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MICHELIN

A BETTER WAY FORWARD

DESTINATION: SUSTAINABLE MOBILITY

In Brief 2017



**INTERVIEW WITH
JEAN-DOMINIQUE SENARD,
Chief Executive Officer**



In 2017, volumes rose by 2.6% over the year, with gains in all our business lines, starting with the MICHELIN brand 18-inch and larger tires, where sales rose 19% in a market up 13%, and the specialty businesses, where volumes increased by 16%.

How can you explain such results?

J.D.S / These results first highlight our ability to better meet our customers' demand. I'd like to thank all of our employees for this achievement. Another strength of Michelin is to be present in every tire market, so that we can capture growth wherever it may be. In every business line, we successfully introduced new, best-selling products, such as the MICHELIN CrossClimate+, the MICHELIN Pilot Sport 4S and the MICHELIN Defender car tires, the MICHELIN X Multi, the MICHELIN XGuard and the BFGoodrich truck tire lines, and the MICHELIN XDR3 mining tires. We also developed solutions that were well received by customers, notably Tire Care and the services offered by Michelin solutions. Not only do our customers trust us, we also enjoy the benefits of a constantly enriched product line-up, more agile production capabilities and a global footprint with broad market access that we are enlarging every chance we get.

Besides, technological innovation is an accelerator of growth. It is the best way to shield our margins from the threat of rising raw material costs. Customers will accept higher prices as long as our tires and solutions deliver more benefits. Technological innovation gives us the resources we need to meet these challenges with peace of mind.

Finally, in 2017, the Group pursued its strategic acquisitions, particularly in such areas as services, with the purchase of NexTraq, experiences, with the partnership with Robert Parker Wine Advocate, and materials, with the acquisition of Lehigh Technologies.

After several months of a rigorous selection process, Michelin's governance chose Florent Menegaux.

In May 2018, in Montreal, you're organizing the second edition of Movin'On, the global summit for sustainable mobility. What is the theme this year?

J.D.S / The transportation industry is a big source of carbon emissions. Crumbling infrastructure, urban sprawl and the resulting traffic congestion are all challenges in an increasingly urbanized world. The theme for 2018 is how to bring global, smart, sustainable and multimodal mobility to life.

More than 4,000 leaders from academia, politics, businesses, cities and start-ups will collaborate to devise real-world solutions to bring sustainable mobility to life and transform ambition into action.

You have also announced that you are preparing your succession, even though your term runs until 2019, isn't that premature?

J.D.S / It is my duty to prepare for the future, calmly and peacefully, with Michelin's governance. A year of transition is not too long for a smooth hand-off. That's what I had from Michel Rollier, so I know how useful and important it is.

After several months of a rigorous and thorough selection process, Michelin's governance unanimously chose Florent Menegaux, who is perfectly qualified to take over from me.

Florent has been working for the Group for more than 20 years.

He has held a wide variety of positions in several geographies and business lines, so he knows Michelin inside and out. Since he was appointed Chief Operating Officer in 2016, we've been working closely together and I've been able to appreciate both his strategic vision and his personal qualities.

At the next Annual Meeting, shareholders will be asked to elect Florent Menegaux as General Managing Partner and Yves Chapot as Managing Partner to assist him. Of course, I'll still lead the Group, exercising all of my responsibilities until the end of the 2019 Annual Meeting.

EXECUTIVE COMMITTEE MEMBERS

ON JANUARY 1, 2018



Michelin is led by Jean-Dominique Senard, Chief Executive Officer and Managing General Partner. He is assisted by the Group Executive Committee, which is comprised of 12 members.



1. JEAN-DOMINIQUE SENARD
Chief Executive Officer

2. SONIA ARTINIAN-FREDOU
Executive Vice President, Mobility Services & Experiences and New Ventures Business Lines

3. LAURENT BOURRUT
Executive Vice President, Long Distance and Urban Transportation Business Lines and European Regions

4. YVES CHAPOT
Executive Vice President, Automotive Business Lines and Asia, Africa, India & the Middle East Regions

5. FRANÇOIS CORBIN
Executive Vice President, Development and Progress

6. CLAIRE DORLAND CLAUZEL
Executive Vice President, Brands and External Relations

7. TERRY K. GETTYS
Executive Vice President, Research and Development

8. JEAN-CHRISTOPHE GUÉRIN
Executive Vice President, Manufacturing

9. JEAN-MICHEL GUILLON
Group Senior Executive Vice President and Chief HR Officer

10. MARC HENRY
Executive Vice President and Chief Financial Officer

11. SERGE LAFON
Executive Vice President, Mining, Off Highway, 2 Wheels, Aircraft Business Lines and Americas Regions

12. FLORENT MENEGAUX
Group Senior Executive Vice President and Chief Operating Officer

13. FLORENCE VINCENT
Executive Vice President, Audit, Quality, Internal Control and Risk Management

SUPERVISORY BOARD

The Supervisory Board exercises permanent oversight of the Company's management and assesses its quality for the benefit of shareholders, presenting a report thereon at each Annual Shareholders Meeting.



1. MICHEL ROLLIER
Chairman of the Supervisory Board
Member of the Compensation and Appointments Committee
Non-independent, non-executive member

2. OLIVIER BAZIL
Chairman of the Audit Committee
Independent Member

3. PAT COX
Member of the Compensation and Appointments Committee
Non-independent, non-executive member

4. BARBARA DALIBARD
Chairman of the Compensation and Appointments Committee
Lead Independent Member of the Supervisory Board
Independent Member

5. JEAN-PIERRE DUPRIEU
Member of the Audit Committee
Independent Member

6. ARUNA JAYANTHI
Independent Member

7. ANNE-SOPHIE DE LA BIGNE
Member of the Audit Committee
Member of the Compensation and Appointments Committee
Independent Member

8. MONIQUE F. LEROUX
Member of the Audit Committee
Independent Member

9. CYRILLE POUGHON
Non-independent, non-executive member

OUR SUSTAINABLE GROWTH MODEL



MICHELIN PURPOSE

WE CARE ABOUT GIVING PEOPLE A BETTER WAY FORWARD

STRATEGY FOR SUSTAINABLE GROWTH: SUSTAINABLY IMPROVING CUSTOMER MOBILITY

1. TIRES THAT TRULY MEET OUR CUSTOMERS' NEEDS

2. TIRE-RELATED SERVICES AND SOLUTIONS

3. ENABLE OUR CUSTOMERS TO ENJOY UNIQUE MICHELIN MOBILITY EXPERIENCES

4. OUR EXPERTISE IN HIGH-TECH MATERIALS

OUR 6 AMBITIONS

- CUSTOMER SATISFACTION
- PERSONAL WELL-BEING AND DEVELOPMENT
- FINANCIAL PERFORMANCE
- PRODUCT PERFORMANCE
- A RESPONSIBLE MANUFACTURER
- HOST COMMUNITIES AND SUSTAINABLE MOBILITY

A CUSTOMER-CENTRIC ORGANIZATION

14 Global Business Lines focused on customer needs, tasked with preparing solutions to serve carefully defined customer segments.
10 Regions closely aligned with our markets, responsible for increasing sales and managing customer relationships.
8 Operational Directions supporting the Regions and Business Lines with their capabilities and expertise.
1 lean Corporate Group with departments focused on their strategic missions.

EMPLOYEES WHO ANCHOR AND DRIVE OUR PERFORMANCE

MOVING FORWARD TOGETHER



**114,070 EMPLOYEES, 170 NATIONALITIES
MAKING OUR DIFFERENCES A VALUABLE
ASSET**

Michelin's corporate performance is closely linked to its employees' professional fulfillment. That's why we give everyone the resources he or she needs to grow, by offering high-quality work environments and extensive, diverse career opportunities in every job family. 76% of managers have been promoted or transferred from within. 74% of top managers in the growth regions were born there, compared with a target of 80% by 2020.

Women account for one-third of all new hires, excluding production operators. Our manufacturing jobs are also attracting more women, thanks to improvements in workstation ergonomics. Today, women account for 25% of all managers and supervisors, a proportion we want to increase to 30% by 2020.

Our goal is for employees to play a leading role in managing their careers. In 2018, this commitment will be supported by the new **InTouch** application, which will provide one-stop, multi-device access to spaces where employees can assess their skills, choose training courses, browse internal job offers and request a transfer or relocation.

80%

Employee
Engagement Rate
2017 annual survey

59,000

Progress Ideas
submitted in 2017

Since 2013, the annual "Moving Forward Together: Your Voice for Action" survey has measured employee sentiment and sense of engagement across the organization. The 2017 round was conducted in 25 languages and 55 countries, with a 91% response rate.

The results are shared by managers and their teams, who together determine the appropriate improvements. Conducting the survey annually encourages everyone to complete the action plans as soon as possible. Our objective is to achieve an 85% engagement rate in 2020.

At Michelin, suggesting Progress Ideas has been a shared passion for 90 years. With just a few clicks on the Innovago online platform, any employee can submit solutions that could help to improve working conditions, safety and quality performance, customer service, competitiveness, environmental impact or other aspects of our operations.

In 2017, 59,000 ideas were submitted and 27,275 were deployed during the year. The target is to have 100,000 Progress Ideas submitted in 2020.



CLOSE-UP ON EMPOWERMENT



Our empowerment process is a powerful driver of continuous improvement. Now deployed across the organization, empowerment is making our teams more self-managing, while also leveraging our collective intelligence to deliver greater benefits to customers.

Decisions are made by the teams closest to the front-line and problems are addressed where they arise, with the support and assistance of managers and the corporate departments. The benefits are many, including more innovation, greater agility, improved motivation and sense of well-being at work, and the emergence of a new attitude toward workplace relationships and social dialogue.

The empowered teams are being supported by the We@Work program, which is helping to redesign workspaces, introduce new ways of working and digitalize working practices and procedures. The OSER training module is also driving progress by enhancing employees' self-awareness, ability to work in a team and communicate with others. It is available online to any unit that wishes to take empowerment to the next level.

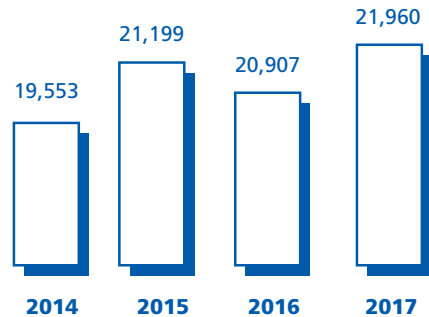
“Our empowerment process is unleashing the creativity, sense of initiative and entrepreneurial spirit of our employees.”



FINANCIAL

NET SALES

in € millions

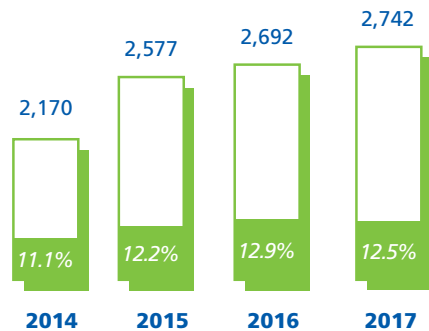


OPERATING INCOME¹

in € millions

OPERATING MARGIN¹

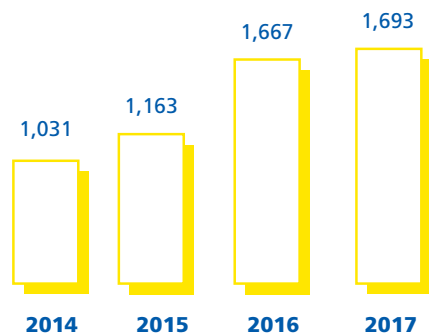
as a % of net sales



1. From recurring activities.

NET INCOME

in € millions

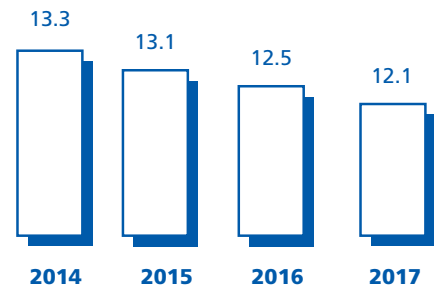


ENVIRONMENTAL

ENERGY CONSUMPTION

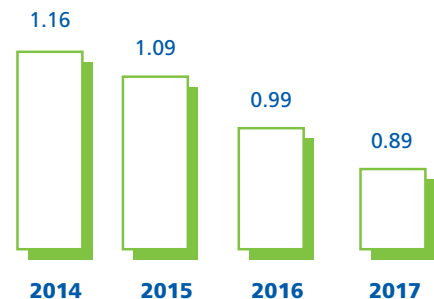
in GJ per tonne of finished product

1 GJ = 277.5 kWh



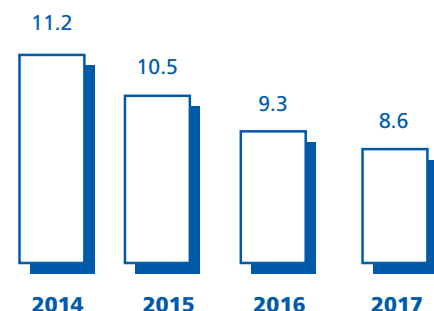
CO₂ EMISSIONS

in tonnes per tonne of finished product



WATER CONSUMPTION

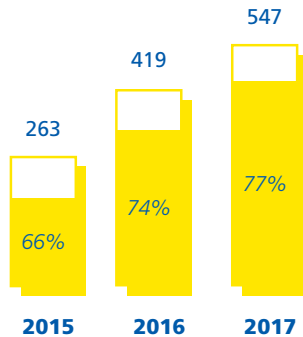
in m³ per tonne of finished product



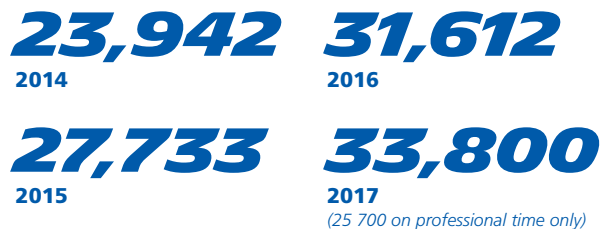
CSR

CSR ASSESSMENTS OF KEY SUPPLIERS

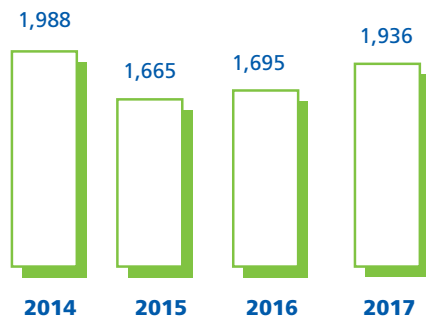
Compliance with Michelin standards in %



PAID WORKING DAYS DEVOTED TO SUPPORTING THE LOCAL COMMUNITY



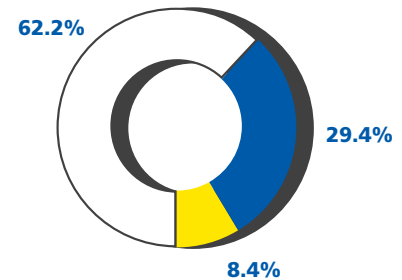
LOCAL JOBS CREATED WITH THE HELP OF MICHELIN DEVELOPMENT¹



1. Active in job markets surrounding Group facilities, Michelin Development has helped to create nearly 23,000 jobs since 1990 in France, Spain, Italy, the United Kingdom, Canada and the United States.

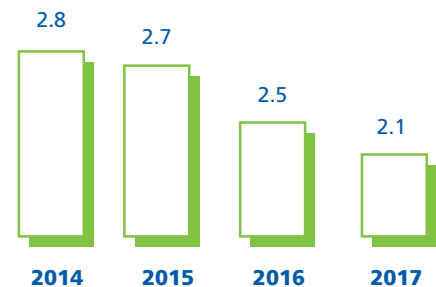
SOCIAL

114,070 EMPLOYEES



- Production operators
- Administrative employees, technicians and supervisors
- Management

WORKPLACE SAFETY TCIR



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

85%
of employees trained in 2017

76%
of managers promoted from within

PERFORMANCE BY BUSINESS



PASSENGER CAR AND LIGHT TRUCK TIRES & RELATED DISTRIBUTION

N° 1 THE WORLD
LEADER IN ENERGY-
EFFICIENT TIRES

31 FACILITIES

16 COUNTRIES

2017 NET SALES (in volumes)

27% original equipment **68%** mature markets
73% replacement **32%** growth markets

IN € MILLIONS	2017	2016	% change YoY
Net sales	12,479	12,105	+3.1%
Operating income ¹	1,552	1,585	-2.1%
Operating margin ¹	12.4%	13.1 %	-0.7 pt

THE GLOBAL MARKET IN 2017

% growth YoY

	ORIGINAL EQUIPMENT	REPLACEMENT
Europe, Russia, CIS	+2%	+4%
North America	-4%	+0%
South America	+20%	+9%
Asia, excluding India	+2%	+4%
Africa, India, Middle East	+7%	+2%
Total	+2%	+3%

2017 CONTRIBUTION

57%
of consolidated net sales

57%
of operating income¹

1. From recurring activities.

TRUCK TIRES & RELATED DISTRIBUTION

N° 1 THE WORLD LEADER
IN ENERGY-EFFICIENT
RADIAL TIRES

22 FACILITIES

15 COUNTRIES

2017 NET SALES (in volumes)

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

IN € MILLIONS	2017	2016	% change YoY
Net sales	6,123	5,966	+2.6%
Operating income ¹	497	580	-14.3%
Operating margin ¹	8.1%	9.7%	-1.6 pt

THE GLOBAL MARKET IN 2017

% growth YoY

	ORIGINAL EQUIPMENT	REPLACEMENT
Europe, Russia, CIS	+8%	+4%
North America	+10%	+4%
South America	+18%	+8%
Asia, excluding India	+26%	+0%
Africa, India, Middle East	-3%	-2%
Total	+17%	+1%

2017 CONTRIBUTION

28%
of consolidated net sales

18%
of operating income¹

1. From recurring activities.

PERFORMANCE BY BUSINESS



SPECIALTY BUSINESSES

16 FACILITIES **7** COUNTRIES

N° 1 THE WORLD LEADER IN
RADIAL EARTHMOVER,
AGRICULTURAL AND
AIRCRAFT TIRES

N° 1 THE EUROPEAN LEADER
IN MOTORCYCLE AND
SCOOTER TIRES

2017 NET SALES (in volumes)

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

IN € MILLIONS	2017	2016	% change YoY
Net sales	3,358	2,836	+18.4%
Operating income ¹	693	527	+31.5%
Operating margin ¹	20.6%	18.6%	+2.0 pt

1. From recurring activities

N° 1

THE EUROPEAN LEADER
IN MAPS, GUIDES,
DIGITAL
TRAVEL-SUPPORT
SERVICES
AND RESTAURANT
BOOKINGS

MORE THAN

16.5 MILLION

MICHELIN LIFESTYLE-
LICENSED PRODUCTS
SOLD IN 2017

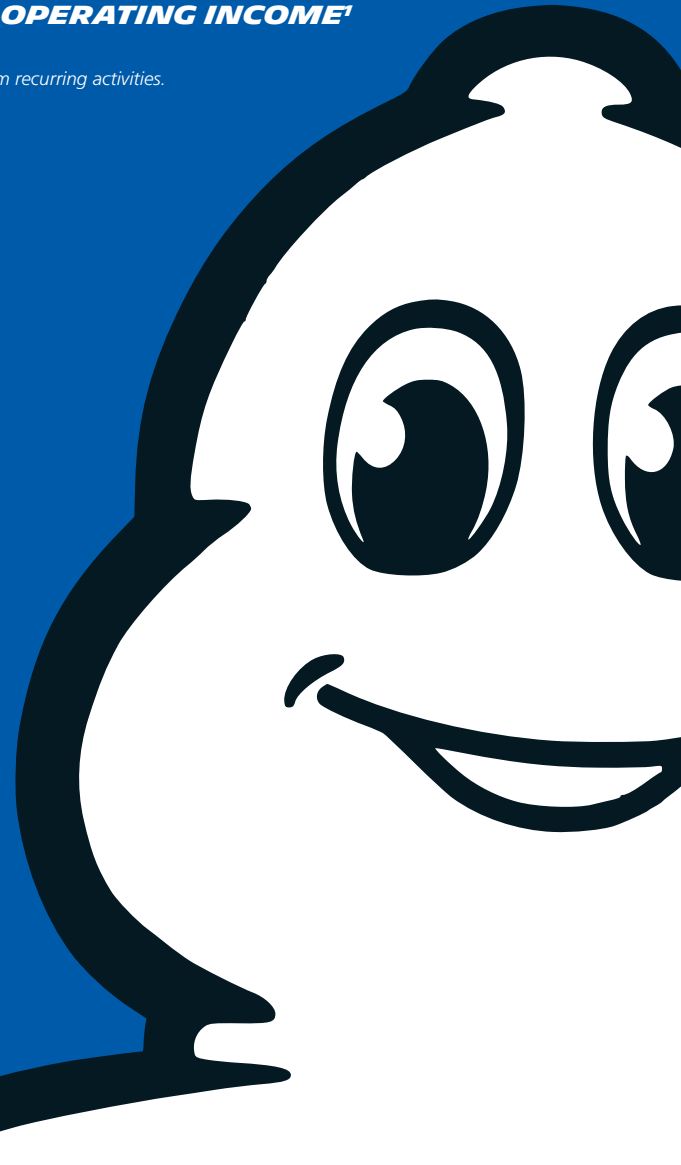
MICHELIN TRAVEL PARTNER MICHELIN LIFESTYLE

2017 CONTRIBUTION

15%
OF CONSOLIDATED
NET SALES

25%
OF OPERATING INCOME¹

1. From recurring activities.



PRIZES, AWARDS AND DISTINCTIONS

**A POWERFUL
GLOBAL BRAND**

\$7.930 BILLION

The value of the MICHELIN
brand in 2018 (+ 30.2%)

Brand Finance Global 500

REPUTATION INSTITUTE WORLD

13th in World ranking
4th EMEA zone (Europe, Middle-East, Africa)
2017 Global RepTrak® 100 (02/17)

INNOVATION AND HIGH QUALITY TIRES

MICHELIN Evobib Tire:
Gold Award
SIMA Innovation Awards 2017

MICHELIN CrossClimate+:
Worldwide product of the 2018
By Nielsen Institute 2018

EXTREMELY SATISFIED CLIENTS

Since 1989, MICHELIN received 84 of the 104 prizes
awarded by J.D. Power, which is 81% of the awards!
UNITED STATES
J.D. Power, tire satisfaction

A RECOGNIZED ENVIRONMENTAL AND SOCIAL COMMITMENT

Best Supplier CSR Performance Improvement
Sustainability Leadership Awards, EcoVadis (05/17)

Sustainability Award, Silver Class
RobecoSAM Corporate Sustainability Assessment (2017)

Responsible Supplier Relationships Label
Only French Group to be awarded on a World scope
Company Mediator and Purchasing National Board (02/17)

TOP PERFORMANCES IN 2017



DAKAR 2017 RALLY
An all-Michelin KTM tire podium



**24 HOURS
OF LE MANS 2017**
Michelin's 20th
consecutive victory



**FIA FORMULA E
2016-2017 SEASON**
Drivers' crown and Teams' title
both earned in Montreal



**FIA WORLD RALLY
CHAMPIONSHIP
(WRC) 2017**
52 World Rally
Championship titles
for Michelin since 1973



**2017 FIM TRIAL
WORLD
CHAMPIONSHIP**
Michelin alongside
Toni Bou for his latest
Trial World Championship win

GIVING PEOPLE A BETTER WAY FORWARD

Because we believe that mobility is essential for human development, we are passionately innovating to make it safer, more efficient and more environmentally friendly.

Our priority and firm commitment is to offer our customers uncompromising quality. Because we believe that all of us deserve personal fulfillment, we want to enable everyone to do his or her best, and to make our differences a valuable asset.

Proud of our values of respect for customers, people, shareholders, the environment and facts, we are all sharing the adventure of better mobility for everyone.

THE GLOBAL SUSTAINABLE MOBILITY ENABLER

114,070
people in 171 countries

70
production facilities

5,000
dealership, distribution hubs
and service centers

OUR STRENGTHS CREATING VALUE



The world's leading source of innovation in support of sustainable mobility

6,000 researchers and technicians
€641 million invested in R&D in 2017

An unrivaled range of products, services and solutions to improve mobility

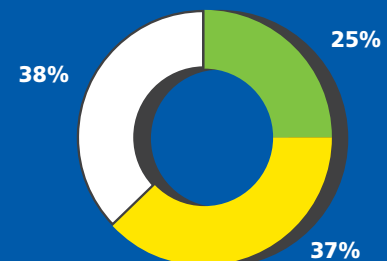


* Except in Europe (including the countries in the former Soviet Union) and in Africa and the Middle East.

A global footprint

The geographic and segment diversity of our operations offers a widening array of growth opportunities.

2017 NET SALES



■ Europe¹ ■ North America² ■ Other regions

1. Including Russia & CIS. 2. Including Mexico.



INTELLIGENT

Mobility that is capable of clearly understanding and meeting everyone's needs, with just the right solution for every use

TODAY, PERSONALIZED SOLUTIONS. TOMORROW, THE VALUE-ADDED OF BIG DATA?

With the digital revolution, connected vehicles and big data analytics, we can develop next-generation solutions that improve our customers' performance. Here are three examples that were introduced in 2017.

Developed with Safran Landing Systems, **PreSense is the world's first connected aircraft tire**, whose integrated pressure sensor simplifies ground maintenance by sending data to a smartphone app.

Zen@Terra helps farmers to run their tractors more efficiently while preserving their crop soil. Controlled from the cabin dashboard, the solution combines MICHELIN EvoBib tires and remote inflating systems from PTG and Teleflow (acquired in 2017) to adjust tire pressure as needed to prevailing conditions of use.

MEMS4, our latest generation mining tire management system, geolocates each tire so that it can be maintained or replaced at the right time without slowing down operations.

In fleet management solutions, sensors, RFID chips, embedded systems and geolocation devices are providing a steady stream of data that we analyze and transform into warnings, advice and action plans. Throughout, we act as a real partner, with a commitment to delivering results. If we make our targets, we share the gains with our customer and if we don't, we give them a refund.

TODAY, ZERO-DEFECT QUALITY. TOMORROW, TOTALLY SATISFIED CUSTOMERS?

By observing the expectations and habits of European drivers, we engineered the MICHELIN CrossClimate and CrossClimate+ tires in response to an unmet need: a single tire capable of delivering consistently safe, efficient performance over time, in both summer and winter driving conditions. We rose to this challenge on the strength of our expertise in materials and metal additive manufacturing technology, which enabled us to develop the tire and successfully bring it to market in record time.

The quality of Michelin tires is admired around the world. We are committed to keeping our customers totally satisfied. With just the right solution to their every need. With a simple, yet deep customer experience, as we continue to build a better way forward together.

*Car Connections:
our online platform
for car lovers*

WOW!

A mobility experience overflowing with excitement, unforgettable emotions and one-of-a-kind encounters

***TODAY,
A SPEEDWAY RACE.
TOMORROW,
A CLASSIC OR CROSS-
COUNTRY RALLY?***

Mobility, whether in a car or on a motorcycle or bike, can also be a lot of fun in all sorts of ways, depending on our tastes, desires and opportunities. We can take a leisurely drive or ride, as exercise or to explore new places. And then there's always racing. Since its first racing win in the Paris-Brest-Paris bicycle race in 1891, Michelin has been constantly involved at the highest level of Motorsport to bring its customers first to the finish line, improve the performance of its tires and demonstrate their superiority. In 2017, with Porsche we won our 20th consecutive victory at the 24 Hours of Le Mans and 53 national and world championship events in Formula E, Endurance, Rally, Moto GP, Trial and Mountain Bike racing.

In 2017, sport driving and speedway racing enthusiasts experienced the thrill of two exciting new tires that far outpace the competition: the MICHELIN Pilot Sport 4 for sports cars and high-performance sedans and the MICHELIN Power RS for large motorcycles. Both of them bring track innovations to the street.

For off-road aficionados, we have designed a new line of Enduro motorcycle tires in medium and hard versions, and four innovative mountain bike tire ranges – two All Mountain and two Cross Country – so that everyone can find the right tire for their ride.

TODAY, A GOURMET EXPERIENCE. TOMORROW, ON-DEMAND EXPERIENCES?

Knowing you've made the right choice. Digital technology puts a whole world of restaurants, getaways, trips and other experiences at our fingertips, but the question is, how do we choose the right one? As the world leader in gourmet dining guides with the Michelin Guide and a major tourist guide publisher with the Green Guides, Michelin wants to be the go-to selection of fine dining venues and travel services.

Nearly 50% of European millennials plan their travel around food and drink⁵, a trend also demonstrated by their counterparts in the United States and Asia. Now the European leader in online restaurant booking with the acquisition of BookaTable and Restaurantes.com, we are steadily broadening our scope of business so that we can provide our customers with an ever-expanding array of constantly enhanced experiences.

In 2017, we acquired 40% stakes in Robert Parker Wine Advocate, the world's most widely read wine tasting and rating guide, and in Le Fooding, a website specialized in discovering hot new restaurants and trendy bars. These partners are now providing exclusive offers for MICHELIN Days, our new private sales platform for web-savvy consumers in France, Spain and Italy.

5. Northstar Research Partners for Expedia Media® Solutions, 2017

30,000
tested and reviewed restaurants just a click away

in
80
countries worldwide





EFFICIENT



Energy and resource-efficient mobility

TODAY, ECO-DESIGN. TOMORROW, THE VISION CONCEPT TIRE?

At Michelin, we are passionate about doing more with less – about delivering more performance without fail at every stage in a tire's life cycle, while using fewer raw materials and less energy.

One compelling example is the MICHELIN Primacy 4 passenger car tire, which offers exceptional braking performance regardless of tread condition, and lasts an average 18,000 km longer than its direct competitors.

Launched in 2017, the MICHELIN X[®] FORCE™ ZL tire for small civilian and military trucks, the MICHELIN[®] X[®]TRA LOAD tire for mining dump trucks, and the MICHELIN ROADBIB on-road tractor tire, are all remarkably robust and long-lasting products.

Another major innovation in 2017 was the MICHELIN Acorus technology presented in partnership with Maxion Wheels, which enables the development of light, flexible wheel and tire assemblies that are highly impact-resistant.

Our Vision concept, introduced during the year at the Movin'On by Michelin summit for sustainable mobility, illustrates our vision of tomorrow's mobility, based on a blend of technologies and services. It is a lightweight, highly resistant airless wheel, made from 100% biodegradable recycled or bio-sourced materials, whose tread can be "replenished" by a 3D printer as needed or to adjust to changing road conditions. It is also equipped with embedded sensors that keep the driver informed of conditions and problems. *Time Magazine* selected the Vision concept as one of the 25 Best Inventions of 2017. Its innovations are protected by 19 patents.

TODAY, FUEL-EFFICIENT TIRES. TOMORROW, ZERO-EMISSION MOBILITY?

As the world leader in energy-efficient tires, we consider that, with transportation accounting for 23% of global carbon emissions, extensive electrification is the only way to drastically reduce its impact on the world's climate and improve the quality of air in cities. In 2017, several countries announced plans to ban internal combustion-powered vehicles by 2030 and an even larger number of cities are following suit.

We are developing tires that improve the range of battery-powered EVs and are helping to deploy hydrogen-powered electric mobility systems. These two technologies can be used together to meet the challenge of achieving zero-emission transportation. We have developed a hydrogen fuel cell capable of outputting 5 to 100KW and installed the necessary production capacity.

Michelin owns a stake in Symbio FCell, which markets hydrogen fuel-cell range extenders for battery-powered EVs, such as Renault's Kangoo ZE van and, since 2017, the Nissan e-NVNV200 minivan. We are a technology partner for the Green GT hydrogen race car and the Yélo H2 hydrogen sea shuttle currently being trialed in La Rochelle, France, and are working with Safran to develop onboard auxiliary power equipment for aircraft.

In all, 10 to 15 million cars and 500,000 trucks could be powered by hydrogen by 2030⁴.

4. *Hydrogen scaling up*, Hydrogen Council-McKinsey & Co., November 2017

HOW DO HYDROGEN FUEL CELLS WORK?

A hydrogen fuel cell generates electricity from the chemical reaction between hydrogen (supplied from an onboard tank) and oxygen (from the air). The only by-product is water. Fuel cells can act as a primary or supplementary power source for all types of electric powertrains. Refueling time and range are comparable to those of an internal combustion vehicle.

CONNECTED

Safer, smoother, more user-friendly mobility

TODAY, SAFETY. TOMORROW, PEACE OF MIND?

Today, with **access to online advice and sales, as well as professional, on-demand fitting and maintenance services**, customers can get just the right tires mounted and properly maintained in just a few clicks.

Now we're taking this to the next level by offering customers the enhanced security and peace of mind that come from the certainty of receiving assistance and support.

Introduced in 2017 and mountable on any type of vehicle, the onboard MICHELIN Safe & Drive system detects impacts, automatically contacts emergency services in the event of an accident and provides 24/7 access to our assistance platform to deal with problems or questions.

Our connected tires equipped with pressure sensors and RFID chips, our onboard telematics systems and our online training modules all help to keep professionals safe as they travel and conduct their business. Michelin solutions' new digital services include MyTraining, which facilitates driver training, and the MyRoadChallenge serious game, which enables them to test and improve their driving skills.

Lastly, MICHELIN RoadConnect is a new free mobile app that makes life easier for truck drivers and helps them to find their friends during breaks and rest periods.



TODAY, OPTIMIZED ROUTES. TOMORROW, A SELF-DRIVING CAR?

Enabling people to get around more but consume less and take fewer risks **requires a coordinated approach to the way we use individual means of transportation such as cars and trucks.** The aim is to unlock specialized solutions encouraging more environmentally efficient, targeted journeys as part of a multimodal transportation system.

Coordinated action begins in towns and cities, where the challenge is particularly complex due to a constantly rising population density. Stakeholders have to work together to digest the countless parameters and find the right solution. More specifically, **connected mobility involves working at ecosystem level** so that technology, product offerings, business models, regulatory frameworks, data standards, infrastructure and individual behaviors can evolve more coherently and efficiently.

Michelin is taking the lead on collaborative intelligence and collective action toward more sustainable mobility. At the Movin'On event in Montreal from June 13 to 15, 2017, 110 companies debated ideas and discussed projects, which drove them to form gateways and create collaborative networks. The ideas that emerged from the event will be explored in greater depth by the resulting ecosystems throughout the year at Open Labs in Europe and North America (200 partners involved in 2017). We are currently leading a number of ecosystem projects with towns and cities. We contribute not only our products and services – tires adapted for specific uses, maps, fleet management solutions, etc. – but also our ability to bring together a whole host of stakeholders. This is facilitated by our experience as a unique influencer in the world of Mobility, developed over the past 20 years through our Challenge Bibendum and Open Lab events.



#MOBILLENIALS

Mobility is about a lot more than just getting from one place to another. For people as well as companies, the important thing is to be able to get around easily, safely and comfortably, all at an affordable price. And today, mobility is being revolutionized by digital technology.

With digital technology, mobility fits in your pocket. Today, a smartphone can find and display a wealth of mobility information, including routes, transportation options, schedules, service availability, real-time traffic conditions and the location of the nearest bus, metro, or self-service bike, car or scooter station. Other apps offer the ability to find, order and electronically pay for car-share, taxi or ride-hailing services.

Focusing on use. At a time when smartphones are opening up so many possibilities, mobility is increasingly offered and perceived as a service that gives users more freedom, while also saving them time and money.

More collaborative, shared mobility alternatives. Traveling is an increasingly hybrid experience, where you take a shuttle to the nearest train station and then reach your final destination on a kick scooter, or else car-share to a city and rent a car for a local excursion. As their numbers decline, vehicles will be shared and used more intensely. This means that they will be on the road longer, so they will need to be more robust and reliable. Companies are keeping pace with this trend.

Michelin is addressing emerging expectations for mobility. Smart mobility is underpinned by integrated systems capable of supporting the on-demand, multimodal provision of convenient, affordable, reliable mobility services, combining public and private transport. Deploying seamless, clean solutions for last-kilometer deliveries in urban areas is another challenge, where the development of on-demand vehicle fleets and the emergence of self-driving cars and shuttles offer promising new possibilities.

1. 2017 World Mobility Observatory survey, conducted by BIPE/Kantar TNS with 24,000 people in 30 major cities in 18 countries

2. 2017 Roland Berger survey of 10,000 drivers in 10 countries (China, France, Germany, India, Japan, Netherlands, South Korea, United Kingdom, United States, Singapore)

3. 2017 Ford/Kantar TNS survey of 1,000 people in France

CONNECTED URBANITES...

Millennials, who tend to be urban, mobile and connected, are radically changing their relationship to mobility in their daily lives and at work. More than half of the world's population lives in cities, a figure that will rise to two-thirds by 2050.



75%
use smartphone apps to organize their daily journeys¹

22%
use shared mobility services as their primary means of transport¹

13%
regularly use car-sharing services¹ (29% in Europe)

46%
would choose a robocab if it were more competitive than a private car²

62%
of millennials appreciate on-demand transportation services³

63%
of millennials want to take advantage of their transit time to do something else³



MICHELIN AND NEW-GEN MOBILITY



Because our purpose is to give people a better way forward, Michelin is helping to support emerging forms of mobility, eagerly foreseeing next-generation developments and transforming its business and operations.

Michelin's organization is highly customer-focused.

New business lines, organized to serve a given segment of customers sharing the same needs, are responsible for understanding the expectations of these customers and meeting them with aligned solutions. Across the Group, research & development, marketing, sales, production and customer service teams are all working toward the same objective: to improve the experience of our customers and increase their satisfaction.

Michelin is inventing new ways of innovating. By working with others, we can innovate better and faster. This vision is embodied in our open innovation process, which involves more than 300 research partnerships. We are encouraging a new approach to co-working with visionaries, innovators, large corporations and entrepreneurs through partnerships, incubators and initiatives like the Paris Process on Mobility and Climate (PPMC) to support sustainable low-carbon transport or Movin'On, the summit for stakeholders in the development of intelligent, sustainable, multimodal mobility.

Michelin is going digital more quickly in every aspect of its business.

A wide range of programs, such as the Factory of the Future, Prod'Agile, Downstream OPE, Voice of the Customer and our new Engage CRM system, are now transforming our operations to deliver our solutions to customers more quickly, make us more agile and efficient, shorten our cycle times and improve our competitiveness.



DESTINATION: SUSTAINABLE MOBILITY



“What excites us is the possibility of leveraging innovation, our corporate DNA, to reinvent mobility in ways that are more environmentally friendly.”

Jean-Dominique Senard

While road mobility plays a key role in economic and human development, its growth poses enormous challenges in such areas as safety, energy, climate change, the environment, health and quality of life. That's why we're bringing all of our innovation capabilities to bear and forging partnerships with stakeholders so that together, we can secure a better way forward and sustainable mobility for everyone.

RESPONSIBLE PURCHASING: MOVING FORWARD TOGETHER

We are as demanding with our suppliers as we are with ourselves. We train our buyers in responsible purchasing practices and build socially responsible criteria into every tender. This process has to reconcile the need for competitive pricing, high quality, secure supply, environmental stewardship and corporate citizenship. In recognition of this commitment, Michelin was awarded France's "Responsible Supplier Relationships" label in 2014. In 2017, the Group also received three awards. First, a *Trophée Or* in the CSR category from purchasing magazine *Décision Achats*. Second, an award from EcoVadis for the Best Supplier CSR Performance Improvement after 78% of the Group's suppliers improved their CSR score over the last five years thanks to their partnership with Michelin. And lastly, an award from the French Ministry for the Economy and Finance for payment deadlines (Major Groups category). Purchases represented 57% of consolidated net sales in 2017, sourced from more than 52,000 suppliers in 50 countries.

Since 2012, Michelin has assessed the performance of its suppliers in four areas: the environment, fair working conditions, business ethics and supply chain. Overall, 77% of the 547 suppliers audited in 2017 were in compliance with Group standards and 66% of raw-material supplier facilities have been certified to ISO 14001 standards. In addition, action plans have been deployed at suppliers who fell short of compliance. In accordance with ISO 20400, the Group conducted a review in 2017 to check its progress in assessing the CSR practices of its raw materials suppliers in countries that present environmental and/or human rights risks. Michelin also mapped out the CSR risks relating to its purchases of industrial inputs and services in high-risk countries.

RESPONSIBLE NATURAL RUBBER

Natural rubber is a critical raw material for the tire industry, accounting for 75% of global production.

As the market's largest buyer, Michelin has for years been deeply committed to ensuring that the entire supply chain is managed responsibly and sustainably. In 2016, we worked with NGOs to prepare our **Responsible Natural Rubber Procurement Policy**, which specifies our principles in five areas: respecting people, protecting the environment, improving agricultural practices, carefully using natural resources and practicing good governance. Since 2017, the Michelin-developed **Rubberway mobile app** has enabled us to chart the CSR practices of stakeholders across our supply chain.

In Brazil, Ouro Verde Bahia is at once a center of research on the most resistant and productive rubber tree varieties, a pilot project to improve the living conditions of smallholders and an ecological reserve.

In Indonesia, we have joined with Barito Pacific Group, with the support of the WWF, to develop **eco friendly natural rubber production practices** on an 88,000 ha plantation. Half of the land will be planted with rubber trees, and the other half with plants native to the region and subsistence crops for the local community. We will also help to protect the forests and endangered species in and around the concessions.

In West Africa, in 2017 we raised our controlling interest in SIPH*, which manages 40,000 ha of rubber trees.

* Société Internationale de Plantations d'Hévéas.

MANUFACTURING: A FOOTPRINT REDUCED BY 47.3% IN 12 YEARS

The production chain accounts for only **6% to 10% of our tires' environmental impact**. To further reduce it, we are deploying a variety of assertive programs, including an ISO 14001-certified environmental management system, a performance standard applied by all of our production facilities and an indicator, the **Michelin Environmental Footprint (MEF)**, to track and manage compliance. The MEF measures water withdrawals, energy use, CO₂ and volatile organic compound (VOC) emissions, the amount of waste produced and amount of waste landfilled, all per tonne of tires produced. Today, we are well on track to meet our goal of shrinking the MEF by 50% between 2005 and 2020, **having reduced the MEF by 47.3%, energy use by 30.4% and CO₂ emissions by 30.7% over the 2010-2017 period.**

We are **also reducing the carbon footprint of our supply chain** by rationalizing distances traveled and maximizing loads, developing multimodal (rail, sea, inland waterway) solutions and reducing the need for air transport, and preferring carriers that share our commitment to energy efficiency and lower emissions.

CIRCULAR ECONOMY: THE 4R STRATEGY

Through its 4R strategy to **Reduce, Reuse, Recycle and Renew**, Michelin is firmly committed to developing the circular economy at each stage of the tire lifecycle.

- **Reduce** the amount of resources needed to make a tire and optimize their use by practicing eco-design and engineering tires that are lighter, more energy efficient and longer lasting. In our industrial processes, this commitment is being supported by our expertise in metal additive manufacturing (**metal 3D printing**). At the same time, we are reducing our environmental footprint in the production phase.
- **Reuse** tires by repairing, regrooving or retreading them. (developed in the following paragraph)
- **Recycle** and recover scrap tires. In line with this commitment, in 2017 we acquired **Lehigh Technologies**, which uses recycled tires to make innovative materials that can replace other feedstocks in the production of tires, plastics and construction materials.
- **Renew**, by using a growing proportion of biosourced materials. Natural rubber and plant-based oils and resins account for 25% of our inputs. We have formed industrial partnerships to **create production channels for biomass derived elastomers**, such as bio-butadiene with Axens, IFPEN and Terreos, and bio-isoprene with Amyris and Braskem. We are also continuing to develop eco-friendly natural rubber production practices through our joint venture with Barito Pacific Group in Indonesia, which focuses on sustainably planting and harvesting rubber trees.

In 2017, we set up a **circular economy steering committee**.

SERVICES & RETREADING: BOLDLY SUSTAINABLE

Michelin combines products and services so that customers can get the most out of their tires for as long as possible.

Maintaining the right pressure improves tire safety, lengthens tread-life, saves fuel and lowers CO₂ emissions.

Retreading gives truck, agricultural, earthmover and aircraft tires a new lease on life, without comprising safety. A MICHELIN truck tire can be retreaded twice, which triples its useful life, **reduces natural resource consumption by 70%**, costs 40% less per kilometer than a new tire and generates 4.3 times more jobs than a non-retreadable imported tire.

We offer truck fleet operators, mining companies and airlines **pay-per-use invoicing** based on the number of kilometers traveled, the number of tonnes carried or the number of landings made using tires that we supply and maintain throughout their lifecycle. Properly maintained tires last longer, which is good for our customers and the environment.

The digital revolution is driving further progress in this area.

Thanks to **connected tires, on-board information systems and data analytics**, we can more quickly identify the causes of fuel inefficiencies and tire wear and recommend solutions, from eco-driving courses to route optimization.

In 2017, we expanded our capabilities with the acquisition of North America-based **NexTraq**, whose **telematics solutions** improve driver safety, fuel management and fleet productivity.

CLIMATE CHANGE: A 360-DEGREE STRATEGY

Transportation accounts for around 15% of global carbon emissions. Michelin has deployed a full range of resources to help meet the COP 21 carbon emissions targets.

In association with NGOs, we initiated the **Paris Process on Mobility and Climate (PPMC)**, which hopes to make transportation carbon neutral by 2050. We support the introduction of a global **carbon pricing** system and already integrate a carbon price into our capital expenditure decision process.

Our **production plants** are expected to reduce their CO₂ emissions by 50% between 2010 and 2050.

However, **the biggest contribution to our effort will come from our tires**, whose use accounts for around 90% of their total carbon impact. A tire's rolling energy represents an average 20% of the fuel burned by an internal combustion powered car and 30% of the power used in an electric car or the fuel burned in a truck. Reducing this rolling resistance therefore helps to save energy and reduce a vehicle's carbon footprint.

After inventing the first **energy-efficient tire** in 1992, we now offer the sixth generation of green tires for cars and the fifth for trucks. **We are committed to reducing the carbon footprint of our tires in use by 20% over a 20-year period**, thereby avoiding the release of 30 million tonnes of CO₂ in 2030. This commitment is being supported by our expertise in high-technology materials and new digital services.

REGULATION: COMBATTING PLANNED OBSOLESCENCE

Michelin is committed to being a leader in sustainable mobility, that is our purpose.

We don't play the planned obsolescence game.

Contrary to what we so often hear, there is no need for trade-offs between safety and the environment.

They can easily be reconciled, as technologies exist and are available. One of the best ways to demonstrate that would be to test tire safety not when tires are new but when they are worn. This would raise the performance of the entire category, for the greater benefit of every customer.

Changing tires when the tread depth wears down to 1.6 mm instead of 3 mm would avoid the purchase of around 400 million tires a year worldwide, equivalent to the release of 35 million tonnes of CO₂.

It's up to each stakeholder to assume their responsibilities with regard to safety and the environment. This is what we do at Michelin by designing tires that last as long as possible, so as to save raw materials, and making sure that their performance remains the same over time. A Michelin tire delivers the same superior performance, especially in terms of safety, until the very end of its useful life. That's our commitment to customers.

In November 2017, German weekly **Auto Bild** published the results of a test conducted on new and used all season tires, which showed that the MICHELIN CrossClimate+ tire offered far superior braking and tread life performance than its competitors.

WORKING TOGETHER TO BUILD BETTER MOBILITY FOR EVERYONE

Michelin engages in open, constructive dialogue with its stakeholders at the local, national and international levels. This enables us to gauge the changing expectations of society and welcome the feedback and new ideas that stimulate our thinking, spur innovation and open new pathways to growth.

At the corporate level, the **Stakeholders Committee** brings together 13 people from around the world who meet once a year with the Chief Executive Officer and members of the Executive Committee to discuss our mobility and sustainable development strategy, technology and our role as a responsible employer. In 2017, an interim meeting was also held in June as part of the Movin'On by Michelin summit.

The new global sustainable mobility summit, Movin'On by Michelin, has followed on from Michelin Challenge Bibendum, which was created 20 years ago. For three days in Montreal, visionaries, innovators, NGOs, large corporations, start-ups, academics, local authorities and government agencies came together to craft a bold new vision of mobility that would "move from ambition to action." The next summit will also be held in Montreal, from May 30 to June 1, 2018.

ROAD SAFETY: A HOLISTIC COMMITMENT

Every year, 1.25 million people are killed and 50 million are injured in traffic accidents, which are the **leading cause of mortality among young people**. In addition to producing tires that consistently deliver superior grip and braking performance over time, Michelin is building awareness of good road safety practices among government authorities and their constituents.

As a dedicated partner of the Global Road Safety Partnership, the Youth for Road Safety (YOURS) association, the United Nations' Decade of Action for Road Safety 2011-2020 and the International Automobile Federation's *FIA Action for Road Safety* campaign, we work directly with public authorities and NGOs, as seen in the following three examples.

as seen in the following three examples.

- **In the United States**, our **Beyond the Driving Test** campaign for young drivers has prompted all 50 states to mandate that driver's education classes include information on the essential role played by tires and tire maintenance in road safety.
- **In South Africa**, the **YOURS** program is training **Youth Ambassadors** in road safety knowledge and peer education methods, which they can use to raise safety awareness in their communities. A similar campaign is being deployed in Brazil.
- **In Southeast Asia**, the Michelin Corporate Foundation is providing long-term support for the **Safe Mobility** program being deployed by the Children of the Mekong NGO, with Michelin Asia employees taking part in the training.



WELCOME TO IN BRIEF 2017

Destination: Sustainable Mobility

Mobility that is connected, affordable, clean, safe, intelligent and enjoyable.

As the inventor of the folding road map in 1910, we have chosen this format, which we all know so well, to talk about the roads taken and the progress made by Michelin in 2017.

To find out more about our year, please visit Michelin.com or take a look at our 2017 Registration Document. We hope you enjoy the brochure. Have a pleasant journey!

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