



**TIRE INDUSTRY**  
R E S E A R C H

# Global Tire Intelligence report

Dateline: 31 July 2016

Compiled by Shaw Information Services trading as  
Tire Industry Research

© 2016 Shaw Information Services Ltd

For subscription enquiries  
David@TireindustryResearch.com  
+44 208 647 1185

## Contents

### Section 1: Outlook 2

President Trump would encourage trade barriers	2
Survey reveals extent of illegal truck tires on US roads	2
Will US government legislate on tire grip?	2
IRSG forecasts lower NR growth	2
Bridgestone's vision of the future	2
EC truck producers fined €2.93 billion for cartel	3

### About this publication 2

### Section 2: Sustainability 4

Michelin commits to zero deforestation	4
Toyo Tires Supports SNR-i	4
3D printing using rubber from end-of-life tires	4
Irish Minister ends voluntary waste tire reporting	4
Recycled tires can improve soil drainage	4
Rubber from old tires used in rail track beds	4

### Section 3: Investments and closures 5

Apollo's Hungary factory on schedule for early 2017	5
Michelin adds Agricultural tire factory in Brazil	5
Michelin to build huge tire plant in Mexico	5
Continental returns to agricultural tire business	5
Sumitomo to build USD95m TBR plant in Brazil	5
Giti Tire to expand US R&D centre	5
Gajah Tunggal to expand TBR production	5
BRISA to add PCR factory, TBR capacity	6
Indonesia's Multistrada to add PCR capacity	6
CAERI buys MTS Flat-Trac	6
LG Chem to invest USD350m in elastomers	6

### Section 5: Top tire makers 7

Bridgestone names new CEO for EMEA region	7
Bridgestone developing telematics fleet solutions	7

Bridgestone makes Senior Management Changes	7
Goodyear Reports Q2, H1 Results	7
Michelin marks 70 years since inventing the Radial	7
Continental supplies tires for Volvo Concept	7
Yokohama uses Exa's aerodynamic model	7
Michelin reports higher profit and volumes in first half	8
Conti names new Head of Commercial Specialty Tires	8
Yokohama completes acquisition of Alliance Tire	8
Kumho tire share for sale	8
Cheng Shin chairman talks Maxxis globalisation	8
Kenda Tire discusses Tech centre in North America	9

### Section 6: Upstream and raw materials 9

Asahi Kasei, JSR adding S-SBR materials	9
Evonik opens competence centre for silanes	9
Evonik opens silica plant in Brazil	9
Malaysia's NR production falls	9
NR prices creep up in China	9

### Section 8: Trade and statistics 10

US rubber makers seek tariffs on imported E-SBR	10
Indian tire makers seek tariffs as Chinese imports soar	10
European tire sales less buoyant in Q2	10
EU passenger car registrations rise in June	10
EU truck registrations: +13.5% in H1; +13.3% in June	10
Everything you need to know about emissions testing	10
US ITC raises duties on China-made OTR tires	11
Indian Rubber Board summarises 2016	11

### Brexit and the tire industry 12

### How many defective tires are really on the road? 14

The newsletter contains information about the global tire industry. The information is provided in good faith, but it is not advice, and should not be treated as such.

Without prejudice to the generality of the foregoing paragraphs, we do not represent, warrant, undertake or guarantee that the information in the newsletter is correct, accurate, complete or non-misleading.

We will not be liable to you in respect of any special, indirect or consequential loss or damage.

## Section 1: Outlook

### President Trump would encourage trade barriers against China and other countries

The Los Angeles Times has carried a [long article](#) analysing how US trade policy might develop if Presidential nominee Donald Trump wins the Presidency.

The article suggests that if Trump wins the elections in November, then he would quickly move to impose trade tariffs of up to 45% on goods imported to the United States from China.

It goes on to analyse the situation in passenger car tires and concludes that these tariffs do not work. Furthermore, they may backfire on US manufacturers, as China might retaliate, and Chinese manufacturers are more nimble than their US counterparts.

In the case of tires, the tariffs had an immediate impact, but imports quickly recovered as imports from other countries increased and Chinese manufacturers set up manufacturing bases overseas.

“By the time we impose the tariffs, the penetration of the imports into our market is so great that it’s too late to reverse what has become a fundamental shift in competitiveness,” said Clyde Prestowitz, an Asia economy expert and former top trade negotiator in the Reagan administration. <http://www.latimes.com/business/la-fi-tariffs-trade-analysis-20160724-snap-story.html>

### Survey reveals extent of illegal truck tires on US roads

Every year the US organisation called Commercial Vehicle Safety Alliance, carries out a survey of trucks across the United States. It is called Road check and is in addition to normal checks carried out by police and other enforcement officers.

This year the survey was carried out between 7-9 June. The survey focussed on the state of tires on trucks. The survey found that tread depth is a significant issue in the United States.

Over the three-days, 57,404 inspections were carried out. This compares with a normal level of around 36,000 inspections. Out of the 57,000 inspections, 5203 (9%) identified tire violations.

Breaking down those 5203 violations, 2222 (43%) identified tread depth below the legal limit of 2/32 inch on rear and trailer tires. A further 246 front tires were found to be below the legal limit of 4/32 inch. Another 743 were clearly either flat or losing pressure and another 641 on top of that were either flat or worn down to the tire fabric. An additional 518 were suffering from tread or sidewall separation.

<http://www.truckinginfo.com/news/story/2016/07/tread-depth-violations-highlight-tire-focused-roadcheck.aspx>

### Will US government legislate on tire grip?

An intelligent column in [Car and Driver](#) magazine asks whether the United States is likely to introduce a scheme that would assess the wet grip of tires. In 2012 the EU introduced a consumer-labelling scheme that imposed limits on grip. China is introducing a similar scheme.

The article quotes Mike Martini, president for Bridgestone’s original equipment division in the U.S. saying “We are first and foremost a safety product,” He adds that if you add in an element about fuel economy, then there can be no compromise on grip.

RMA spokesman Dan Zielinski responded, “The last thing we wanted to see was a tire company to trade traction for fuel economy,” when asked about the impact of future regulations on high-performance tires.

<http://blog.caranddriver.com/the-future-of-tires-will-the-government-limit-grip/>

### IRSG forecasts lower NR growth

Total world rubber consumption increased by 1.2% in 2015, growing significantly below the long-term growth rate of 3.6% (average growth rate of 1961-2013) and 3.1% growth in 2014.

The slower growth in 2015 affected the outlook for 2016-2018, causing the growth rate to moderately bounce back before settling down to a more

## About this publication

This document has been prepared in response to demands from the global tire community for insight into the global tire industry – and especially Europe.

Our company tracks the tire industry around the world. We publish a weekly report that gives Western executives deep insight into current developments in China’s tire industry.

Part of that research involves tracking the China-based publications that report on the global tire industry. We noticed that Chinese reporting of Western developments is woefully inadequate.

During conversations with many Chinese people, we identified a strong need in China for a source of information on the global tire industry that lies outside of the official channels.

Furthermore, in conversations with industry analysts, we identified a need for a short-form document that explains and analyses latest developments in the global tire industry.

**About the author.** This report is compiled by David Shaw. Mr Shaw publishes widely on LinkedIn about the tire industry. He has a 30-year track record reporting on the global tire industry at the highest levels. He publishes market research reports; offers a weekly news service and manages conferences globally.

For more information see <http://TireIndustryResearch.com>

steady pace of growth.

According to the IRSG standard scenario of economic growth, total world synthetic rubber (SR) demand is estimated increase by a modest 2.2% in 2016. Demand is expected to grow by further 2.6% in 2017, but decelerate to a growth rate of 2.2% in 2018.

Throughout the majority of the forecast period, 2016-2022, the world SR consumption is forecast to grow less rapidly than NR consumption. However, according to IRSG’s downside scenario, world demand for SR will increase by 1.8% both in 2016 and 2017.

Demand for NR will benefit not just from the improving world economic outlook but also from the change in the relative price of rubber that will favor greater consumption.

Table 3.1: World Tire Production (million units)

	2014	2015	2016	2017	2018	2019
IMF Scenario	1738	1762	1807	1873	1945	2006
% change	4.6	1.4	2.5	3.6	3.9	3.1
Downside Scenario	1738	1762	1803	1860	1931	1988
% change	4.6	1.4	2.3	3.2	3.8	3.0
2020	2021	2022	2023	2024	2025	
IMF Scenario	2062	2119	2185	2246	2312	2381
% change	2.8	2.8	3.1	2.8	2.9	3.0
Downside Scenario	2042	2098	2167	2224	2291	2353
% change	2.7	2.7	3.3	2.6	3.0	2.7

### Bridgestone's vision of the future



Bridgestone Americas has identified six agents of change that will affect the future of the tire and rubber industry. Steve Charles, Vice President of Product Development for Bridgestone Americas Tire Operations in Akron, Ohio listed them as follows:

- Advancements in technology;
- Regulatory movements;
- The need to for environmental sustainability;

- The pursuit of automated driving;
- Shifts in global demographics; and
- Changes in societal behaviours.

Bridgestone's leading initiative related to environmental factors is to reduce the weight of its products. With reduced weight and the need to improve recycling of tires, Bridgestone aims to have a fully sustainable and recyclable product in the future, with an ultimate goal to have its entire product line fully sustainable by 2050.

Bridgestone is using more computer modelling in its tire technology efforts and one benefit has been shortening the time to bring a new tire to market.

According to Charles, below are some examples of what can be expected in the near future:

- Convergence of tire classes—continued movement toward commoditisation is possible.
- Regardless of performance characteristics, the tire could see its performance attributes value erode.
- Further reduction in rolling resistance to aid fuel economy and other CO2 regulations.
- Application of sensor technology for intelligent tires, particularly for data collection in autonomous vehicles and fleet maintenance.
- Increased sustainability through, for example, using rubber made from biomass.
- Improved materials, greater sustainability and reversible cross-link systems to enable full tire recycling.
- Change in tire design to tall and thin tires, especially to suit electric vehicles.
- Greater use of modelling in performance prediction and tire design for speed and reduced development cost.
- Strong emphasis on extended mobility; for example, RFT, self-sealing, and non-pneumatic technology.

[https://www.bridgestoneamericas.com/en/newsroom/press-releases/2016/bridgestone\\_s-vision-of-the-future-of-the-tire-industry](https://www.bridgestoneamericas.com/en/newsroom/press-releases/2016/bridgestone_s-vision-of-the-future-of-the-tire-industry)

## EC truck producers fined €2.93 billion for cartel

The European Commission has found that EU truck manufacturers, MAN, Volvo/Renault, Daimler, Iveco, and DAF broke EU antitrust rules.

These truck makers colluded for 14 years on truck pricing and on passing on to customers the costs of compliance with stricter emission rules. The Commission has imposed a record fine of EUR2,926,499,000.

MAN was not fined as it revealed the existence of the cartel to the Commission. All companies acknowledged their involvement and agreed to settle the case.

The decision, revealed on 19 July, relates specifically to the market for the manufacturing of medium (weighing between 6 to 16 tons) and heavy trucks (weighing over 16 tons).

The Commission's investigation revealed that MAN, Volvo/Renault, Daimler, Iveco and DAF had engaged in a cartel relating to: coordinating prices at "gross list" level for medium and heavy trucks in the European Economic Area (EEA). The "gross list" price level relates to the factory price of trucks, as set by each manufacturer. Generally, these gross list prices are the basis for pricing in the trucks industry. The final price paid by buyers is then based on further adjustments, done at national and local level, to these gross list prices.

the timing for the introduction of emission technologies for medium and heavy trucks to comply with the increasingly strict European emissions standards (from Euro III through to the currently applicable Euro VI) the passing on to customers of the costs for the emissions technologies required to comply with the increasingly strict European emissions standards (from Euro III through to the currently applicable Euro VI).

The total fines imposed are as follows:

	Reduction under the Leniency Notice	Reduction under the Settlement Notice	Fine (Euro)
MAN	100%	10%	0
Volvo/Renault	40%	10%	670 448 000
Daimler	30%	10%	1 008 766 000
Iveco	10%	10%	494 606 000
DAF		10%	752 679 000
Total			2 926 499 000

[http://europa.eu/rapid/press-release\\_IP-16-2582\\_en.htm](http://europa.eu/rapid/press-release_IP-16-2582_en.htm)

## Section 2: Sustainability

### Michelin commits to zero deforestation

#### The pentagon chart of natural rubber sustainability



Michelin has become the first tire maker to commit to zero deforestation. This will mean Michelin will implement a programme to trace all rubber used in its factories to ensure none of its is sourced from offending plantations or smallholdings, but also that Michelin is putting in place forest protection schemes in many locations around the world.

Michelin said, "Rubber supply chains have never been mapped to the approximately 6 million farmers involved globally in natural rubber cultivation. The Group thus cannot yet predict how long the process will take. However, based on the initial results of the pilot started in 2015, the Group targets to achieve this mapping for at least 80% of natural rubber purchased volumes by 2020."

The commitment is published in its document titled Sustainable Natural Rubber Policy and includes the following commitment:

By all reasonable means, the Group ensures that the natural rubber it uses comes exclusively from plantations that fully comply with the "zero deforestation" principles:

- National forest protection laws are observed;
- Primary forests are completely protected and preserved;

[Return to Contents page](#)

- Areas of High Conservation Value (HCV) as defined and audited by the HCV Resource Network (<https://www.hcvnetwork.org/>) are protected and preserved;
- Areas of High Carbon Stock (HCS) as defined and audited by the HCS Approach Steering Group (<http://highcarbonstock.org/>) are protected and preserved.

<http://michelinmedia.com/c6/zero-deforestation/>

[http://michelinmedia.com/site/user/files/1/SUSTAINABLE-NATURAL-RUBBER-POLICY\\_VD.pdf](http://michelinmedia.com/site/user/files/1/SUSTAINABLE-NATURAL-RUBBER-POLICY_VD.pdf)

### Toyo Tires Supports SNR-i

Toyo Tire & Rubber Co., Ltd. said it will voluntarily participate in the Sustainable Natural Rubber Initiative (SNR-i), an effort put forward by the International Rubber Study Group ("IRSG") to ensure the sustainability of natural rubber as a resource.

The Toyo Tires Group has established "Collaboration with business partners" as a priority theme of its CSR policy, and has formulated "Toyo Tires Group CSR Procurement Guidelines," which it shares with its partners. Participation in SNR-i will strengthen the company's CSR initiatives across the entire supply chain while contributing to the achievement of a sustainable natural rubber economy.

<http://www.toyo-rubber.co.jp/english/news/2016/160617.html>

### 3D printing using rubber from end-of-life tires

Emerging Objects (EO), a 3-D printing specialist, has manufactured the first object made from end-of-life tires created using the innovative 3-D printing process.

EO has developed a formula for using recycled rubber content in 3D printing inks. The materials are sourced from tires that have been cryogenically reduced to a micronised rubber powder. The powders are supplied by [Lehigh Technologies](#).

EO said, "We envision using this material to make 3D printed outdoor furniture and as 3D printed panels for exterior building components such as wall panels that can be used as for acoustic and sound dampening purposes."

<http://www.emergingobjects.com/project/rubber-pouff/>

### Irish Minister ends voluntary waste tyre reporting

Ireland's Minister for housing, planning and local government is abolishing a scheme of self-regulation for tyre makers and the motor industry. The move comes after a study found that nearly half of all garages are not recycling tyres correctly.

The self-regulation scheme was introduced in 2007 and in the discussions leading up to that, tyre companies were warned that if the self-regulation did not work, then compulsory legislation would be brought in.

<http://www.thetimes.co.uk/article/tyre-makers-hit-the-skids-with-coveney-3nmx202mm>

### Recycled tires can improve soil drainage

A new development from Canada's Dalhousie University suggests using tire-derived aggregate (TDA) in construction projects to improve drainage and absorb vibrations.

TDA is derived from end-of-life tires. The tires are coarsely cut up into chunks larger than about 75mm.

<http://www.dal.ca/news/2016/07/20/revolutionizing-construction.html>

### Rubber from old tires used in rail track beds



Rail engineers in Spain have found that using rubber from end-of-life tires can help improve the life and performance of rail track beds.

A mixture of crushed stone and tire-derived aggregate has been tested along a section of the Almoraima-Algeciras ADIF line in Andalusia. Researchers found it absorbs the vibrations from moving trains, reducing noise from the line. The addition of tyre rubber into the mixture also increases the resistance of the crushed limestone to abrasion and fragmentation.

<http://phys.org/news/2016-07-material-trackbeds-incorporates-rubber-tyres.html>

## Section 3: Investments; additions and closures

### Apollo's factory in Hungary to produce first tires early in 2017

Indian tire maker Apollo tires has said construction of its passenger car tire factory in Hungary is on schedule. It is expected to produce its first tires in the first quarter of 2017.

The company had said it will invest more than EUR400 million for the new unit.

<http://www.thehindubusinessline.com/todays-paper/tp-news/apollo-tyres-to-open-unit-in-hungary-by-next-year/article8863351.ece>

### Michelin adds Agricultural tire factory in Brazil



Michelin is adding capacity for high-technology agricultural tires at its factory in Campo Grande, in Rio de Janeiro, Brazil.

The company did not disclose the capacity or the level of investment. Michelin did say that the tires would use its Ultraflex technology in which the tires are reinforced with hybrid fibres using a combination of aramid and nylon. This allows the tires to operate at low pressure and this, in turn allows farmers to reduce the soil compaction underneath the tires. This improves crop yields.

The Ultraflex technology also allows equipment operators to drive at high speeds from field to field, without compromising tire life.

<http://agricola.michelin.com.br/br/Homepage-content/NOTICIAS-MICHELIN-AGRICOLA-NO-BRASIL/PNEUS-AGRICOLAS-DE-TECNOLOGIAS-MICHELIN-SERAO-FABRICADOS-NO-BRASIL>

### Michelin to build huge tire plant in Mexico

Michelin is planning to build a large tire factory in Mexico to manufacture high-end tires for passenger cars and light trucks. The first tires are expected to come off the production line in fourth-quarter 2018.

The new plant in León (Guanajuato state) is the Group's 21st in North America and 69th worldwide.

The 142,000-m<sup>2</sup> plant represents an investment of EUR450 million (\$510 million). Construction is expected to begin in second-half 2016.

During the initial production phase, it is expected to manufacture four to

five million high-performance tires a year. Most of these will be produced as original equipment for customers who make cars and light trucks. The plant's location was chosen because it is just a three-hour drive from the production facilities of 18 large car manufacturers with operations in Mexico.

<http://michelinmedia.com/c6/michelinannouncesnewfacilityinmexico/>

### Continental returns to agricultural tire business



Continental said it is investing EUR49.9m in a new factory to make premium-brand radial agricultural tires. The new factory will be co-located with its existing car tire factory in Lousado, Portugal. It will add around 125 jobs.

Conti sold its agriculture business to Mitas / CGS in 2004. Part of that sale agreement allowed Mitas to use the Continental name for 15 years, until 2019. However, with the sale of Mitas to Trelleborg, that agreement is now scheduled to end in 2017, two years earlier than initially agreed.

This means Continental is able to make tires under its own premium brand name from next year, and this is significant in the timing of the most recent announcement.

Conti also said it will invest EUR2.5 million in a new Research & Development Centre in Lousado. The unit will drive new product growth in the agricultural segment and will work closely with Continental's Central Research & Development department in Hanover, Germany. At the start will employ five recently recruited engineers. It is foreseen to increase the workforce up to ten highly qualified employees.

<http://www.continental-tires.com/specialty/media-services/news-room/20160630-radio-agricultural-production>

### Sumitomo to build USD95m TBR plant in Brazil

Sumitomo Rubber Industries, Ltd. (SRI) is to begin production of Dunlop-brand truck and bus tires at the company's factory in Brazil. The plant is designed to serve the Brazilian domestic market.

SRI plans to invest a total of 312 million real (approx. USD95m) to install new production equipment at the existing Brazil Factory in Fazenda Rio Grande, Parana State.

Local production of truck and bus tires is scheduled to begin in March of 2019 with an initial capacity of 500 tires per day.

SRI's Brazil Factory began producing passenger car and light truck tires in

October 2013. At the end of 2015 capacity was 15,000 tires per day. SRI currently imports truck and bus tires for the domestic market. The Brazilian market for these tires is expected to grow by about 2% each year.

[http://www.srigroup.co.jp/english/news/2016/2016\\_062.html](http://www.srigroup.co.jp/english/news/2016/2016_062.html)

### Gajah Tunggal to expand TBR production

Gajah Tunggal – closely aligned with GiTi Tire – is planning to expand its capacity for truck and bus radial (TBR) tires in Indonesia.

In May 2016, the company said it had allocated USD80m – 100m for capital expenditure, but did not say how it will be spent. The company now says it expects to spend USD30m – 40m on increasing TBR capacity upgrade TBR production to fill the gap in the US and global markets left by Chinese TBR producers. The remaining USD40m – 50m will go for routine maintenance on existing equipment.

Comment: Many tire makers divide their capital expenditure budgets between on-going maintenance of existing equipment and investments to add additional capacity.

Currently, Gajah Tunggal has daily capacity for 55,000 car radial tires (PCR); 95,000 tires for two-wheelers and 14,000 inner tubes. It is reported to be operating at around 70% - 80% capacity.

<http://www.shangbaoindonesia.com/?p=158414>

### GiTi Tire to expand US R&D centre



GiTi Tire Group's is planning to double the size of its North American tech centre, to support its tire manufacturing plant, nearing completion in South Carolina.

The tech centre opened in Uniontown, Ohio in 2015.

The Uniontown facility is one of five R&D centres the Singapore-based tire maker operates — the others are in China, Indonesia, United Kingdom (testing centre only) and Germany.

The centre uses computer-aided design technologies and has tire testing capabilities. Soon, more testing equipment will be added and the staff will be increased, said Hamid Aboutorabi, director of the R&D centre. He declined to give an employment figure, saying only that the centre will be "growing very rapidly, probably more than doubling in size."

<http://www.craigslist.com/article/20160625/NEWS/160619967/giti-tire-to-expand-uniontown-rd-center>

## Section 3: Investments; additions and closures

### Turkish tire maker BRISA to add PCR factory, TBR capacity

BRISA, the tire-making joint venture between Turkey's Sabanci group and Japan's Bridgestone has applied for a loan of USD150m from the European Bank of Reconstruction and development (EBRD).

EBRD said the loan would be used to part-fund a new car-tire factory and expand existing truck & bus (TBR) tire capacity.

In the associated document, EBRD said, "The Project envisages that the new PCR plant in Aksaray, Turkey, will have an annual production capacity of almost 4.2 million tires for passenger cars and light commercial vehicles.

It added, BRISA's existing factory in Izmit will increase its capacity for the truck and bus segment.

Total project costs are estimated at USD330m.

Brisa is incorporated in Turkey for the manufacturing, marketing and selling of tyres and rubber products. The Company operates as a joint venture between Bridgestone Corporation and Haci Omer Sabanci Holding A.i. each holding 43.63% equity stake. The Company is listed on Borsa Istanbul with a circa 10% free float.

<http://www.ebrd.com/work-with-us/projects/psd/brisa-tyres.html>

### Indonesia's Multistrada to add PCR capacity

Indonesian tyre maker PT Multistrada Arah Sarana Tbk, is aiming for a "ten to 15 per cent increase in revenue" during 2016, according to UK magazine, Tyres & Accessories (T&A). Most of the increase would come from higher exports.

T&A quoted Pieter Tanuri, president director of Multistrada saying Multistrada intends to add production capacity for both car and motorcycle tyres. T&A said, Multistrada has daily capacity for 28,500 car tires and 16,000 two-wheeler tyres. In 2015 the company sold 6.8 million car tyres, down 12 percent on 2014. Motorcycle tyre sales increased by three per cent to 3.3 million units. Car tyre sales were down following a 14 per cent fall in exports. Despite this Multistrada has taken out a US\$30 million loan to increase production capacity for both car and motorcycle tires.

Daily production capacity for passenger car tyres is expected to increase by 3,500 units per day to 32,000 tyres through a debottlenecking project, and this will help lift daily motorcycle tyre production capacity by 2,000 units a day to 18,000 tyres.

<http://www.tyrepress.com/2016/07/multistrada-to-increase-production-capacity-despite-lower-car-tyre-exports/>

### CAERI buys MTS Flat-Trac test machine

MTS said it has sold its first advanced Flat-Trac Rolling Road System in China. China Automotive Engineering Research Institute (CAERI) has bought the system for use in CAERI's Automotive Wind Tunnel Centre in Chongqing, South West China.

The Flat-Trac will be integrated into CAERI's aero-acoustics wind tunnel laboratory. By using this system in conjunction with the wind tunnel, CAERI technicians will be able to carry out comprehensive tests on vehicles which take into account the air flow between the vehicle and road surface, along with the effect of rotating wheels on their aerodynamic profiles, thereby making the simulation as realistic as possible. This leads to better optimisation of vehicle shape to reduce drag, thus boosting fuel efficiency levels, curbing emissions and reducing noise.

[http://www.mts.com/en/about/news/MTS\\_2014141](http://www.mts.com/en/about/news/MTS_2014141)

### LG Chem to invest USD350m in elastomers



LG Chem said in late July it will invest a total of KRW400 billion (\$351.7 million) to increase capacity for an unspecified range of elastomers. The bulk of the investment will be spent on building more manufacturing facilities in Daesan, South Chungcheong Province. The new production lines will have a capacity of some 200,000 tons of elastomers each year, the company said. This is the nation's largest elastomer-production facility. The company currently has annual capacity for some 90,000 tons of elastomers, including BR, E-SBR, S-SBR and NBR as well as SBS styrenic block copolymers. The expansion, which will be on stream in 2018, should allow the firm to manufacture more than 290,000 tons of elastomers annually. The company did not say what types of material would be made in the new facilities.

[http://m.koreatimes.co.kr/phone/news/view.jsp?req\\_newsidx=210255](http://m.koreatimes.co.kr/phone/news/view.jsp?req_newsidx=210255)

## Section 5: Top tire makers

### Bridgestone names new CEO for EMEA region

Bridgestone has named Paolo Ferrari as the new President and Chief Executive Officer (CEO) of its Europe, Middle East, and Africa (EMEA) business unit. He will be based in Zaventem, Belgium. Mr. Ferrari also will be a member of the Bridgestone Europe NV/SA Board of Directors and Executive Committee.

Mr. Ferrari joins Bridgestone from Pirelli where, most recently, he had been the CEO of Pirelli's LATAM division, prior to that had been CEO and Chairman of the North American business.

<http://www.bridgestone.eu/corporate/press-releases/2016/07/new-president-and-chief-executive-officer-for-bridgestone-europe-middle-east-and-africa/>

### Bridgestone developing telematics fleet solutions

In a further move to find a business model that adds more value than a physical tire, Bridgestone is working in Brazil to deliver information about tire condition to fleet managers.

In mid-July Bridgestone said it is now verifying a fleet solution using its proprietary IT system called Tirematics™ in cooperation with Rio de Janeiro's Bus Rapid Transit (BRT) operators.

The system uses sensors to measure air pressure and temperature of tires. It then sends this data over a cellular network, permitting fleet manager to remotely monitor real-time information about the tires as well as vehicle location.

<http://www.bridgestone.com/corporate/news/2016071301.html>

### Bridgestone makes Senior Management Changes

Bridgestone has announced the retirement of Gary Garfield, president and CEO of Bridgestone Americas, effective Dec. 31, 2016.

The company has taken the opportunity to change around many of its executives in North America.

Bridgestone Americas has announced that Gordon Knapp, the company's Chief Operating Officer (COO), will become Bridgestone Americas' President and CEO on Sept. 1, 2016, and William "Bill" Thompson, the company's current Chief Financial Officer (CFO), will succeed Knapp as COO on that date.

Garfield will remain as an advisor to the company and the new leadership team until year-end. Garfield also will retire from his position as Executive Vice President and Executive Officer of Bridgestone Americas' parent company, Bridgestone Corporation, effective Aug. 31.

Eduardo Minardi, CEO and Chairman of Bridgestone Europe becomes Chairman of Bridgestone Americas

<http://www.bridgestone.com/corporate/news/2016072801.html>

### Goodyear Reports Q2, H1 Results

Goodyear has reported strong profit growth an improvement in margins and higher volumes, but revenues fell by 2% in the first six months of the year, suggesting a decline in selling prices.

(In millions, except per share amounts)	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
NET SALES	\$3,879	\$4,172	\$ 7,570	\$ 8,196
Cost of Goods Sold	2,813	3,027	5,514	6,093
Selling, Administrative and General Expense	593	648	1,208	1,256
Rationalisations	48	46	59	62
Interest Expense	104	110	195	217
Other (Income) Expense	20	13	26	(119)
Income before Taxes	301	328	568	687
United States and Foreign Taxes	93	120	171	243
Net Income	208	208	397	444
Less: Minority Shareholders' Net Income	6	16	11	28
Goodyear Net Income	\$ 202	\$ 192	\$ 386	\$ 416

#### Americas

(in millions)	Second Quarter		Six Months	
	2016	2015	2016	2015
Tire Units	18.8	20.0	36.8	39.2
Sales	\$2,090	\$2,416	\$4,041	\$4,659
Segment Operating Income	291	358	551	606
Segment Operating Margin	13.9%	14.8%	13.6%	13.0%

#### Europe, Middle East and Africa

(in millions)	Second Quarter		Six Months	
	2016	2015	2016	2015
Tire Units	15.4	14.8	31.6	30.7
Sales	\$1,261	\$1,265	\$2,512	\$2,596
Segment Operating Income	148	108	228	181
Segment Operating Margin	11.7%	8.5%	9.1%	7.0%

#### Asia Pacific

(in millions)	Second Quarter		Six Months	
	2016	2015	2016	2015
Tire Units	7.3	6.0	14.6	11.7
Sales	\$528	\$491	\$1,017	\$941
Segment Operating Income	92	84	171	151
Segment Operating Margin	17.4%	17.1%	16.8%	16.0%

[https://corporate.goodyear.com/en-US/media/news/goodyear\\_reports\\_second\\_quarter\\_first\\_half\\_results\\_2016.html](https://corporate.goodyear.com/en-US/media/news/goodyear_reports_second_quarter_first_half_results_2016.html)

### Michelin marks 70 years since inventing the Radial

Michelin invented the radial construction of tires in 1946. Prior to that, all tires had been cross-ply or bias-ply construction.

In 1946, Michelin engineers had a radically new idea. They added an extra thread to the existing diagonal structure to make a 90° angle with the tire's median axis.

The tread surface, the part of the tire in contact with the road, was more rigid providing better grip and greater resistance. The sidewalls remained flexible but their load-bearing capacity increased which improved driving comfort. Deformations were reduced, limiting energy loss and therefore fuel consumption.

It was this invention that took Michelin from a small, regional company to a global presence. Because US-based tire makers were slow to convert to radial designs, Michelin had a great opportunity to expand into the US and took it.

That propelled Michelin to one of the top tire makers in the world.

<http://www.michelin.com/eng/media-room/press-and-news/michelin-news/Passion/The-70th-anniversary-of-the-radial-revolution>

### Continental supplies tires for Volvo Concept

Continental is the official tyre supplier of the Volvo Concept Truck project. The main goal of the project is to significantly improve the freight-moving efficiency of future trucks and reduce their greenhouse gas emissions. The project focuses on the complete vehicle, both truck and trailer.

Following joint research, the concept truck was equipped with Continental tyres 315/70 R22.5 for both steer & drive axles, while the trailer of the concept truck was equipped with 385/55 R22.5 tyres.

<http://www.continental-tyres.co.uk/truck/media-services/news-room/20160721volvoconcept>

### Yokohama uses Exa's aerodynamic model

Computer simulation company Exa Corp. says Yokohama Rubber used its software to develop advanced aerodynamics on its tires.

Exa said its PowerFLOW software has helped Yokohama to develop pronounced fins on the tire sidewall assist to streamline airflow around the

## Section 5: Top tire makers

tires when in motion and contribute to the overall efficiency and safety of the vehicle.

<http://investor.exa.com/releasedetail.cfm?releaseid=972921>

### Michelin reports higher profit, volume and margins on lower sales in the first half

Michelin reported improvements in sales, margins and profits, despite a 2% decline in sales for the six months to June 2016. The company reported Volumes up 2.5%, beating the market in every segment, rising 4% in Passenger car and Light truck tires and 1% in Truck tires, and declining by 2% in the Specialty businesses.

(In EUR Millions)	First-Half 2016	First-Half 2015
<b>Net Sales</b>	<b>10,292</b>	<b>10,497</b>
EBITDA From Recurring Activities	2,085	1,913
EBITDA Margin On Recurring Activities	20.3%	18.2%
Operating Income From Recurring Activities*	1,405	1,262
Operating Margin On Recurring Activities	13.7%	12.0%
Passenger Car/Light Truck Tires And Related Distribution	13.8%	10.8%
Truck Tires And Related Distribution	9.9%	9.6%
Specialty Businesses	20.6%	21.5%
Operating Income/(Loss) From Non-Recurring Activities	(51)	(17)
Operating Income	1,354	1,245
<b>Net Income</b>	<b>769</b>	<b>707</b>
Earnings Per Share (In EUR)	4.24	3.79
Capital Expenditure	623	632
Net Debt	1,719	1,798
Gearing	18%	18%
Employee Benefit Obligations	5,273	4,780
Free Cash Flow	8	(219)
Employees On Payroll	112,400	112,600

Michelin Segment Information	Net Sales		Operating Income From Recurring Activities		Operating Margin On Recurring Activities	
	H1 2016	H1 2015	H1 2016	H1 2015	H1 2016	H1 2015
In Eur Millions						
Passenger Car/Light Truck Tires And Related Distribution	5,916	5,860	814	632	13.8%	10.8%
Truck Tires And Related Distribution	2,907	3,068	288	293	9.9%	9.6%
Specialty Businesses	1,469	1,569	303	337	20.6%	21.5%
Group	10,292	10,497	1,405	1,262	13.7%	12.0%

Global tire markets: First-Half 2016	% change YoY (in number of tires)	Europe (Including Russia & CIS)*	Europe (Excluding Russia & CIS)*	North America	Asia (Excl. India)	South America	Africa / India / Middle East	Total
Passenger Car and Light Truck Tires	Original equipment Replacement	+5% +2%	+7% +3%	+3% +2%	+2% +5%	-19% -1%	+7% +4%	+2% +3%
Truck Tires (radial and bias)	Original equipment Replacement	+5% +5%	+6% +5%	-12% +2%	+1% -5%	-25% -1%	+13% +0%	+0% -2%

<http://www.michelin.com/eng/media-room/press-and-news/press-releases/Finance/Financial-Information-for-the-Six-Months-Ended-June-30-2016>

### Conti names Enno Straten as Head of Commercial Specialty Tires



As of July 1, 2016, Enno Straten takes over as Managing Director of Continental's business unit Commercial Specialty Tires (CST). He succeeds Dr. Michael Märtens who left the company last year to concentrate on other projects outside the industry. Straten, who has worked at Continental for 17 years, reports directly to Dr. Andreas Esser, Executive Vice President of Continental's business unit Commercial Vehicle Tires.

<http://www.continental-tires.com/specialty/media-services/news-room/20160623-enno-straten>

### Yokohama completes acquisition of Alliance Tire

Tokyo – The Yokohama Rubber Co., Ltd., said that on July 1 it completed the acquisition of the Alliance Tire Group B.V. (ATG). Yokohama first announced the agreement to acquire ATG on March 25, 2016. ATG will be included in Yokohama's consolidated accounts from the third quarter of fiscal year 2016 (ending December 31, 2016), and the expected impact on the Company's full-year consolidated financial statements will be announced as soon as possible

<http://www.y-yokohama.com/release/?id=2637&lang=en>

### Kumho tire share for sale

Korean banks owed money by Kumho are seeking to sell their shares in order to recover their capital.

In a 2010 restructuring some of the company's debts were converted to shares. The banks are now seeking to get their money back by selling the shares. The former creditors own some 42.1 percent of the total equity in the company. The banks are expected to post a sales notice as early as September. The sale process could then begin in January.

Kumho Asiana Group Chairman Park Sam-koo said he expects to buy back the shares. In addition some tire makers have expressed interest in buying the shares, so interest could be strong.

Kumho Tire operates four plants in China, and one each in Vietnam and the United States. In 2015, the company generated operating profits on revenues of 39.1 billion won (USD35.7 million) on revenues of 3.04 trillion won (USD2775 million).

[http://www.koreatimes.co.kr/www/news/biz/2016/07/123\\_209584.html](http://www.koreatimes.co.kr/www/news/biz/2016/07/123_209584.html)

### Cheng Shin chairman talks Maxxis globalisation strategies

UK magazine Tyres & Accessories secured an interview with Robert Lo, chairman of Cheng Shin Rubber Ind. Co. and Derek McMartin, managing director of Maxxis International UK.

The pair were keen to highlight a new range of tires developed specifically for the European market.

The new M36+, launched at Reifen, is perhaps the most prominent example of this: "This is our first run-flat for the European market. You'll



see more dedicated product for Europe released going forwards.” Martin added, “Runflat tyres are now available in our (European) markets, and all-season tyres are selling very well.”

Original equipment business is also a global target for Maxxis: “Major car manufacturers have been testing our tyres, and their performance compared positively with the existing original equipment fitments. People will start to take us more seriously when they see us on OE.” Lo and McMartin add that this strategy covers many of the segments for which the company produces tyres, explicitly referring to one of the manufacturer’s historically strong sectors: “We want to push this in the two-wheel market.”

<http://www.tyrepress.com/2016/07/cheng-shin-chairman-talks-maxxis-globalisation-strategies-on-reifen-stand/>

## Kenda Tire discusses Tech centre in North America

Taiwan’s Kenda Tire held an open house at its technical centre in Akron, Ohio. The 4600m<sup>2</sup> unit opened in November 2015 and is located in Green, Ohio, about 11 miles from Akron.

So far Kenda has invested some \$2.5 million on equipment and facilities at the centre. Kenda currently employs 25 people at the centre, up from 18 when it first opened.

The facility is specifically set up to develop technology and products to supply to car makers in the Americas.

Kenda also has plans to set up a similar facility in Europe and has tasked one of its engineers, Frits van der Steegen, to manage the project.

<http://www.tirebusiness.com/article/20160628/NEWS/160629936?template=printart>

## Section 6: Upstream and raw materials

### Asahi Kasei, JSR adding S-SBR materials

Leading Japanese suppliers of synthetic rubber are building their business in solution-SBR.

Asahi Kasei is committing 5 billion yen (\$47.4 million) to re-structure production facilities in Singapore. The company plans to boost annual production capacity of solution-styrene butadiene rubber (S-SBR) at the location by 30,000 tons, or 30%, by the latter half of 2018.

That will bring Asahi Kasei’s global production capacity to 260,000 tons per year.

Meanwhile, JSR established a sales agency in Dusseldorf, Germany, in June. The company doubled the number of S-SBR sales employees working in Europe to about a dozen or so.

In Japan, JSR has created a tech centre for tire applications at its Mie Prefecture research facility. The centre employs dozens of staff members, consolidating product development functions previously scattered across locations.

Global demand for S-SBR is estimated at roughly 1 million to 1.1 million tons in 2015 and growing at 6-7% annually.

The spate of fuel efficiency scandals at car manufacturers has spurred renewed interest in technology that can reduce fuel consumption.

<http://asia.nikkei.com/Business/Trends/Asahi-Kasei-JSR-putting-high-mileage-rubber-into-high-gear>

### Evonik opens competence centre for silanes in Germany

In mid-July, Evonik opened a EUR20million silanes competence centre at its site in Rheinfelden Germany. The unit employs 100 and occupies around 3,500 m<sup>2</sup> of floor space. Silanes are used to help silica interact with rubber in advanced tire compounds, but also in many other applications.

Evonik produces silanes worldwide at sites in Germany, Belgium, China, and the USA. The Group also operates laboratories to provide applied technology support and regional specialised research in Germany, China, India, Japan, and the USA. The portfolio includes a wide range of chlorosilanes as well as organofunctional and sulfur-functional silanes.

[http://corporate.evonik.com/en/media/press\\_releases/Pages/news-details.aspx?newsid=60788](http://corporate.evonik.com/en/media/press_releases/Pages/news-details.aspx?newsid=60788)

### Evonik opens silica plant in Brazil

Evonik Industries put its precipitated silica production plant in Americana (São Paulo, Brazil) into operation on July 20, 2016. This material is mainly used in the manufacture of low rolling resistance tires. This is the first

plant for highly dispersible silica (HD silica) to come on stream in South America. Evonik’s investment for this plant is around EUR50m.

The use of silica in combination with silanes means that tires can be produced with a much lower rolling resistance, which can reduce fuel consumption by up to eight percent (compared to conventional automobile tires). Dr. Johannes Ohmer, member of the Board of Management of the Resource Efficiency Segment, explained: “We are the only manufacturer that offers both components and are thus an expert partner for high-performance tire compounds for our customers in the tire and rubber industries.”

[http://corporate.evonik.com/en/media/press\\_releases/Pages/news-details.aspx?newsid=60908](http://corporate.evonik.com/en/media/press_releases/Pages/news-details.aspx?newsid=60908)

### Malaysia’s NR production falls

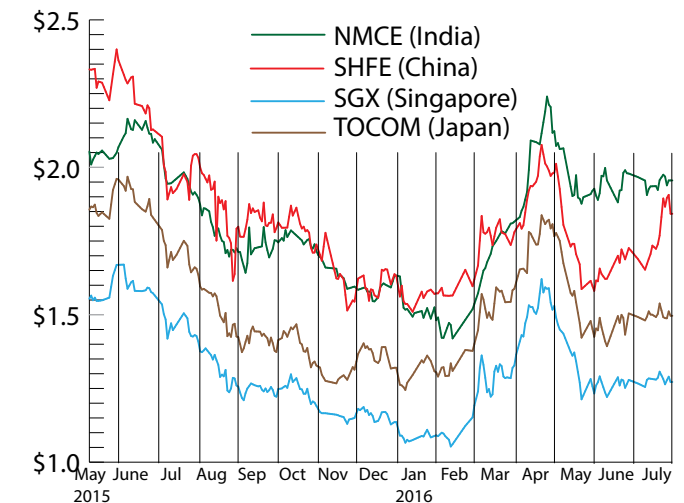
Malaysia’s natural rubber (NR) production in May 2016 stood at 33,565 tonnes, down 19.7 percent on April 2016, and down by 14.1 percent on May 2015.

Exports amounted to 51,146 tonnes down by 9.0 percent on the previous month, but up by 26.2% on May 2016. The five most important destinations for NR exports were China, Germany, Iran, U.S.A. and Korea.

Meanwhile, domestic consumption of NR in May 2016 fell by 3.2 per cent to 39,599 tonnes from previous month and grew by 1.0 per cent over the year-ago figure.

[https://www.statistics.gov.my/index.php?r=column/cthemeByCat&-cat=73&bul\\_id=TGtwTFVpQ0tDemxjVlYxRUxoNWVldz09&menu\\_id=Z-OVTZGU1UHBT1VJMFlpaXRRR0xpdz09](https://www.statistics.gov.my/index.php?r=column/cthemeByCat&-cat=73&bul_id=TGtwTFVpQ0tDemxjVlYxRUxoNWVldz09&menu_id=Z-OVTZGU1UHBT1VJMFlpaXRRR0xpdz09)

### NR prices creep up in China



## Section 8: Trade and statistics

### US rubber makers seek tariffs on imported E-SBR

A US legal firm has written to Lisa R. Barton, Secretary, USITC; requesting the Commission to conduct an investigation under section 731 of the Tariff Act of 1930 regarding the imposition of anti-dumping duties on U.S. imports of Emulsion Styrene Butadiene Rubber from Korea, Mexico, and Poland.

According to the petitions, over 70% of E-SBR is used to make tires.

The Petitioner alleges dumping margins as follows:

Brazil – 59.3 percent to 69.4 percent

Korea – 22.4 percent to 44.2 percent

Mexico – 23.2 percent

Poland – 40.4 percent to 44.8 percent

<https://www.usitc.gov/3164.htm>

<http://www.natlawreview.com/article/new-antidumping-duty-petitions-emulsion-styrene-butadiene-rubber-brazil-korea-mexico>

### Indian tire makers seek tariffs as Chinese imports soar

India's imports of radial tyres continued to grow in the three months to June 2016. This is driving local manufacturers to repeat demands for action against dumping by China. Imports of truck and bus radial (TBR) tyres surged 40% during April-June, while those of passenger car radials increased 22%, the Automotive Tyre Manufacturers Association said. Tyre dealers, however, said they are against any move to ban imports or impose a new duty, and cited "overpricing" by the local manufacturers for the increased imports.

Imports of TBRs reached 150,000 units a month from an average 100,000 units in fiscal 2016, ATMA said, citing government data.

Tires originating from China made up 96% of all TBR imports in the three months to June 2016.

According to ATMA, China's export price of TBR is significantly lower than the price of such products in the Chinese domestic market. The per unit import price from China is even less than the cost of raw materials that go into the making of tyres, it alleged.

The industry says 5,000-6000 jobs have been lost in the past few months, especially contractual ones, with new hiring at a halt.

<http://economictimes.indiatimes.com/industry/auto/news/tyres/truck-radial-tyres-imports-up-40-per-cent-during-april-june-quarter/article-show/53329722.cms>

[http://www.business-standard.com/article/companies/tyre-industry-petitions-against-imports-from-china-116070400258\\_1.html](http://www.business-standard.com/article/companies/tyre-industry-petitions-against-imports-from-china-116070400258_1.html)

### European tire sales less buoyant in Q2

Europe's tire makers say that sales of tires in the European region slowed in the three months to June 2016.

ETRMA released statistics from its members, saying the second quarter of 2016 showed a less dynamic market compared to the first three months of the year. This was particularly the case for the sale of consumer tyres in the month of June, which went down by 2%.

Sales in the agricultural segment remain critically low and consistently decreasing, with a staggering -7% for the second quarter and an even worse -7.8% when looking at the full first semester. "

Type (000 units)	Q2 / 2015	Q2 / 2016	Change	H1 / 2015	H1 / 2016	Change
Car tires	48,585	49,293	+1.5%	100,559	102,574	+2%
Truck tires	1,404	1,410	+0.4%	3,554	3,683	+3.6%
Agri Tires	415	386	-7%	851	784	-7.8%
Two Wheeler	2,422	2,665	+10%	5,719	6,102	+6.7%

[http://www.etrma.org/uploads/Modules/Newsroom/20160714---eu-tyre-market-2q-2016--1-six-months-\(3\).pdf](http://www.etrma.org/uploads/Modules/Newsroom/20160714---eu-tyre-market-2q-2016--1-six-months-(3).pdf)

### EU passenger car registrations rise in June

In June 2016, the European passenger car market grew strongly for the 34th consecutive month. Registrations in June increased by 6.9% compared to June 2015, reaching 1,459,508 units.

Among the major markets, Italy (+11.9%), Spain (+11.2%), Germany (+8.3%) recorded positive performance, while the French market remained stable (+0.8%). Demand in the UK fell slightly in June. Registrations went down by -0.8%, mainly due to a drop in private sales.

**Over the first half of 2016**, new passenger car registrations increased by 9.4% in the EU, totalling 7,842,965 units. All major markets posted growth, contributing to the overall upturn of the European market. The Italian (+19.2%) and Spanish (+12.5%) car markets saw double-digit growth over the period, followed by France (+8.3%), Germany (+7.1%) and the UK (+3.2%).

<http://www.acea.be/press-releases/article/passenger-car-registrations-9.4-in-first-semester-6.9-in-june>

### EU truck registrations: +13.5% in H1; +13.3% in June

In June 2016, demand for new commercial vehicles in the EU increased for the 18th consecutive month, totalling 223,519 units, a rise of 13.3%. All major markets grew, with Italy (+29.9%), Spain (+14.5%), Germany (+11.3%), France (+11.1%) and the UK (+2.8%) posting the strongest growth.

In the first half of 2016, the EU market expanded (+13.5%), totalling 1,170,263 commercial vehicles. During the same period, Italy (+30.8%), Spain (+14.0%), France (+12.7%), Germany (+10.4%) and the UK

(+3.6%) all posted growth.

Light commercial vehicles (below 3.5 tonnes)

In June 2016, new registrations of light commercial vehicles totalled 187,158 units, up (+14.2%) compared to June 2015. This marked the 34th consecutive month of growth in this segment. Italy (+27.6%), Spain (+17.3%), Germany (+12.9%) and France (+11.3%) all contributed positively to the upturn with double-digit percentage gains. The UK market also grew (+2.7%) last month, although at a more modest rate.

Heavy trucks (over 16 tonnes)

June 2016 results show an increase in new heavy truck registrations (+13.0%), totalling 26,122 units. Italy (+62.7%) largely contributed to this positive outcome, followed by France (+17.9%), Germany (+9.8%) and the UK (+1.1%). The Spanish market showed a decline (-15.7%), which can be explained by the fact that the PIMA Transport Plan boosted registrations by more than 100% in June 2015.

Medium trucks (between 3.5t and 16t)

In June 2016, 33,031 new trucks were registered in the EU, up (+10.3%) compared to June 2015. Among major markets results for trucks were diverse. Both Italy (+53.9%) and France (+15.7%) made a significant contribution to the overall upturn, while Spain (-6.6%) performed less well than last year.

Buses and coaches (Over 3.5 tonnes)

In June 2016, new bus and coach registrations decreased (-4.8%) compared to June 2015, totalling 3,330 units. Spain (+34.2%), Germany (+29.4%) and the UK (+12.3%) positively contributed to the overall expansion, while France (-30.2%) performed less well than in June 2015.

<http://www.acea.be/press-releases/article/commercial-vehicle-registrations-13.5-in-the-first-half-of-the-year-13.3-in>

### Everything you need to know about emissions testing

The new CarEmissionsTestingFacts.eu website provides a fact-based overview on all things related to the testing of car emissions in Europe. [The website has been created by ACEA, the federation of car makers in Europe. It comes in response to the scandal over emissions testing surrounding VW and other car makers.](http://www.acea.be/press-releases/article/commercial-vehicle-registrations-13.5-in-the-first-half-of-the-year-13.3-in)

<http://www.acea.be/news/article/caremissionstestingfacts.eu-everything-you-need-to-know-about-emissions-tes>

## Section 8: Trade and statistics

### US ITC raises duties on China-made OTR tires

On 28 June, the United States officially announced that it is increasing duties on certain off-road tires (OTR) made in China. The new rate is effective from 23 March 2015. The official announcement was published in the Federal register of 22 July 2016.

Exporter	Producer	Margin (%)
Aeolus Tyre Co., Ltd	Aeolus Tyre Co., Ltd	13.92
Double Happiness Tyre Industries Corp., Ltd	Double Happiness Tyre Industries Corp., Ltd	13.92
Jiangsu Feichi Co., Ltd	Jiangsu Feichi Co., Ltd	13.92
Oriental Tyre Technology Limited	Midland Off The Road Tire Co., Ltd	13.92
Oriental Tyre Technology Limited	Midland Specialty Tire Co., Ltd	13.92
Oriental Tyre Technology Limited	Xuzhou Hanbang Tyres Co., Ltd	13.92
Qingdao Etyre International Trade Co., Ltd	Shandong Xingda Tyre Co. Ltd	13.92
Qingdao Etyre International Trade Co., Ltd	Shandong Xingyuan International Trade Co. Ltd	13.92
Qingdao Etyre International Trade Co., Ltd	Shandong Xingyuan Rubber Co. Ltd	13.92
Qingdao Hengda Tyres Co., Ltd	Qingdao Hengda Tyres Co., Ltd	13.92
Qingdao Milestone Tyre Co., Ltd	Qingdao Shuanghe Tyre Co., Ltd	13.92
Qingdao Milestone Tyre Co., Ltd	Shandong Zhentai Tyre Co., Ltd	13.92
Qingdao Milestone Tyre Co., Ltd	Shifeng Double-Star Tire Co., Ltd	13.92
Qingdao Milestone Tyre Co., Ltd	Weifang Longtai Tyre Co., Ltd	13.92
Qingdao Qizhou Rubber Co., Ltd	Qingdao Qizhou Rubber Co., Ltd	13.92
Qingdao Sinorient International Ltd	Qingdao Hengda Tyres Co., Ltd	13.92
Qingdao Sinorient International Ltd	Shifeng Double-Star Tire Co., Ltd	13.92
Qingdao Sinorient International Ltd	Tengzhou Broncho Tyre Co., Ltd	13.92
Shandong Huitong Tyre Co., Ltd	Shandong Huitong Tyre Co., Ltd	13.92
Shandong Jinyu Tyre Co., Ltd	Shandong Jinyu Tyre Co., Ltd	13.92
Shandong Taishan Tyre Co., Ltd	Shandong Taishan Tyre Co., Ltd	13.92
Shandong Wanda Boto Tyre Co., Ltd	Shandong Wanda Boto Tyre Co., Ltd	13.92
Shandong Xingyuan International Trading Co., Ltd	Shandong Xingda Tyre Co., Ltd	13.92
Shandong Xingyuan International Trading Co., Ltd	Xingyuan Tyre Group Co., Ltd	13.92
Techking Tires Limited	Shandong Xingda Tyre Co. Ltd	13.92
Techking Tires Limited	Shandong Xingyuan International Trade Co. Ltd	13.92
Techking Tires Limited	Shandong Xingyuan Rubber Co. Ltd	13.92
Triangle Tyre Co., Ltd	Triangle Tyre Co., Ltd	13.92
Wendeng Sanfeng Tyre Co., Ltd	Wendeng Sanfeng Tyre Co., Ltd	13.92
Kenda Rubber (China) Co., Ltd./Kenda Global	Kenda Rubber (China) Co., Ltd	13.92
Qingdao Aonuo Tyre Co., Ltd	Qingdao Aonuo Tyre Co., Ltd	13.92

<https://www.federalregister.gov/articles/2016/07/22/2016-17308/certain-new-pneumatic-off-the-road-tires-from-the-peoples-republic-of-china-notice-of-amended-final>

### Indian Rubber Board summarises 2016

India's Rubber Board publishes a monthly bulletin covering developments in the industry in India. The May edition covers the fiscal year from April 2015 to March 2016.

India Production And Consumption of NR & SR (Metric Tonnes)						
		March 2016 (1)	March 2015 (2)	April 2015 to March 2016 (3)	April 2014 to March 2015 (4)	Change in (3) & (4)
<b>PRODUCTION</b>						
Natural Rubber (NR)	Ribbed Smoked Sheet (RSS)	17,720	20,710	375,495	451,090	
	Solid Block Rubber	8730	8510	92,785	98,865	
	Latex Concentrates (drc)	5580	5030	71,835	66,520	
	Others	970	750	21,885	28,525	
	<b>Total</b>	<b>33,000</b>	<b>35,000</b>	<b>562,000</b>	<b>645,000</b>	<b>-12.9%</b>
	Styrene Butadiene (SBR)	10,798	4193	76,999	35,738	
Synthetic Rubber (SR)	Polybutadiene(BR)	11,200	10,440	111,807	105,925	
	Others	1089	540	11,039	10,228	
	<b>Total</b>	<b>23,087</b>	<b>15,173</b>	<b>199,845</b>	<b>151,891</b>	<b>31.6%</b>
<b>NR &amp; SR total</b>	<b>Total NR &amp; SR</b>	<b>56,087</b>	<b>50,173</b>	<b>761,845</b>	<b>796,891</b>	<b>-4.4%</b>
<b>CONSUMPTION *</b>						
Natural Rubber (NR)	Ribbed Smoked Sheet (RSS)	45,490	46,570	459,570	518,440	
	Solid Block Rubber	34,460	32,420	426,215	394,240	
	Latex Concentrates (drc)	6340	8215	86,530	86,005	
	Others	1890	2145	22,100	22,225	
	<b>Total</b>	<b>88,180</b>	<b>89,350</b>	<b>994,415</b>	<b>1,020,910</b>	<b>-2.6%</b>
	Out of which Auto Tyre Manufacturers	58,300	60,239	663,495	680,849	-2.5%
Synthetic Rubber (SR)	Styrene Butadiene (SBR)	21,900	20,575	250,610	217,450	
	Polybutadiene(BR)	15,425	14,845	172,155	171,085	
	Others	10,870	11,625	130,605	147,595	
	<b>Total</b>	<b>48,195</b>	<b>47,045</b>	<b>553,370</b>	<b>536,130</b>	<b>3.2%</b>
		Out of which Auto Tyre Manufacturers	33,036	31,890	377,090	367,798
<b>NR &amp; SR total</b>	<b>Total NR &amp; SR</b>	<b>136,375</b>	<b>136,395</b>	<b>1,547,785</b>	<b>1,557,040</b>	<b>-0.6%</b>
<b>NR &amp; SR total</b>	<b>Out of which Auto Tyre Manufacturers</b>	<b>91,336</b>	<b>92,129</b>	<b>1,040,585</b>	<b>1,048,647</b>	<b>-0.8%</b>

<http://www.rubberboard.org.in/PDF/RSNMay2016E.pdf>

# Brexit and the tyre industry

By David Shaw, CEO Tyre Industry Research

The last few weeks have seen an earthquake in British politics. Usually I like to stay away from political discussions, as I think business tries to do its best regardless of the political environment. Recent events in the UK, however, are bound to have an impact on the business community, both within the UK and outside.

For those who do not know, the UK population voted by a 52-48 majority in late June to leave the EU.

For Brits it has meant a melt-down in our political system; a change in Prime Minister; the threat of a break-up of the United Kingdom and even questions about the very foundation of our democratic processes. Furthermore, the pound has de-valued around 10% against the dollar and other currencies. The uncertainty has also triggered a decline in the value of the Euro against international currencies, by around 2%.

Despite the short-term turmoil in currency markets, I don't think this vote will have a huge impact on the global tyre industry. The UK is a relatively small market – around 27m PCR sales and something over 1m TBR sales. It has four tyre factories, all of which are controlled by international companies: Michelin, Pirelli and Cooper.

I don't expect any of these companies to make quick decisions on leaving the UK, though longer term, I think it makes increased investment in those factories significantly less likely. Furthermore, an independent England is likely to seek to revoke many of the labour-protection laws in place in EU countries, making it easier for business leaders to cut jobs and close factories. On the other hand a weaker GBP against the EUR is likely to make UK factories slightly more competitive against their EU counterparts, despite a likely increase in dollar-denominated materials costs.

## Negotiations will be crucial

Much, however, will depend on the “negotiations” between the UK government and the EU. Currently, EU officials are anxious to prevent the contagion from spreading to France, Denmark and other countries. Their tactics are to seek a rapid exit with relatively hard terms on the UK in order to discourage others from following the same path.

I feel the need to clarify something that to me seems obvious, but seems to have escaped the notice of some UK politicians. That is to say that the remaining EU countries link freedom of movement with access to the Single Market.

Angela Merkel, François Hollande, Donald Tusk and Jean-Claude Juncker have all made it clear that no country can have one without the other.

One of the reasons the United States does not have full access to the EU's single market is that it does not accept free movement of people. One of the reasons that Norway does have such access is that it has accepted the



principal of free movement.

Too many UK politicians are telling the British people that it is possible to negotiate a deal involving full access to the single market and at the same time restrict movement of people across the UK borders.

In my opinion, the UK either accepts free movement, in which case it would make much more sense to remain part of the EU.

Or it does not. In which case we are essentially out of the whole European trading environment.

In the latter case, the UK government will find it necessary very quickly to negotiate a better trade deal than the WTO minimum rules. We simply do not have the resources to do that. The UK has a couple of dozen experienced trade negotiators at best. The EU and the US each have over 500.

## UK seeks to delay withdrawal

The UK's politicians will not rush into exercising article 50 of the Lisbon treaty, initiating the UK's departure from the European Union. Once that Article is invoked, the process becomes irreversible and the UK will have a maximum two years to disentangle itself from the EU.

We are in a period of uncertainty until the respective negotiating teams get down to hard details.

But once a UK politician invokes Article 50, much of the UK's limited negotiating power dissolves. The remaining EU members have no need to compromise their principles, especially those of free movement of people.

All the discussion in the UK today is on delaying the withdrawal. Our new prime Minister, Theresa May has said she will not invoke Article 50 before the end of 2016. None of the politicians who led the campaign to leave has any kind of plan for the negotiations on Brexit and none has any idea what the future might look like. To be honest, most of those pro-exit politicians have quit or lost power. Furthermore, our civil service does not have the

man-power or skills to effect those negotiations across a huge range of trade and legislative issues. The UK government employs literally no experienced trade negotiators.

## Brexit likely to mean a free-for-all on tyre imports

As I understand it, the UK is the only country in the EU that has so far not enshrined the EU tyre labelling rules into national law. Unless the UK chooses to implement that law during the exit process, the UK will become the only country in Europe with minimal regulations covering tyre performance and quality. The rest of Europe has the label; the UK does not. The rest of Europe is steadily working on enforcement of the label. The UK with no law cannot have any enforcement mechanism.

The almost-inevitable consequence is that the UK wholesalers will be able to source cheap tyres from anywhere with almost no regulation and no enforcement. For Chinese tyre makers, this is good news. The UK has many higher priorities than introducing new legislation on tyres. It remains to be seen how seriously the UK government takes the issue, but it is likely that the UK will continue to be an attractive destination for China-made tyres. The UK government is keen to avoid upsetting the Chinese government, so is unlikely to impose any tariffs on China-made goods.

## UK tyre business focussed on price

The UK car tyre replacement market is characterised by a focus on price. This country has one of the highest percentages of imports of any country in the European region. Estimates put imports anywhere from 40% imports to 60% of the total replacement market. Compare that with around 25% in the rest of the EU.

Many overseas companies like to use the UK as their first market when seeking to enter the EU sales environment. There are good reasons for that: the lack of winter tyre differentiation; the desire for low prices and the relative brand insensitivity of the UK tyre buying population. A large number

of tire wholesalers operate in the UK and they cater to this market.

In the truck and bus sector, the UK has been one of the pioneers of PPK contracts – they have not always worked, but the point about the UK is that the fleets in this country have a series of creative, intelligent operations managers and they –together with the tire sales teams – have managed to pioneer new business models and work on ways of making the fleet operations more efficient.

However, the retread sector has suffered badly at the hands of the importers. An attempt earlier this year by independent retreaders to persuade the EU to impose anti-dumping duties on Chinese tire imports failed. There is little hope that the UK government will be any more sympathetic, especially as our politicians are scared of upsetting the Chinese government with any kind of trade barrier.

### Regional differences

One of the most-discussed aspects of the UK's referendum is that Scotland, Northern Ireland and the London regions all voted strongly to remain, while the non-metropolitan regions of England voted overwhelmingly to leave.

Two years ago, Scotland voted to remain part of the United Kingdom, largely because voters were told at the time that a vote to leave the United Kingdom would mean a vote to leave the EU. The expectation in the UK is that Scotland's politicians will first seek to prevent the UK's withdrawal from the EU, thanks to their parliamentary rights to be consulted on major constitutional changes. If that fails, they will seek to withdraw from the UK and maintain a relationship with the EU.

At present there is a growing sense among Irish politicians that they too will seek to re-unify with Southern Ireland in order to retain their EU membership rights.

It is too soon to say if these ambitions will come to fruition, but it is becoming clear that Thursday's vote is putting huge strains on the unity of the United Kingdom. It looks increasingly likely that the UK will fracture under those strains.

### Looking to an EU without England

Looking forward a couple of years, then, I think we can look forward to a number of changes in the UK tire segment.

First, dis-investment in the two tire factories in England – Pirelli in Carlisle and Cooper in Melksham – is likely to accelerate. Michelin already announced – long before the Brexit vote – the planned closure of its truck tire plant in Northern Ireland, while Michelin continues to operate a small tire factory in the Scottish town of Dundee.

A second consequence is likely to be an increase in the number of tire imports, some of which bear false label gradings. We can expect that those who import tires into the UK will quickly learn that there is minimal

enforcement of the tire labelling regulations. As one of the biggest destinations for tires in the EU, that might be a concern to road safety specialists.

A third aspect is likely to be a restructuring of sales and marketing operations, with the Scottish activities brought under the existing Scandinavian operations while England, as a non-EU member with different trading arrangements is likely to become increasingly isolated. The current trend toward high levels of Chinese and other imports is likely to increase.

Another aspect will be a change in the fleet arrangements. Many of the truck fleets are staffed by Poles, Romanians and other EU-nationals. Almost two-thirds (64%) of fleets now believe their costs will rise as a result of the UK leaving the European Union (EU), according to a poll by Fleet News. Fuel costs and new vehicle costs will rise, due to exchange rate issues.

# How many defective tires are really on the road?



In 30-odd years of reporting on the global tire industry, I've come across countless estimates of the number of vehicles on the road with one or more defective tires.

The one thing these surveys agree on is that it is a lot.

## People do not care about tires

People in many countries and all kinds of walks of life do not much care about tires. Quite a few are even a little bit complicit in accepting illegal tires on their vehicles.

We run with slow punctures because it is expensive to replace a tire; we run on under-inflated tires because we can't be bothered to check the pressure or to re-inflate them. We run on tires with tread worn below the legal limit because... well just because we can.

## UK's Tyresafe pioneers engagement with stake-holders

Although much of the UK tire industry lags behind their global counterparts, the UK-based organisation called TyreSafe has done a great deal to promote the idea of tire safety. I'd say it is one of the most effective – and certainly one of the most cost-effective – on the planet.

It actively engages with the emergency services; consumer interest groups and many others to discuss and educate about tire safety issues. Not only do they actively engage, but they are pro-active and generate animations, leaflets, clever copy and tag lines to help all those other non-tire specialist organisations to engage with the public and further spread the message about tire safety.

Much of that is down to the energy and out-of-the-box thinking of the team at Tyresafe.

## Estimating tread depth

However, one area where I disagree with their methodologies is in estimating the number of defective tires on the road.

Tyresafe, like many tire organisations, chooses to carry out surveys of tires as they are removed from vehicles when drivers attend a tire service outlet.

They look at the resulting tires and project forward from that as if the removed tires were a random sample.

It will come as no surprise to anyone familiar with the tire industry that some of the tires handled by these tire shops are worn to illegal levels, or damaged or otherwise unroadworthy. That's why people visit a tire service facility; to replace a worn or faulty or damaged tire.

If there is nothing wrong with the tire, we don't visit a service station.

## "up to" 27% of tires are dangerous

According to Tyresafe's latest survey of 340,000 tire replaced by tire service shops, around 92,000 of them were already worn to illegal levels. This is 27%.

Tyresafe then makes the rather extraordinary extrapolation that this implies "up to" 27% of vehicles on UK roads carry one or more illegal tires.

Strictly speaking, it is true that the 27% of illegal tires removed from vehicles puts an upper limit of 27% of vehicles on the road bearing one or more illegal tires, so the tagline that "up to" 27% of cars might be illegal is not a lie. It is nevertheless highly misleading.

But to conclude – as Tyresafe does in its slide presentation – "evidence suggests a quarter of vehicles on UK roads are being driven with poorly-maintained or illegal tyres every day" is, frankly, stretching the point way too far. Tyresafe's own evidence suggests nothing of the kind.

First, the organisation does not say how many of those 92,000 defective tires were the only defective tire on a vehicle. My suspicion – confirmed by Police – is that a driver who is content to drive on one illegal tire is also content to drive on two or three, whereas more responsible drivers may occasionally drop below the limit on one tire, but will usually seek to replace a worn tire before it becomes illegal.

## Tires removed from vehicles are not representative

When we look at a sample of tires inspected in a car park or on a motorway service station, the percentage is nothing like 27%.

At the TyreSafe event in July 2016, SigmaVision made a presentation about its laser-based tread depth measurement systems. They are accurate, reliable and measure tread depth across the whole profile, so are able to identify uneven wear due to incorrect inflation or misalignment.

Sigmavision presented data taken from a sample of vehicles on UK roads around Warrington on a single day in February 2016. Around 90% of the tires measured had a tread depth of greater than 3mm. This suggests to me that the number of excessively-worn tires on UK roads might be around 5%, but is definitely less than 10%. Some of those will be on the same vehicle, so the number of vehicles with illegal tires is almost certainly below 5%.

## Even some tire professionals do not care about tires

The same company measured the tires on 79 vehicles being driven by individuals attending the Tyresafe briefing – one might assume that all those attendees were fully engaged with tire safety. Just one tire (out of 316) was below the legal limit of 1.6mm; a further three were within a hair's breadth at 1.7mm. Fourteen were at 3mm or below – that's over 95% with a tread above 3mm.

When we look at cars visiting a workshop – not specifically for tire issues – the same patterns emerge. Sigmavision showed a curve showing that out of over 4000 measurements taken in the United States, about 100 tires had a tread depth below 2mm. That's rather less than 3%.

Differences between replaced tires and the wider population

Without minimising the problem, I want to highlight the fact that the tires removed at tire workshops should not be taken as representative of the overall tire population.

While I have picked out the most recent briefing for this analysis, I have seen countless reports of surveys presented by different bodies in different countries which use the same flawed methodology.

I understand why tire organisations adopt this approach: there is no country or region in the world that I am aware of where tread depths are routinely measured on a representative sample of vehicles. Good data on tread depth populations simply does not exist in the public domain.

In my view global tire makers could improve their contribution to road

safety by carrying out surveys of tread depths on real roads.

We know that in the UK and other parts of Europe the average annual mileage per vehicle is something like 13,000km. We also know that many tire makers aim for an average life of around 40,000 km as the tread wears from around 8mm to 1.6mm. So 13,000 km corresponds to about 2mm of tread, though it could of course be much greater than that.

### How do the two populations compare?

If we want to acquire tread depth data, the easiest, most convenient way to get at that data is by asking tire service professionals to measure the treads on tires they are removed for replacement.

In my view if that data is to be extrapolated to help understand the wider vehicle population, then we need to analyse how the sample of tires being replaced, relates to the sample of tires on the vehicles.

### Statistical spread of tire tread depth

A statistician might immediately imagine that the distribution of tread depths in the wider vehicle population is close to a normal distribution. I do not think that is necessarily a valid assumption. Again, better data would help us to better understand the issues.

Whether the tread depth distribution is a normal distribution or a flatter distribution between 7mm and 4mm, with a drop off at low values, is unclear.

What is clear is that in a stable vehicle population, many vehicle owners choose to replace their tires as the tread wears away, with Summer tire replacement starting around 3mm.

The fact is that few drivers check their tires. Many will only become aware of low tread depths after they visit a workshop for some reason. A motorist who visits the workshop just once a year will experience around 2mm of tread wear between each visit.

This goes some way to explaining the distributions seen by the tire fitting centres and reported in these misleading surveys. A large number of drivers choose to leave tire replacement until they are told that they have to do so. As we noted earlier, drivers are sometimes complicit in allowing themselves to drive on illegal tires.

### New technology allows more representative sampling

While other tread-depth systems are available, I want to alert our industry to SigmaVision's products. They allow us to acquire mass, semi-automated measurements of tread depths for almost the first time.

Historically we have had to rely on technicians getting out a manual depth gauge and checking the tires they just removed.

Now we can demonstrate to safety authorities and legislators just what the real scale of the problem is.



### Every collision is one too many

I don't want to trivialise the issue. Those who attend road traffic collisions will frequently remind you that for each statistic there is a family destroyed: a parent left disabled; a teenager no longer able to fulfil their early promise.

I don't dispute Tyresafe's figures that in vehicles involved in a collision where someone was killed or seriously injured, 38% had defective or illegal or under-inflated tires. Though plenty of surveys suggest that more than 38% of all tires are under-inflated, so I am not sure what that statistic tells us.

We know that well-maintained tires save lives. We know that heavily-worn tires increase the risk of aquaplaning and of skidding in both the wet and the dry.

If we are to correctly estimate how many lives are at risk, then we need good data and sensible models and reliable quantitative evidence, not over-exaggerated claims.