information about lease transactions. Upon implementation, an entity's lease payment obligations will be recognized at their estimated present value along with a corresponding right-of-use asset. Lease expense recognition will be generally consistent with current practice.

The Company adopted this guidance as of January 1, 2019 using the required modified retrospective method with the non-comparative transition option. The Company applied the transitional package of practical expedients allowed by the standard to not reassess the identification, classification and initial direct costs of leases commencing before this ASU's effective date. The Company also applied the lease term and impairment hindsight transitional practical expedients. The Company has chosen to apply the following accounting policy practical expedients: to not separate lease and non-lease components to new leases as well as existing leases through transition; and the election to not apply recognition requirements of the guidance to short-term leases.

On adoption, we recognized additional operating lease liabilities of approximately \$2.9 million as of January 1, 2019, with corresponding right-of-use assets based on the present value of the remaining minimum rental payments for our existing operating leases. The operating lease right-of-use assets recorded upon adoption were offset by the carrying value of liabilities previously recorded under Accounting Standards Codification ("ASC") Topic 420, *Exit or Disposal Cost Obligations* ("Topic 420") and impairment charges totaling \$0.3 million and \$0.2 million, respectively. Refer to Note 4, "Leases," included in Item 8, "Financial Statements and Supplementary Data," of this Annual Report for additional disclosures relating to the Company's leasing arrangements.

Recently issued accounting pronouncements

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which significantly changes the accounting for credit losses on instruments within its scope. The new guidance introduces an approach based on expected losses to estimate credit losses on certain financial instruments, including trade receivables, and requires an entity to recognize an allowance based on its estimate of expected credit losses

rather than incurred losses. This standard will be effective for interim and annual periods starting after December 15, 2022 and will generally require adoption on a modified retrospective basis. We are in the process of evaluating the impact of the standard.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As a "smaller reporting company" as defined by Item 10 of Regulation S-K, 17 CFR \S 229.10(f)(1), the Company is not required to provide this information.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Stockholders and Board of Directors Energy Focus, Inc. Solon, Ohio

Opinion on the Consolidated Financial Statements

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

Continuation as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 3 to the consolidated financial statements, the Company has experienced recurring losses from operations and negative cash flows from operations that 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 3. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated 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.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits 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.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated 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 consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing separate opinions on the critical audit matter or on the accounts or disclosures to which it relates.

Reserves for Excess, Obsolete and Slow-Moving Inventories

Description of the Matter

As described in Notes 2 and 5 to the consolidated financial statements, the Company assesses the valuation of inventories each reporting period based on the lower of cost or net realizable value. The Company establishes reserves for excess, obsolete and slow-moving inventories after evaluation of historical sales, current economic trends, forecasted sales, product lifecycles and

current inventory levels. The assessment is both quantitative and qualitative. As of December 31, 2020, the Company had inventories of \$5.6 million, net of reserves for excess, obsolete and slow-moving inventories.

Auditing management's estimates for excess, obsolete and slow-moving inventories required subjective auditor judgment and evaluation of the reasonableness of significant assumptions used in developing the reserves as detailed above, as well as the inputs and related calculations related to historical sales and on-hand inventories.

How We Addressed the Matter in Our Audit

We obtained an understanding and evaluated the design of internal controls over the Company's reserves for excess, obsolete and slow-moving inventories, including management's assessment of the assumptions and data underlying the reserve calculation.

Our substantive audit procedures included, among others, testing the logic and integrity of calculations within management's analysis; testing the completeness and accuracy of underlying data used, including inventory quantities, carrying costs and the estimate of net realizable value by product; and evaluating the reasonableness of management's assumptions related to demand forecasts, estimated reserve percentages and qualitative considerations involving, among others, the implications of the COVID-19 pandemic and new or revised operational strategies. Evaluating the reasonableness of management's assumptions involved (i) comparing historical sales by product, used as a basis for future demand, to audited sales subledgers on a sample basis, (ii) performing sensitivity analyses on reserve percentages applied to categories of projected demand to evaluate the changes in the reserve that would result from changes in the assumption, (iii) holding discussions with senior management to determine whether strategic or operational changes in the business were consistent with the projections of future demand that were utilized as basis for the reserves recorded, (iv) corroborating management's qualitative considerations through review of recent sales transactions, including those subsequent to year-end, and order backlog and deferrals on a sample basis, and (v) testing declines in the reserve and evaluating whether such declines were the result of the sale or write-off of inventory or the result of changes in the significant assumptions used to the develop the reserve.

/s/ GBQ Partners, LLC

We have served as the Company's auditor since 2019.

Columbus, Ohio March 25, 2021

ENERGY FOCUS, INC. CONSOLIDATED BALANCE SHEETS AS OF DECEMBER 31,

(amounts in thousands except share data)

(uniounis in thousands except share data)	2020	2019
ASSETS		
Current assets:		
Cash	\$ 1,836	\$ 350
Trade accounts receivable, less allowances of \$8 and \$28, respectively	2,021	2,337
Inventories, net	5,641	6,168
Short-term deposits	796	126
Prepaid and other current assets	782	353
Total current assets	11,076	9,334
Property and equipment, net	420	389
Operating lease, right-of-use asset	794	1,289
Restructured lease, right-of-use asset	107	322
Other assets	_	405
Total assets	\$ 12,397	\$ 11,739
LIABILITIES		
Current liabilities:		
Accounts payable	\$ 2,477	\$ 1,340
Accrued liabilities	45	186
Accrued legal and professional fees	149	215
Accrued payroll and related benefits	885	360
Accrued sales commissions	95	32
Accrued restructuring	11	24
Accrued warranty reserve	227	195
Deferred revenue	72	18
Operating lease liabilities	598	550
Restructured lease liabilities	168	319
Finance lease liabilities	3	3
Convertible notes	_	1,700
Iliad note, net of discount and loan origination fees	_	885
PPP loan	529	_
Credit line borrowings, net of loan origination fees	2,298	715
Total current liabilities	 7,557	6,542

(continued on the following page)

ENERGY FOCUS, INC. CONSOLIDATED BALANCE SHEETS AS OF DECEMBER 31,

(amounts in thousands except share data)

	2020		2019
Other liabilities			14
Operating lease liabilities, net of current portion	3	318	906
Restructured lease liabilities, net of current portion		—	168
Finance lease liabilities, net of current portion		1	4
PPP loan, net of current maturities	2	266	_
Iliad note, net of current maturities			109
Total liabilities	8,1	42	7,743
STOCKHOLDERS' EQUITY			
Preferred stock, par value \$0.0001 per share:			
Authorized: 5,000,000 shares (3,300,000 shares designated as Series A Convertible Preferred Stock) at December 31, 2020 and 2,000,000 shares (no shares designated as Series A Convertible Preferred Stock) at December 31, 2019			
Issued and outstanding: 2,597,470 at December 31, 2020 and no shares outstanding at December 31, 2019		—	_
Common stock, par value \$0.0001 per share:			
Authorized: 50,000,000 shares at December 31, 2020 and 30,000,000 shares at December 31, 2019			
Issued and outstanding: 3,525,374 at December 31, 2020 and 2,485,684* at December 31, 2019		—	_
Additional paid-in capital	135,1	.13	128,873
Accumulated other comprehensive loss		(3)	(3)
Accumulated deficit	(130,8	55)	(124,874)
Total stockholders' equity	4,2	255	3,996
Total liabilities and stockholders' equity	\$ 12,3	97	\$ 11,739

*Shares outstanding for prior periods have been restated for the 1-for-5 reverse stock split effective June 11, 2020.

ENERGY FOCUS, INC. CONSOLIDATED STATEMENTS OF OPERATIONS FOR THE YEARS ENDED DECEMBER 31,

(amounts in thousands except per share data)

·	• •	2020	2019
Net sales		\$ 16,828	\$ 12,705
Cost of sales		11,643	10,731
Gross profit		5,185	1,974
Operating expenses:			
Product development		1,415	1,284
Selling, general, and administrative		7,900	7,449
Restructuring		(60)	196
Total operating expenses		9,255	8,929
Loss from operations		(4,070)	(6,955)
Other expenses:			
Interest expense		481	317
Loss on extinguishment of debt		276	_
Loss from change in fair value of warrants		1,086	_
Other expenses		73	91
Loss from operations before income taxes		(5,986)	(7,363)
(Benefit from) provision for income taxes		(5)	10
Net loss		\$ (5,981)	\$ (7,373)
Net loss per common share - basic and diluted:			
Net loss	<u> </u>	\$ (1.83)	\$ (2.99)
Weighted average shares of common shares outstanding:			
Basic and diluted*		3,270	2,462
*Shares outstanding for prior periods have been restated for the	1-for-5 reverse stock split effective June 1	11, 2020.	

ENERGY FOCUS, INC. CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS FOR THE YEARS ENDED DECEMBER 31,

(amounts in thousands)

	2020	2019	
Net loss	\$ (5,	,981) \$ (7,3)	373)
Other comprehensive loss:			
Foreign currency translation adjustments			(2)
Comprehensive loss	\$ (5,	,981) \$ (7,3)	375)

ENERGY FOCUS, INC. CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019

(amounts in thousands)

	Prefer	red Stock	Commo	on Stock	Additional Paid-in	Accumulated Other Comprehensive	Accumulated	
	Shares	Amount	Shares*	Amount	Capital	Loss	Deficit	Total
Balance at December 31, 2018	_	\$ —	2,418	\$ —	\$ 128,368	\$ (1)	\$ (117,315)	\$ 11,052
Adjustment to beginning accumulated deficit upon adoption of Topic 842	_	_	_	_	_	_	(186)	(186)
Issuance of common stock under employee stock option and stock purchase plans	_	_	78	_	5	_	_	5
Common stock withheld in lieu of income tax withholding on vesting of restricted stock units	_	_	(10)	_	(116)	_	_	(116)
Stock-based compensation	_	_	_	_	616	_	_	616
Foreign currency translation adjustment	_	_	_	_	_	(2)	_	(2)
Net loss						<u> </u>	(7,373)	(7,373)
Balance at December 31, 2019	_	\$ —	2,486	\$ —	\$ 128,873	\$ (3)	\$ (124,874)	\$ 3,996
Issuance of common stock under employee stock option and stock purchase plans	_	_	60	_	100	_	_	100
Common stock withheld in lieu of income tax withholding on vesting of restricted stock units	_	_	_	_	(3)	_	_	(3)
Issuance of common stock and warrants	_	_	688	_	2,749	_	_	2,749
Offering costs on issuance of common stock and warrants	_	_	_	_	(510)	_	_	(510)
Issuance of common stock upon the exercise of warrants	_	_	269	_	2,235	_	_	2,235
Warrant liability - issuance	_	_	_	_	(1,636)	_	_	(1,636)
Warrant liability - modification	_	_	_	_	1,405	_	_	1,405
Conversion of notes to preferred stock	2,709		_		1,769	_	_	1,769
Issuance of common stock upon the conversion from preferred stock	(112)	_	22	_	_	_	_	_
Stock-based compensation	_	_	_	_	131	_	_	131
Net loss							(5,981)	(5,981)
Balance at December 31, 2020	2,597	<u>\$</u>	3,525	<u> </u>	\$ 135,113	\$ (3)	\$ (130,855)	\$ 4,255

ENERGY FOCUS, INC. CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31,

(amounts in thousands)

(uniounts in thousands)	2020	2019
Cash flows from operating activities:	 	
Net loss	\$ (5,981)	\$ (7,373)
Adjustments to reconcile net loss to net cash used in operating activities:	(-)/	())
Depreciation	184	326
Stock-based compensation	131	616
Change in fair value of warrant liabilities	1,086	_
Provision for doubtful accounts receivable	(20)	(5)
Provision for slow-moving and obsolete inventories	(610)	14
Provision for warranties	31	78
Amortization of loan discounts and origination fees	395	108
Loss on dispositions of property and equipment	8	24
Change in operating assets and liabilities:		
Accounts receivable	377	(131)
Inventories	1,137	1,876
Short-term deposits	(670)	699
Prepaid and other assets	(18)	(88)
Accounts payable	1,096	(2,214)
Accrued and other liabilities	349	(542)
Deferred revenue	 54	(12)
Total adjustments	 3,530	749
Net cash used in operating activities	(2,451)	(6,624)
Cash flows from investing activities:		
Acquisitions of property and equipment	(223)	(132)
Proceeds from the sale of property and equipment		3
Net cash used in investing activities	(223)	(129)
Cash flows from financing activities:		
Proceeds from the issuance of common stock and warrants	2,749	_
Proceeds from the exercise of warrants	918	_
Offering costs paid on the issuance of common stock and warrants	(510)	_
Proceeds from PPP loan	795	_
Proceeds from exercise of stock options and purchases through employee stock purchase plan	100	_
Principal payments under finance lease obligations	(3)	(3)
Common stock withheld in lieu of income tax withholding on vesting of restricted stock units	(3)	(110)
Payments for deferred financing costs & termination fees	(320)	(208)
Proceeds from the Iliad Note	_	1,115
Payments on the Iliad Note	(1,306)	_
Proceeds from convertible notes	_	1,700
Net payments from credit line borrowings - Austin Facility	(719)	(1,400)
Net proceeds from credit line borrowings - Credit Facilities	 2,459	
Net cash provided by financing activities	4,160	1,094

(continued on the following page)

ENERGY FOCUS, INC. CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED) FOR THE YEARS ENDED DECEMBER 31,

(amounts in thousands)

	2020	2019
Effect of exchange rate changes on cash		16
Net increase (decrease) in cash and restricted cash	1,486	(5,643)
Cash and restricted cash, beginning of year	692	6,335
Cash and restricted cash, end of year	\$ 2,178	\$ 692
Classification of cash and restricted cash:		
Cash	\$ 1,836	\$ 350
Restricted cash held in other assets	342	342
Cash and restricted cash	\$ 2,178	\$ 692
Supplemental information:		
Cash paid in year for interest	\$ 269	\$ 215
Cash paid in year for income taxes	\$ 4	\$ 15

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. NATURE OF OPERATIONS

Energy Focus, Inc. engages primarily in the design, development, manufacturing, marketing and sale of energy-efficient lighting systems and controls and recently announced development of ultraviolet light disinfection ("UVCD") products. We develop, market and sell high quality light-emitting diode ("LED") lighting products and UVCD products and controls in the commercial and military maritime markets ("MMM"). Our mission is to enable our customers to run their facilities and offices with greater energy efficiency, productivity, and human health through advanced LED retrofit and UVCD solutions. Our goal is to be the LED and human-centric lighting ("HCL") technology and market leader for the most demanding applications where performance, quality, value (high quality at an affordable price), environmental impact and health are considered paramount. We specialize in LED lighting retrofit by replacing fluorescent, high-intensity discharge lighting and other types of lamps in institutional buildings for primarily indoor lighting applications with our innovative, high-quality commercial and military tubular LED ("TLED"), as well as other LED and lighting control products. On October 14, 2020, we also announced the launch of our UVCD product portfolio.

The LED lighting industry has changed dramatically over the past several years due to increasing commoditization, competition and price erosion. We have been experiencing these industry forces in both our military business since 2016 and in our commercial segment, where we once commanded significant price premiums for our flicker-free TLEDs with primarily 10-year warranties. Since April 2019, we have focused on redesigning our products for lower costs and consolidating our supply chain for stronger purchasing power where appropriate in order to price our products more competitively. Despite these efforts, the pricing of our legacy products remains at a premium to the competitive range and we expect aggressive pricing actions and commoditization to continue to be a headwind until our more differentiated new products ramp in volume. These trends are not unique to Energy Focus as evidenced by the increasing number of industry peers facing challenges, exiting LED lighting, selling assets and even going out of business. In addition to continuous, scheduled cost reductions, our strategy to combat these trends is to move up the value chain, with more innovative and differentiated products and solutions that offer greater, distinct value to our customers. Two specific examples of these products we have recently developed include the RedCap[®], our emergency backup battery integrated TLED, and EnFocus[™], our new dimmable/tunable lighting and control platform that we launched in 2020. We believe our revamped go-to-market strategy that focuses more on direct-sales and additional sales representatives and listens to the voice of the customer has led to better and more impactful product development efforts and will eventually translate into larger addressable market and greater sales growth for us.

During 2020, we continued to see the benefits from the relaunch efforts (described below) undertaken by the new, current management team, in addition to a number of strategic sourcing projects completed during 2020. It is our belief that the continued momentum of the efforts undertaken in 2019 and into 2020, along with the development and launch of new and innovative products, will over time result in improved sales and bottom-line performance for the Company. We launched our EnFocusTM platform during the second quarter of 2020 and continued to receive positive feedback from existing, new, and prospective customers. The EnFocusTM platform offers two immediately available product lines: EnFocusTM DM, which provides a dimmable lighting solution, and EnFocusTM DCT, which provides both a dimmable and color tunable lighting solution. EnFocusTM enables buildings to have dimmable, color tunable and circadian-ready lighting using existing wiring, without requiring any wireless communications, through a relatively simple upgrade with EnFocusTM switches and tubular LEDs, a more environmentally sustainable solution compared with replacing each lighting fixture.

In addition, in response to the COVID-19 pandemic and an anticipated increase in sanitation and hygiene demand for buildings, facilities and homes, we started developing advanced UVCD products for both consumer as well as the commercial and industrial markets in the first quarter of 2020. We announced the following three UVCD products in October 2020: abUVTM circadian lighting and UVCD air disinfection integrated troffers controlled by the EnFocusTM platform technology; the nUVoTM portable disinfection device for offices and homes; and the mUVeTM autonomous robot designed for surface disinfection.

Since April 2019, we experienced significant change at the Company. Prior to James Tu returning as Chief Executive Officer and Chairman at the beginning of April 2019, the Company had experienced significant sales declines, operating losses and increases in its inventory. Immediately upon Mr. Tu returning to the Company, significant additional restructuring efforts were undertaken. The Company has since then replaced the entire senior management team, significantly reduced non-critical expenses, minimized the amount of inventory the Company was purchasing, dramatically changed the composition of our board of directors, as well as adding very selectively to the executive team by hiring Tod Nestor as President and Chief Financial Officer at the beginning of July 2019 and James R. Warren as Senior Vice President, General Counsel and Corporate Secretary in September 2020, in addition to recruiting new departmental leaders across the Company. The cost savings efforts undertaken included the Company implementing phased actions to reduce costs to minimize cash usage. Our initial actions included the elimination of certain positions, restructuring of the sales organization and incentive plan, flattening of the senior management

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

team, additional operational streamlining, management compensation reductions, and outsourcing of certain functions including certain elements of supply chain and marketing.

On June 11, 2020, in accordance with previous stockholder approval, our Board of Directors effected a 1-for-5 (the "Split Ratio") reverse stock split of the Company's common stock, par value \$0.0001 per share. The reverse stock split became effective immediately upon the filing of the Certificate of Amendment to the Company's Certificate of Incorporation, as amended (the "Certificate of Incorporation"), with the Delaware Secretary of State (the "Effective Time"). At the Effective Time, every five shares of common stock issued and outstanding automatically combined into one validly issued, fully paid and non-assessable share of common stock. No fractional shares were issued as a result of the reverse stock split. The \$0.0001 par value per share of common stock and other terms of the common stock were not affected by the reverse stock split. The number of authorized shares of common stock under the Certificate of Incorporation remained unchanged at 50,000,000 shares. Proportional adjustments were made to the conversion and exercise prices of our outstanding warrants and stock options, and to the number of shares issued and issuable under our stock incentive plans in connection with the reverse stock split. The information presented in the financial statements for all prior periods have been retroactively adjusted to reflect the reverse stock split. Preferred shares outstanding were not affected by the reverse stock split and, as such, those shares have not been adjusted.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies of our Company, which are summarized below, are consistent with U.S. GAAP and reflect practices appropriate to the business in which we operate.

Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods presented. Estimates include, but are not limited to, the establishment of reserves for accounts receivable, sales returns, inventory excess and obsolescence reserve and warranty claims, the useful lives for property and equipment and stock-based compensation. In addition, estimates and assumptions associated with the determination of the fair value of financial instruments and evaluation of long-lived assets for impairment requires considerable judgment. Actual results could differ from those estimates and such differences could be material.

Basis of presentation

The Consolidated Financial Statements include the accounts of the Company. All significant inter-company balances and transactions have been eliminated. Unless indicated otherwise, the information in the Notes to Consolidated Financial Statements relates to our operations.

Revenue recognition

Net sales include revenues from sales of products and shipping and handling charges, net of estimates for product returns. Revenue is measured at the amount of consideration we expect to receive in exchange for the transferred products. We recognize revenue at the point in time when we transfer the promised products to the customer and the customer obtains control over the products. Distributors' obligations to us are not contingent upon the resale of our products. We recognize revenue for shipping and handling charges at the time the goods are shipped to the customer, and the costs of outbound freight are included in cost of sales. We provide for product returns based on historical return rates. While we incur costs for sales commissions to our sales employees and outside agents, we recognize commission costs concurrent with the related revenue, as the amortization period is less than one year. We do not incur any other incremental costs to obtain contracts with our customers. Our product warranties are assurance-type warranties, which promise the customer that the products are as specified in the contract. Therefore, the product warranties are not a separate performance obligation and are accounted for as described below. Sales taxes assessed by governmental authorities are accounted for on a net basis and are excluded from net sales.

A disaggregation of product net sales is presented in Note 13, "Product and Geographic Information."

Cash and restricted cash

At December 31, 2020 and 2019, we had cash and restricted cash of \$2.2 million and \$0.7 million, respectively, on deposit with

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

financial institutions located in the United States. The \$2.2 million of cash includes restricted cash of \$0.3 million which is presented within prepaid and other current assets and other assets in the accompanying Consolidated Balance Sheets at December 31, 2020 and 2019, respectively. Please refer to Note 3, "Restructuring," for additional information.

Inventories

We state inventories at the lower of standard cost (which approximates actual cost determined using the first-in-first-out method) or net realizable value. We establish provisions for excess and obsolete inventories after evaluation of historical sales, current economic trends, forecasted sales, product lifecycles, and current inventory levels. The assessment is both quantitative and qualitative and currently includes a COVID-19 impact analysis. During 2019, due to efforts to sell excess and obsolete inventory and better management of inventory orders, we realized a net reduction of \$0.6 million of our excess and obsolete reserves. During 2020, we continued to apply discipline in manufacturing and supply chain management, focusing on a reduction of lead time and inventory on hand which resulted in a net reduction of our gross inventory levels of \$1.2 million and excess inventory reserves of \$0.6 million compared to 2019. Adjustments to our estimates, such as forecasted sales and expected product lifecycles, could harm our operating results and financial position. Please refer to Note 5, "Inventories," for additional information.

Accounts receivable

Our trade accounts receivable consists of amounts billed to and currently due from customers. Our customers are concentrated in the United States. In the normal course of business, we extend unsecured credit to our customers related to the sale of our products. Credit is extended to customers based on an evaluation of the customer's financial condition and the amounts due are stated at their estimated net realizable value. During the first eleven months of 2019, we evaluated and monitored the creditworthiness of each customer on a case-by-case basis. However, during December 2019, we transitioned to an account receivables insurance program with a very high credit worthy insurance company where we have the large majority of the accounts receivable insured with a portion of self-retention. This third party also provides credit-worthiness ratings and metrics that significantly assists us in evaluating the credit worthiness of both existing and new customers. We maintain allowances for sales returns and doubtful accounts receivable to provide for the estimated amount of account receivables that will not be collected. The allowance is based on an assessment of customer creditworthiness and historical payment experience, the age of outstanding receivables, and performance guarantees to the extent applicable. Past due amounts are written off when our internal collection efforts have been unsuccessful, and payments subsequently received on such receivables are credited to the allowance for doubtful accounts. We do not generally require collateral from our customers.

Our standard payment terms with customers are net 30 days from the date of shipment, and we do not generally offer extended payment terms to our customers, but exceptions are made in some cases to major customers or with particular orders. Accordingly, we do not adjust trade accounts receivable for the effects of financing, as we expect the period between the transfer of product to the customer and the receipt of payment from the customer to be in line with our standard payment terms.

Income taxes

As part of the process of preparing the Consolidated Financial Statements, we are required to estimate our income tax liability in each of the jurisdictions in which we do business. This process involves estimating our actual current tax expense together with assessing temporary differences resulting from differing treatment of items, such as deferred revenues, for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included in our Consolidated Balance Sheets. We then assess the likelihood of the deferred tax assets being recovered from future taxable income and, to the extent we believe it is more likely than not that the deferred tax assets will not be recovered, or is unknown, we establish a valuation allowance.

Significant management judgment is required in determining our provision for income taxes, deferred tax assets and liabilities, and any valuation allowance recorded against our deferred tax assets. At December 31, 2020 and 2019, we have recorded a full valuation allowance against our net deferred tax assets in the United States due to uncertainties related to our ability to utilize our deferred tax assets, primarily consisting of certain net operating losses carried forward. The valuation allowance is based upon our estimates of taxable income by jurisdiction and the period over which our deferred tax assets will be recoverable. In considering the need for a valuation allowance, we assess all evidence, both positive and negative, available to determine whether all or some portion of the deferred tax assets will not be realized. Such evidence includes, but is not limited to, recent earnings history, projections of future income or loss, reversal patterns of existing taxable and deductible temporary differences, and tax planning strategies. We continue to evaluate the need for a valuation allowance on a quarterly basis.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

At December 31, 2020, we had net operating loss carry-forwards of approximately \$115.9 million for federal income tax purposes (\$72.3 million for state and local income tax purposes). However, due to changes in our capital structure, approximately \$61.5 million of the \$115.9 million is available to offset future taxable income after the application of the limitations found under Section 382 of the Internal Revenue Code of 1986, as amended (the "IRC"). As a result of the Tax Cuts and Jobs Act of 2017 (the "Tax Act"), net operating loss carry-forwards generated in tax years beginning after December 31, 2017 can only offset 80% of taxable income. These net operating loss carry-forwards can no longer be carried back, but they can be carried forward indefinitely. The \$7.1 million and \$8.3 million in net operating losses generated in 2020 and 2019, respectively, will be subject to the new limitations under the Tax Act. If not utilized, the carry-forwards generated prior to December 31, 2017 of \$37.3 million will begin to expire in 2021 for federal purposes and have begun to expire for state and local purposes. Please refer to Note 12, "Income Taxes," for further information.

Financial Instruments

In January 2020, we completed a registered direct offering for the sale of 688,360 shares of our common stock to certain institutional investors, at a purchase price of \$3.37 per share. We also sold, to the same institutional investors, warrants to purchase up to 688,360 shares of common stock at an exercise price of \$3.37 per share in a concurrent private placement for a purchase price of \$0.6250 per warrant. We paid the placement agent commissions of \$193 thousand plus \$50 thousand in expenses in connection with the registered direct offering and the concurrent private placement and we also paid legal, accounting and other fees of \$231 thousand related to the offering. Total offering costs of \$510 thousand have been presented as a reduction of additional paid-in capital and have been netted within equity in the Consolidated Balance Sheet as of December 31, 2020. In addition, we issued warrants to the placement agent to purchase up to 48,185 shares of common stock at an exercise price of \$4.99 per share. Net proceeds to us from the sale of common stock and warrants (the "January 2020 Equity Offering") were approximately \$2.3 million. In accordance with the terms of the Iliad Note (as defined below in Note 9, "Debt"), 10% of the gross proceeds from the January 2020 Equity Offering (\$275 thousand) were used to make payments on the Iliad Note, of which \$226 thousand went towards the outstanding principal amount and the balance to interest.

Warrants to purchase an aggregate of 467,306 shares remain outstanding at December 31, 2020 with a weighted average exercise price of \$3.51 per share. During the twelve months ended December 31, 2020, 269,240 warrants were exercised resulting in total proceeds of \$918 thousand. The exercise of the remaining warrants outstanding could provide us with cash proceeds of up to \$1.6 million in the aggregate.

Due to a potential cash settlement upon occurrence of a fundamental transaction within the warrant agreement, the warrants were initially classified as liabilities, as opposed to equity, and were recorded at their fair values at each balance sheet date. During December 2020, the warrant holders agreed to a modification of the terms of their warrants which removed the potential cash settlement option upon the occurrence of a fundamental transaction. As such, during the fourth quarter of 2020, the remaining 467,306 warrants were fair-valued through the modification date with the offsetting adjustment recorded in income. The \$1.4 million warrant liability was then reclassified into equity and the warrants are no longer subject to re-measurement at each balance sheet date. Please also refer to Note 11, "Stockholders' Equity".

Fair value measurements

Fair value is defined as the price that would be received to sell an asset or would be paid to transfer a liability in an orderly transaction between market participants on the measurement date. The fair value of financial assets and liabilities are measured on a recurring or non-recurring basis. Financial assets and liabilities measured on a recurring basis are those that are adjusted to fair value each time a financial statement is prepared. Financial assets and liabilities measured on a non-recurring basis are those that are adjusted to fair value when a significant event occurs.

We utilize valuation techniques that maximize the use of available market information and generally accepted valuation methodologies. We assess the inputs used to measure fair value using a three-tier hierarchy. The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value, giving the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The three levels of the fair value hierarchy are described below. We classify the inputs used to measure fair value into the following hierarchy:

- Level 1 Unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2 Unadjusted quoted prices in active markets for similar assets or liabilities, or unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or inputs other than quoted prices that are observable for the asset or liability.
- Level 3 Unobservable inputs for the asset or liability.

The carrying amounts of certain financial instruments including cash, accounts receivable, accounts payable, and accrued liabilities approximate fair value due to their short maturities. Based on borrowing rates currently available to us for loans with similar terms, the carrying value of borrowings under our revolving credit facilities also approximates fair value.

A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. In determining the appropriate levels, we perform a detailed analysis of the assets and liabilities whose fair value is measured on a recurring basis. We review and reassess the fair value hierarchy classifications on a quarterly basis. Changes from one quarter to the next related to the observability of inputs in a fair value measurement may result in a reclassification between fair value hierarchy levels. There were no reclassifications for all periods presented.

A roll-forward of fair value measurements using significant unobservable inputs (Level 3) for the warrants is as follows (in thousands):

	31, 2020
Balance January 1, 2020	\$ _
Issuance of warrants, January 2020	1,636
Settlements from exercise	(1,317)
Loss from change in fair value of warrants	1,086
Reclassification to equity upon modification	\$ (1,405)
Balance December 31, 2020	\$

Long-lived assets

Property and equipment are stated at cost and include expenditures for additions and major improvements. Expenditures for repairs and maintenance are charged to operations as incurred. We use the straight-line method of depreciation over the estimated useful lives of the related assets (generally two to 15 years) for financial reporting purposes. Accelerated methods of depreciation are used for federal income tax purposes. When assets are sold or otherwise disposed of, the cost and accumulated depreciation are removed from the accounts and any gain or loss is reflected in the Consolidated Statements of Operations. Refer to Note 6, "Property and Equipment," for additional information.

Long-lived assets are reviewed for impairment whenever events or circumstances indicate the carrying amount may not be recoverable. Events or circumstances that would result in an impairment review primarily include operations reporting losses, a significant change in the use of an asset, or the planned disposal or sale of the asset. The asset would be considered impaired when the future net undiscounted cash flows generated by the asset are less than its carrying value. An impairment loss would be recognized based on the amount by which the carrying value of the asset exceeds its fair value, as determined by quoted market prices (if available) or the present value of expected future cash flows. Refer to Note 6, "Property and Equipment," for additional information.

Certain risks and concentrations

Historically our products were sold through a direct sales model, which included a combination of direct sales employees, electrical and lighting contractors, and distributors. Up until December 2019, we performed ongoing credit evaluations of our customers, but in December 2019 converted to the use of a third-party accounts receivable insurance and credit assessment company. Although we maintain allowances for potential credit losses that we believe to be adequate, a payment default on a significant sale could materially and adversely affect our operating results and financial condition, although we have mitigated this risk somewhat through the accounts receivable insurance program.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

We have certain customers whose net sales individually represented 10% or more of our total net sales, or whose net trade accounts receivable balance individually represented 10% or more of our total net trade accounts receivable, as follows:

- In 2020, two customers accounted for 62% of net sales, with sales to our primary distributor for the U.S. Navy accounting for approximately 49% and sales to a regional commercial lighting retrofit company accounting for approximately 12% of net sales. When sales to our primary distributor for the U.S. Navy are combined with sales to shipbuilders for the U.S. Navy, total net sales of products for the U.S. Navy comprised approximately 53% of net sales for the same period. In 2019, two customers accounted for 45% of net sales and total sales to distributors to the U.S. Navy represented 23% of net sales.
- At December 31, 2020, a distributor to the U.S. Navy accounted for 28% of our net trade accounts receivable and a shipbuilder for the U.S. Navy accounted for 21% of our net trade accounts receivable. At December 31, 2019, a distributor to the U.S. Navy accounted for 10% of our net trade accounts receivable and a large regional retrofit company accounted for 41% of our net trade accounts receivable.

We require substantial amounts of purchased materials from selected vendors. With specific materials, all of our purchases are from a single vendor. Substantially all of the materials we require are in adequate supply. However, the availability and costs of materials may be subject to change due to, among other things, new laws or regulations, suppliers' allocation to other purchasers, interruptions in production by suppliers, global health issues such as the COVID-19 pandemic, and changes in exchange rates and worldwide price and demand levels. Our inability to obtain adequate supplies of materials for our products at favorable prices could have a material adverse effect on our business, financial position, or results of operations by decreasing our profit margins and by hindering our ability to deliver products to our customers on a timely basis. Additionally, certain vendors require advance deposits prior to the fulfillment of orders. Deposits paid on unfulfilled orders totaled \$0.8 million and \$0.1 million at December 31, 2020 and 2019, respectively.

We have certain vendors who individually represented 10% or more of our total expenditures, or whose net trade accounts payable balance individually represented 10% or more of our total net trade accounts payable, as follows:

- One offshore supplier and one domestic supplier accounted for approximately 21% and 12%, respectively, of our total expenditures for the twelve months ended December 31, 2020. At December 31, 2020, this same offshore supplier accounted for approximately 44% of our trade accounts payable balance.
- For the twelve months ended December 31, 2019, one offshore supplier accounted for approximately 21% of our total purchases. This same offshore supplier accounted for approximately 54% of our trade accounts payable balance at December 31, 2019.

Product development

Product development expenses include salaries, contractor and consulting fees, supplies and materials, as well as costs related to other overhead items such as depreciation and facilities costs. Research and development costs are expensed as they are incurred.

Net loss per share

Basic loss per share is computed by dividing net loss available to common stockholders by the weighted average number of shares of common stock outstanding during the period, excluding the effects of any potentially dilutive securities. Diluted loss per share gives effect to all dilutive potential shares of common stock outstanding during the period. Dilutive potential shares of common stock consist of incremental shares upon the exercise of stock options, warrants and convertible securities, unless the effect would be anti-dilutive.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table presents a reconciliation of basic and diluted loss per share computations (in thousands, except per share amounts):

	For the years ended December 31,			ecember 31,
		2020	2019	
Numerator:				
Net loss	\$	(5,981)	\$	(7,373)
Denominator:				
Basic and diluted weighted average common shares outstanding*		3,270		2,462
*Shares outstanding for prior periods have been restated for the 1-for-5 stock split effective June 11, 2020.				

As a result of the net loss we incurred for the year ended December 31, 2020, options, restricted share units, warrants and convertible preferred stock

As a result of the net loss we incurred for the year ended December 31, 2020, options, restricted share units, warrants and convertible preferred stock representing approximately 69 thousand, 4 thousand, 174 thousand and 506 thousand shares of common stock, respectively, were excluded from the basic loss per share calculation, because their inclusion would have been anti-dilutive.

As a result of the net loss we incurred for the year ended December 31, 2019, options and restricted share units representing approximately 1 thousand and 27 thousand shares of common stock, respectively, and convertible preferred stock representing approximately 507 thousand shares of common stock, were excluded from the basic loss per share calculation as their inclusion would have been anti-dilutive.

Stock-based compensation

We recognize compensation expense based on the estimated grant date fair value under the authoritative guidance. Management applies the Black-Scholes option pricing model to value stock options issued to employees and directors and applies judgment in estimating key assumptions that are important elements of the model in expense recognition. These elements include the expected life of the option, the expected stock-price volatility, and expected forfeiture rates. Compensation expense is generally amortized on a straight-line basis over the requisite service period, which is generally the vesting period. See Note 11, "Stockholders' Equity," for additional information. Common stock, stock options, and warrants issued to non-employees that are not part of an equity offering are accounted for under the applicable guidance under Accounting Standards Codification ("ASC") 505-50, "Equity-Based Payments to Non-Employees," and are generally re-measured at each reporting date until the awards vest.

Foreign currency translation

Our product development center in Taiwan, which was shut down in 2019, used local currency as its functional currency. Included within "Accumulated other comprehensive loss" within the Consolidated Statements of Stockholders' Equity is the effect of foreign currency translation related to our Taiwan operations. The 2019 shut down did not have a material effect on the Consolidated Financial Statements.

Advertising expenses

Advertising expenses are charged to operations in the period incurred. They consist of costs for the placement of our advertisements in various media and the costs of demos provided to potential distributors of our products. Advertising expenses were \$0.1 million and \$0.2 million for the years ended December 31, 2020 and 2019, respectively.

Product warranties

Through March 31, 2016, we warranted finished goods against defects in material and workmanship under normal use and service for periods generally between one and five years. Beginning April 1, 2016, we warrant our commercial TLEDs, the troffer luminaires, and certain Globe Lights for a period of ten years (excluding RedCap[®] and our Battery Backup TLEDs), and all other LED products for five years per the Terms and Conditions outlined on our website. Beginning in October 2019, TLEDs (excluding RedCap[®]) are primarily warranted for ten years, certain D-Series lamps are warranted for either ten years or five years based on the customer's choice at time of purchase, and the warranty for all of our other products is five years. Warranty settlement costs consist of actual amounts expensed for warranty, which are largely a result of the cost of replacement

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

products provided to our customers. A liability for the estimated future costs under product warranties is maintained for products under warranty based on the actual claims incurred to date and the estimated nature, frequency, and costs of future claims. These estimates are inherently uncertain and changes to our historical or projected experience may cause material changes to our warranty reserves in the future. We continuously review the assumptions related to the adequacy of our warranty reserve, including product failure rates, and make adjustments to the existing warranty liability when there are changes to these estimates or the underlying replacement product costs, or the warranty period expires.

The following table summarizes warranty activity for the periods presented (in thousands):

	At December 31,			
		2020		2019
Balance at the beginning of the year	\$	195	\$	258
Accruals for warranties issued		33		78
Adjustments to existing warranties		19		(91)
Settlements made during the year (in kind)		(20)		(50)
Accrued warranty reserve at the end of the period	\$	227	\$	195

Recently issued accounting pronouncements

In June 2016, the Financial Accounting Standards Board ("FASB") issued ASU No. 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which significantly changes the accounting for credit losses on instruments within its scope. The new guidance introduces an approach based on expected losses to estimate credit losses on certain financial instruments, including trade receivables, and requires an entity to recognize an allowance based on its estimate of expected credit losses rather than incurred losses. This standard will be effective for interim and annual periods starting after December 15, 2022 and will generally require adoption on a modified retrospective basis. We are in the process of evaluating the impact of the standard.

Adoption of recent accounting pronouncements

In August 2018, the FASB issued ASU No. 2018-15, *Intangibles--Goodwill and Other--Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*, which aligns the requirements for capitalizing implementation costs in a cloud computing service contract with the requirements for capitalizing implementation costs incurred for an internal-use software license. This standard was effective for interim and annual periods starting after December 15, 2019. The adoption of this guidance did not have a significant impact on our financial position, results of operations, or cash flows.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, which supersedes the current lease accounting requirements. Additionally, in July 2018, the FASB issued ASU No. 2018-11, *Leases (Topic 842)*: *Targeted Improvements*, which simplifies adoption of Topic 842 by allowing an additional transition method that will not require restatement of prior periods and providing a new practical expedient for lessors to avoid separating lease and non-lease components within a contract if certain criteria are met (provisions of which must be elected upon adoption of Topic 842). The new standard requires a lessee to record on the balance sheet the assets and liabilities for the rights and obligations created by leases with lease terms of more than 12 months. It also requires lessees to disclose certain key information about lease transactions. Upon implementation, an entity's lease payment obligations will be recognized at their estimated present value along with a corresponding right-of-use asset. Lease expense recognition will be generally consistent with current practice.

The Company adopted this guidance as of January 1, 2019 using the required modified retrospective method with the non-comparative transition option. The Company applied the transitional package of practical expedients allowed by the standard to not reassess the identification, classification and initial direct costs of leases commencing before this ASU's effective date. The Company also applied the lease term and impairment hindsight transitional practical expedients. The Company has chosen to apply the following accounting policy practical expedients: to not separate lease and non-lease components to new leases as well as existing leases through transition; and the election to not apply recognition requirements of the guidance to short-term leases.

The results for reporting periods beginning on or after January 1, 2019 are presented under Topic 842, while prior period amounts are not adjusted and continue to be reported in accordance with legacy generally accepted accounting principles.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

On adoption, we recognized additional operating lease liabilities of approximately \$2.9 million on January 1, 2019, with corresponding right-of-use assets based on the present value of the remaining minimum rental payments for our existing operating leases. The operating lease right-of-use assets recorded upon adoption were offset by the carrying value of liabilities previously recorded under ASC Topic 420, *Exit or Disposal Cost Obligations* ("Topic 420"), and impairment charges totaling \$0.3 million and \$0.2 million, respectively. Refer to Note 4, "Leases" below for additional disclosures relating to the Company's leasing arrangements.

NOTE 3. RESTRUCTURING

Due to our financial performance in 2019 and 2020, including net losses of \$7.4 million, and \$6.0 million, respectively, and total cash used in operating activities of \$6.6 million and \$2.5 million, respectively, we determined that substantial doubt about our ability to continue as a going concern continues to exist at December 31, 2020.

Since April 2019, we experienced significant change at the Company. Prior to James Tu returning as Chief Executive Officer and Chairman at the beginning of April 2019, the Company had experienced significant sales declines, operating losses and increases in its inventory. Immediately upon Mr. Tu returning to the Company, significant additional restructuring efforts were undertaken. The company has since then replaced the entire senior management team, significantly reduced non-critical expenses, minimized the amount of inventory the company was purchasing, dramatically changed the composition of our board of directors, as well as adding very selectively to the executive team by hiring Tod Nestor as President and Chief Financial Officer at the beginning of July 2019 and James R. Warren as Senior Vice President, General Counsel and Corporate Secretary in September 2020, in addition to recruiting new departmental leaders across the Company. The cost savings efforts undertaken included the Company implementing phased actions to reduce costs to minimize cash usage. Our initial actions included the elimination of certain positions, restructuring of the sales organization and incentive plan, flattening of the senior management team, additional operational streamlining, management compensation reductions, and outsourcing of certain functions including certain elements of supply chain and marketing. In connection with these actions, we recorded severance and related benefits charges of \$0.2 million during 2019. These additional restructuring charges primarily related to severance and related benefits charges as a result of eliminating three positions during the first quarter of 2019 and nine positions during the second quarter of 2019, as well as costs associated with closing our offices in San Jose, California and Taipei, Taiwan in the second quarter of 2019. With quarterly sales for the Company leveling off at its low point in the third quarter of 2019 at \$2.9 million, we began to see the impact for our relaunch efforts and restructuring of our sales organization in the fourth quarter achieving sales of \$3.5 million, or a quarter-over-quarter growth rate of 21.1%. In addition, losses were mitigated through the better cost management and a sharp focus on better managing pricing and inventory decisions for the last half of 2019.

For the twelve months ended December 31, 2020, we recorded net restructuring credits of approximately \$60 thousand related to the costs and offsetting sub-lease income and accretion expense for the remaining lease obligation for our former New York, New York office. Our restructuring liabilities consist of estimated ongoing costs related to long-term operating lease obligations, which the Company has exited. The recorded value of the ongoing lease obligations is based on the remaining lease term and payment amount, discounted to present value. Changes in subsequent periods resulting from a revision to either the timing or the amount of estimated cash flows over the future period are measured using the credit adjusted, risk free rate that was used to measure the restructuring liabilities initially. Please also refer to Note 4, "Leases" as certain amounts formerly included below in the restructuring reserve as of December 31, 2018, have been reclassified on the balance sheet to be shown netted against the restructured lease, right-of-use asset in accordance with Topic 842.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following is a reconciliation of the beginning and ending balances of our restructuring liability as it relates to the Company's restructuring plans (in thousands):

	Restructuring Liability
Balance at December 31, 2018	\$ 350
Accretion of lease obligations	4
Reclassification upon adoption of Topic 842	(273)
Payments	(43)
Balance at December 31, 2019	\$ 38
Accretion of lease obligations	2
Payments	(29)
Balance at December 31, 2020	\$ 11

The following is a reconciliation of the ending balance of our restructuring liability at December 31, 2020 and December 31, 2019 (in thousands):

	2020		2019	
Balance at December 31	\$	11	\$	38
Less, short-term restructuring liability		11		24
Long-term restructuring liability, included in other liabilities	\$		\$	14

As a result of the restructuring actions and initiatives described above, we have reduced our operating expenses to be more commensurate with our sales volumes, however, we continue to incur losses and have a substantial accumulated deficit, and substantial doubt about our ability to continue as a going concern continues to exist at December 31, 2020.

Since the executive transition on April 1, 2019, we have continued to evaluate and assess strategic options as we seek to achieve profitability. We plan to achieve profitability through growing our sales by continuing to execute on our multi-channel sales strategy that targets key verticals, such as government, healthcare, education, and commercial and industrial, complemented by our marketing outreach campaigns and expanding channel partnerships. We also plan to continue to develop advanced lighting and lighting control technologies and introduce impactful new products such as EnFocusTM, a breakthrough lighting control platform we officially launched during the second quarter of 2020. In addition, during the third quarter of 2020, we announced newly developed UVCD products for both consumer, as well as commercial and industrial, markets.

As described in Note 11, "Stockholders' Equity," we also raised approximately \$2.3 million of net proceeds upon the issuance of common stock and warrants in connection with the January 2020 Equity Offering. Additionally, we have entered into two new revolving credit facilities as described in Note 9, "Debt," which allow for expanded borrowing capacity.

The restructuring and cost cutting initiatives implemented during 2019, as well as the January 2020 Equity Offering that significantly strengthened our balance sheet, and our enhanced debt capacity due to the debt refinancing in August 2020, were designed to allow us to effectively execute these strategies. However, our efforts may not occur as quickly as we envision or be successful due to the long sales cycle in our industry, the corresponding time required to ramp up sales from new products and markets into this sales cycle, the timing of introductions of additional new products, significant competition, potential sales volatility given our customer concentration, and the recent and lingering economic impact from the COVID-19 pandemic, among other factors. As a result, we will continue to review and pursue selected external funding sources to ensure adequate financial resources to execute across the timelines required to achieve these objectives including, but not limited to, the following:

- obtaining financing from traditional or non-traditional investment capital organizations or individuals;
- · obtaining funding from the sale of our common stock or other equity or debt instruments; and
- obtaining debt financing with lending terms that more closely match our business model and capital needs.

There can be no assurance that we will obtain funding on acceptable terms, in a timely fashion, or at all. Obtaining additional funding contains risks, including:

· additional equity financing may not be available to us on satisfactory terms, and any equity we are able to

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- issue could lead to dilution for current stockholders and have rights, preferences and privileges senior to our common stock;
- loans or other debt instruments may have terms and/or conditions, such as interest rate, restrictive covenants, conversion features, refinancing demands, and control or revocation provisions, which are not acceptable to management or our board of directors; and
- the current environment in the capital markets combined with our capital constraints may prevent us from being able to obtain adequate debt financing.

If we fail to obtain additional financing to sustain our business before we are able to produce levels of revenue to meet our financial needs, we will need to delay, scale back or eliminate our growth plans and further reduce our operating costs and headcount, each of which would have a material adverse effect on our business, future prospects, and financial condition. A lack of additional funding could also result in our inability to continue as a going concern and force us to sell certain assets or discontinue or curtail our operations and, as a result, investors in the Company could lose their entire investment.

Considering both quantitative and qualitative information, we continue to believe that the combination of our plans to ensure adequate external funding, timely re-organizational actions, current financial position, liquid resources, obligations due or anticipated within the next year, development and implementation of an excess inventory reduction plan, application and successful acquisition of a Paycheck Protection Program ("PPP") loan during April 2020, plans and initiatives in our research and development, product development and sales and marketing, and development of potential channel partnerships, if adequately executed, will provide us with an ability to finance our operations through the next twelve months and will mitigate the substantial doubt about our ability to continue as a going concern.

In January 2019, we received a letter from the Nasdaq Listing Qualifications Staff (the "Staff") notifying us that, for the prior 30 consecutive trading days, the closing bid price for our common stock was below the minimum \$1.00 per share required pursuant to Nasdaq Listing Rule 5550(a)(2) (the "Bid Price Rule"). In accordance with Nasdaq Listing Rule 5810(c)(3)(A), our common stock traded above \$1.00 for the required number of days within the 180-calendar day period immediately following our receipt of the notice to regain compliance with the Bid Price Rule.

On May 15, 2019, we received a letter from the Staff notifying us that our common stock had again fallen out of compliance with the Bid Price Rule. On October 15, 2019, the Company formally requested a 180-day extension beginning November 12, 2019 to regain compliance. On April 16, 2020, the Nasdaq Stock Market ("Nasdaq") announced that, in response to the COVID-19 pandemic and related extraordinary market conditions, it had provided temporary relief through June 30, 2020 from compliance with, among other rules, the Bid Price Rule. As a result, we had until July 24, 2020 to regain compliance with the Bid Price Rule, which we accomplished by effecting a 1-for-5 reverse stock split on June 11, 2020, increasing the per share trading price of our common stock. Our common stock began trading on Nasdaq on a split-adjusted basis at the opening of trading on June 12, 2020.

On August 17, 2020, we received a letter from the Staff notifying us that we were no longer in compliance with Nasdaq Listing Rule 5550(b)(1), which requires listed companies to maintain stockholders' equity of at least \$2,500,000 if they do not meet the alternative compliance standards relating to the market value of listed securities or net income from continuing operations (the "Minimum Stockholders' Equity Rule"). Our Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2020, reflected that our stockholders' equity as of June 30, 2020 was \$1,714,000. In addition, as of August 13, 2020, we did not meet the alternative compliance standards relating to the market value of listed securities or net income from continuing operations. On October 5, 2020, based on our timely submission of our plan to regain compliance, Nasdaq granted us an extension through February 15, 2021 to regain compliance with the Minimum Stockholders' Equity Rule, subject to our compliance with certain terms of the extension. In accordance with one part of the plan submitted to the Staff, we have successfully modified our outstanding warrants and are able to now classify the warrants within equity. In December 2020, we reclassified \$1.4 million from warrant liability into equity. At December 31, 2020, our stockholders' equity was \$4,255,000. On January 20, 2021, we received a letter from the Staff notifying us that, on a conditional basis, Nasdaq has determined that we have regained compliance with the Minimum Stockholders' Equity Rule.

NOTE 4. LEASES

The Company leases certain equipment, manufacturing, warehouse and office space under non-cancellable operating leases expiring through 2024 under which it is responsible for related maintenance, taxes and insurance. As of January 21, 2021, the terms of one of these equipment operating leases has been extended through 2026. In accordance with Topic 842, the related right-of-use asset and lease liability will be updated at the time of modification in January 2021. The Company has one finance lease containing a bargain purchase option upon expiration of lease in 2022. The lease term consists of the non-cancellable

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

period of the lease, periods covered by options to extend the lease if the Company is reasonably certain to exercise the option, and periods covered by an option to terminate the lease if the Company is reasonably certain not to exercise the option. The present value of the remaining lease obligation for these leases was calculated using an incremental borrowing rate ("IBR") of 7.25%, which was the Company's borrowing rate on the revolving credit agreement signed on December 11, 2018. The weighted average remaining lease term for operating, restructured and finance leases is 1.6 years, 0.5 years, and 1.3 years, respectively.

The Company had two restructured leases with sub-lease components for the New York, New York and Arlington, Virginia offices that were closed in 2017. The New York, New York lease expires in 2021 and the Arlington, Virginia lease expired in September 2019. At the "cease use" date in 2017, the Company recorded the present value of the future minimum payments under the leases and costs that continue to be incurred with no economic benefit to the Company in accordance with Topic 420. The Company entered into sub-leases for both offices and included the estimated sub-lease payments as an offset to the remaining lease obligations, as required by Topic 420 at that time. In adopting Topic 842, the carrying value of the aforementioned net liabilities has been reclassified as a reduction of the restructured lease, right-of-use asset, which totaled \$0.3 million as of January 1, 2019. As part of the lease agreement for the New York, New York office, there is \$0.3 million in restricted cash in prepaid and other current assets on the accompanying Consolidated Balance Sheets as of December 31, 2020 which represents collateral against the related Letter of Credit issued as part of this agreement. As of December 31, 2019, the \$0.3 million in restricted cash is included in other long-term assets on the Consolidated Balance Sheet.

The restructured lease and sub-lease were deemed to be in-scope and thus subject to the requirements of Topic 842 and were evaluated for impairment in accordance with the asset impairment provisions of ASC 360, *Property, Plant and Equipment* ("Topic 360"). The Company concluded its net right-of-use assets were not impaired and the carrying amount approximates expected sublease income in future years as of December 31, 2020. The Company continues to carry certain immaterial operating expenses associated with this lease as restructuring liabilities and will continue to accrete those liabilities in accordance with Topic 420, as has been done since the cease use date in 2017.

Due to the continued net losses, going concern, and restructuring actions discussed in Note 3, "Restructuring," the Company also evaluated its Solon, Ohio operating lease right-of-use asset for potential impairment under Topic 360. As a result of this evaluation, the Company determined that the operating lease right-of-use asset for the Solon, Ohio operating lease was impaired upon the adoption of Topic 842. Therefore, the Company recorded an impairment of this right-of-use asset of approximately \$0.2 million, with a corresponding offset to accumulated deficit as of January 1, 2019.

Components of the operating, restructured and finance lease costs recognized in net loss were as follows (in thousands):

		For the years ended December 31,			
		2020	20	019	
Operating lease cost (income)		_			
Sub-lease income	\$	(105)	\$	(100)	
Lease cost		597		628	
Operating lease cost, net		492		528	
Restructured lease cost (income)					
Sub-lease income		(272)		(403)	
Lease cost		237		385	
Restructured lease income, net		(35)		(18)	
Finance lease cost					
Interest of lease liabilities	<u></u>	_	_	1	
Finance lease cost, net		_		1	
	Φ.	457	Φ.	F44	
Total lease cost, net	\$	457	\$	511	

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Supplemental Consolidated Balance Sheet information related to the Company's operating and finance leases are as follows (in thousands):

	At December 31,			
	2020	2019		
Operating Leases				
Operating lease right-of-use assets	\$ 794	\$ 1,289		
Restructured lease right-of-use assets	107	322		
Operating lease right-of-use assets, total	901	1,611		
Operating lease liabilities	916	1,480		
Restructured lease liabilities	168	488		
Operating lease liabilities, total	1,084	1,968		
Finance Leases				
Property and equipment	13	13		
Allowances for depreciation	(9)	(5)		
Finance lease assets, net	4	8		
Finance lease liabilities	4	6		
Total finance lease liabilities	\$ 4	\$ 6		

Future minimum lease payments required under operating, restructured and finance leases for each of the years 2021 through 2025 are as follows (in thousands):

	Operat	ing Leases	Restructured Leases	Restructured Leases Sublease Payments	Finance Lease
2021	\$	622 \$	170 \$	(136)	\$ 3
2022		329	_	_	1
2023		16	_	_	_
2024		1	_	_	_
2025		_	_	_	_
Total future undiscounted lease payments		968	170	(136)	4
Less imputed interest		(52)	(2)	2	_
Total lease obligations	\$	916 \$	168 \$	(134)	\$ 4

Supplemental cash flow information related to leases was as follows (in thousands):

	Years ended December 31,				
	2020		2019		
Supplemental Cash Flow Information:					
Cash paid, net, for amounts included in the measurement of lease liabilities:					
Operating cash flows from operating leases	\$ 537	\$		536	
Operating cash flows from restructured leases	\$ 69	\$		87	
Financing cash flows from finance leases	\$ 3	\$		3	

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 5. INVENTORIES

Inventories are stated at the lower of standard cost (which approximates actual cost determined using the first-in, first-out cost method) or net realizable value and consists of the following (in thousands):

	At December 31,			
	2	2020		2019
Raw materials	\$	2,695	\$	3,937
Finished goods		5,840		5,749
Reserve for excess, obsolete, and slow-moving inventories		(2,894)		(3,518)
Inventories, net	\$	5,641	\$	6,168

The following is a roll-forward of the reserves for excess, obsolete, and slow-moving inventories (in thousands):

	At December 31,			
		2020		2019
Beginning balance	\$	(3,518)	\$	(4,085)
Accrual		281		(814)
Reduction due to sold inventory		343		845
Write-off for disposed inventory		_		536
Reserves for excess, obsolete, and slow-moving inventories	\$	(2,894)	\$	(3,518)

During 2020, we continued to apply discipline in manufacturing and supply chain management, focusing on a reduction of lead time and inventory on hand which resulted in a net reduction of our gross inventory levels and excess inventory reserves of \$0.6 million compared to 2019.

During 2019, management implemented a purchasing freeze and cost-cutting measures resulting in lower procurement in the first half of 2019, with only selective and necessary purchases done in the second half of 2019. During the second half of 2019, management negotiated cost reduction terms with suppliers on certain products. This initiative, in conjunction with a price adjustment strategy on products we have in excess inventory, resulted in a net reduction of our gross inventory levels and excess inventory reserves of \$1.9 million compared to 2018.

NOTE 6. PROPERTY AND EQUIPMENT

Property and equipment are stated at cost and depreciated using the straight-line method over the estimated useful lives of the related assets and consist of the following (in thousands):

	At December 31,			
	20	020		2019
Equipment (useful life 3 - 15 years)	\$	1,281	\$	1,297
Tooling (useful life 2 - 5 years)		240		203
Vehicles (useful life 5 years)		47		47
Furniture and fixtures (useful life 5 years)		137		137
Computer software (useful life 3 years)		1,057		1,028
Leasehold improvements (the shorter of useful life or lease life)		169		211
Finance lease right-of-use asset		13		13
Construction in progress		140		48
Property and equipment at cost		3,084		2,984
Less: accumulated depreciation		(2,664)		(2,595)
Property and equipment, net	\$	420	\$	389

Depreciation expense was \$0.2 million and \$0.3 million for the years ended December 31, 2020 and 2019, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

In 2019, the Company ceased operations of the Taiwan affiliate and closed the Taiwan office. The net carrying value of the property and equipment of the office was immaterial. There were no impairment charges for property and equipment during 2020 and 2019.

NOTE 7. PREPAID AND OTHER CURRENT ASSETS

Prepaid and other current assets consisted of the following (in thousands):

		At December 31,			
	20)20		2019	
Prepaid insurance	\$	126	\$	140	
Prepaid expenses		233		133	
Prepaid rent		80		70	
Restricted cash		342		_	
Other		1		10	
Total prepaid and other current assets	\$	782		353	

NOTE 8. ACCRUED LIABILITIES

Accrued current liabilities consisted of the following (in thousands):

	At December 31,			
	2020			2019
Accrued legal and professional fees	\$	149	\$	215
Accrued payroll and related benefits		885		360
Accrued sales commissions		95		32
Accrued restructuring		11		24
Accrued warranty reserve		227		195
Accrued liabilities		45		186
Total accrued liabilities	\$	1,412	\$	1,012

NOTE 9. DEBT

Credit facilities

On August 11, 2020, we entered into two debt financing arrangements (together, the "Credit Facilities"). The first arrangement is an inventory financing facility (the "Inventory Facility") pursuant to the Loan and Security Agreement (the "Inventory Loan Agreement") between the Company and Crossroads Financial Group, LLC, a North Carolina limited liability company (the "IF Lender"). Borrowings under the Inventory Facility are permitted up to the lower of (i) \$3.0 million and (ii) a borrowing base determined from time to time based on the value of the Company's eligible inventory, valued at 75% of inventory costs or 85% of the inventory net orderly liquidation value, less the availability reserves. The outstanding indebtedness under the Inventory Facility accrues at an annual rate equal to the greater of (i) 5.75% and (ii) 4.00% plus the three-month LIBOR rate and is also subject to a service fee of 1% per month. The annualized interest rate at December 31, 2020 was 23.6%. The Inventory Facility's interest and service fees combined amount is subject to a minimum monthly fee of \$18 thousand. There would be no breakage fee for the Company for the Inventory Facility if the Company were to refinance it with an American Bankers Association ("ABA") equivalent institution after August 11, 2021. The Inventory Facility is secured by substantially all of the present and future assets of the Company and is also governed by an intercreditor agreement among the Company, the IF Lender and the RF Lender (defined below). The Inventory Facility matures on August 11, 2022, subject to early termination upon 90 days' notice and otherwise in accordance with the terms of the Inventory Loan Agreement. The term is automatically extended in successive one year increments unless terminated by either party in accordance with the Inventory Loan Agreement.

The second arrangement is a receivables financing facility (the "Receivables Facility") pursuant to the Loan and Security Agreement (the "Receivables Loan Agreement") between the Company and Factors Southwest L.L.C. (d/b/a FSW Funding), an Arizona limited liability company (the "RF Lender"). Borrowings under the Receivables Facility are permitted up to the lower

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

of (i) \$2.5 million or (ii) a borrowing base determined from time to time based on the value of the Company's eligible accounts receivable, valued at 90% of the face value of such accounts receivable, less availability reserves, if any. Interest on outstanding indebtedness under the Receivables Facility accrues at an annual rate equal to (i) the highest prime rate announced from time to time by the Wall Street Journal plus (ii) 2%. At December 31, 2020, the annualized interest rate was 7.9% and the annualized interest rate on the collateral management fee was 5.9%. The Receivables Facility is also secured by substantially all of the present and future assets of the Borrower and is also governed by an intercreditor agreement among the Company, the IF Lender and the RF Lender. A \$25 thousand, or 1%, facility fee was charged at closing. There would be no breakage fee for the Company for the Receivables Facility if the Company were to refinance it with an ABA equivalent institution. The Receivables Facility matures on August 11, 2022, subject to early termination in accordance with the terms of the Receivables Loan Agreement; provided that the term is automatically extended in successive one year increments unless terminated by either party in accordance with the Receivables Loan Agreement.

Borrowings under the Inventory Facility were \$1.3 million and borrowings under the Receivables Facility were \$1.0 million at December 31, 2020. These facilities are recorded in the Consolidated Balance Sheet as of December 31, 2020 as a current liability under the caption "Credit line borrowings, net of origination fees." Outstanding balances include unamortized net issuance costs totaling \$0.1 million for the Inventory Facility and \$40 thousand for the Receivables Facility as of December 31, 2020.

The Credit Facilities replaced the Austin Credit Facility ("Austin Facility") that was entered into on December 11, 2018 and was secured by a lien on our assets. The Austin Facility was a three year, \$5.0 million revolving line of credit. The total loan amount available to us under the Austin Facility from time to time was based on the amount of our (i) qualified accounts receivable, which is equal to the lesser of 85% of our net eligible receivables of, or \$4.5 million, plus (ii) available inventory, which is the lesser of 20% of the net realizable value of eligible inventory of, or \$500 thousand. The Austin Facility charges interest deeming a minimum borrowing requirement of \$1.0 million. Interest on advances under the line was due monthly at the "Prime Rate," as published by the Wall Street Journal from time to time, plus a margin of 2%. The borrowing rate as of December 31, 2019 was 6.75%. Overdrafts were subject to a 2% fee. Additionally, an annual facility fee of 1% on the entire \$5.0 million amount of the Austin Facility was due at the beginning of each of the three years that the Austin Facility was outstanding and a 0.50% collateral management fee on the average outstanding loan balance was payable monthly. We paid the first year's fee when the Austin Facility was signed and the second year's fee in December of 2019. Borrowings under the Austin Facility were \$0.7 million at December 31, 2019. On August 11, 2020, we paid \$1.4 million to close the Austin Facility which included a \$100 thousand termination fee. Additionally, we wrote off \$59 thousand of the remaining related debt acquisition costs. The termination fee and the write-off of debt acquisition costs are reflected as a loss on extinguishment of debt in our Consolidated Statements of Operations for the twelve months ended December 31, 2020.

Convertible Notes

On March 29, 2019, we issued \$1.7 million aggregate principal amount of subordinated convertible promissory notes (the "Convertible Notes") to certain investors in a private placement exempt from the registration requirements of the Securities Act of 1933, as amended. The Convertible Notes had a maturity date of December 31, 2021 and bore interest at a rate of 5% per annum until June 30, 2019 and at a rate of 10.0% thereafter. Pursuant to their terms, on January 16, 2020, following approval by our stockholders of certain amendments to the Certificate of Incorporation, the principal amount of all of the Convertible Notes, and the accumulated interest thereon (\$0.1 million), which totaled \$1.8 million, were converted at a conversion price of \$0.67 per share into an aggregate of 2,709,018 shares of the Company's Series A Convertible Preferred Stock, par value \$0.0001 per share (the "Series A Preferred Stock"), which is convertible on a one-for-five basis into shares of our common stock. During the year ended December 31, 2020, 111,548 shares of the Series A Preferred Stock were converted into 22,310 shares of common stock.

The Series A Preferred Stock was created by the filing of a Certificate of Designation with the Secretary of State of the State of Delaware on March 29, 2019, which authorized 2,000,000 shares of Series A Preferred Stock (the "Original Series A Certificate of Designation"). The Original Series A Certificate of Designation was amended on January 15, 2020 following Stockholder Approval to increase the number of authorized shares of Series A Preferred to 3,300,000 (the Original Series A Certificate of Designation as so amended, the "Series A Certificate of Designation").

Pursuant to the Series A Certificate of Designation, each holder of outstanding shares of Series A Preferred Stock is entitled to vote with holders of outstanding shares of common stock, voting together as a single class, with respect to any and all matters presented to the stockholders of the Company for their action or consideration, except as provided by law. In any such vote,

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

each share of Series A Preferred Stock shall be entitled to a number of votes equal to 11.07% of the number of shares of common stock into which such share of Series A Preferred Stock is convertible.

The Series A Preferred Stock (a) has a preference upon liquidation equal to \$0.67 per share and then participates on an as-converted basis with the common stock with respect to any additional distributions, (b) shall receive any dividends declared and payable on our common stock on an as-converted basis, and (c) is convertible at the option of the holder into shares of our common stock on a one-for-five basis. We also filed a Certificate of Elimination with respect to the authorized, but unissued, Series A Participating Preferred Stock, to return such shares to the status of preferred stock available for designation as the Series A Preferred Stock.

The purchase agreement related to the Convertible Notes contained customary representations and warranties and provided for resale registration rights with respect to the shares of our common stock issuable upon conversion of the Series A Preferred Stock.

Iliad Note

On November 25, 2019, we entered into a note purchase agreement (the "Iliad Note Purchase Agreement") with Iliad Research and Trading, L.P. ("Iliad") pursuant to which the Company sold and issued to Iliad a promissory note in the principal amount of \$1.3 million (the "Iliad Note"). The Iliad Note was issued with an original issue discount of \$142 thousand and Iliad paid a purchase price of \$1.1 million for the issuance of the Iliad Note, after deduction of \$15 thousand of Iliad transaction expenses.

On December 1, 2020, we repaid the \$30 thousand remaining outstanding balance on the Iliad Note in full prior to its maturity date of November 24, 2021. Remaining debt and original issue discount costs of \$117 thousand were written off at that time and are reflected as a loss on extinguishment of debt in our Consolidated Statements of Operations for the twelve months ended December 31, 2020. The Iliad Note accrued interest at 8% per annum, compounded daily, on the outstanding balance. We were able to prepay the amounts outstanding under the Iliad Note at a premium, which was 15% during the first year and 10% during the second year. Beginning in May 2020, Iliad could have required us to redeem up to \$150 thousand of the Iliad Note in any calendar month. We had the right on three occasions to defer all redemptions that Iliad could otherwise require us to make during any calendar month. No such deferrals were exercised.

Pursuant to the Iliad Note Purchase Agreement and the Iliad Note, we had, among other things, agreed that, until the Iliad Note was repaid 10% of gross proceeds the Company received from the sale of our common stock or other equity must be paid to Iliad and applied to reduce the outstanding balance of the Iliad Note. In accordance with the terms of the Iliad Note, 10% of the gross proceeds from the January 2020 Equity Offering (\$275 thousand) were used to make payments on the Iliad Note, of which \$226 thousand went towards the outstanding principal amount.

The total liability for the Note Purchase Agreement, excluding financing fees, was \$1.3 million at December 31, 2019. Unamortized loan discount and debt issuance costs were \$0.2 million at December 31, 2019.

PPP Loan

On April 17, 2020, the Company was granted a loan from KeyBank National Association ("KeyBank") in the amount of approximately \$795 thousand, pursuant to the Paycheck Protection Program ("PPP") under Division A of the Coronavirus Aid, Relief and Economic Security Act (the "CARES Act"), which was enacted on March 27, 2020. The funds were received on April 20, 2020. At December 31, 2020, \$529 thousand is classified as short-term debt and \$266 thousand is classified as long-term debt on the Company's Consolidated Balance Sheets. The loan accrues interest at a rate of 1% per annum and matures on April 17, 2022. Under the terms of the PPP, certain amounts of the loan may be forgiven if they are used for qualifying expenses as described in the CARES Act. The Company believes it has used the loan for qualifying expenses. On October 20, 2020, we submitted a loan forgiveness application for the full amount of the loan to KeyBank and on October 21, 2020, KeyBank accepted the application and forwarded it to the Small Business Administration ("SBA") for approval. The entire principal balance and interest were forgiven on February 11, 2021. The forgiveness income will be recorded as other income in the Consolidated Statements of Operations during 2021. See also Note 16, "Subsequent Events".

NOTE 10. COMMITMENTS AND CONTINGENCIES

Purchase Commitments

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of December 31, 2020, we had approximately \$8.0 million in outstanding purchase commitments for inventory, of which \$4.8 million is expected to ship in the first quarter of 2021 and thereafter.

NOTE 11. STOCKHOLDERS' EQUITY

1-for-5 Reverse Stock Split

On June 11, 2020, in accordance with previous stockholder approval, our Board of Directors effected a 1-for-5 reverse stock split of the Company's common stock, par value \$0.0001 per share. The reverse stock split became effective immediately (the "Effective Time") upon the filing of the Certificate of Amendment to the Company's Certificate of Incorporation, as amended (the "Certificate of Incorporation"), with the Delaware Secretary of State. At the Effective Time, every five shares of common stock issued and outstanding automatically combined into one validly issued, fully paid and non-assessable share of common stock. No fractional shares were issued as a result of the reverse stock split. The fractional shares were settled in cash in an amount not material to the Company. The \$0.0001 par value per share of common stock and other terms of the common stock were not affected by the reverse stock split. The number of authorized shares of common stock under the Certificate of Incorporation remained unchanged at 50,000,000 shares.

The current financial statements, as well as prior period financial statements, have been retroactively adjusted to reflect the reverse stock split.

Proportional adjustments were made to the conversion and exercise prices of our outstanding warrants and stock options, and to the number of shares issued and issuable under our stock incentive plans in connection with the reverse stock split. The current financial statements as well as prior period financial statements have been retroactively adjusted to reflect the reverse stock split. Preferred shares outstanding were not affected by the reverse stock split and, as such, those shares have not been adjusted.

The reverse stock split was effected solely to increase the per share trading price of the common stock to satisfy the \$1.00 minimum bid price requirement pursuant to Nasdaq Listing Rule 5550(a)(2) for continued listing on Nasdaq. The common stock began trading on Nasdaq on a split-adjusted basis at the opening of trading on June 12, 2020.

Preferred Stock

Pursuant to the terms of the Convertible Notes, on January 16, 2020, following approval by our stockholders of certain amendments to the Certificate of Incorporation, the principal amount of all of the Convertible Notes and the accumulated interest thereon at the date of conversion (totaling \$1.8 million) were converted at a conversion price of \$0.67 per share into an aggregate of 2,709,018 shares of the Company's Series A Preferred Stock, which is convertible on a one-for-five basis into shares of our common stock. During the year ended December 31, 2020, 111,548 shares of the Series A Preferred Stock were converted into 22,310 shares of common stock.

The Series A Preferred Stock was created by the filing of a Certificate of Designation with the Secretary of State of the State of Delaware on March 29, 2019, which designated 2,000,000 shares of the Company's preferred stock, par value \$0.0001 per share, as Series A Preferred Stock (the "Original Series A Certificate of Designation"). On January 15, 2020 with prior stockholder approval, the Company amended the Certificate of Incorporation to increase the number of authorized shares of preferred stock to 5,000,000. The Original Series A Certificate of Designation was also amended on January 15, 2020, to increase the number of shares of preferred stock designated as Series A Preferred Stock to 3,300,000 (the Original Series A Certificate of Designation, as so amended, the "Series A Certificate of Designation").

Pursuant to the Series A Certificate of Designation, each holder of outstanding shares of Series A Preferred Stock is entitled to vote with holders of outstanding shares of common stock, voting together as a single class, with respect to any and all matters presented to the stockholders of the Company for their action or consideration, except as provided by law. In any such vote, each share of Series A Preferred Stock shall entitle its holder to a number of votes equal to 11.07% of the number of shares of common stock into which such share of Series A Preferred Stock is convertible.

The Series A Preferred Stock (a) has a preference upon liquidation equal to \$0.67 per share and then participates on an as-converted basis with the common stock with respect to any additional distributions, (b) shall receive any dividends declared and payable on our common stock on an as-converted basis, and (c) is convertible at the option of the holder into shares of our common stock on a one-for-five basis. On March 29, 2019, the Company also filed a Certificate of Elimination with respect to

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

its authorized, but unissued, Series A Participating Preferred Stock, to return such shares to the status of undesignated preferred stock available for designation as Series A Preferred Stock.

The purchase agreement related to the Convertible Notes contained customary representations and warranties and provided for resale registration rights with respect to the shares of our common stock issuable upon conversion of the Series A Preferred Stock.

January 2020 Equity Offering

Issuance of Common Stock and Warrants

In January 2020, we completed a registered direct offering for the sale of 688,360 shares of our common stock to certain institutional investors, at a purchase price of \$3.37 per share. We also sold, to the same institutional investors, warrants to purchase up to 688,360 shares of common stock at an exercise price of \$3.37 per share in a concurrent private placement for a purchase price of \$0.625 per warrant. We paid the placement agent commissions of \$193 thousand plus \$50 thousand in expenses in connection with the registered direct offering and the concurrent private placement and we also paid legal, accounting and other fees of \$231 thousand related to the offering. Total offering costs of \$0.5 million have been presented as a reduction of additional paid-in capital and have been netted within equity in the Consolidated Balance Sheet as of December 31, 2020. In addition, we issued warrants to the placement agent to purchase up to 48,185 shares of common stock at an exercise price of \$4.99 per share. Net proceeds to us from the sale of common stock and warrants were approximately \$2.3 million. In accordance with the terms of the Iliad Note, 10% of the gross proceeds from the January 2020 Equity Offering (\$275 thousand) were used to make payments on the Iliad Note, of which \$226 thousand went towards the outstanding principal amount and the balance to interest.

Warrants to purchase an aggregate of 467,306 shares remain outstanding at December 31, 2020 with a weighted average exercise price of \$3.51 per share. The exercise of warrants could provide us with cash proceeds of up to \$1.6 million in the aggregate if all warrants are exercised. During the twelve months ended December 31, 2020, 269,240 warrants were exercised resulting in total proceeds of \$918 thousand.

As of December 31, 2020, we had the following outstanding warrants to purchase shares of common stock:

	Number of Underlying Shares	Exercise Price	Expiration
Investor Warrants	425,626	\$3.3700	January 13, 2025
Placement Agent Warrants	41,680	\$4.9940	January 13, 2025
	467,306		

Warrant Classification

We account for common stock warrants as either liabilities or equity instruments depending on the specific terms of the warrant agreement. Common stock warrants that could require cash settlement are accounted for as liabilities and are revalued at fair value at each balance sheet date subsequent to the initial issuance. Changes in the fair market value of the warrant are reflected in the consolidated statement of operations as income (expense) based upon the change in fair value of warrants. Common stock warrants without cash settlement provisions are accounted for as equity and re-measurement at each balance sheet date is not required.

The warrants we issued in the January 2020 Equity Offering contained a provision for net cash settlement in the event that there is a fundamental transaction involving the Company (e.g., merger, sale of substantially all assets, tender offer, or share exchange). Due to this provision, the warrants were initially classified as liabilities, as opposed to equity, and were recorded at their fair values at each balance sheet date with fair value adjustments recognized as a component of earnings. During December 2020, the warrant holders agreed to a modification of the terms of their warrants which removed the potential cash settlement option upon the occurrence of a fundamental transaction. As such, during the fourth quarter of 2020, the liability relating to the remaining 467,306 warrants was fair-valued through the modification date with the offsetting adjustment recorded in income. The \$1.4 million warrant liability was then reclassified into equity and the warrants are no longer subject to re-measurement at each balance sheet date.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Stock-based compensation

On March 18, 2020, our board of directors approved the Energy Focus, Inc. 2020 Stock Incentive Plan (the "2020 Plan"). The 2020 Plan was approved by the stockholders at our annual meeting on September 17, 2020, after which no further awards could be issued under the Energy Focus, Inc. 2014 Stock Incentive Plan ("the 2014 Plan"). The 2020 Plan initially allows for awards up to 350,000 shares of common stock and expires on September 17, 2030. At December 31, 2020, 331,150 shares remain available to grant under the 2020 Plan.

On May 6, 2014, our board of directors approved the 2014 Plan. The 2014 Plan was approved by the stockholders at our annual meeting on July 15, 2014, after which no further awards could be issued under the Energy Focus, Inc. 2008 Incentive Stock Plan (the "2008 Plan"). The 2014 Plan initially allowed for awards up to 120,000 shares of common stock and expires on July 15, 2024. On July 22, 2015, the stockholders approved an amendment to the 2014 Plan to increase the shares available for issuance under the 2014 Plan by an additional 120,000 shares. On June 21, 2017, the stockholders approved an amendment to the 2014 Plan to increase the shares available for issuance under the 2014 Plan by an additional 260,000. No awards may be granted under this plan.

We have one other historical equity-based compensation plan under which options are currently outstanding; however, no new awards may be granted under this plan. Generally, stock options are granted at fair market value and expire ten years from the grant date. Employee grants generally vest in three or four years, while grants to non-employee directors generally vest in one year. The specific terms of each grant are determined by our board of directors.

Stock-based compensation expense is attributable to stock options and restricted stock unit awards. For all stock-based awards, we recognize compensation expense using a straight-line amortization method.

The following table summarizes stock-based compensation expense and the impact it had on operations for the periods presented (in thousands):

	For the year ended December 31,			
	2020	2	019	
Cost of sales	\$ 2	\$	9	
Product development	10		26	
Selling, general, and administrative	119		581	
Total stock-based compensation	\$ 131	\$	616	

At December 31, 2020 and 2019, we had unearned stock compensation expense of \$0.2 million and \$0.6 million, respectively. These costs will be charged to expense and amortized on a straight-line basis in subsequent periods. The remaining weighted average period over which the unearned compensation is expected to be amortized was approximately 3.1 years as of December 31, 2020 and 2.6 years as of December 31, 2019.

Stock options

The fair value of each stock option is estimated on the date of grant using the Black-Scholes option pricing model. Estimates utilized in the calculation include the expected life of the option, risk-free interest rate, and expected volatility, and are further comparatively detailed as follows:

	20	20	2019
Fair value of options issued	\$	2.06 \$	1.45
Exercise price	\$	2.68 \$	2.20
Expected life of option (in years)		6.1	4.8
Risk-free interest rate		0.7 %	1.8 %
Expected volatility		93.6 %	90.0 %
Dividend yield		0.00 %	0.00 %

We utilize the simplified method as provided by ASC 718-10 to calculate the expected stock option life. Under ASC 718-10, the expected stock option life is based on the midpoint between the vesting date and the end of the contractual term of the stock option award. The use of this simplified method in place of using the actual historical exercise data is allowed when a stock

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

option award meets all of the following criteria: the exercise price of the stock option equals the stock price on the date of grant; the exercisability of the stock option is only conditional upon completing the service requirement through the vesting date; employees who terminate their service prior to the vesting date forfeit their stock options; employees who terminate their service after vesting are granted a limited time period to exercise their stock options; and the stock options are nontransferable and non-hedgeable. We believe that our stock option awards meet all of these criteria. The estimated expected life of the option is calculated based on contractual life of the option, the vesting life of the option, and historical exercise patterns of vested options. The risk-free interest rate is based on U.S. treasury zero-coupon yield curve on the grant date for a maturity similar to the expected life of the option. The volatility estimates are calculated using historical volatility of our stock price calculated over a period of time representative of the expected life of the option. We have not paid dividends in the past, and do not expect to pay dividends over the corresponding expected term as of the grant date.

Options outstanding under all plans at December 31, 2020 have a contractual life of ten years, and vesting periods between one and four years. A summary of option activity under all plans was as follows:

	Number of Options		Weighted Average Exercise Price Per Share
Outstanding at December 31, 2018	58,574	\$	18.90
Granted	137,860	Ψ	2.20
Cancelled	(35,499)		12.75
Expired	(5,505)		26.65
Outstanding at December 31, 2019	155,031	\$	5.23
Granted	112,350		2.68
Cancelled	(33,774)		9.56
Exercised	(12,157)		2.11
Outstanding at December 31, 2020	221,450	\$	3.45
Vested and expected to vest at December 31, 2020	177,827	\$	3.62
Exercisable at December 31, 2020	38,465	\$	7.88

The "Expected to Vest" options are the unvested options that remain after applying the pre-vesting forfeiture rate assumption to total unvested options. 12,157 options were exercised during 2020, and no options were exercised during 2019. The total intrinsic value of options outstanding and options exercisable at December 31, 2020 was \$403 thousand and \$54 thousand, respectively, which was calculated using the closing stock price at the end of the year of \$4.03 per share less the option price of the in-the-money grants.

The options outstanding at December 31, 2020 have been segregated into ranges for additional disclosure as follows:

OPTIONS OUTSTANDING				O	OPTIONS EXERCISABLE			
Range	of Exerc	cise Prices	Number of Shares Outstanding	Weighted Average Remaining Contractual Life (in years)	Weighted Averag Exercise Price	Number of e Shares Exercisable	Weighted Average Remaining Contractual Life (in years)	Weighted Average Exercise Price
\$1.45	_	\$1.48	27,525	9.2	\$ 1.45	425	9.2	\$ 1.45
\$1.49	_	\$1.68	50,000	9.2	1.50	_	9.2	1.50
\$1.69	_	\$2.25	80,975	8.6	2.10	21,250	8.5	2.10
\$2.26	_	\$5.79	31,380	8.8	2.55	7,420	8.7	2.40
\$5.80	_	\$53.50	31,570	8.1	12.64	9,370	4.3	25.61
			221,450	8.8	\$ 3.45	38,465	7.6	\$ 7.88

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Restricted Stock Units

In 2015, we began issuing restricted stock units to certain employees and non-employee Directors under the 2014 Plan with vesting periods ranging from one to four years from the grant date. In 2020, we began issuing restricted stock units to certain employees and non-employee Directors under the 2020 Plan with vesting periods ranging from one to four years.

The following table shows a summary of restricted stock unit activity:

	Restricted Stock Units Outstanding	Weighted Average Grant Date Fair Value
At December 31, 2018	109,371	\$ 12.70
Granted	17,115	3.10
Vested	(87,256)	11.15
Forfeited	(32,627)	11.65
At December 31, 2019	6,603	\$ 13.17
Granted	19,200	2.44
Vested	(20,068)	3.96
Forfeited	(1,255)	12.40
At December 31, 2020	4,480	\$ 8.64

Employee stock purchase plans

In September 2013, our stockholders approved the 2013 Employee Stock Purchase Plan (the "2013 Plan") to replace the 1994 prior purchase plan. A total of 100,000 shares of common stock were provided for issuance under the 2013 Plan. The 2013 Plan permits eligible employees to purchase common stock through payroll deductions at a price equal to the lower of 85 percent of the fair market value of our common stock at the beginning or end of the offering period. Employees may end their participation at any time during the offering period, and participation ends automatically upon termination of employment with us. During 2020 and 2019, employees purchased 26,632 and 3,138 shares, respectively. At December 31, 2020, 50,544 shares remained available for purchase under the 2013 Plan.

NOTE 12. INCOME TAXES

We file income tax returns in the U.S. federal jurisdiction, as well as in various state and local jurisdictions. With few exceptions, we are no longer subject to U.S. federal, state, and local, or non-U.S. income tax examinations by tax authorities for years before 2017. Our practice is to recognize interest and penalties related to income tax matters in income tax expense when and if they become applicable. At December 31, 2020 and 2019, respectively, there were no accrued interest and penalties related to uncertain tax positions.

The following table shows the components of the provision for income taxes (in thousands):

	Fo	For the year ended December 31,				
	20	20 2	2019			
<u>Current:</u>						
State	\$	(5) \$	10			
<u>Deferred:</u>		•				
U.S. Federal		_	_			
(Benefit from) provision for income taxes	\$	(5) \$	10			

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The principal items accounting for the difference between income taxes computed at the U.S. statutory rate and the (benefit from) provision for income taxes reflected in our Consolidated Statements of Operations are as follows:

	For the year end	For the year ended December 31,				
	2020	2019				
U.S. statutory rate	21.0 %	21.0 %				
State taxes (net of federal tax benefit)	5.6	2.0				
Valuation allowance	(26.0)	(20.7)				
Other	(0.5)	(2.4)				
	0.1 %	(0.1)%				

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets are as follows (in thousands):

	At December 31,				
	2	020		2019	
Accrued expenses and other reserves	\$	1,787	\$	1,505	
Right-of-use-asset		(225)		(378)	
Lease liabilities		271		461	
Tax credits, deferred R&D, and other		20		44	
Net operating loss		14,510		12,758	
Valuation allowance		(16,363)		(14,390)	
Net deferred tax assets	\$		\$	_	

In 2020, our effective tax rate was lower than the statutory rate due to an increase in the valuation allowance as a result of the \$7.1 million additional federal net operating loss we recognized for the year. In 2019, our effective tax rate was lower than the statutory rate due to an increase in the valuation allowance of the \$8.3 million additional federal net operating loss we recognized for the year.

At December 31, 2020, we had net operating loss carry-forwards of approximately \$115.9 million for federal income tax purposes (\$72.3 million for state and local income tax purposes). However, due to changes in our capital structure, approximately \$61.5 million of the \$115.9 million is available after the application of IRC Section 382 limitations. As a result of the Tax Act, net operating loss carry-forwards generated in tax years beginning after December 31, 2017 can only offset 80% of taxable income. These net operating loss carry-forwards can no longer be carried back, but they can be carried forward indefinitely. The \$7.1 million and \$8.3 million in federal net operating losses generated in 2020 and 2019 will be subject to the new limitations under the Tax Act. If not utilized, the carry-forwards generated prior to December 31, 2017 of \$37.3 million will begin to expire in 2021 for federal purposes and have begun to expire for state and local purposes.

Since we believe it is more likely than not that the benefit from net operating loss carry-forwards will not be realized, we have provided a full valuation allowance against our deferred tax assets at December 31, 2020 and 2019, respectively. We had no net deferred tax liabilities at December 31, 2020 or 2019, respectively. In 2020, we recognized various states tax benefits as a result of the adjustment from the 2019 provision to the actual tax on the 2019 returns that were filed in 2019. In 2019, we recognized various states tax expense as a result of the adjustment from the 2018 provision to the actual tax on the 2018 returns that were filed in 2019.

NOTE 13. PRODUCT AND GEOGRAPHIC INFORMATION

We focus our efforts on the sale of LED lighting products, in particular our MMM and commercial tubular TLED lines of products and controls, into targeted vertical markets. Our products are sold primarily in the United States through a combination of direct sales employees, lighting agents, independent sales representatives and distributors. We currently operate in a single industry segment, developing and selling our LED lighting products and controls into the MMM and commercial markets.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table provides a breakdown of product net sales for the years indicated (in thousands):

	Year ended December 31,				
	2020		2019		
Commercial products	\$ 5,404	\$	7,877		
MMM products	11,424		4,828		
Total net sales	\$ 16,828	\$	12,705		

A geographic summary of net sales is as follows (in thousands):

	For the year ended December 31,					
	2020	2	019			
United States	\$ 16,685	\$	12,599			
International	143		106			
Total net sales	\$ 16,828	\$	12,705			

At December 31, 2020 and 2019, approximately 100% of our long-lived assets, which consist of property and equipment, were located in the United States.

NOTE 14. RELATED PARTY TRANSACTIONS

On December 12, 2012, our board of directors appointed James Tu to serve as our non-executive Chairman. On April 30, 2013, Mr. Tu became the Executive Chairman assuming the duties of the Principal Executive Officer. On October 30, 2013 Mr. Tu was appointed Executive Chairman and Chief Executive Officer by our board of directors. On May 9, 2016, Mr. Tu also assumed the role of President. On August 11, 2016, our board of directors appointed a separate Executive Chairman of the Board, and Mr. Tu continued to serve in the role of Chief Executive Officer and President, until February 19, 2017.

On November 30, 2018, each of Gina Huang, Brilliant Start Enterprise, Inc. ("Brilliant Start"), Jag International Ltd., Jiangang Quo, Cleantech Global Ltd., James Tu, 5 Elements Global Fund L.P., Schema Hui Cheng, Communal International, Ltd., and 5 Elements Energy Efficiency Limited (the "Former Schedule 13D Parties") filed a Schedule 13D with the SEC, indicating that they may have been deemed to be a "group" under Section 13(d)(3) of the Exchange Act of 1934, as amended, and Rule 13d-5 promulgated thereunder, and that such group beneficially owned 17.6% of our common stock. The Schedule 13D was amended on February 26, 2019 and April 3, 2019.

On February 21, 2019, the Former Schedule 13D Parties entered into a settlement with the Company providing for the appointment of two directors (Geraldine McManus and Jennifer Cheng) and the nomination of those two directors for election at the Company's 2019 annual meeting of stockholders.

On March 29, 2019, the Company entered into a note purchase agreement (the "Note Purchase Agreement") with certain investors, including Fusion Park LLC (of which James Tu is the sole member) ("Fusion Park") and Brilliant Start (which is controlled by Gina Huang, a current member of our board of directors), for the purchase of an aggregate of \$1.7 million of Convertible Notes. Pursuant to the Note Purchase Agreement, Fusion Park and Brilliant Start purchased \$580 thousand and \$500 thousand, respectively, in principal amount of Convertible Notes. In connection with the sale of Convertible Notes, Mr. Tu was appointed as a member of our board of directors on April 1, 2019 and Chief Executive Officer, President and interim Chief Financial Officer on April 2, 2019.

Mr. Tu is also the Founder, Chief Executive Officer and Chief Investment Officer of 5 Elements Global Advisors, an investment advisory and management company managing the holdings of 5 Elements Global Fund LP, which was a beneficial owner of more than 5.0% of our common stock prior to the August 2014 registered offering. As of December 31, 2020, 5 Elements Global Fund LP beneficially owns approximately 1.7% of our common stock. 5 Elements Global Advisors focuses on investing in clean energy companies with breakthrough, commercialized technologies, and near-term profitability potential. Mr. Tu is also Co-Founder of Communal International Ltd. ("Communal"), a British Virgin Islands company dedicated to assisting clean energy, solutions-based companies, maximizing technology and product potential and gaining them access to global marketing, distribution licensing, manufacturing and financing resources. Communal has a 50.0% ownership interest in 5 Elements Energy Efficiencies (BVI) Ltd., a beneficial owner of approximately 1.6% of our common stock. Schema Cheng controls 5 Elements Energy Efficiencies (BVI) Ltd. and owns the other 50.0%. She is Co-Founder of Communal International Ltd. with Mr. Tu and the mother of Simon Cheng. Mr. Cheng was a member of our board of directors through February 19,

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

2017 and an employee of the Company through June 30, 2018 and rejoined the Company on August 5, 2019. Schema Cheng is also the mother of Jennifer Cheng, a current member of our board of directors.

NOTE 15. LEGAL MATTERS

We may be the subject of threatened or pending legal actions and contingencies in the normal course of conducting our business. We provide for costs related to these matters when a loss is probable and the amount can be reasonably estimated. The effect of the outcome of these matters on our future results of operations and liquidity cannot be predicted because any such effect depends on future results of operations and the amount or timing of the resolution of such matters. While it is not possible to predict the future outcome of such matters, we believe that the ultimate resolution of such individual or aggregated matters will not have a material adverse effect on our consolidated financial position, results of operations, or cash flows. For certain types of claims, we maintain insurance coverage for personal injury and property damage, product liability and other liability coverages in amounts and with deductibles that we believe are prudent, but there can be no assurance that these coverages will be applicable or adequate to cover adverse outcomes of claims or legal proceedings against us.

NOTE 16. SUBSEQUENT EVENTS

On April 17, 2020, the Company was granted a loan from KeyBank National Association ("KeyBank") in the amount of approximately \$795 thousand, pursuant to the PPP under Division A of the CARES Act, which was enacted on March 27, 2020. The funds were received on April 20, 2020. Under the terms of the PPP, certain amounts of the loan may be forgiven if they are used for qualifying expenses as described in the CARES Act. The Company believes it has used the loan for qualifying expenses. On October 20, 2020, we submitted a loan forgiveness application for the full amount of the loan to KeyBank and on October 21, 2020, KeyBank accepted the application and forwarded it to the Small Business Administration ("SBA") for approval. The entire principal balance and interest were forgiven on February 11, 2021. The forgiveness income will be recorded as other income in the Consolidated Statements of Operations during 2021.

SUPPLEMENTARY FINANCIAL INFORMATION TO ITEM 8.

The following table sets forth our selected unaudited financial information for the four quarters in the years ended December 31, 2020 and 2019, respectively. This information has been prepared on the same basis as the audited financial statements and, in the opinion of management, contains all adjustments necessary for a fair presentation thereof.

QUARTERLY FINANCIAL DATA (UNAUDITED)

(amounts in thousands, except per share amounts)

2020	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
Net sales	\$ 3,746	\$ 5,964	\$ 3,335	\$ 3,783
Gross profit	1,434	1,376	1,343	1,032
Net income (loss)	65	(1,165)	(4,340)	(541)
Net income (loss) per common share attributable to common stockholders - ${\it basic}^1$:	\$ 0.01	\$ (0.35)	\$ (1.36)	\$ (0.18)
Net income (loss) per common share attributable to common stockholders - $\mbox{\tt diluted}^1$:	\$ 0.01	\$ (0.35)	\$ (1.36)	\$ (0.18)
Weighted average shares used in computing net income (loss) per common share ² :				
Basic	3,491	3,308	3,192	3,086
Diluted	4,307	3,308	3,192	3,086

2019	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
Net sales	\$ 3,531	\$ 2,915	\$ 3,082	\$ 3,177
Gross profit	957	1,028	(109)	98
Net loss	(1,308)	(946)	(2,254)	(2,865)
Net loss per common share (basic and diluted) ¹	\$ (0.53)	\$ (0.38)	\$ (0.91)	\$ (1.18)
Shares outstanding (basic and diluted) ²	2,480	2,474	2,467	2,425

¹ In accordance with Topic 260 "Earnings Per Share", net income has been allocated to holders of common shares and participating securities including preferred shares and warrants, accordingly. Earnings per share disclosed above utilizes income attributable to common shareholders after this required allocation.

²Shares outstanding for prior periods have been restated for the 1-for-5 reverse stock split effective June 11, 2020.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of disclosure controls and procedures

We maintain disclosure controls and procedures, as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC, and that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure.

Pursuant to Rule 13a-15(b) under the Exchange Act, our management must evaluate, with the participation of our Chief Executive Officer and Chief Financial Officer, the effectiveness of our disclosure controls and procedures, as of December 31, 2020, the end of the period covered by this report. Management, with the participation of our current Chief Executive Officer and Chief Financial Officer, did evaluate the effectiveness of our disclosure controls and procedures as of the end of period covered by this report. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at a reasonable assurance level as of December 31, 2020.

Management's report on internal controls over financial reporting

Management of Energy Focus, Inc. is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of internal control over financial reporting as of December 31, 2020 based upon criteria established in "Internal Control – Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "COSO Framework").

An effective internal control system, no matter how well designed, has inherent limitations, including the possibility of human error and circumvention or overriding of controls; therefore, it can provide only reasonable assurance with respect to reliable financial reporting. Furthermore, effectiveness of an internal control system in future periods cannot be guaranteed, because the design of any system of internal controls is based in part upon assumptions about the likelihood of future events. There can be no assurance that any control design will succeed in achieving its stated goals under all potential future conditions. Over time, certain controls may become inadequate because of changes in business conditions, or the degree of compliance with policies and procedures may deteriorate. As such, misstatements due to error or fraud may occur and not be detected.

Based upon our evaluation under the COSO framework as of December 31, 2020, management concluded that its internal control over financial reporting was effective as of December 31, 2020.

Changes in internal control over financial reporting

During the quarter ended December 31, 2020, there were no changes in our internal control over financial reporting that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Attestation Report of Independent Registered Public Accounting Firm

This Annual Report does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our independent public accounting firm pursuant to the rules of the SEC that permit us to provide only management's report.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEMS 10 to 14 (inclusive)

Except as set forth in Part I, the information required by Items 10, 11, 12, 13 and 14 will appear in the definitive Energy Focus, Inc. Proxy Statement for the Annual Meeting of Stockholders to be held on or about May 26, 2021, which will be filed pursuant to Regulation 14A under the Securities Exchange Act of 1934 and is incorporated by reference in this Annual Report pursuant to General Instruction G(3) of Form 10-K (other than the portions thereof not deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934).

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) (1) Financial statements

The financial statements required by this Item 15(a)(1) are set forth in Item 8, "Financial Statements and Supplementary Data," of this Annual Report.

(2) Financial statement schedules

Schedule II—Valuation and Qualifying Accounts is set forth below. All other schedules are omitted either because they are not applicable, or the required information is shown in the financial statements or the notes.

SCHEDULE II ENERGY FOCUS, INC. SCHEDULE OF VALUATION AND QUALIFYING ACCOUNTS

(amounts in thousands)

Description	Beginning Balance	Charges to Revenue/ Expense	Deductions	Ending Balance
Year ended December 31, 2020				
Allowance for doubtful accounts and returns	\$ 28	\$ _	\$ 20	\$ 8
Inventory reserves	3,518	_	624	2,894
Valuation allowance for deferred tax assets	14,390	1,973	_	16,363
Year ended December 31, 2019				
Allowance for doubtful accounts and returns	\$ 33	\$ 30	\$ 35	\$ 28
Inventory reserves	4,085	814	1,381	3,518
Valuation allowance for deferred tax assets	12.822	1,568	_	14,390

(3) Exhibits

EXHIBIT INDEX

Exhit Numb	
<u>3.1</u>	Certificate of Incorporation of Energy Focus, Inc. (incorporated by reference to Appendix A to the Registrant's Definitive Proxy Statement on Schedule 14A filed May 1, 2006).
3.2	Certificate of Amendment to the Certificate of Incorporation of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on June 21, 2010 (incorporated by reference to Exhibit 3.2 to the Registrant's Annual Report on Form 10-K filed on March 24, 2020).
<u>3.3</u>	Certificate of Amendment to the Certificate of Incorporation of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on October 9, 2012 (incorporated by reference to Exhibit 3.3 to the Registrant's Annual Report on Form 10-K filed on March 24, 2020).
<u>3.4</u>	Certificate of Amendment to the Certificate of Incorporation of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on October 28, 2013 (incorporated by reference to Exhibit 3.4 to the Registrant's Annual Report on Form 10-K filed on March 24, 2020).

- Certificate of Amendment to the Certificate of Incorporation of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on July 16, 2014 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on July 16, 2014).
- 3.6 Certificate of Amendment to the Certificate of Incorporation of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on July 24, 2015 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on July 27, 2015).
- 3.7 Certificate of Amendment to the Certificate of Incorporation of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on January 15, 2020 (incorporated by reference to Exhibit 3.7 to the Registrant's Annual Report on Form 10-K filed on March 24, 2020).
- 3.8 Certificate of Designation of Series A Convertible Preferred Stock of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on March 29, 2019 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on April 1, 2019).
- 3.9 Amendment to the Certificate of Designation of Series A Convertible Preferred Stock of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on May 30, 2019 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on May 30, 2019).
- 3.10 Amendment to the Certificate of Designation of Series A Convertible Preferred Stock of Energy Focus, Inc. filed with the Secretary of State of the State of Delaware on January 15, 2020 (incorporated by reference to Exhibit 3.10 to the Registrant's Annual Report on Form 10-K filed on March 24, 2020).
- 3.11 Certificate of Amendment of Certificate of Incorporation, dated June 11, 2020 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on June 11, 2020).
- 3.12 Bylaws of Energy Focus, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on May 18, 2020).
- 3.13 Certificate of Ownership and Merger, Merging Energy Focus, Inc., a Delaware corporation, into Fiberstars, Ind. a Delaware corporation, filed with the Secretary of State of the State of Delaware on May 4, 2007 (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q filed on May 10, 2007).
- 4.1 Description of Securities of Energy Focus, Inc. (incorporated by reference to Exhibit 4.1 to the Registrant's Annual Report on Form 10-K filed on March 24, 2020).
- 4.2 Form of Warrant (incorporated by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K filed on January 13, 2020).
 - 4.3 Form of Placement Agent Warrant (incorporated by reference to Exhibit 4.2 of the Registrant's Current Report on Form 8-K filed on January 13, 2020).
 - 4.4 Form of Amendment to Common Stock Purchase Warrant (filed with this Annual Report).
 - 2013 Employee Stock Purchase Plan (incorporated by reference to Appendix A to the Registrant's Definitive Proxy Statement on Form DEF14A filed on August 16, 2013).
- 10.2* 2008 Incentive Stock Plan, as amended (incorporated by reference from Appendix B to the Registrant's Preliminary Proxy Statement on Form PRER14A filed on June 8, 2012).
- 10.3* 2014 Stock Incentive Plan, as amended (incorporated by reference to Exhibit 10.4 to the Registrant's Annual Report on Form 10-K filed on February 22, 2018).
- 10.4* Form of Nonqualified Stock Option Grant Agreement to Non-Employee Directors (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on July 16, 2014).
- 10.5* Form of Nonqualified Stock Option Grant Agreement to Employees (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on July 16, 2014).
- 10.6* Form of Restricted Stock Unit Grant Agreement to Employees (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on July 16, 2014).
- 10.7* Form of Restricted Stock Unit Grant Agreement to Non-Employee Directors (incorporated by reference to Exhibit 10.8 to the Registrant's Annual Report on Form 10-K filed on February 22, 2018).
- 10.8* Form of Incentive Stock Option Grant Agreement to Employees (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed on July 16, 2014).
 - 10.9* Form of Notice of Stock Option Grant for 2008 Stock Incentive Plan (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on November 13, 2013).
- 10.10* Lease agreement by and between Aurora Development Center LLC and Energy Focus, Inc. dated April 19, 2016 (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on May 11, 2016).
- 4.11* Agreement dated February 21, 2019 entered into by Energy Focus, Inc. and the Investor Group thereto (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on February 26, 2019).
- Note Purchase Agreement, dated March 29, 2019, among the Company and each of the Investors thereto (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on April 1, 2019).
- 10.13 Form of Subordinated Convertible Promissory Note entered into by the Company and each of the Investors on March 29, 2019 (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on April 1, 2019).
- 10.14 Form of Amended and Restated Subordinated Convertible Promissory Note entered into by the Company and each of the Investors thereto (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on May 30, 2019).

<u>10.15*</u>	President and Chief Financial Officer Offer Letter dated June 18, 2019 between Tod A. Nestor and Energy Focus, Inc. (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on July 22, 2019).
<u>10.16*</u>	Energy Focus, Inc. Executive Bonus Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on July 19, 2019).
<u>10.17</u>	Form of Securities Purchase Agreement, dated as of January 9, 2020, between the Company and each purchaser named in the signature pages thereto (incorporated by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K filed on January 13, 2020).
<u>10.18</u>	SBA Loan Agreement, dated as of April 17, 2020, between the Company and KeyBank National Association (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on May 13, 2020).
<u>10.19</u>	Loan and Security Agreement, dated as of August 11, 2020, by and between the Company and Crossroads Financial Group, LLC (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on August 13, 2020).
10.20#	Loan and Security Agreement, dated as of August 11, 2020, by and between the Company and Factors Southwest L.L.C. (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed on August 13, 2020).
10.21*	Energy Focus, Inc. 2020 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on September 22, 2020).
10.22*	Energy Focus, Inc. 2020 Stock Incentive Plan - Form of Restricted Stock Unit Award Agreement for Employees (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on September 22, 2020).
10.23*	Energy Focus, Inc. 2020 Stock Incentive Plan - Form of Restricted Stock Unit Award Agreement for Non-Employee Directors (incorporated by reference

- to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on September 22, 2020). Energy Focus, Inc. 2020 Stock Incentive Plan - Form of Nonqualified Stock Option Agreement for Employees (incorporated by reference to Exhibit 10.4 10.24*
- to the Registrant's Current Report on Form 8-K filed on September 22, 2020). 10.25* Energy Focus, Inc. 2020 Stock Incentive Plan - Form of Incentive Stock Option Agreement (incorporated by reference to Exhibit 10.5 to the Registrant's
 - Current Report on Form 8-K filed on September 22, 2020).
 - 21.1 Subsidiaries of the Registrant (filed with this Report).
 - Consent of GBQ Partners, LLC, Independent Registered Public Accounting Firm (filed with this Report). 23.1
 - 31.1 Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
 - 31.2 Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
 - 32.1+ Certification of Chief Executive Officer and Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
 - 101+** The following financial information from Energy Focus, Inc. Annual Report on Form 10-K for the year ended December 31, 2020, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income (Loss), (iv) Consolidated Statements of Shareholders' Equity, (v) Consolidated Statements of Cash Flows, (vi) the Notes to Consolidated Financial Statements.
 - 104** Cover Page Interactive Data File (embedded within the Inline XBRL document).
 - Management contract or compensatory plan or arrangement.
 - Pursuant to Regulation S-T, this interactive data file is not deemed filed for purposes of Section 11 of the Securities Act, or Section 18 of the Exchange Act, or otherwise subject to the liabilities of these sections.
 - This exhibit will not be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that Section. Such exhibit shall not be deemed incorporated into any filing under the Securities Act or the Exchange Act.
 - Portions of this exhibit have been redacted in compliance with Regulation S-K Item 601(b)(10).

ITEM 16. FORM 10-K SUMMARY

None.

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.

ENERGY FOCUS, INC.

Date: March 25, 2021 By: /s/ James Tu

James Tu

Executive Chairman and 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 indicated and on the date indicated:

<u>Date</u>	<u>Signature</u>	<u>Title</u>
March 25, 2021	/s/ James Tu	Executive Chairman and Chief Executive Officer
	James Tu	(Principal Executive Officer)
March 25, 2021	/s/ Tod Nestor	President and Chief Financial Officer
	Tod Nestor	(Principal Financial and Accounting Officer)
March 25, 2021	/s/ Jennifer Y. Cheng	
· · · · · · · · · · · · · · · · · · ·	Jennifer Y. Cheng	Director
March 25, 2021	/s/ Gina Huang (Mei Yun Huang)	
	Gina Huang (Mei Yun Huang)	Director
March 25, 2021	/s/ Geraldine F. McManus	
	Geraldine F. McManus	Director
March 25, 2021	/s/ Philip Politziner	
	Philip Politziner	Director
March 25, 2021	/s/ Stephen Socolof	
	Stephen Socolof	Director

Amendment to Common Stock Purchase Warrant`

Energy Focus, Inc.

This Amendment to Common Stock Purchase Warrant (the "*Amendment*") is made as of December 22, 2020, by and between Energy Focus, Inc., a Delaware corporation (the "*Company*") and the holder party hereto (the "*Holder*").

RECITALS

WHEREAS, the Company previously issued to the Holder that certain Common Stock Purchase Warrant dated January 13, 2020 (the "*Warrant*") pursuant to which the Company granted to Holder the right to purchase from the Company a certain number of fully paid non-assessable shares of Common Stock of the Company, in the amounts and on the terms as set forth therein, as adjusted prior to the date hereof pursuant to the terms of the Warrant; and

WHEREAS, the Holder and the Company have agreed to amend the Warrant on the terms set forth herein.

NOW, THEREFORE, in consideration of the premises and the mutual agreements hereinafter set forth, the parties hereto agree as follows:

- 1. Capitalized terms not otherwise defined in this Amendment shall have the definitions ascribed to them in the Warrant.
- 2. The Company represents that all other holders of outstanding Warrants have agreed concurrently to also amend the terms of their outstanding Warrants on terms consistent herewith.
- 3. Section 3(e) of the Warrant is hereby deleted and replaced with the following:
 - e) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person in which the Company is not the surviving entity (other than a reincorporation in a different state or a similar transaction pursuant to which the surviving company remains a public company), (ii) the Company (and all of its Subsidiaries, taken as a whole), directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off, merger or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the voting power of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then,

upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder (without regard to any limitation in Section 2(e) on the exercise of this Warrant), the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation in Section 2(e) on the exercise of this Warrant). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. Notwithstanding anything to the contrary, in the event of a Fundamental Transaction, the Company or any Successor Entity (as defined below) shall, at the Holder's option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction (or, if later, the date of the public announcement of the applicable Fundamental Transaction), purchase this Warrant from the Holder by paying to the Holder the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the remaining unexercised portion of this Warrant on the date of consummation of such Fundamental Transaction, that is being offered and paid to the holders of Common Stock of the Company in connection with the Fundamental Transaction, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of Common Stock are given the choice to receive from among alternative forms of consideration in connection with the Fundamental Transaction".

4. Except as expressly provided for in this Amendment, no other term or provision of the Warrant is amended or modified in any respect.

[Signature pages follow]

IN WITNESS	S WHEREOF, the parties	hereto have duly	executed this A	mendment by thei	ir authorized represen	tatives as of the date
first above written.	-	-		•	•	

Holder:	_ ENERGY FOCUS, INC.
By:	By:
Name:	Name: Tod A. Nestor
Title:	Title: President and Chief Financial Officer

[Signature Page - Amendment to Common Stock Purchase Warrant]

SUBSIDIARIES

Name Location Doing Business as

Energy Focus LED Solutions, LLC Solon, Ohio Energy Focus LED Solutions, LLC

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Energy Focus, Inc. Solon, Ohio

We hereby consent to the incorporation by reference in the Registration Statements on Form S-1 (No. 333-237614), and Form S-3 (No. 333-228255) and Form S-8 (Nos. 333-249272, 333-219805, 333-206088, 333-197422, and 333-193024) of Energy Focus, Inc. of our report dated March 25, 2021, relating to the consolidated financial statements and financial statement schedule, which appear in this Form 10-K.

/s/ GBQ Partners, LLC

Columbus, Ohio March 25, 2021

CERTIFICATION

I, James Tu, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of Energy Focus, 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.

By: <u>/s/ James Tu</u>
Name: James Tu

Title: Executive Chairman and Chief Executive Officer

Date: March 25, 2021

CERTIFICATION

I, Tod A. Nestor, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of Energy Focus, 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.

By: /s/ Tod A. Nestor
Name: Tod A. Nestor

Title: President and Chief Financial Officer

Date: March 25, 2021

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

In connection with the Annual Report of Energy Focus, Inc. (the "Company") on Form 10-K for the year ended December 31, 2020 (the "Report"), I, James Tu, Executive Chairman and Chief Executive Officer of the Company, and I, Tod A. Nestor, President and Chief Financial Officer of the Company, each certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes Oxley Act of 2002, that to the best of my knowledge:

(i) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ James Tu

James Tu

Executive Chairman and Chief Executive Officer

Date: March 25, 2021

/s/ Tod A. Nestor

Tod A. Nestor

President and Chief Financial Officer Date: March 25, 2021

A signed original of this written statement required by Section 906 has been provided to Energy Focus, Inc. and will be retained by Energy Focus, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.