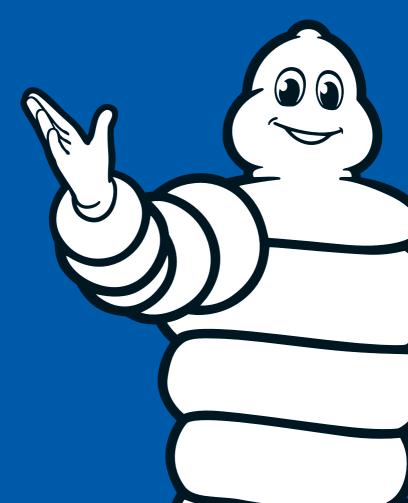


# OUR STRATEGIC VISION IS INSPIRED BY SUSTAINABLE MOBILITY

2018 Annual and Sustainable Development Report



# THE JOURNEY TO SUSTAINABLE PERFORMANCE



In recent years, the Michelin Group's operating environment has been shifting constantly, as new competition disrupts our markets, new needs emerge from our customers, new technologies reshape our industry, the digital paradigm profoundly transforms our organization and the expectations of our stakeholders, and new geopolitical realities call old certainties into question. All of these changes represent exciting challenges for the Group.

To meet them, Michelin is leveraging a number of proven strengths: an assertive corporate mission widely embraced across the enterprise, an ambitious strategy focused on the long term, a global brand that serves as a foundation of trust and value, and engaged employees who have always been able to foresee and respond to the emerging aspirations of our customers and stakeholders.

#### A SHARED VISION

Underpinning the strength of the Michelin Group is the seamless alignment between its corporate purpose, its strategic vision and its commitments, as it offers everyone a better way forward and improves the mobility of its customers.

By building on these fundamentals, the Group considerably stepped up its transformation over the past year, in particular by deploying a new organization designed to embed customers and employee empowerment into every aspect of the business. Among the many valuable lessons learned from the new operating procedures has been the need to adjust the Group's executive bodies, so as to make decision-making processes clearer, faster and more closely aligned with critical corporate and market issues. Changes in the Group Executive Committee take effect on March 28, 2019 and a Group Management Committee has been created.

## RESPONSIBLE GOVERNANCE

At Michelin, corporate governance is a solid process focused on long-term responsibility, with a clear segregation of management and supervisory powers.

#### ROBUST RESULTS

Across the Michelin community, employees all share the Group's commitment to simultaneously improving its financial, environmental and social responsibility performance.

## **DIVERSIFIED OPERATIONS**

Michelin delivers superior quality tires, high-tech materials, solutions and services for everything that rides, travels or is carried on every continent around the world. The segment and geographic diversity of its markets is fostering its long-term growth.

#### A SUSTAINABLE MOBILITY ENABLER

Michelin is helping to make mobility safer, more affordable, more efficient and more environmentally friendly by organizing cooperation among the various stakeholders in the sustainable mobility ecosystem.





## A SHARED VISION

# What can you tell us about Michelin in 2018?

Jean-Dominique Senard: 2018 was a successful year. The commitment of our teams enabled us to deliver a robust performance, in line with our 2020 objectives. In a challenging environment shaped by the decline in the Chinese market, lower demand for original equipment Passenger car tires in Europe and sharp declines in emerging market currencies, we delivered growth in our sales volumes. We defended our operating margin well and generated higher structural free cash flow. We also completed the strategic acquisitions of Camso and Fenner, which together represent additional full-year sales of around €1.7 billion. With them, Michelin has stepped up its expansion in new markets, become the global market leader in off-the-road mobility and opened up promising new prospects in high-tech materials.

**Florent Menegaux:** Our global footprint was strengthened during the year. We commissioned a premium car tire plant in Mexico and a synthetic rubber plant in Indonesia, in partnership with Petrokimia Butadiene Indonesia. With the Indonesian plant and the rubber compound unit we already operate in Thailand, we can now meet the strong demand for low rolling resistance tires in Asia.

Yves Chapot: Market access for our products is a priority. To broaden and build on it, we entered into three partnerships during the year, including a major alliance in North America, where we partnered with Sumitomo to create the region's largest tire wholesaler, TBC. In addition, we joined forces with the auto service center chain Mobivia-A.T.U. in Europe and with the distributor CFAO in Africa.

"With Michelin's governance, we've been preparing all year long for the changeover in Group leadership, for a smooth, efficient transition."

Jean-Dominique Senard, Managing Chairman



# Are you going to pursue your strategy of partnerships and acquisitions?

**J-D. S.:** Michelin's strategy is informed by its purpose of "offering everyone a better way forward." We want to be a global leader in sustainable mobility and a company demonstrating sustainability in every aspect of its business, including financial performance, the environment, employee relations and social responsibility. Our acquisitions are expected to support this vision, and 2018 was an important year for completing a series of transactions that are moving us in the right direction. In 2019, the priority will be successfully integrating the newly acquired businesses into the Group and closing the acquisition of Indonesian tire manufacturer Multistrada.

In fact, we began 2019 by taking up an 88% stake in Multistrada, which has net sales of around €270 million. The same transaction involved the purchase of a 20% stake in wholesaler PT Penta. Together, this has stepped up our expansion in the most populous country in Southeast Asia, which is a fast-growing market, and given us efficient, competitive production capacity in the region without having to build any new facilities.

F. M.: These alliances are helping to strengthen the Michelin Group in its four core businesses: high quality tires adapted to our customers' needs; services and solutions that make vehicle fleets more efficient and productive; experiences, information and services that make mobility easier and more pleasant for consumers; and high-tech materials that underpin the performance of our tires over time and that we can market in other industries. Our partnerships and acquisitions are helping to enhance our products and services, accelerate their digitalization, and expand our innovation capabilities. We have formed more than 300 research and development partnerships. We support startups by helping them to optimize and process engineer their innovations that will make the world more sustainable.

"I fully embrace Michelin's humanistic vision of enhancing mobility, using technology to improve people's well-being and innovating to open new ways forward."

Florent Menegaux Managing General Partner

**Y. C.:** We also want our end-users to enjoy a quality of service that reflects the quality of our tires. That's why we're investing in dealerships and forging partnerships with franchised or independent wholesalers, specialty chains and retailers. In particular, we provide them with turnkey services, training and solutions so that they can take advantage of the growth in online sales.

# **3** Looking forward, what are the main challenges facing Michelin?

**J-D. S.:** Digitalization is transforming the way we work, the way we innovate and the way we collaborate. It's enabling us to manage the enterprise in a flatter, more efficient way, while nurturing deeper, richer relationships with our customers. In 2018, we introduced a simpler, more agile organization that is also more customer focused. Our new management model empowers our teams, frees up our collective intelligence, fosters a more open, inquisitive mindset and encourages everyone to take charge of their own growth. We're going to continue building on this.

**F. M.:** Society is changing, and companies are confronting new challenges. When it comes to social and environmental issues, companies are expected to get involved and come up with solutions. Our own engagement is reflected in our commitment to making tires that deliver

the same high performance throughout their useful lives and in our initiatives to support sustainable urban mobility, the circular economy, carbon taxation and apprenticeship programs.

Y. C.: In 2018, Michelin topped the list of America's Best Large Employers¹ and also ranked among world companies with the best reputation.² We have to live up to this recognition. We have to continue to improve the way we fulfill all our responsibilities, demonstrating that the digital revolution currently underway across the manufacturing industry can be an opportunity for everyone.

"In areas like training, the social safety net, the environment and climate change, companies have to take the lead in offering solutions.

We're doing our part."

Yves Chapot, General Manager

<sup>1</sup> Forbes, America's Best Large Employers 2018. 2 Reputation Institute, Global RepTrak® 2019: Michelin ranked eighth in the 15 countries surveyed worldwide and number one in France



# A BUSINESS MODEL THAT CREATES VALUE FOR EVERYONE

OUR PURPOSE:

OFFERING EVERYONE A BETTER WAY FORWARD

OUR SUSTAINABLE GROWTH STRATEGY:

SUSTAINABLY IMPROVING CUSTOMER MOBILITY BY OFFERING:

TIRES SEAMLESSLY ALIGNED WITH CUSTOMER NEEDS SERVICES AND SOLUTIONS THAT MAKE MOBILITY MORE EFFICIENT DIGITAL
SERVICES, MAPS
AND GUIDES
FOR AN OUTSTANDING
CUSTOMER
EXPERIENCE

OUR EXPERTISE
IN HIGH-TECH
MATERIALS
TO INNOVATE
SUSTAINABLY

#### **TO MAKE SUSTAINABLE MOBILITY:**



Safe

Affordable



Effective/Efficient



Clean

#### A CUSTOMER-CENTRIC ORGANIZATION

**14** global **Business Lines** that design solutions to meet the needs of customers with similar expectations

**10 Regions** responsible for increasing sales and managing customer relationships

**8 Operating Units** whose capabilities and expertise support the Regions and Business Lines in their commitment to superior customer service

1 lean Corporate Unit with departments focused on their strategic missions to serve our customers

### THE GROUP EXECUTIVE COMMITTEE

as of March 28, 2019



Michelin is led by Jean-Dominique Senard, Managing Chairman and Managing General Partner, assisted by a 10-member Executive Committee.















**1. JEAN-DOMINIQUE SENARD**Managing General Partner and Managing
Chairman until May 17, 2019

#### 2. FLORENT MENEGAUX

Managing General Partner and Managing Chairman effective May 17, 2019

#### 3. YVES CHAPOT

General Manager and Chief Administrative and Financial Officer effective July 31, 2019



**4. SONIA ARTINAN-FREDOU**Services & Solutions, High-Tech Materials

#### 5. LAURENT BOURRUT

Road Transportation, Distribution, Europe Regions

#### 6. ADELINE CHALLON-KEMOUN

Brands, Sustainable Development, Communication and Public Affairs



Automotive, Motorsport, Mobility Experiences, North, Central and South America Regions

#### **8. JEAN-CHRISTOPHE GUÉRIN** Manufacturing

#### 9. SERGE LAFON

Specialties, Africa/India/Middle East, China, East Asia & Australia Regions



**10. JEAN-CLAUDE PATS**Personnel

**11. ÉRIC VINESSE**Research and Development.

### THE SUPERVISORY BOARD

The Supervisory Board exercises permanent oversight of Michelin's management and assesses its quality on behalf of the shareholders.



#### **1.OLIVIER BAZIL**

Independent member Chairman of the Audit Committee

#### 2.JEAN-PIERRE DUPRIEU

Independent member Member of the Audit Committee

#### **3.ANNE-SOPHIE DE LA BIGNE**

Independent member
Member of the Audit Committee
Member of the Compensation and
Appointments Committee

#### 4.CYRILLE POUGHON

Non-independent member (non-executive) Member of the Audit Committee

#### **5.BARBARA DALIBARD**

Senior independent member Chair of the Compensation and Appointments Committee

#### 6.MICHEL ROLLIER

Non-independent member (non-executive) Chairman of the Supervisory Board Member of the Compensation and Appointments Committee

#### 7.ARUNA JAYANTHI

Independent member Member of the Compensation and Appointments Committee

#### **8.MONIQUE LEROUX**

Independent member Member of the Audit Committee

#### 9.THIERRY LE HENAFF

Independent member

# MICHELIN

#### **FINANCIAL HIGHLIGHTS**

### SALES

in € millions



#### **OPERATING INCOME**<sup>1</sup>

in € millions

#### OPERATING MARGIN<sup>1</sup>

as a % of net sales



1. For the reporting segments.

**NET INCOME** 

# in € millions 1,031 1,163 1,667 1,693 1,660

2016

2017

2018

2014

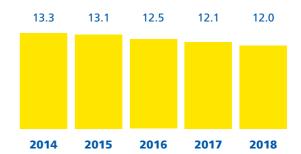
2015

#### **ENERGY CONSUMPTION**

**ENVIRONMENTAL** 

**INDICATORS** 

in Gj per tonne of finished product 1 Gj = 277.5 kWh



#### CO<sub>2</sub> EMISSIONS

in tonnes per tonne of finished product



#### **WATER CONSUMPTION**

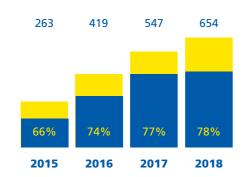
in cu.m per tonne of finished product



# SOCIAL RESPONSIBILITY OUTCOMES

#### CSR ASSESSMENTS OF KEY SUPPLIERS

78% are confirmed in compliance with Group's CSR standards

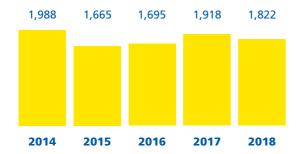


PAID WORKING DAYS DEVOTED BY MICHELIN EMPLOYEES TO LOCAL COMMUNITY OUTREACH

23,942 31,612 in 2014 in 2016 27,733 33,800 in 2015 in 2017

**34,800**in 2018

# LOCAL JOBS CREATED WITH THE HELP OF MICHELIN DEVELOPMENT<sup>2</sup>



2. Since 1990, Michelin Development has helped to create more than 36,000 jobs in the Group's local labor markets in France, Spain, Italy, the United Kingdom, Canada and the United States.

# MICHELIN

# **EMPLOYEE INDICATORS**

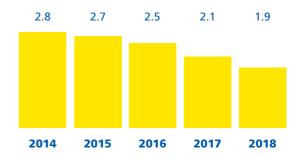
#### 117,400 EMPLOYEES



**Production** operators

Administrative employees, technicians and supervisors Managers

#### **WORKPLACE SAFETY TCIR<sup>3</sup>**



3. Total Case Incident Rate: the number of incidents recorded per 200,000 hours worked.

**97%** of employees trained in 2018

76% of managers promoted from within

**80%** of employees feel engaged



## AUTOMOTIVE AND RELATED DISTRIBUTION

#### **2018 UNIT SALES**

27% original equipment73% replacement32% growth markets

€M	2018	2019	% change**
Net sales	11,340	11,953	- 5.1%
Operating income <sup>1</sup>	1,314	1,465	- 10.3%
Operating margin <sup>1</sup>	11.6%	12.3%	- 0.7 pt

<sup>1.</sup> For the reporting segments.

#### **CHANGE IN THE GLOBAL MARKET**

compared with 2017

	ORIGINAL EQUIPMENT	REPLACEMENT
Europe, Russia, CIS	- 2%	+ 2%
North America	-1%	+ 3%
Central America	+ 1%	+ 4%
South America	+ 3%	- 8%
Asia, excluding India	- 4%	- 2%
Africa, India, Middle East	+ 4%	+ 0%
Total	- 2%	+ 1%

#### **2018 CONTRIBUTION**

*51%* 

of consolidated sales

47%

of operating income<sup>1</sup>



## ROAD TRANSPORTATION & RELATED DISTRIBUTION

#### **2018 UNIT SALES**

28% original equipment 63% mature markets 72% replacement 37% growth markets

€M	2018	2019	% change**
Net sales	5,852	5,946	- 1.6%
Operating income <sup>1</sup>	513	483	+ 6.0%
Operating margin <sup>1</sup>	8.8%	8.1%	+ 0.6 pt

<sup>1.</sup> For the reporting segments.

#### CHANGE IN THE GLOBAL MARKET

compared with 2017

	ORIGINAL EQUIPMENT	REPLACEMENT
Europe, Russia, CIS	+ 3%	+ 0%
North America	+ 19%	+ 7%
Central America	-8%	+ 4%
South America	+ 54%	+ 2%
Asia, excluding India	- 6%	- 5%
Africa, India, Middle East	+ 10%	- 1%
Total	+ 1%	- 2%

#### **2018 CONTRIBUTION**

27%

of consolidated sales

18%

of operating income<sup>1</sup>



<sup>\*\*</sup> Reflecting the deconsolidation of TCi in North America.

#### **SPECIALTY BUSINESSES** AND RELATED DISTRIBUTION

#### **2018 UNIT SALES**

48% mature markets **52%** growth markets

€M	2018	2017	% change³
Net sales	4,836	4 061	+ 19.1%
Operating income <sup>2</sup>	948	794	+ 19.4%
Operating margin <sup>2</sup>	19.6%	19.6%	+ 0.0 pt

#### **2018 CONTRIBUTION**

34%

of consolidated sales

of operating income<sup>2</sup>

2. For the reporting segments. 3. Including the impact of the Fenner acquisition.



\*As part of the new organization introduced in 2018, the Group's reporting segments have been adjusted as follows:

- Replacement Light truck tires are now part of the Road transportation segment.
- Construction Truck tires are now included in the Specialty business segment, which also
- covers mining, earthmover, agricultural, two-wheel and aircraft tires, plus high-tech materials. - The maps, guides, digital travel-support services, restaurant booking services

and Michelin Lifestyle product licensing businesses have been transferred to the Automotive division

THE GLOBAL **SUSTAINABLE** MOBILITY **ENABLER** 



\$7.232BN

The value of the MICHELIN brand in 2019. according to Brand Finance

2019 Brand Value Results Overview

**117,400** people in 171 countries

production facilities4

+ 5,000

dealerships, distribution hubs and service centers

#### THE WORLD'S **LEADING**

source of innovation in support of sustainable mobility

*6,000* researchers and technicians

€648M invested in R&D in 2018

A GLOBAL **FOOTPRINT NET SALES BY** REGION

Europe<sup>5</sup>

**36**% North America<sup>6</sup>

25% Other regions

- 4. Tire plants only (except Camso).
- 5. Including Russia & CIS 6. Including Mexico.

Ranked THE TOP French company

**Brand** RTH

overall among the world's 100 most reputable companies in the Global RepTrak 2019 survey

MICHELIN MAN.

named "Icon of the Millennium" Advertising Week, 2018





#### **BFGoodrich**

Kleber

**Ж** коrmoran

levorin

O'FILLIAM

RIKEN

TAURUS

GTIGAR **UNIROYAL** \*

**SIAMTYRE** 

EUROMASTER

TYRE PLUS O blackcircles.com







Bookatable\*

\* Except in Europe (including the countries in the former Soviet Union) and in Africa and the Middle East.

## WORKING TOGETHER TO IMPROVE SUSTAINABLE MOBILITY

#### MOVIN'ON Summit

In 2017, the Movin'On by Michelin global summit followed on from the Michelin Challenge Bibendum, twenty years

after its creation. The new event brings together every mobility ecosystem in a collaborative commitment to transforming ambition into action and making mobility more innovative and sustainable.

ransportation accounts for nearly a quarter of all emissions from the burning of fossil fuels, making it the third leading source of greenhouse gas emissions. As a truly global sustainable mobility summit, Movin'On brings together for three days every year some 4,000 decision-makers and influencers, manufacturers, experts, academics, startuppers, politicians, journalists, transportation authorities and NGOs

to debate and enable the future of sustainable mobility.

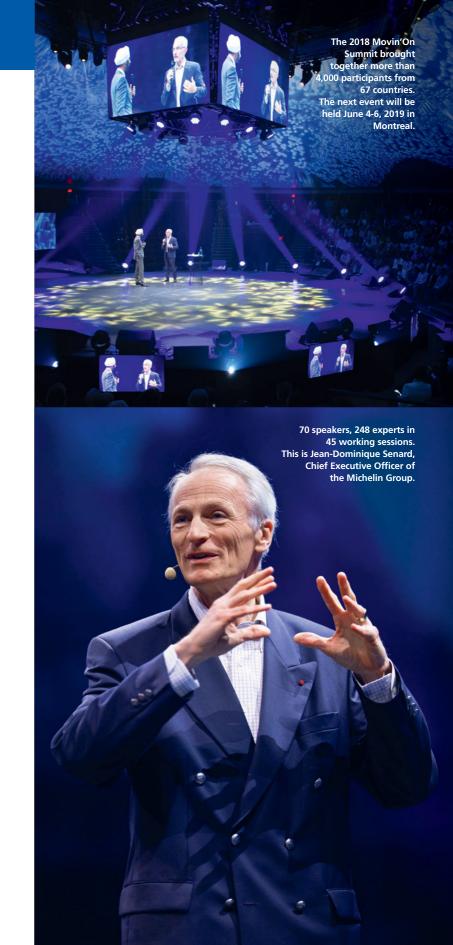
Building on the success of the first event in 2017, Movin'On 2018 focused on transforming ideas into solutions and creating actionable tools to make intelligent, sustainable and multimodal global mobility a reality.

Among the second summit's innovations were unique trials that inspired participants to think outside the box, a village of 40 startups selected through a global contest and a toolbox to help decarbonize transportation systems. Developed by IDDRI, ITF, WBCSD, WWF and PPMC and tested by summit

"The ecosystem approach enables us to innovate more efficiently by improving everyone's understanding of sustainable mobility issues and their possible solutions"

Alexis Offergeld, Director of Movin'On LAB

participants, these tools are available on the collaborative movinonconf.com platform created to engage everyone in sharing knowledge and taking action.



#### ENABLING TOMORROW'S MOBILITY

In addition to these collaborative tools, the Movin'On spirit also lives on throughout the year in the Movin'On LAB, a "think and action tank" created by Michelin that comprises nearly 300 leading manufacturing and consulting companies, innovators, researchers and public and private organizations. Together, they form the world's leading innovation-driven sustainable mobility network.

As an integral part of the Movin'On Summit, Movin'On LAB provides an on-going, year-round forum where members can share their expertise and opinions concerning various aspects of the mobility of tomorrow, as part of issue-specific communities.

Published in 2018, the first position paper from one of the communities, *Speeding Up to <2°C*, expresses a vision shared by nearly twenty leading mobility stakeholders. It identifies the most promising short-term solutions to help keep the average rise in global temperatures below 2°C. Compared to a business-as-usual scenario, deployment of the highlighted solutions would reduce  $CO_2$  emissions from transportation by 5% to 12% in 2030. This represents 15% to 40% of the effort required by the transportation industry according to the "beyond 2°C" scenario.

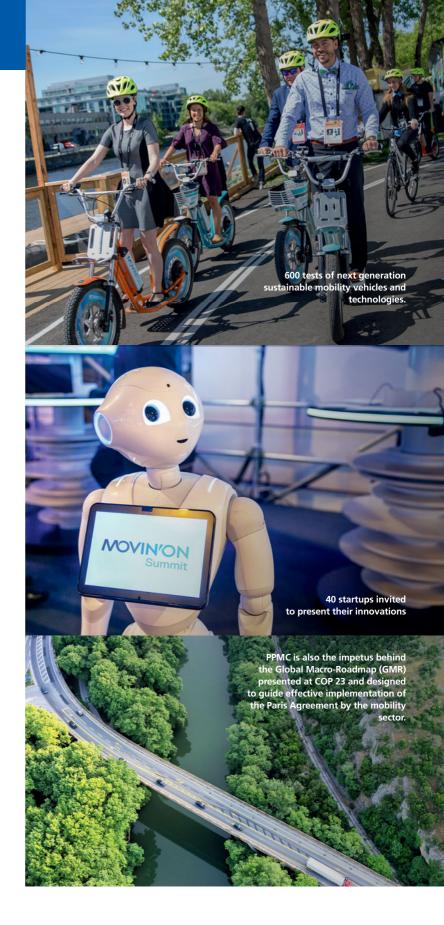
80%

Michelin's vision for the next thirty years is that its tires will incorporate up to 80% sustainable materials and that every effort will be made, across every stakeholder industry, to ensure that 100% of end-of life tires are recycled or reused as fuel.

#### MICHELIN, A TRUSTED THIRD PARTY IN SUSTAINABLE MOBILITY

As a driving force in sustainable mobility, Michelin is taking the lead in bringing together a growing number of partners. One example is the Paris Process on Mobility and Climate (PPMC), which produced a roadmap for the decarbonization of transportation by 2050. Today, it is focusing on three core challenges: improving air quality, combatting global warming and supporting the energy transition.

The PPMC is also promoting practical clean mobility solutions, such as the hydrogen-powered electric mobility systems that Michelin is supporting, both directly and by helping hydrogen energy startups bring their innovations to the production stage.



# OFFERING EVERYONE A BETTER WAY FORWARD: THE CORPORATE PURPOSE OF A WORLD LEADER IN SUSTAINABLE MOBILITY



#### **FOUR AREAS OF GROWTH**

Michelin is driving growth in four areas that will help to make mobility safer, more affordable, more efficient, cleaner and more comfortable.

#### TIRES



The technology leader in tires for every form of mobility, Michelin designs, manufactures and distributes tires seamlessly aligned with the needs and usage patterns of every customer, with the goal of delivering consistent performance over time.

## SERVICES & SOLUTIONS



A pioneer in connected tires, the Group offers professionals services and solutions that improve the performance, safety and environmental footprint of their business operations.

## MOBILITY EXPERIENCES



Michelin markets maps, guides, digital services and exclusive solutions that make mobility easier and enable customers to enjoy unforgettable experiences while on the road.

#### HIGH-TECH MATERIALS



Another area with high-growth potential is Michelin's widely recognized expertise in materials chemistry and physics, which it is expanding through acquisitions and actively marketing to other industries.

Michelin is broadening its business base and transforming itself to meet the emerging expectations of its customers.

#### CLOSER TO THE CUSTOMER

**Michelin's transformation** is being supported by the new organization introduced in 2018 to drive faster growth, by simplifying our operations and making them more flexible and more agile.

The global Business Lines design solutions in response to the expectations of different customer groups, such as driving enthusiasts, long-haul truckers or mining companies. Customer relationships are now managed by the **Regions**, whose contours have been redefined to reflect local

"It is by undertaking an in-depth transformation that Michelin will remain truest to its founding spirit, its values and its future destiny."

Jean-Dominique Senard, Managing Chairman cultural affinities. The Operating Units provide their expertise and support. The Corporate Unit has been streamlined, with a leaner management structure and corporate departments refocused on their strategic missions.

#### **MORE ENGAGED**

Simplification also involves increasing **employee empowerment,** with decisions made as close to operations and customers as possible and initiative and dialogue actively encouraged.

This trust-based relationship fosters engagement and drives faster transformation by motivating everyone to contribute to the process. At the same time, the Group is giving all employees opportunities to grow and encouraging everyone to play a leading role in managing their careers. Deployed in 2018, the InTouch digital platform enables every employee, at any time and on any screen, to assess their skills, choose a training program, view in-house job openings and submit transfer requests.

#### **HUMAN LIFE 4.0**

**The Group is stepping up its digitalization** with the deployment of new solutions for its customers, suppliers and employees. Our Factory of the Future and FactoLab programs are preparing new Human-Machine cooperation systems that will improve working conditions and encourage every employee to be more creative.

Digital manufacturing technology and empowerment are putting data to work for the men and women on the shopfloor, giving them more autonomy, increasing efficiency, quickening response times and reducing their unit's environmental footprint. Demonstration trials conducted in 2018 have paved the way to roll-out in 70 Group plants in 2019. FactoLab, a public-private laboratory, is committed to improving working conditions, for example, with collaborative robots that can eliminate the most strenuous manual tasks.

After being deployed worldwide in 2018, Engage, our new customer relationship management system, is now being used by nearly 4,000 marketing, sales and customer service employees and by 100,000 customers and dealers. It is bringing us closer to our end-users and helping us to understand them better.

The next step will be to integrate artificial intelligence to improve tire management over time, for example, by using image analysis to warn customers when a tire change is absolutely necessary.

#### **MORE OPEN**

Mobility, especially in its sustainable forms, is now being facilitated by a growing number of operators. Addressing the related issues requires a new, multi-disciplinary approach, bringing together public authorities, private sector stakeholders and NGOs. Already the world leader in advanced tire research and development, we are expanding our ecosystem with a forward-facing open innovation strategy, involving more than 300 research partnerships, an Incubator Program Office (IPO), a venture capital fund, joint ventures and co-developments. We also play a recognized role as a trusted partner in bringing together sustainable mobility stakeholders to pursue shared initiatives.

Deeply embedded in the Group's DNA is the belief that innovation and progress must serve people and society for the better. Michelin is committed to demonstrating that the Fourth Industrial Revolution is an opportunity for everyone.



"Our sales. marketing and customer service teams are working together in real time on the same platform with a view to improving the customer experience. Our systems are now totally customercentric. A pool of experts has been formed to continuously enhance that experience by leveraging the latest technological innovations. like artificial intelligence."

Sophie Foucque, Chief Digital Officer, B to B, Engage Project Manager

"Human Life 4.0, our digitalization strategy, sends a strong message that at Michelin, the future will be digital and people-focused."

Florent Menegaux, Managing General Partner

#### TIRES

Both directly and through its dealership networks, Michelin is dedicated to designing and delivering tires that meet every user expectation. Our goals are to increase net sales in the tire business by 20% by 2020¹ and to reduce the amount of energy used by a tire per kilometer by 20% by 2030² (compared with 2010).

ased on a thorough, unrivaled understanding of our customers' needs and requirements, as well as how and why they use their vehicles, we design tires that deliver game-changing performance, endurance and safety.

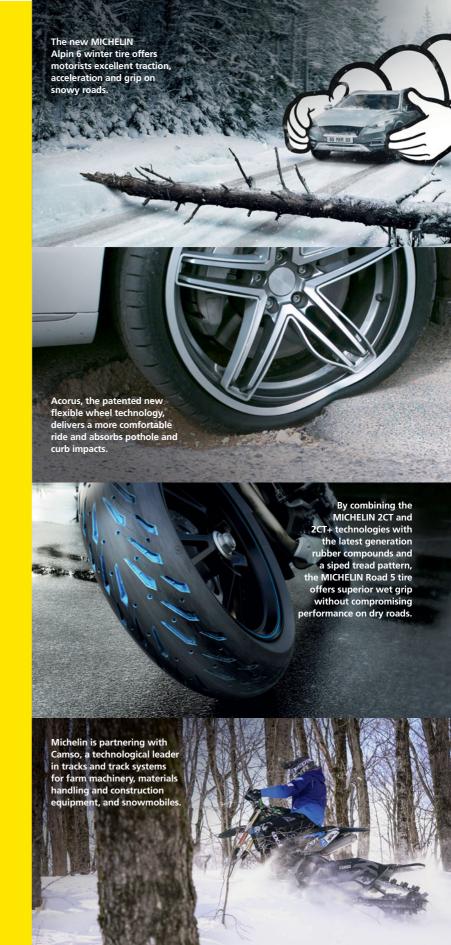
#### In the original equipment market,

Michelin equips everything on wheels, with forefront positions in every market, including cars, vans, trucks, farm equipment, earthmovers and handling equipment, two-wheel vehicles and aircraft. We use our tire and suspension system expertise to assist automakers.

"With Camso,
Michelin has
become the
world leader
in off-the-road
mobility solutions.
Cooperation
between our
researchers is
going to boost our
innovation capacity
in tracks and
airless tires."

Thomas Boettcher, Director, OTR Tire Business Line

Wherever the automobile is heading – hybrid EVs powered by batteries, hydrogen fuel cells or a combination of both, self-driving cars – tires will play a major role in vehicle performance, particularly in terms of fuel efficiency and range. As the world leader in energy-efficient tires, Michelin has the technology to support these trends.



**In the replacement market,** which represents around 75% of all tires sold worldwide, the Group markets a diverse range of products suitable for every use. We are strengthening our presence in the wholesale and retail segments through partnerships and franchises to secure and broaden our market access. We are fostering synergies between the online tire retailers and brick & mortar dealerships to offer end-customers a high-quality fitting and service experience.

As the world's leading premium tire brand for retail and corporate customers, the MICHELIN brand accounts for nearly 80% of consolidated sales volumes. With the start-up of a new plant in Mexico in 2018 and the commissioning of new capacity elsewhere in the world, our premium car tire production capacity has doubled over the past six years. The Group addresses other market segments with an aligned brand portfolio and tires that are competitively differentiated by quality.

In 2018, three major acquisitions strengthened our positions in the specialty tire and dealership businesses. The acquisition of Canada-based Camso has made Michelin the world leader in the \$13-billion market for off-the-road mobility solutions. The technology leader in rubber tracks and solid tires, Camso equips farm machinery, materials handling and construction equipment, and snowmobiles. It generates \$974 million in revenue, with 7,700 employees and 17 plants. Camso also has a competitive production base in Vietnam and Sri Lanka, and a track record of robust growth and firm margins. Its product portfolio fits closely with Michelin's and gives the new organization solid positions and excellent prospects in the materials handling, farm machinery and construction equipment markets.

**In North America, Michelin and Sumitomo Corp.** combined their replacement tire distribution and related service operations into a 50/50 joint venture called NTW, which is now the second-largest tire wholesaler in the United States and Mexico. Customer benefits include better availability of tire products at all price points thanks to faster delivery to direct customers and a robust base to expand online sales with in-store fitting for both individuals and corporate fleets.

In addition, **two other partnerships were formed** during the year. In Europe, Michelin acquired a 20% stake in the chain of 600 A.T.U auto service centers operated in Germany, Switzerland and Austria by the Mobivia Group. Secondly, the acquisition of UK-based Fenner and more specifically its Engineered Conveyor Solutions (ECS) division, one of the world's largest suppliers of heavy conveyor belts and conveyor belt solutions, has strengthened the Group's leadership in the mining market. Michelin now offers mining customers a comprehensive range of tires, conveyor belts and services.

- 1. Compared with 2015.
- 2. Compared with 2010.



**2,520** sales outlets in North America

**2,200** Euromaster centers in Europe

**1,965**Tyreplus centers in the new markets

## SUSTAINABLE MOBILITY DRIVEN BY PERFORMANCE MADE TO LAST

Not all new tires are created equal, and worn tires **even less so.** In fact, some tires that have worn down to the legal minimum tread depth (1.6 mm in Europe) brake just as well as certain new tires. But how can we know which ones? Tests and labeling systems focus on new tires and many tiremakers and influencers encourage users to change them too soon. In the interest of our customers, as well as the environment. Michelin makes tires that deliver the same safe, superior performance from the first to the last kilometer. Using tires until they are worn down to the minimum legal tread depth would avoid the unnecessary replacement of 400 million tires a year, worldwide, the waste of the corresponding production materials and the emission of 35 million tonnes of CO<sub>2</sub> (estimates based on European data). Plus, in Europe alone, motorists would save a massive €6.9 billion. Michelin is committed to planned longevity, because it supports mobility that is efficient, environmentally sensitive, affordable and safe.

# **SERVICES & SOLUTIONS**

Digital technologies, geolocation and instant communication are all revolutionizing the transportation industry. As the leading source of connected tires, Michelin offers corporate customers all the benefits of its data analysis expertise to simplify their maintenance operations, improve their safety performance, reduce their operating costs and attenuate their environmental impact. Our goal is to double revenue from the sale of services and solutions by 2020¹.

ichelin services are designed to enable customers to get the most out of their tires, by increasing tread life and improving fuel efficiency. This commitment can be seen in the expanding deployment of service centers and authorized networks, such as ExelAgri for farmers, mobile tire-fitting vans and on-site maintenance services.

Maintaining the right pressure improves tire safety, lengthens tread-life, saves fuel and lowers  ${\rm CO_2}$  emissions. Retreading gives worn truck, agricultural, earthmover and aircraft tires a new lease on life, without compromising safety. A MICHELIN truck tire can be retreaded twice, thereby tripling its useful life. In fact, with just one retreading, the extended tread life of a MICHELIN tire can save 70% of the natural resources that would be used to make a new Tier 3 tire.

**Fleet operators** conduct their business in an increasingly restrictive environment, juggling demands such as on-time delivery, the safety and security of people and goods, compliance with environmental standards, managing maintenance and replacement purchases and continuously improving efficiency and competitiveness.

The digital revolution is opening up opportunities for new gains. Thanks to connected tires, on-board information systems, digital applications, telematics and data analytics, we can identify the causes of fuel inefficiencies or downtime and recommend solutions, from predictive maintenance to eco-driving courses and route optimization. Today, the Group is actively pursuing this path to the future with MICHELIN Services and Solutions, Sascar in Brazil, Mexico and Argentina, and NexTrag in the United States.





**In 2018, we acquired Truckfly, a free application** designed to make life easier for truck drivers. Truckfly offers truckers one of Europe's largest databases of roadside restaurants, rest areas, service stations, truck parks and other points of interest (POIs). The database is constantly updated by a community of 120,000 users.

**Our most recent digital solutions have garnered a number of awards.** At the Transport & Logistics Innovation Week (SITL) trade show in Paris, MyBestRoute won the 2018 Technologies and Information

Systems Innovation Award. The application enables truckers to select the best route, in line with the preferences of their fleet managers and based on their truck's configuration and load.

Three digital applications earned a 2018 Innovation Award from France's Road Safety Association: Mylnspection, which standardizes vehicle inspections, MyTraining, which facilitates driver training, and MyRoadChallenge, a serious game that celebrates truckers' skills by rewarding them for their good driving practices.

"We want to improve truckers' lives on the road, and the free Truckfly application helps us to do that. We're going to enhance its features to make it even better for the user community."

> Xavier Gosselin, Service Designer Services & Solutions Europe

Other digital solutions aimed at consumers are increasingly popular with motorists, including MICHELIN Track Connect, the first connected coaching application for sports car enthusiasts, and Driving Data to Intelligence (DDI), a 100% connected start-up imagined by Michelin to act as a powerful "digital seatbelt" that encourages motorists to demonstrate safer, more environmentally friendly driving behavior.

Connected sustainable mobility, which requires the capture and analysis of mobility data, is one of tomorrow's major challenges and Michelin is assertively developing new services and solutions to meet it.

1. Compared with 2015.

425
Services & Solutions experts supporting our customers

853,000 vehicles covered by a Michelin contract worldwide

120,000 drivers using Truckfly

MORE THAN
50
service solutions worldwide

## SUSTAINABLE MOBILITY THROUGH THE CIRCULAR ECONOMY

For years now, Michelin has been offering trucking, airline and mining companies solutions whereby we sell the use of our tires rather than their ownership,

i.e., we supply the tires, oversee their management and invoice the customer based on distance covered, landings made or weight carried. The Group handles every aspect of this process, from tire selection and fitting to maintenance, support, retreading and end-of-life recycling. Onboard tire pressure and temperature monitoring systems help to optimize preventive maintenance, avoid accidents and reduce downtime. Properly maintained tires last longer and are more fuel efficient, which is good for our customers and the environment.

Michelin is committed to the functional economy, because it supports mobility that is safe, efficient, affordable and clean.

Four areas of growth

# MOBILITY EXPERIENCES

Today's connected, on-demand, shared-use mobility offers a myriad of opportunities for new experiences. Michelin is capitalizing on its expertise in maps and guides to broaden their scope and leverage their value in digital services. Its goal is to become the go-to independent selection of fine dining venues and travel services, while tripling revenue from these businesses by 2020¹.

e are helping people to prepare and enjoy their travel experience with maps, travel and fine dining guides, traveler information websites, online booking platforms and a suite of free applications available in 13 European countries. The applications offer a choice of itineraries (shortest, fastest, least expensive, most interesting), voice guided GPS navigation, and weather, traffic, service station and car park information. They also display speed warnings and hazard reports, updated in real-time by the ViaMichelin user community. They include tourist site information from the Green Guides and the MICHELIN Guide's selection of restaurants and hotels.

As the world leader in fine dining guides, the European leader in online restaurant booking and a major publisher of travel guides, Michelin offers high-quality selections based on applied criteria to guide customers in making the right choice.

Gourmet dining opportunities are an increasingly important factor in both business and leisure travel. The MICHELIN Guide, which covers 30 countries from China to Brazil, also helps to promote travel to cities and countries around the world.

To advise foodies and enable them to enjoy an ever-expanding array of constantly enhanced experiences, we are broadening our scope of business by taking equity stakes in such partners as Le Fooding, a website and guide publisher specialized in hot new restaurants, trendy bars and take-away spots, and in Robert Parker Wine Advocate, the world's most widely read wine tasting and rating guide.





In 2018, Tablet joined the Michelin Group. Dedicated to travelers looking for an unforgettable, one-of-a kind hotel experience, Tablet is a selection and booking platform that currently offers 3,500 hotels that stand out for their quality and uniqueness. Like the MICHELIN Guides, Tablet curates its selection based on the actual guest experience they deliver and on rigorously collected information. In addition, the Tablet Plus Club offers its members exclusive benefits, such as an upgrade to a superior room category.

Today, half of Tablet's customers are in North America. The alliance will help it to conquer a wider audience, while enabling Michelin to enhance its travel portfolio, thereby benefiting both its customers and the MICHELIN brand.

1. Compared with 2015.

"Tablet is part of this new lifestyle that fully corresponds to the ethos of the MICHELIN Guides. We want to offer our readers the best, by revealing places that offer this extra touch of soul."

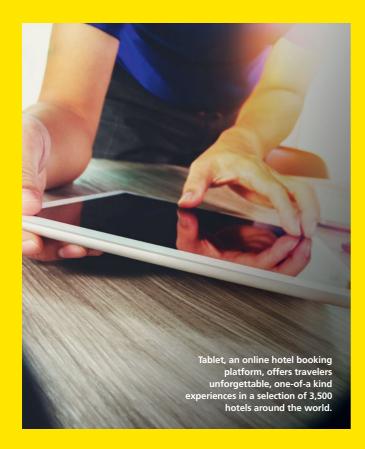
Pascal Couasnon,
Director, Mobility Experiences
and Michelin Motorsport

#### THE EUROPEAN LEADER

in online reservation booking

**3,065**starred restaurants are recommended by the MICHELIN Guide in 30 countries

**22,000** starred locations in more than 100 Michelin Travel destinations



## SUSTAINABLE MOBILITY – ACTIVELY ENGAGED IN ROAD SAFETY

In addition to the safety impact of its tires, services and solutions, Michelin works to improve road safety directly, through its employees and its Corporate Foundation.

As an active member of the Global Road Safety Partnership, the Youth for Road Safety association, the United Nations' Decade of Action for Road Safety and the International Automobile Federation's FIA Action for Road Safety campaign, we focus primarily on awareness and educational initiatives for young people. Examples include the Road Safety Academy in China, Beyond the Driving Test in the United States, the Michelin Best Driver contest for students in Brazil, the Safe Mobility program for schoolchildren in Southeast Asia, and Youth Road Safety Ambassadors in South Africa. In 2018, Michelin and Total launched a joint road safety education program that aims to reach 100,000 young people over a three-year period. Michelin is committed to innovating, engaging and taking action to make mobility safer.

Four areas of growth

### HIGH-TECH MATERIALS

Michelin has built up extraordinary expertise in the design and production of high-tech materials, such as elastomers, engineered fabrics, biomaterials, resins and metal 3D printing. Already a core factor in the performance of the Group's tires, this expertise will be enhanced with targeted acquisitions and actively marketed to other industries.

ne example is the metal additive manufacturing technology used by Michelin to make the molds for its high-performance tires. Created with Fives, a leader in high value-added production lines, AddUp is leveraging this expertise to serve the aerospace, automotive, energy and medical equipment markets, while actively participating in the organization of the new industry. In 2018, AddUp acquired two companies, Poly-Shape and BeAM, that offered a strong fit with its existing business.

**Another example is hydrogen-powered electric mobility systems.** Hydrogen fuel cells offer an alternative to battery-electric powertrains as a way to lower CO<sub>2</sub> and other harmful emissions generated by the transportation industry. They are also compatible with the wide variety of ways in which EVs are used. As part of its commitment to zero emission mobility, Michelin has developed hydrogen fuel cells capable of outputting 5kW to 100kW that can serve as a primary or supplementary power source for all types of electric powertrains in vans, trucks, trains and ships. The cells generate electricity inside the vehicle from the chemical reaction between hydrogen (supplied from an onboard tank) and oxygen (from the air), releasing only water as a byproduct. Wholly-owned subsidiary Symbio, a pioneer in hydrogen fuel-cell systems, is a core stakeholder in the Group's memorandum of understanding signed with Faurecia in March 2019, which aims to create the leader in hydrogen mobility systems.





# In 2018, two major investments strengthened our positions in high-tech materials.

We brought a synthetic rubber production facility on-stream in Java, representing an investment of \$435 million committed as part of a 55/45 partnership with Petrokimia Butadiene Indonesia. Two similar Michelin facilities are already up and running in France and the United

"Innovation in hightech materials will be key to creating value in the coming years. Fenner will enable the Group to accelerate its growth in this market."

Sonia Artinian-Fredou, Executive Vice-President, Services & Solutions and High-Tech Materials Business Lines

States. The new capacity will enable us to meet strong demand for energy-efficient tires in Asia, as well as to serve other industries.

With the acquisition of Fenner, and particularly its Advanced Engineering Products (AEP), division, we have brought in one of the world's leading producers of reinforced polymers for high value-added niche applications, ranging from medical implants to belts, seals and hoses for highly demanding industrial needs. With Fenner's AEP division, Michelin has strengthened its expertise in high-tech materials and its ability to market these capabilities in new markets, such as industrial and medical equipment.

## **20** MILLION

equivalent passenger car tires have not been landfilled over the past ten years, thanks to Lehigh Technologies

# 2 MILLION cars AND 350,000 TRUCKS

the estimated number of fuel-cell vehicles on the road by 2030 (according to a McKinsey study)



#### SUSTAINABLE MOBILITY THROUGH THE CIRCULAR ECONOMY

# Michelin is firmly engaged in the circular economy through its 4R strategy to Reduce, Reuse, Recycle and Renew.

The focus is doing more with less. Reduce the amount of resources needed to make a tire by practicing eco-design and engineering tires that are lighter, more energy efficient and longer lasting. Reuse tires by repairing, regrooving or retreading them. Recycle scrap tires and recover their resources with appropriate technologies (Lehigh). Renew by using biobased materials. Industrial partnerships have been formed to produce these materials, such as the biobutadiene made by the IFPEN/Axens venture. Michelin also supports the responsible production of natural rubber, in particular through a major project in Indonesia with Barito Pacific Group and the support of the WWF, promoting best practices across the industry. Michelin is committed to the circular economy, because it supports mobility that is efficient, safe, affordable and clean.

#### www.michelin.com



Turn over the map to learn about Michelin's four areas of growth.



## 2018 ANNUAL AND SUSTAINABLE DEVELOPMENT REPORT

For more information, please visit Michelin.com or take a look at our 2018 Registration Document. We hope you enjoy our brochure. Have a pleasant journey!