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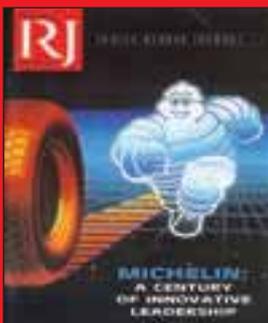
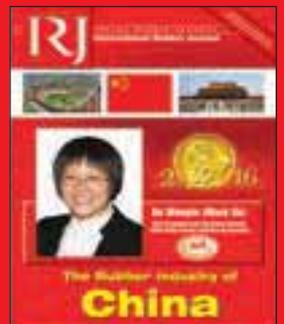
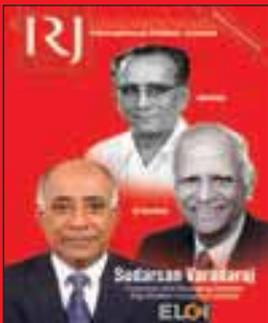
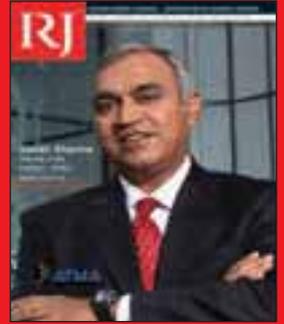


Fazilet Cinaralp

Secretary General
European Tyre &
Rubber Manufacturers' Association



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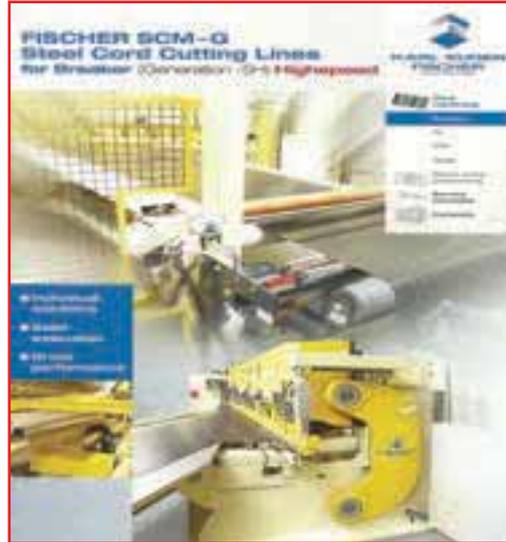
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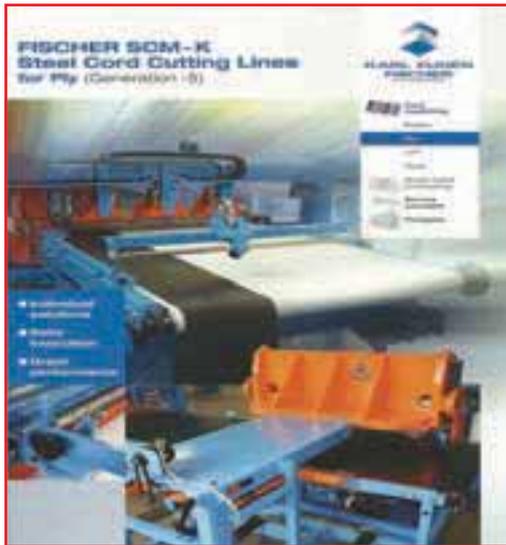
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INTERNATIONAL RUBBER JOURNAL

RJ

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As we enter the second half of the year there is good news of an above-normal, evenly distributed monsoon across India. There are other positive macro factors (higher automobile and agricultural production) to justify the latest estimate of a 7.6% GDP growth rate for the country this year. The only negative factors are the depreciation of the Rupee to nearly 69 against the US dollar, ever-rising crude oil prices and the sops being doled out by the Indian Government with an eye on the November Assembly elections.

While it is still too early to assess the outcome of the June Trump-Kim Jung Un summit, Trump has unleashed a tariff war against the whole world, (China, Russia, Europe, Mexico, Canada and India). Other nations have started retaliating against the US and the Chinese have stated that this could eventually lead to a global economic war and recession and possibly to Trump's defeat in 2020.

Our Cover Story for this issue features the European Tyre & Rubber Manufacturers Association (ETRMA) the very effective and powerful voice of the European tire and rubber industry. The ETRMA is without any doubt one of the most productive and efficiently-run associations and enjoys a high level of global respect, thanks in no small part to its dynamic Secretary General, Mrs Fazilet Cinaralp, a very highly-regarded and knowledgeable professional.

In this issue, we have pleasure in covering the 10th Anniversary Celebrations of BKT (Balakrishna Tyres) well-known Earthmax tires in Crete recently. BKT's plans for a 60,000 tonne carbon black greenfield plant are progressing well. The company will further enlarge its footprints globally as it reaches full capacity at its ultra-modern factory in Bhuj and manufactures even bigger OTR tires.

Vietnam the rising star of the rubber world, continues to progress rapidly both in terms of NR production, exports and in manufacture of tire and rubber products.

The quarterly report of The Economist headed by Dr. Prachaya Jumpasut is as insightful and illuminating as ever.

It is difficult to believe that the IRJ is now a quarter-century old! It has been an exciting, rewarding and tough journey, as we took flight in India and spread our wings across the world from the beginning with our coverage of global events

and our presence at events in China, South Korea, Japan, Thailand, Malaysia, Sri Lanka and other parts of Asia, Russia, the US, Europe and the Middle East. We feel humbled and gratified that we were able to bring the achievements of India's tire and rubber industry to the world, while also keeping the Indian rubber industry informed of important developments across the global world of rubber. The tremendous growth of the Chinese and Indian rubber industry has been a pleasure to witness and report on from close quarters, because since our very inception, it has been our aim to turn the rubber world's attention from the West to the East, or at least to give the East a fair share of attention as well.

We at the IRJ are proud to have pioneered the publication in the rubber industry press of in-depth cover stories on news-making Indian and global rubber and rubber-related companies. The IRJ has evolved into a comprehensive, broad-ranging business magazine for the rubber industry, covering all aspects of related interest- including Automobile news, Indian and International Business news. It is gratifying that readers and industry players have appreciated the scope of our coverage and the unique India-focused approach with an eye on global events that makes the IRJ what it is.

Our journey would not have been possible without the support and encouragement of our friends and advertisers in India and overseas and, most importantly, without the dedication and hard work of our entire team. My very grateful and sincere thanks to all of you.

M Noorani

Aida Malik

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Fazilet Cinaralp

Secretary General

European Tyre & Rubber Manufacturers Association
In an Interview with M Noorani

Since when have you been with ETRMA?

Since the ETRMA was created, ie 2006, following the closure of BLIC (the Liaison Office of the European Rubber Industry) which was set up in 1959.

What led to the formation of BLIC in 1959 ?

BLIC was the second European sector organisation launched in January 1959 in the aftermath of the European Common Market. This was the joint initiative of national associations from five countries where there was already a strong tire and rubber industry, ie France, Germany, Italy, Netherlands and Belgium.

Throughout these years, BLIC has devoted itself to advocating the regulatory interests of the industry before the European Union Institutions. Its activities have continuously adapted and grown with the evolution and expansion of the European Union.

What are the objectives (mission) of ETRMA ?

Our mission is to strengthen the reputation and competitiveness of the European tire and rubber manufacturing industry. ETRMA is the lead advocate, trusted and respected voice for the European tire and rubber manufacturing industry, advancing safe, sustainable mobility for the future.

The tire and rubber industry employs directly more than 3,60,000 people with a turnover of EURO 73B in 2016, which constitutes about half a point of the EU turnover.

ETRMA's membership include the following tire manufacturers: Apollo Vredestein, Bridgestone Europe, Brisa, Cooper Tire, Continental, Goodyear Dunlop Tires Europe, Hankook, Marangoni, Michelin, Nokian Tyres, Pirelli, Prometeon Tyre and Trelleborg Wheel Systems. Tire/Rubber Manufacturers Associations in the following countries are also members of ETRMA: Belgium, Finland, France, Germany, Hungary, Italy, the Netherlands, Poland, Spain and the UK.

ETRMA in Brussels continues to deploy the necessary steps to put forward the industry points of view,



anticipating and assisting the EU institutions in their sophisticated regulatory steps and pushing for fair trade and better market access.

Can you tell us something about the organisation structure of ETRMA and its top management (including yourself, President Franco Annunziato and Vice President Thierry du Granrut)?

ETRMA is a lean organisation. The key decision body is the Board of Directors; it is chaired by the President, who is elected for three years. The current President is Franco Annunziato, from Bridgestone. Beyond his high-level international exposure, Franco Annunziato has a long-standing experience with the European industry.

Usually, the Vice President is nominated amongst the rubber manufacturing leaders. Thierry du Granrut comes from the French Rubber Manufacturing Association (SNCP).

The Secretary General manages the organisation, coordinates the board and the key policy committees and is responsible for implementing the board decisions. **Some more information about ETRMA's Secretariat would also be interesting ?**

The Secretariat is composed of a highly-experienced and truly European team, who is supporting and coordinating the working groups' activities. More than 30 groups bring together industry experts from members whose expertise range from environmental to chemical, occupational, standardisation, data analysts, regulatory and of course, public affairs.

Being a follower of your activities, I realise that you co-ordinate very regularly with many international partners across the globe. Can you please elaborate ?

The tire manufacturers are global players.

Over the years, collaboration and exchange of best practices within the tire sector has been strongly reinforced at the global level. Regular exchanges take place between ETRMA and colleagues from our Russian (TMA), Japanese (JATMA), US (U.S.TMA), Indian (ATMA), Canadian (TRAC) and Korean (KOTMA) sister Associations. Recently, ETRMA has also established a regular exchange with the China Rubber Industry Association, CRIA.

The discussions on tire regulations and standards within the international arena of the United Nations WP29 (and of ISO) also provide an important opportunity for exchange of experience and goals.

Engaging in a global dialogue around existing and emerging issues and developing a shared vision for growth and sustainability is important to advancing our mutual commitment to ensuring the tire manufacturing industry's positive societal impacts.

Our exchanges facilitate robust discussions, enhance our industry associations, and provide a macro perspective on matters impacting our global operating environment.

Can you comment on ETRMA's close co-operation



Franco Annunziato



Thierry du Granrut

with international bodies like IRSG, and The International Rubber Association based in Thailand?

This is a very good question. Let us take the International Rubber Study Group.

The IRSG is an intergovernmental organisation, whose prime members are

governments. The European Union is a founding member and a key contributor to the organisation. ETRMA (previously BLIC) is one of longest-standing member of the Panel of Associates, and of its Industry Advisory Panel (IAP).



ETRMA's cooperation with IRSG is two-fold. ETRMA is *Advisor* to the EU and is a member of its IAP. I had the honour to be the Chair of IAP –for two terms 2011/2016 - when the natural rubber sustainability agenda was launched and established.

The International Rubber Association



(IRA), based in Thailand, is a forum where rubber trade-related issues are discussed. BLIC was another founding member of it. ETRMA is a member of the Management Committee of IRA. Topics usually discussed include contracts for TSR, for Latex in Drums, ... establishing best practices amongst rubber trade community stakeholders.

Finally, the United Nations Economic Committee for Europe (UNECE) is a very important regulatory forum for the automotive sector. The WP29 of UNECE sets the regulatory framework for automobiles and their components. It is the international reference organisation. It is a fact that all tire regulations have been established within UN. European Union recognises UN Regulations as an alternative to EU law and makes the UN regulations mandatory for placing products on the EU market.



Statistics are an important element of knowledge of the tire sector. One of ETRMA's many strengths is its excellent documentation. Apart from your

Tires are the only contact point between the vehicle and the road. So, they make a critical contribution to road vehicle performances

members, are these also available to others ?

Thank you! The tire sales data on the European market are publically reported and published on a quarterly basis (also on the website of ETRMA www.etrma.org); no other data is communicated to non-members.

Reverting to your very fine presentation at the IRSG-World Rubber Summit in Colombo on May 8, can you please tell our readers something about the mission of SNR-L.

Briefly the mission of the SNR-L is to establish the sustainability of the natural rubber value chain.

There were good reasons why natural rubber was somehow targeted, back in 2012. I could list a few of them:

- Rubber is key to global mobility
- It has a long and a complex supply chain, faced with social and environmental challenges
- Smallholders grow 85% of the world's rubber and the productivity level is a crucial issue in major producing countries, like Indonesia. Optimised agricultural practices, best use of resources (water, for example) are necessary conditions to improve the revenue of the millions of farmers;
- Deforestation, loss of biodiversity, shortage of skills, land rights... pose another series of challenges. We should not forget that the market for natural rubber is concentrated in ONE dominant product, the tire, which consumes more than 70% of it.

So, with SNR-L, the dialogue set at that time was the first, multi-stakeholder approach to natural rubber sustainability, initiated by the VALUE CHAIN within the IRSG/IAP—and already at that time, the tire industry was best placed in the value chain to actively support the activities (resource wise and financially), hence the involvement of ETRMA and its tire members SNR-L exists. Since January 2016, it is possible for any economic operator in the value chain to register and declare its commitment to the Initiative.

The SNR-L built a very solid foundation with regards to natural rubber sustainability, and the concepts that have come out are likely to inform the work of the future platform.

What is the European tire industry's vision for 2020 ?

2020 is much too soon. Therefore, ETRMA has set its vision for 2030. The European tire industry has proven to be a reliable partner for European regulators. Our industry credentials include commitment to quality, and to regulatory compliance. It has contributed proactively to the European environmental agenda, such as CO2 and noise emission reductions through tire technology; promotion of extended producer responsibility for end-of-life tire collection and treatment.

Our industry commitment to road safety: tires are the only contact point between the vehicle and the road. For this reason, they make a critical contribution to road vehicle performances. The contribution of the

tire industry to road safety through continued investments in research and innovation has been

fundamental. Advanced winter tire technology and extended mobility technologies are just some of the most recent examples.

Finally, its commitment to sustainability: The tire industry has significantly improved the sustainability of tires at every stage from design to end-of-life. Weight reduction, voluntary commitment to phase out PAH-rich oils in tires, supporting the chemical industry in evaluating the risks connected to their products and the Sustainable Natural Rubber Initiative are some of the most recent examples of that commitment.

The future offers still a number of challenges

- Our sector wishes to remain a stronghold of European manufacturing. ETRMA will work on the enforcement of legislation and compliance; promote industrial competitiveness through affordable energy and international trade.
- Maintain the EU tire and rubber industry's leadership in terms of design, manufacturing processes and performance. Therefore, we will endeavor to making the case for increasing EU funding for (collaborative) research programmes to leverage industrial investments, create synergies and secure Europe's technological lead, will be crucial.
- Industry needs regulatory predictability. ETRMA will continue to work with the European legislator that it takes into account the full impact of policies in different fields which may entail technology trade-offs for the industry. A careful balance is needed between ambitious climate and traffic noise policy objectives on the one hand, and road safety targets on the other. These objectives must also be set in a way which is not prescriptive, and respects technology neutrality.
- Finally, the question of the role of the industry in the future as the world of vehicles and mobility changes is very high on our agenda. With the expected increase in automation and changes to mobility patterns, road users, infrastructure providers and components, manufacturers are responsible to ensure safer driving. This can only be achieved by allowing the free access to in-vehicle generated data, on a real-time basis. The access to in-vehicle data should not be conditioned by sharing proprietary information with the vehicle manufacturers to develop new services for the owner/user of the vehicle, as it would constitute a barrier for companies' investments in innovation. There is a serious risk that the exclusive or privileged access to in-vehicle-generated data and to the owner/user related information of the vehicle manufacturer through the digital interface undermine the fair competition on the market and the quality of the service provided to the users. This is also high on the regulators' agenda. Our industry has shown that it is able to strive by anticipating the challenges and by living up to them, adapting and always being part of the solution.

As you may know, already important initiatives having an impact on the tire and rubber manufacturing industry are in the European legislative pipeline for the next decade.



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ETRMA : Forceful Voice of European Tyre Industry

The ETRMA headed by the indefatigable Fazilet Cinaralp is a great example of an effective association due to her extensive travels worldwide and presence at all important international conferences across the globe. It is in the forefront of all important matters concerning the Global Tire and Rubber Industry Association. The European tire industry directly employs more than 36,000 people and had a turnover of Euro 73 Billion in 2016 on securing half a point of the EU turnover.

Two leading industry figures chair the ETRMA : **Franco Annunziato** of **Bridgestone** is the **President** and **Thierry du Granrut** of France's SNCP (French Rubber Association) is the Vice President.

While the General Assembly sets the general policy, Secretary General Fazilet Cinaralp manages the whole organisation, coordinates the board, policy committees and work group's activities and implements the decision. Five committees and 20 sector groups are composed of industry experts who study specific issues, make recommendations and prepare ETRMA's position papers. If required, the committees can be assisted by specialised working groups.



FAZILET CINARALP, Secretary General, ETRMA



President Franco Annunziato (Bridgestone)



Vice President Thierry du Granrut (SNCP)

HISTORY

1959

Two years after signing the Treaty establishing the



European Community (EC) in Rome, rubber manufacturing associations from five founding Member States created the **Bureau de Liaison des Industries du Caoutchouc - BLIC**. Based in Brussels, it was in anticipation of the new opportunities that the ambitious European project could bring.

1984 - 1998

The Association constantly **increased its membership** at the rate of the **European construction** with the admission of national rubber industry associations from UK in 1984, Spain in 1986, Luxembourg in 1994, Finland and Sweden in 1997 and opened to EU candidate countries with Hungary becoming in 1999 an associate member. This led to the **representation of the rubber manufacturing** industry from 13 EU countries.

2001

Two Policy Committees with direct participation of companies were set up to steer industry-related agenda on tires and in Rome

general rubber goods. **BLIC modernised its designation as "European Association of the Rubber Industry"** to better reflect the reality of its mission and activities.

2006

The European Tyre and Rubber Manufacturers' Association (ETRMA), replaced **BLIC**. This modernised structure and identity provides the tire and rubber goods producers with the proper means to overcome the increasing challenges that they face at European and global levels, while anticipating further regulatory and market pressures. ETRMA members are:



- Apollo Vredestein, Bridgestone Europe, Continental, Cooper Tire, Goodyear-Dunlop Tires Europe, Marangoni, Michelin, Nokian Tire, Pirelli Tire and Trelleborg Wheel Systems.

- National rubber manufacturers' associations of Belgium (Febelplast), Finland (RMAF), France (SNCP), Germany (wdk), Italy (Federazione Gomma Plastica), The Netherlands (NVR), Portugal (APIB), Spain (Consortio) and Sweden (SGI). United Kingdom (BTMA) is an

affiliated member.

The ETRMA represents **4.200** companies in EU25, employing **360.000** individuals with a turnover exceeding • **49 b** while the exports represent more than • **6.3 b**. The product range of its members is extensive from tires to pharmaceutical, baby care, construction and automotive rubber goods.

2008

Mitas joined ETRMA Tyre Corporate membership from January 1.

2009

Hankook Tire Europe joined ETRMA Tyre Corporate membership from January 1.

2010

BRISA joined ETRMA as an affiliated member from January 1.

2012

HTA joined ETRMA as an affiliated member from March 6.

2013

PTIA joined ETRMA as an affiliated member.

2016

Trelleborg acquired Mitas.

2017

Prometeon Tyre Group joined ETRMA in September as an Affiliate Member.

ETRMA's Secretariat run by Fazilet Cinaralp, Secretary General, is composed of a European staff based in Brussels. It administers the whole organisation, coordinates the activities of the Board of Directors and policy Committees and implements the decisions.

GLOBAL PARTNERSHIP



Names from left to right: Marta Conti (Coordinator Trade Affairs), Jean Pierre Taverne (EU ELT-Technical Coordinator & Director Circular Economy), Fazilet Cinaralp, Mirella Larsen (Office Manager), Marianna Faino (Coordinator Environment & Transport), Laia Perez Simbor (Coordinator Chemicals and H&S)

Industry sharing of Best Practices at global level Over the years, collaboration within the tire sector has been strongly reinforced at the global level. Colleagues from its Japanese sister organisation (JATMA) and from the US (U.S.TMA) and India's ATMA have notably expressed the need to enlarge discussions to include more regular focus on key issues on their

respective agendas. Recently, ETRMA has also opened a regular exchange with CRIA (China Rubber Industry Association).

Today, the areas mainly cover health, safety and environment priorities. Indeed, learning the experience and activities of colleagues from

other parts of the world contributes immensely to building the knowledge base essential for making continuous improvements in the production and management of tires until their final use and disposal. This international co-operation



also includes trade issues with a view to making common efforts to improve and sustain fair-trading for tires/rubber products.

The discussions on tire regulations and standards within the international arena of the United Nations WP29 also provide an important opportunity for exchange of experience and goals.

The European tire industry is a key contributor to the Geneva discussions through the technical sister organisation, ETRTO (European Tyre and Rim Technical Organisation)

International co-operation on rubber

Natural rubber and synthetic rubber are essential raw materials used in the manufacturing of tires and general rubber goods.



The IRSG (International Rubber Study Group) of which ETRMA is a member, provides a forum for the discussion of matters affecting the supply and demand of both synthetic and natural rubber. Based in Singapore, it covers all aspects of the world rubber industry, including marketing, shipping, distribution and trade in raw materials and the manufacture and sale of rubber products.



ETRMA remains a long-standing active member of the International Rubber Association (IRA), located in Thailand. The Association provides a readily available platform for the exchange of views between members of the various sectors of the world rubber producing, consuming and trading industry.

Competition Rules

The European Tyre and Rubber Manufacturers' Association carries out representation, co-ordination, communication, promotion and technical liaison activities on behalf of its members' tyre and rubber industry interests. In the course of carrying out such activities, ETRMA is normally involved in monitoring and assessing together with its members the institutional, legislative/regulatory, judicial, administrative and other developments in the European Union and other trade or regulatory bodies that may impact the members' interests, at both international and national levels. As a result of these activities, ETRMA may additionally undertake communications and other actions designed to promote its members' collective interests.

All of these types of activities in the framework of ETRMA entail the collection and sharing of certain data/information as well as discussions intended to facilitate decision-making on proposed actions to be taken, whether by ETRMA alone, in conjunction with actions of its members, or eventually by the members on their own.

ETRMA and its members are committed to carrying out the above activities in full compliance with applicable competition rules relating to information exchange and other cooperative activities amongst actual or potential competitors, including in the context of industry associations.

It has thus adopted and strictly applies the following guidelines. Without being exhaustive, in the context of any activity organised under the auspices of ETRMA, members shall not:

- Exchange commercially sensitive (i.e. strategically useful) information about their own or their competitors' business activities, including, but not limited to, information concerning prices, costs, production, sales, customers and investments.
- Discuss or agree on prices, price changes, price trends or price policies, policies or calculation of discounts or rebates, or any marketing policy which may affect current or future pricing.
- Discuss or agree to limit or allocate sales territories or customers or parts or material sourcing.
- Discuss or agree to limit or control levels of production, inventory levels, production processes, parts, materials or technological development, or to limit or coordinate investment.
- Discuss or agree on new technical standards with a view to creating excessive or unjustified barriers to market entry.
- Discuss or agree on bids made in a tendering process.
- Establish blacklists or boycotts of suppliers, purchasers, or competitors.
- Engage in any vote or coordination which has the purpose or effect of excluding a potential or

existing member without valid and objective reasons.

- Collectively compile or publish, for public or non-public use, statistics concerning current or future industry trends or members' market practices, activities or status in a manner which may disclose strategically useful information regarding any one undertaking (as a rule, only aggregated recent (but at least three months old) or historical data to be compiled/published).

Any other discussion, disclosure of information or action regarding these or similar commercially sensitive issues, whether on or off the record, during a scheduled meeting or not, in the context of an ETRMA-organised/sponsored event, is strictly prohibited and could expose not only the members concerned, but also ETRMA as a trade association, to significant competition law penalties.

If any participant has any question as to the legality of a proposed activity or discussion topic, the issue should be raised immediately to the chair person or other organiser and the activity or specific discussion in question should be suspended pending referral of the issue to the ETRMA Secretary General, who shall discuss it with legal counsel and provide the necessary guidance or advice.

For its part, no ETRMA officer, director or employee or any working group within ETRMA has the authority to take any action which might violate competition law in general or these guidelines in particular. Moreover, no officer, director or employee or working group has the authority to direct, approve or condone any such action. Violations of these guidelines may be grounds for disciplinary action by the Board of Directors, adapted to the circumstances of the particular violation.

At the recently-held World Rubber Summit organised in Colombo in May 2018 by the IRSG, Fazilet Cinaralp was again a very active participant. Her presentation was one of the highlights of the World Rubber Summit:

The mission of the **SNR-I** is to establish the sustainability of the natural rubber value chain

- 2012 Voluntary value chain initiative kicks off
- 2015 stakeholders meetings organised
- 2016 Roll out & public launch

SNR-I

- ▶ **Criteria 1: Support improvement of productivity**
 - ▶ Performance indicator 1.1: Optimizing the planting of recommended clones
 - ▶ Performance indicator 1.2: Optimizing planting density
 - ▶ Performance indicator 1.3: Optimizing fertilizers, and chemical use
- ▶ **Criteria 2: Enhance Natural Rubber quality**
 - ▶ Performance indicator 2.1: Commitment to natural rubber quality
 - ▶ Performance indicator 2.2: Compliance with Testing and grading
- ▶ **Criteria 3: Support forest sustainability**
 - ▶ Performance indicator 3.1: Compliance with relevant local legal requirements
 - ▶ Performance indicator 3.2: Protection/Conservation of protected areas
- ▶ **Criteria 4: Water management**
 - ▶ Performance indicator 4.1: Compliance with relevant local legal requirements and local customary water use rights
 - ▶ Performance indicator 4.2: Treatment of industrial waste water
- ▶ **Criteria 5: Respect human and labour rights**
 - ▶ Performance indicator 5.1: Child labour and minimum age for workers
 - ▶ Performance indicator 5.2: Forced labour
 - ▶ Performance indicator 5.3: Freedom of association and collective bargaining

SNR-i: Pilot Phase Update

Self-declaration Status

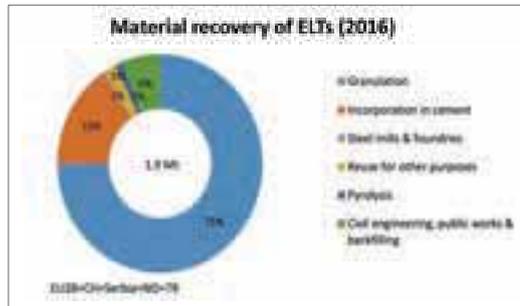
- ▶ Geographical coverage of self-declared registrants
- ▶ Brazil, Cameroon, Côte d'Ivoire, EU, Gabon, Ghana, Guatemala, India, Indonesia, Japan, Korea, Malaysia, Nigeria, Panama, Taiwan, Thailand
- ▶ 50 Self-declarations
 - ▶ Downstream-tyre: 10
 - ▶ Plantation: 6
 - ▶ Processor: 28
 - ▶ Trader: 5
 - ▶ Cooperative: 1

SNR-i: Pilot Phase Update

Self-declared registrants to date: 50

Agropecuaria Caucho S.A	Multinners Enterprise Co Ltd	Southland Rubber Group
Bridgestone Singapore	Olam Rubber, Gabon	Sri Trang Agro-Industry
Continental Tires Holding Singapore	Phatthalung Paratex	Sumitomo Rubber Industries Ltd
Euroma/Sinochem	Pirelli Tyre SpA	Syarikat Chuan Lee Rubber
Getahindus	PT. Badja Baru	Tat Win Company
Goodyear Orient Company	PT. Bumi Asri Pasaman (KBK)	Teh Ah Yau Rubber Factory
GMG Global	PT. Kirana Megatara	Timberfarm
Halcyon	PT.Nusa Alam Rubber	Thai Eastern Group
Hankook Tire Co.Ltd	PT. Sampit	Toyo Tire & Rubber Co Ltd
Harrisons Malayalam	R1 International	Toyotsu Chemiplas Corporation
Hevea-Tec	RCMA Group	Tropicore
MicheIn Group	Siat	Yokohama Rubber Co Ltd
Nokian Tyres	SIFCA/SIPH	Vonbundit
Nteq Polymer	Sipef	Weber & Schaefer GmbH & Co. KG
Mardec Berhad	Socfin/Sogescol FR	Kelani Valley Plantations PLC
Fazenda Continental	PT. Aneka Bumi Pratama	Braslatex
Goiaslatex	Heveaforte	

UTILISATION OF USED TIRES :
Used-tire figures improve, but concerns remain



New national collection schemes and increased production of rubber granulate have driven up the recycling of end of life tires (ELTs) in Europe. Figures issued early May by ETRMA show that, in 2016, 94% of all used tires were collected and treated across 32 countries – the EU28, Norway, Serbia, Switzerland and Turkey.

Of these tires, around 1.9 million tonnes went for material recovery and 1.1 million tonnes for energy recovery, the association said. Granulation accounted for 75% of material recovery, and cement kilns for 81% of energy recovery.

Used-tire arising's in Europe increased by about 2% year-on-year to 3.9 million tonnes, whilst the reuse of part-worn tires – comprising casings used for retreading on the domestic market, export & domestic second-hand markets – fell by 5%.

ETRMA's analysis showed that ELT granulation grew by 9.3% year-on-year in 2016, while there was a 2% rise in ELTs sent to energy-recovery. However, civil engineering uses of whole or shredded ELTs decreased 3%, and reuse of tires as blasting mats and dock fenders fell 15%.

Extended producer responsibility (EPR) programmes for tires expanded to three more European countries, with the creation of national ELTma CZ and ELTma SK schemes in the Czech Republic and Slovakia in 2016, and Repak ELT in Ireland in 2017.

In 2018, 23 countries operate under an EPR regime for tires representing about 65% of EU arisings, while ETRMA noted discussions now in the UK about introducing an EPR regime for tires.

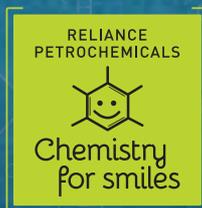
The tire industry clearly supports the EPR model, according to Fazilet Cinaralp, Secretary General of ETRMA. However, she added that this approach much be "backed by clear statutory requirements... [with] a separate line on the invoice, showing the environmental contribution for ELT management, ensuring full transparency for both national authorities and to the end consumer".

The Future : ETRMA has thoroughly proved itself to be a very effective organisation and will be continuing to play a great supportive role in the years to come as the European Tire Industry continues its dynamic growth. ETRMA is on its way to achieving a turnover of Euro 100 Billion in the near future.

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EPO award for Michelin's 'auto-regenerate' tire

● The European Patent Office (EPO) has awarded the European Inventor Award 2018 in the industry category to Michelin's 'auto-regenerate' tire. At an event in Paris which was held on June 7, Michelin's researchers Agnès Poulbot and Jacques Barraud were recognised for their work on a new generation of tires, which are marketed as the Regenion™ tire technology.

The tread design, carried out by 3D metal printing, includes several unique



Michelin's Agnes Poulbot

layers of tread within the same tire. As the outermost layer is worn down, a new, specialised tread will emerge to be in contact with the road surface. This can extend the tire's lifespan by 20%. Due to its design, the tire claims to reduce rolling resistance and increase fuel efficiency. "The patented design offers another significant benefit: upgrading a vehicle to Regenion tires results in 3,724 kg of fewer CO2 emissions per tire's lifespan compared to conventional models," the EPO citation noted.

Marangoni mulling over investment in Brazil

● The Tyre Retreading Machinery (TRM), part of Marangoni Meccanica SpA, has said that it is "looking with high interest" into investing in South America, particularly Brazil.

Marangoni said it explored the idea further with Brazilian and Latin American tire officials during the recent Tire Cologne event in Cologne, Germany. The Brazilian market is currently facing great challenges, according to Alessandro Villa, TRM's managing director. These include "a concentration of the activity in large retreaders, the pressure on cost-efficiency and compliance to the NR12 safety norm."

TRM can find solutions to those requirements and has the expertise to work in this environment. "We are looking with great interest at the market despite the import duties and

the not so favourable exchange rate," Villa added. TRM is working with regional industry veteran Marcelo Amorim, who has an experience of working with major tire companies in the region, on the proposed project.

Trump imposes 25% import tariff on Chinese aircraft tires

● US President Donald Trump has imposed 25% tariffs on \$50bn worth of Chinese goods, accusing Beijing of intellectual copyright theft. Tariffs that affect more than 800 products worth \$34bn in annual trade came into effect from July 6. The White House said it would consult on tariffs on the other \$16bn of products, and would apply these later. If China retaliates, as it has already pledged to do, the US will impose even more tariffs, Trump warned. He said tariffs were "essential to prevent further unfair transfers of American technology and intellectual property to China, which will protect American jobs."

The Chinese product lines that have been hit range from aircraft tires to turbines and commercial dishwashers. China said it is planning measures of the "same scale and the same strength". It has previously said American products targeted for tariffs

would include US aircraft and soybeans. "If the US takes unilateral and protectionist measures that harm Chinese interests, we will respond immediately by taking the necessary decisions to safeguard our legitimate rights and interests," Chinese foreign ministry spokesman Geng Shuang said. All trade talks between China and the US would be void if Washington imposed trade sanctions, he added.

'Counter-productive'

The US wants China to stop practices that allegedly encourage transfer of intellectual property – design and product ideas – to Chinese companies, such as requirements that foreign firms share ownership with local partners to access the Chinese market. However, many economists and businesses in the US say the tariffs are likely to hurt some of the sectors that the administration is trying to protect, which depend on parts or assembly in China.

Farmers are also worried about the harm caused by retaliation. Economists estimate that the tariffs will hurt GDP by less than half a percent. But the measures could also lead to higher prices and job losses in some industries. The Motor and Equipment Manufacturers Association, which represents car parts makers, called the tariffs as "taxes that hurt US companies, put jobs at risk, and negatively impact consumers."

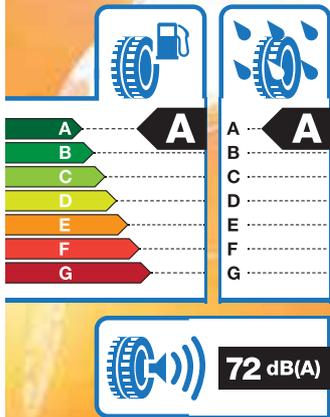
Bridgestone invests Euro 24m in Spanish site for new truck tire line

● Bridgestone Corp is investing Euro 24 million in its manufacturing site in Puente San Miguel, Spain, to launch a new product line focused on 24-inch radial truck tires. The move will give "a significant boost" to the site in north Spain, where it will be able to manufacture agricultural and truck tires at the same time. The investment will include purchase of new machinery and infrastructure in order to upgrade the overall efficiency of the plant. Robots, auto-guided vehicles, testing and production machinery will be installed, and energy efficiency will be improved.

Bridgestone has already committed a Euro 35-million investment at the

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Puente San Miguel site under its 2018-2021 strategic plan. Production from the new line is expected in 2019, although product development and qualification will take place in the second half of this year. It expects to create 40 jobs, selection process for which will begin "in a few weeks". Through the project, production capacity is expected to reach 500 tires per day. According to Bridgestone, 243 radial truck tires have enhanced traction and durability, and are suitable for markets where they have to be used both on- and off-road.

Triangle Tire chairman Ding Yuhua no more

● Triangle Tire Co. Ltd's Executive Chairman Ding Yuhua passed away on June 13. He was 69.

During his 28 years with Triangle Tire, Ding spearheaded efforts to



Ding Yuhua dies

make the company and the Triangle brand known globally. The company grew from a provincial tire factory in the late 1990s to one of the world's 20 largest tire producers.

Some of Triangle's recent milestones that had been achieved under Ding's leadership include:

■ Being listed on the Shanghai Stock exchange, making Triangle a publicly-traded company – September 2016;

■ Establishing Triangle Tire USA in Franklin, Tenn – January 2016;

■ Decision to build a factory in the US, committing \$580 million (Euro 500 million) for two plants, one for passenger/light truck tires and one for medium truck tires, to be built near Rocky Mount, North Carolina – December 2017.

According to the Triangle Tire website, Ding was also Senior Vice President of the China Rubber Industry Association, and was listed as a senior economist and engineering technology researcher.

Under Ding's leadership, Triangle was awarded more patents than any other Chinese tire manufacturer. Triangle's research and development were named as the Chinese industry's national laboratory. Shandong-based Triangle already has named Ding Mu, Ding's son, as its new chairman.

Continental Tire Division announces three new business unit heads

● Continental is reorganising the top management of its Tire Division. As of now, Christian Koetz (48) leads the Commercial Vehicle Tires and reports to Nikolai Setzer, Member of the Executive Board of Continental and Head of the Tire Division. Koetz's former position as Head of Passenger and Light Truck Replacement Tires EMEA (Europe, Middle East and Africa) is taken over by Philipp von Hirschheydt (43), whose former position as Head of Passenger and Light Truck Replacement Tires APAC (Asia Pacific Region) is filled by Ferdinand Hoyos (41).

Continental develops pioneering technologies and services for sustainable as well as connected mobility of people and their goods. Founded in 1871, the technology company offers safe, efficient, intelligent and affordable solutions for vehicles, machines, traffic and transportation. In 2017, Continental generated sales of Euro44 billion and currently employs more than 240,000 people in 61 countries.

The Tire division has 24 production and development locations worldwide. As one of the leading tire manufacturers with around 54,000 employees, the division posted sales of Euro11.3 billion in 2017. Continental ranks among the technology leaders in tire

production and offers a broad product range for passenger cars, commercial vehicles and two-wheelers. Through continuous investment in R&D, it makes a major contribution to safe, cost-effective and ecologically-efficient mobility. The Tire division's portfolio includes services for the tire trade, fleet applications and digital management systems for commercial vehicle tires.



Nikolai Setzer, Member of the Executive Board of Continental and Head of the Tire Division



Ferdinand Hoyos, Head of Passenger and Light Truck Replacement Tires APAC



Christian Kötz, Head of Commercial Vehicle Tires



Philipp von Hirschheydt, Head of Passenger and Light Truck Replacement Tires EMEA



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Regional Tire Manufacturing Associations convene in Washington, D.C.

● Chief executives from regional tire manufacturing associations including the European Tyre & Rubber Manufacturers' Association (ETRMA), the Tire and Rubber Association of Canada (TRAC), the Japan Automobile Tyre Manufacturers Association, Inc. (JATMA), the Korean Tire Manufacturers Association (KOTMA), and the US Tire Manufacturers Association (USTMA) convened for a two-day meeting from June 5-6, 2018, in Washington, DC to discuss important issues about the tire manufacturing industry and the stakeholders it serves across the globe. Major topics included industry commitments in sustainability and environmental stewardship, the comprehensive global regulatory landscape and a platform for increased dialogue. "Our

associations comprise leading worldwide tire companies representing a majority of the world's tire-manufacturing capacity. Engaging in a global dialogue around existing and emerging issues as well as developing a shared vision for growth and sustainability is important to advancing our mutual commitment for ensuring the tire manufacturing industry's positive societal impacts. Our meeting facilitated robust discussions, enhanced our industry associations, and presented a macro perspective on matters impacting our global operating environment," the group said. Chief executives Fazilet Cinaralp from ETRMA, Anne Forristall Luke of USTMA, Kenji Kurata from JATMA, Glenn Maidment of TRAC and Yun Tae-gun from KOTMA attended the meeting.

Nokian breaks ground for tech centre in Spain

● Finland's Nokian Tyres broke ground on the construction of a new technology centre in Santa Cruz de la Zarza (Spain), with the first test



Hille Korhonen, Nokian President and CEO

tracks set to be completed in 2019. It will be fully operational in 2020. This will be Nokian's third test centre after Ivalo and Nokia, Finland. It will allow for year-round testing of summer, all-season and winter tires. The aim is to develop tires that are safer, more functional and eco-friendly. Nokian first disclosed plans for the facility in 2016. It said demand is high, particularly in Central Europe and North America, which are Nokian's key growth markets, for summer and

Hankook, Arlanxeo ink deal to develop new tire rubber materials

● Rubbers Hankook Tire and Arlanxeo have agreed an R&D partnership to develop new synthetic rubber grades and technologies for premium tires. The deal marks Hankook's second Memorandum of Understanding (MoU) with the world's largest synthetic rubber producer, to co-develop advanced tire materials. The companies will jointly study the development of new rubber grades and increasing the performance of tires from early stages of product development. Partnership between Hankook and Arlanxeo, a JV of Lanxess and Saudi Aramco, started in 2008, with the supply of materials such as solution styrene butadiene rubber and neodymium butadiene rubber. In 2014, a first MOU was signed to expand and collaborate on the development of tire materials. The relationship with Arlanxeo "will continue to result in great technological advancement between the two companies," Hankook Tire CTO Hyung Nam Kim said. For Arlanxeo, CEO Jorge Nogueira said the latest agreement would strengthen co-operation with Hankook Tire. "As before we will continue to assist Hankook Tire as a reliable partner to develop its market position as a key global tire maker with innovative high-quality products," said Nogueira.



Hyung Nam Kim, CTO Hankook Tire and Dr. Matthias Gotta, Business Unit Head Tire & Specialty

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Viewpoints: Giti director on TBR market, tariffs

● Giti has seen its share of the truck tire market grow steadily in the UK and Europe since mid-2017, according to Tony McHugh, Sales and Marketing Director, truck & bus, Giti Tire, which is based in Northwich, UK. That positive trend has continued into 2018, helped by supply issues with some other manufacturers, McHugh told ERJ in an April 26 interview at the Commercial Vehicle Show 2018 in Birmingham. "I would love to say this is all because of our fantastic sales team and fantastic products," he said. "But realistically, a big factor has also been the issues in the supply-chain, both for premium-tire and budget-tire manufacturers." Asked about plans for the rest of the year, McHugh said Giti is quite focused on a value-approach to the market for fleets: "That is where we see our future: more and more fleet engagements." In terms of customer trends, McHugh pointed to Giti's introduction of tires to meet the latest EU noise regulations. These offerings, he said are "performing excellently in the marketplace." Speaking just before the EU imposed provisional anti-dumping duties on Chinese TBR tires, McHugh said this situation was causing a lot of uncertainty in the market. Many tires, he reckoned, had been sold and "probably purchased" already leaving some suppliers in the difficult situation of

having to go back to customers saying 'I need to charge you more'. "This confusion is slowing the market [particularly at] the lower end where people bring in and sell by container," he said. Asked about Giti's position as a supplier of truck tires into the EU from its Chinese facilities, McHugh said, "We will have to see what happens and what plans we can put into place." Giti, he added, also operates plants in America and Indonesia, but at the moment, truck tires are supplied from its plants in China. "You can have contingency plans, but they don't happen overnight when you are talking about tires," he noted. "You can't shut one factory down and open another up immediately: it doesn't happen like that."



Tony McHugh, Sales and Marketing Director, truck & bus, Giti Tire

all-season tires with high-speed ratings. "We have been planning the new centre for a long time in co-operation with the local authorities and other partners," Nokian President and CEO Hille Korhonen said. "Now is the time to take the next step and start building a technology centre for the future that offers versatile opportunities for accelerating product development and growing our product range." The area will span nearly 750 acres, with more than

10 different test tracks that will be used to study the durability and performance of tires with modern testing technology. An 4.3-mile oval track will circle the facility, allowing testing of tires at speeds of up to 185 miles per hour. Wet grip and rolling noise tests also can be conducted on the track. "The hot Spanish conditions provide us with a great setting for testing our tires all year long," said Pontus Stenberg, Vice-President of the Products and Technologies unit for

Nokian. He added, "Comprehensive testing and a thorough understanding of customer needs ensures that our premium tires are state-of-the-art and work reliably in all conditions." Nokian said the technology centre will focus on accelerating sustainable product development and innovation, furthering Nokian's recent research project that studied the utilisation of the guayule plant for more environmentally-friendly tire manufacturing. According to the company, guayule can survive under dry and barren conditions and is seen as a potential replacement for natural rubber.

ATG mulling new production plant

● Alliance Tire Group (ATG), manufacturer of off-highway tires, is considering the construction of a new production unit either in India or outside it. ATG said given the "speed of growth" in the past few years, the company believes it would be able to double its sales in the next 5-7 years. As it is currently evaluating its product needs and investigating various sites, it could not comment on the size of the investment. ATG, which was acquired by Yokohama in 2016, hopes to finalise the location by the end of this year. It already has two production plants in the Indian cities of Tirunelveli in Tamil Nadu; and Dahej in Gujarat and one in Hadera, Israel. The plant is expected to be complete within two years.

Kordsa presented its composite technologies that lighten vehicles at the Michelin Movin' On Conference

● Recently, Kordsa attended the Movin'On Conference in Montreal. At the conference, formerly known as Michelin Challenge Bibendum and held by Michelin for more than 20

years, Kordsa made a presentation that emphasised the need to lighten vehicles for efficient and sustainable mobility. It also covered the differences that they could make in mobility with their composite technologies developed through their open innovation approach. The Movin'On Conference, which is organised with the goal of "living a global, smart, sustainable and multi-model mobility," aims to find sustainable solutions to the challenges of moving people and goods from one place to another. It also refers to the effects on mobility of the groundbreaking changes in daily life. During the conference, more than 4,000 participants from 31 countries came together and over 70 speakers made inspiring presentations, panels, roundtable meetings and practical workshops. Kordsa, the reinforcer of one out of every three automobile tires and two out of every three aircraft tires worldwide today, highlighted current issues of mobility and its solution suggestions. It emphasised the need to lighten vehicles for efficient and sustainable mobility by

using heavy vehicles to move a mass from one place to another. The presentation also underlined the future of mobility, and how it can be made more efficient in the future as well as Kordsa's aim to reduce the rolling resistance to decrease the fuel consumption with its tire reinforcement technologies and lighten vehicles with its composite technologies in order to achieve a more sustainable mobility. Kordsa, a key supporter of the open innovation model, contributes to the future of mobility by developing composite technologies in a wide range of industries from aerospace to automotive and supports the future of mobility by lightening the vehicles in its Composite Technologies Centre of Excellence, which serves as a technology hub.

BRV: German tire sales to steady in 2018

● BRV the German tire retail association anticipates largely stable sales figures in the country's replacement tire market in 2018.



BRV Managing Director Yorick Lowin

The only variation will be in the consumer sector, where BRV sees potential growth of 0.8% in both the car and off-road tire segments.

The BRV forecasts flat trading in all other market segments during 2018, from HGV to the niche markets.

"The consolidation phase in the tire replacement business will continue," said BRV Managing Director Yorick Lowin. The BRV leader does expect growth in the all-season tire category reaching 12% during this year, before flattening out. "The fact that the expected increase for the entire consumer tire segment is significantly lower at 0.8% is due to all-season tires in all three product categories of the segment having the lowest share," concluded Lowin.



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BKT CELEBRATES 10th EARTHMAX ANNIVERSARY IN GRAND STYLE IN CRETE

Balkrishna Industries Ltd. (BKT), one of the world's leading Off-Highway tire manufacturers headquartered in India, chose the splendid historical setting of Crete to celebrate 10 years of their milestone EARTHMAX together with distributors and partners arriving from every corner of the world. The international press was also invited to assist some sessions and to attend a press conference. On the occasion, BKT announced its objective to achieve a 10% market share in the All Steel radial segment of the global OTR market by 2025.

For an entire week, the Out of the Blue, Capsis Elite Resort on a private peninsula near Heraklion, Crete and its excellent meeting facilities provided the venue for the 10th Anniversary Celebrations of BKT's milestone EARTHMAX. BKT's distributors and partners, in particular company owners, managers and marketing specialists, landed on June 1, 2018 on the island of Crete to participate in the event. Celebrations started officially with a one-day Conference, in which high-ranking company officials illustrated past, present and future of the EARTHMAX tire lineup providing also profound and valuable insights into the OTR market in general. During the following days, BKT offered its guests a multi-faceted, colourful programme including several team-building activities and as cultural highlight an excursion to the Palace of Knossos, the largest archeological site on Crete and Europe's oldest city. On June 5, after the departure of BKT's distribution partners, several representatives of the international press arrived to attend the press conference scheduled for the next day.

After the launch of the first EARTHMAX tire for loaders in 2008, today EARTHMAX is BKT's extensive range of All Steel radial OTR tires designed to withstand even the harshest operating conditions in quarries, mines and construction sites. Enhanced by the common feature of a strong All Steel structure conferring the tire casing durability and excellent resistance against impacts, the EARTHMAX range of radial OTR tires is ready to face and master any adversity. After the development of tires for loaders



Arvind Poddar, Chairman and Managing Director of BKT

followed by rigid dumpers, today also Giant tires are part of the EARTHMAX tire lineup.

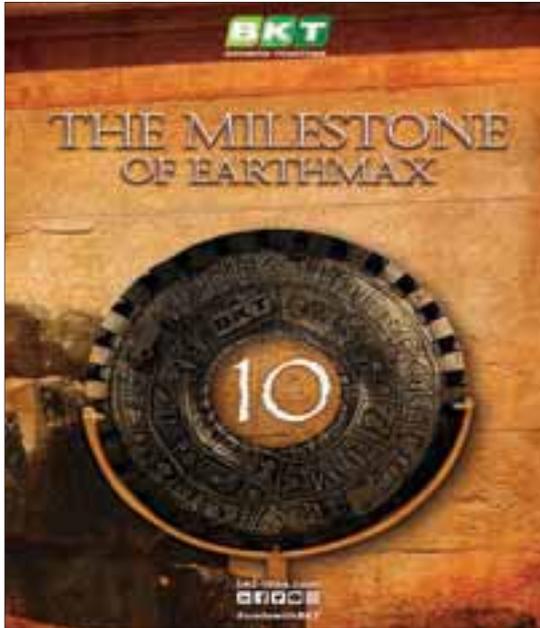
The Conference was officially opened by Arvind Poddar, Chairman and Managing Director of BKT, with a great motivational speech: "Like building and constructing the Palace of Knossos was a great achievement and advancement in ancient times, similarly building and engineering our first EARTHMAX tire has been a great



Rajiv Poddar, Joint Managing Director of BKT

achievement and advancement in modern times – a milestone in BKT's history." He explained how the company full of visionary spirit had seen the opportunity of entering the OTR segment against and despite the backdrop of the global crisis. "EARTHMAX is a tool but also your mate in the most challenging operations that ensures safety, performance and quality, as well as time and cost savings. A true representative of our corporate history and values." Subsequently, the President draw parallels between tire performance features and corporate values. He explicated e.g. that resistance, a tire's capacity of withstanding impacts such as forces, cuts, wear, heat or any other adverse condition, related to the company's ability of facing and overcoming any situation or obstacle that might call into question credibility, reliability and reputation. A tire's robustness was compared to staying upright and withstanding possible counterattacks. Traction was used as a metaphor for leadership and being a forerunner. Comfort was related to the corporate philosophy paying attention to coworkers, their quality of life and well-being. The speech concluded with a thought addressed to future generations: "It is our duty to transmit such values guiding us today and our business in such a way that future generations will have the right tools to continue our path, to bring in new ideas and new approaches to the market – yet, keeping in mind, as we did – the faith to our history and role as well as the underlying commitment and passion."

The second speaker at the Conference was Rajiv Poddar, Joint Managing Director of BKT, who spoke about the initial challenges entering the OTR All Steel radial segment, the



methodical approach by means of three PDCA cycles for loader, rigid dumper, and Giant tire development. "The development and production start of OTR Giant tires has been possible after the strategic transfer of the entire OTR All Steel radial manufacturing line to our state-of-the-art production site in Bhuj in 2014-2015. The opening of the Bhuj production plant has been part of our overall strategy to gain a foothold in the global OTR tire market and to strive for our strategic vision to reach a sales volume of 40,000 MT per year in the All Steel radial segment by 2020 worldwide on the path to meeting our strategic objectives to reach a 10% market share in OTR by 2025, when our Bhuj site will run at full capacity." Rajiv Poddar then illustrated a series of Case Studies as a reality check of the highly-demanding conditions in the mining and construction sector, highlighting the importance of evaluating specific performance criteria in order to recommend the best solution from both a technical and a financial point of view, and the necessity of being ready to promptly intervene. In this context, the role of the on-site tire service provider becomes essential. The company has already drawn up an overall service strategy, which will be adapted at a local level in cooperation with the distributors.

The Conference concluded with a talk by Dilip Vaidya, BKT's President and Director of Technology, who pointed out that he was not standing there to look back, but was always focused on innovation and new technologies that would lead the company to the NEXT LEVEL. He outlined the mining sector as one of the toughest sectors on Earth. "In these rocky, abrasive and harsh environment, tires are exposed to extreme mechanical stress and fatigue, to extremely heavy loads the toughest handling and transport conditions," Dilip Vaidya explained. He then gave an overview of the challenges in tire design and development, especially Giant tire development, and mentioned the advantages of latest-generation machinery that was purchased for improved compounding, steel cord processing and steel cord cutting along with a new Tire Building Machine to complete and enhance the complex tire manufacturing process. "We could say," he said – "that for building a Giant tire, a Giant process is needed."

Afterwards, he mentioned the quality standards and

measures and spoke about the unprecedented changes in technology at a global level. "We are searching into solutions to cope with sensor-assisted autonomous transportation, enhanced tire and equipment integration systems, data flow and analytics optimisation for increased productivity – all this in compliance with the megatrends of sustainability, diverse mobility, electrification, and safety," he stated. With reference to these megatrends, he pointed out the importance of sustainability: "While improving our products and enhancing technologies, it is our responsibility and



Dilip Vaidya, BKT's President and Director of Technology

also great opportunity and challenge to make our contribution to a mere sustainable future for everyone living on this planet."

BKT has indeed, recently entered into a Joint Research Agreement with KULTEVAT, Inc., a leading US biotechnology company that is specialized in the cultivation and procession of TKS DANDELION as a renewable and sustainable alternative for natural rubber, which has become a critical material. After an experimental research stage, the supply of one metric ton of stabilised TKS RUBBER is provided by October 2019. "In addition to Lab optimization and manufacturing process trials on all of our tire ranges, we will also focus on compounding methods for the specific OTR segment," Vaidya specified. Other ongoing projects are based on the development of high-performance compounds by means of nanomaterials or nanocomposites providing enhanced thermal and mechanical stability. Research in this field focuses on graphene, nanoclay and nanocellulose. In this context, also BKT's recently opened CARBON BLACK manufacturing plant comes into play. Dilip Vaidya concluded his speech by emphasizing the importance of on-site OTR tire service presenting a few tools and support methods.

Not only at this Conference but through all related activities organised during these momentous celebrations of the 10th EARTHMAX Anniversary, BKT has proven once again its commitment to progress by means of significant investments into research and the implementation of all findings for the purpose of providing end users with high-quality products. Having entered and conquered the OTR radial tire segment, the company is definitely reaching the NEXT LEVEL through the manufacturing of OTR Giant tires.

Sanjiv Goenka's Philip Carbon to grow



RP- Sanjiv Goenka Group

● The RP-Sanjiv Goenka Group had a commodity tagged status earlier, but it has now emerged as a structurally superior manufacturing company, making specialty grades of carbon black.

It started working on its transformation two-three years ago when it realised that it had to move away from commodity blanks. This year, as a percentage of sales non-rubber blacks will be 10%. Last year, it was 5%. Before that, maybe it was 1-2%. For March 19, our specialty sales will be 31,000 tonnes. This is compared to about 15,000 tonnes last year and about 7,000 tonnes the previous year.

Phillips Carbon is adding more capacity, better technology, more and more products. Secondly, the part of the transformation journey has been in terms of improving efficiencies in yields. It has improved efficiencies across every operating parameter in the factories — procurement, logistics, supplies, palletisation and transportation. It appears to be a different company. It was a difficult decision three years ago when we changed the entire management. Every functional head, the CEO, everyone was changed and that change is bearing fruits today.

The company has improved significantly. It is beginning to lead in all operating parameters across the industry. Today at 5,15,000 tonnes, we are the largest carbon black

producer in India. We are adding 80,000 tonnes in Mundra and Palej, which will be operational in the next nine to 10 months. We are looking at another 1,20,000 -1,50,000 tonne capacity in Chennai at a cost of about Rs.500 crore.

Whether it is 8% to 10% or 7% to 8% or 9%-10%, growth is robust. It is sold out on capacity and will continue to sell its full capacity. Margin improvements are expected from its shift in product mix, shift from rubber blacks to non-rubber blacks, from commodity blacks to specialty blacks and our addition in capacity. Debt equity is already down to 0.6:1 for March 18 and it will further go down despite Rs 800 crore capex. The effort is to reduce debts, reduce interest, and focus more and more on productive investments.

Our margins have been maintained and if anything, slightly improved in the first couple of months of this year. Crude prices have been at its highest in the recent past. At this level, Phillips Carbon not really anticipates it to impact margins and has an understanding with the tire industry that as far as price increases or decreases are concerned, they are taken over by the tire industry.

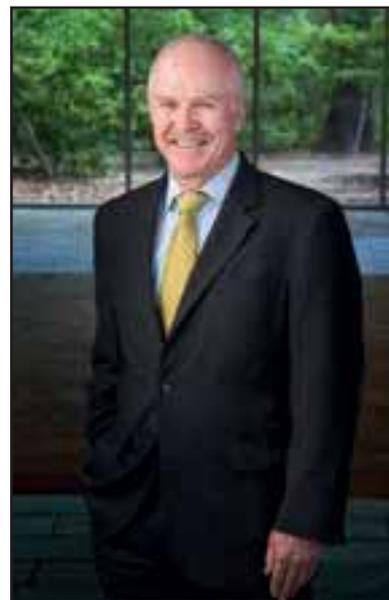
ExxonMobil Singapore Butyl and Resins Plants begin production

■ Hydrogenated hydrocarbon resin and halobutyl production capacity increased 90,000 tonnes and 140,000 tonnes per year respectively

■ Meets growing demand for synthetic rubber and adhesives in Asia Pacific



Gan Seow Kee, chairman and managing director of ExxonMobil Asia Pacific Pte Ltd



John Verity, president, ExxonMobil Chemical Company

■ Project delivered on time and on budget

ExxonMobil has started production of hydrogenated hydrocarbon resin and halobutyl rubber at its integrated manufacturing complex in Singapore, the company's largest integrated refining and petrochemical complex in the world.

"These new plants enhance the competitiveness and strategic importance of ExxonMobil's integrated manufacturing facility in Singapore, and are part of the company's long-term plan for advantaged investments around the world," said John Verity, president of the ExxonMobil Chemical Company. "We remain committed to safe and environmentally-responsible operations as we manufacture products that support better living standards and economic progress for a fast-growing middle class population in Asia Pacific."

ExxonMobil's new Escorez™ hydrogenated hydrocarbon resins plant will be the world's largest with a capacity of 90,000 tonnes per year, and will meet long-term demand growth for hot-melt adhesives used in packaging or baby diapers. The new 140,000-tonnes-per-year butyl plant will produce premium halobutyl rubber used by manufacturers for tires that better maintain inflation to improve fuel economy.



Learn more about
the gear extruders
type ROTOMEX

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July 2 – 5, 2018
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Keeping tires properly inflated can help save about a billion gallons (or 38 billion liters) of fuel and result in an estimated emissions reduction of eight million tonnes of carbon dioxide per year, equivalent to the emissions of about 2.5 million cars worldwide.

Construction of the multi-billion dollar expansion project was completed safely and on schedule. The project employed more than 5,500 contract workers at the peak of construction. The plants add 140 jobs to ExxonMobil's existing workforce of more than 2,500 at its Singapore manufacturing complex. ExxonMobil has more than 4,000 employees in Singapore.

The startup of these two new plants follows ExxonMobil's earlier acquisition of one of the world's largest aromatics production facilities in Singapore last year.

"With these latest additions, we are well-positioned to serve customers in key Asian growth markets," said Gan Seow Kee, chairman and managing director of ExxonMobil Asia Pacific Pte Ltd. "The expansion helps to further establish Singapore as a key producer of fuels and petrochemical products, particularly products that help our customers improve fuel economy and reduce emissions."

The new plants expand on ExxonMobil's flexible steam cracking capability in Singapore, which provides a range of feedstocks for upgraded specialty products to meet growing long-term demand in Asia Pacific. The Singapore complex also includes a new cogeneration unit at the refinery, bringing the total cogeneration capacity of the site to over 440 megawatts, which will help reduce emissions and support more efficient use of energy.

Continental Carbon to expand in India, US

● China Synthetic Rubber Corp (CSRC), a Taiwan-based leading supplier of carbon black, has announced plans to pump just under Euro 200 million into its operations in India and the US to increase production. The company said that it will be raising capital through the issuance of 180 million new shares in the near term to fund investments in the two countries.

S K Joshi appointed CEO of Fishfa Rubbers

● The dynamic S K Joshi with his vast experience in international marketing and in identifying new avenues globally has been appointed CEO of Fishfa, one of India's leading reclaim rubber manufacturers.

His experience of more than 4 decades in marketing with different industry sectors includes a spell as General Manager of India's No. 1 automobile company, Maruti Suzuki Ltd.



S K Joshi

CSRC is planning to inject \$155 million (Euro 133 million) into Continental Carbon India Ltd, to expand manufacturing capacity at its production unit in Gujarat. As for the US investment, CSRC has proposed a capital injection of \$52 million (Euro 45 million) to Continental Carbon Co, headquartered in Houston, Texas, to replenish its operating capital.

In a separate 14 June report, CSRC also signalled plans to spin off its carbon black and biotech operations to improve efficiency. CSRC claims to be the world's fifth-largest carbon black supplier. The company said it would remain listed on the local bourse after the move and would rename itself International CSRC Investment Holdings Co Ltd. The planned spin-off is scheduled to take effect on 30 Sept.

Evonik cutting 1,000 jobs to reduce costs

● German speciality chemicals firm Evonik AG is to cut up to 1,000 jobs globally by 2020 in a bid to reduce costs by Euro 200 million, the company.

The jobs will be in administration and sales positions and will help it towards achieving a "performance-oriented" corporate culture and a "healthy cost structure," said the company statement. In autumn 2017, Evonik set itself a target of permanently reducing administrative and selling expenses by Euro 200 million worldwide. About two-thirds of the cost savings will come from administration and a third will come from sales functions. The first Euro 50

million of the cuts will be achieved this year, Evonik added.

Zeon adding HNBR capacity

● Zeon Corp. is raising production capacity for hydrogenated nitrile rubber (HNBR) at its manufacturing plant in Kawasaki, Japan. Zeon, manufacturer of the materials under the Zetpol brand, states that its overall production capacity for the high-performance rubber is 9,500 tonnes per annum.

"The Kawasaki Plant produces high-performance Zetpol, and the production volume is 500 tonnes a year," said a company spokeswoman.

Explaining the project, Zeon said that at the manufacturing site, Zetpol is produced in two forms of rubber and latex. "Rubber is made by drying latex, and this investment will increase the drying capacity to increase rubber production," she noted. The company said drying capacity will be "about twice" the current level.

Zeon manufactures the speciality rubber at three of its production plants in Takoaka and Kawasaki in Japan and at its Zeon Chemicals LP subsidiary in the US. The Japanese materials supplier said recently that its HNBR products, marketed under the brand Zetpol, were finding increasingly use in safety and underhood parts for vehicles. The rubber, with enhanced heat resistance, is being adopted as an alternative to fluorinated rubber (FKM) in high-temperature environments, according to Zeon. The Kwasaki plant, manufactures high-performance



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- Green Polymers** - EVA bags and Special Polymers for Tyre & Rubber Applications.
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Zetpol, which offers heat resistance > 10°C higher than conventional Zetpol. The plant also produces Zetpol HNBR Latex, which is commonly used in coating glass cord and fabric.

The global carbon black market is expected to reach an estimated \$20.2 billion by 2023 with a CAGR of 5.6% from 2018 to 2023

●The future of the global carbon black market looks attractive with opportunities in the transportation, industrial, and building & construction, and packaging sectors. The global carbon black market is expected to reach an estimated \$20.2 billion by 2023 with a CAGR of 5.6% from 2018 to 2023. The major growth drivers for this market are increasing tire production, and rising demand for specialty carbon black in plastic, ink, and coating applications.

Emerging trends, which have a direct impact on the dynamics of the carbon black industry, include growing usage of recycled and bio-based carbon black, and shifting focus from commodity to more specialized grade carbon black. Carbon Black Market Trends Carbon Black Market Forecast Growth Opportunities for the Global Carbon Black Market by Region The Lucintel report includes the carbon black market size, and forecast for the global carbon black through 2023, segmented by application, end use, and region as follows:

Carbon Black Market by Application [Kilotons and \$M shipment analysis from 2012 to 2023]:

Tire Rubber Non-Tire Rubber Plastic Ink Coating Others Carbon Black Market by End Use Industry [Kilotons and \$M shipment analysis from 2012 to 2023]:

Transportation Industrial Building and Construction Printing and Packaging Others Carbon Black Market by Region [Kilotons and \$M shipment analysis for 2012 – 2023]:

North America United States Canada Mexico Europe Germany Italy Russia Asia Pacific China Japan India Thailand Indonesia South Korea The Rest of the World Some of the carbon black companies profiled in this report include Birla Carbon, Cabot

Troester ROTOMEX Series Extended by New ZX neo Versions

●In order to meet continuously evolving material requirements, TROESTER has expanded their existing offering of the Rotomex ZX series gear extruders with the addition of the ZX 75neo and ZX 120neo. Offered in a wide variety of sizes to meet an array of applications from small to large output requirements, these machines are ideally adapted for direct feeding of extrusion, calendaring and other rubber processing equipment.

The new ZX neo machines incorporate several upgrades to the current Rotomex offering, including a safety clutch that releases when a torque limit is reached to prevent damage to the machine or two temperature control units, whereby the gear pump housing and the head can now be controlled independently. This creates an opportunity to achieve higher throughputs. Other features are a fully integrated loop control that is ready to easily connect with downstream equipment, an optimized handling of the rubber leakage and a disassembly aid for the breaker plate. Moreover, the larger operator panel that includes a scandisk memory card port to allow for easy recording of production data. In addition, there is a database of service information that provides details about critical spare parts, and who at TROESTER to contact for troubleshooting and service needs.

The ZX 75neo and ZX 120neo are now available in addition to the conventional Rotomex sizes. **A ZX 75neo will be exhibited on the DKT Expo in Nuremberg, Germany in July 2018. Following the expo this machine will be available for trials at TROESTER in Hanover, Germany or for rental upon request.**

German Rubber Conference DKT 2018, July 2 – 5, Nuremberg/Germany
Contact: Karsten Jung, Sales Director Rubber Machinery Division / TROESTER



Gear Extruder ROTOMEX ZX 75neo

Corporation, China Synthetic Rubber (CSR), Orion Engineered Carbons Holdings, OMSK Carbon Group, Tokai Carbon, Philips Carbon Black, and Sid Richardson Carbon & Energy and others.

Lucintel predicts that carbon black demand in tire will remain the largest application over the forecast period supported by continuously increasing fleet size of passenger cars and light commercial vehicle. Lucintel forecasts that plastic segment is expected to witness the highest growth in the forecast period due to growth in plastic pipe, wire & cable, and packaging market.

Within the global carbon black market, transportation will remain the largest end use industry during the forecast period supported by increasing demand for the tire and mechanical rubber goods. Lucintel

predicts that the demand for carbon black in the packaging end use is likely to experience the highest growth in the forecast period supported by growth in the food and beverages, household products, personal care, and pharmaceuticals sectors.

Asia Pacific is expected to be the largest region by value and volume and will experience the highest growth over the forecast period supported by higher vehicle production and shift of tire production in low-cost countries, such as India and China.

Some of the features of "Carbon Black Market Report: Trends, Forecast and Competitive Analysis" include: Market size estimates: Global carbon black market size estimation in terms of value (\$M) and volume (KT) shipment.

Trend and forecast analysis: Market

trend (2012-2017) and forecast (2018-2023) by application, and end use industry.

Segmentation analysis: Global carbon black market size by various applications such as application, supply, and luminaire in terms of value and volume shipment.

Regional analysis: Global carbon black market breakdown by North America, Europe, Asia Pacific, and the Rest of the World.

Growth opportunities: Analysis on growth opportunities in different applications and regions of carbon black in the carbon black market.

Strategic analysis: This includes M&A, new product development, and competitive landscape of carbon black in the carbon black market. Analysis of competitive intensity of the industry based on Porter's Five Forces model.



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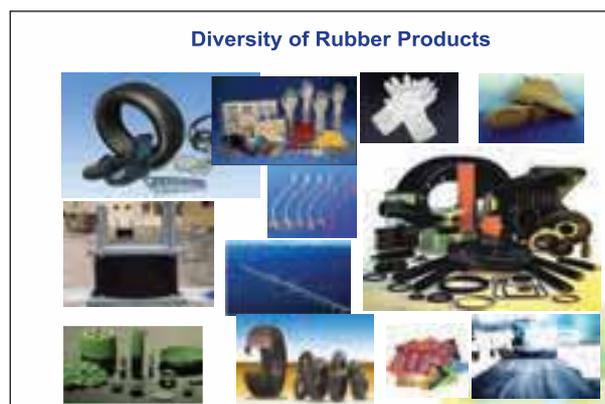
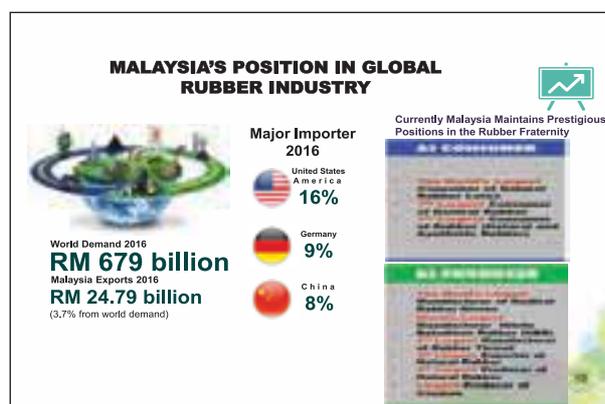
Zairossani Mohd. Nor
Director General,
(MRB) Malaysian Rubber Board

R&D Partnership between government Agencies and Industry: Exploring new opportunities for value addition



CONTENTS

- 1 • Status and Trends of Rubber Industry
- 2 • Industry Challenges, Rubber Value Chain and R&D Partnership
- 3 • Opportunities for Value Addition
- 4 • Summary



Rubber Industry: Current Trends

- > Worldwide demand for rubber is expected to rise 3.9%/year through 2019 (due to rising levels of tyre manufacturing)
- > Asia Pacific region
 - to outstrip global demand growth, rising 4.8%/year (2 and 5 times than expected growth in North America and in Europe, respectively)
 - to account for 65.2% global demand by 2019 from 62.5% in 2014
 - growth in manufacturing activity increases demand for non-tyre applications (automotive, medical, industrial rubber products)
 - fastest growing national rubber markets – Indonesia, India, Thailand, China, Malaysia and Vietnam
 - China remains the world's largest market and is expected to represent more than 50% of the Asia Pacific region

Emerging Trends in Industry

World economy is evolving and new trends reshaping the world. Four fundamental disruptive forces:

1. The shift in the centre of economic activity to emerging markets like China at a speed never before witnessed
2. The accelerating economic impact of technology (smartphones)
3. The decreasing fertility rate and ageing population. The number of people of working age will also fall
4. The growing world connectivity. The global trading system has expanded beyond conventional hubs through data and communications

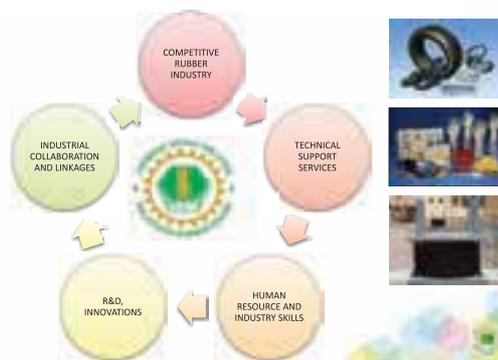
Source: No Ordinary Disruption: The Four Forces Breaking All the Trends (Richard Dobbs, 2015)

Repositioning R&D

- Response to emerging disruptive market forces and disruptive technologies as well as sustainable technology development
- Requirement to adjust to new technological and market trends.
- Requirement for visionary R&D leadership with focus on emerging mass markets and invest to realize future potential technologies.
- Necessities for technology forecasting for predicting technological development and the impact of future technologies
- Review of national and institutional innovation system for rubber industry



Developing Effective Rubber Industry Ecosystem



Sustainable Rubber Industry



Approaches towards implementation:

- Optimization of resources
Renewable natural rubber, energy reduction, non-toxic chemicals or raw materials
- Environmental impacts
Waste minimization, recycling and environment management systems (ISO-14000 series standards)
- Technological development
R&D in cost-competitive and eco-efficient technologies (green rubbers, green rubber products)
- Institutional changes
Comprehensive environmental regulations



Innovations towards Sustainable Rubber Industry

Proposed approaches to identify key innovative drivers (research and development, market requirement and policy)



Tyre Products

INDUSTRIAL COLLABORATIVE RESEARCH ACTIVITIES

Latex Products



Non-Tyre Products



Effective collaboration occurs through application of collective knowledge and targeted research and mutually beneficial collective solutions.



Challenges in Rubber Smallholding Sector

Rubber growers in Malaysia are predominantly the smallholders:

- Scattered holdings of uneconomic size, low yield level, non-remunerative income, low adoption of technology and an aged population.
- Multi-tier marketing chain does not help as it increases the discount margin with narrow revenue for smallholders.
- Smallholders can improve income through collective purchase, use of technologies, and by integrating into downstream supply chain industries (forward integration)



Production/Productivity → Revenue → Price → Quality → DRC → Contaminations

Technology Enabler 1

Rubberized Bitumen : Strategy to Increase Domestic Rubber Consumption



Technology Enabler 2**NR Serum Bioprocessing**

Utilization of natural rubber serum (NRS) as a new source of income for rubber processing to achieve green industry status)

**Quebrachitol**

- Alternative source of carbohydrate
- Antibiotics and Enzyme Inhibitors
- Inositol derivatives

**Protein Powder**

Rich plant protein - phytase, hevacine, calmodulin, etc.

- Industrial proteins and enzymes
- Culture growth media
- Food additives
- Animal feed supplements

Technology Enabler 3**ARTWORK AND STATIONERY**

Natural rubber (NR) composite colouring materials are developed by the Malaysian Rubber Board to create an alternative for the conventional colouring materials such as water colours, poster colours and acrylic colouring materials for artwork and stationery uses.

The NR composites are waterborne colouring materials suitable for arts, arts deco and stationery uses. It is composed mainly of natural occurring material such as epoxidised natural rubber latex, cellulose and pigments.



NR composite on drawing paper
(Subki Ishak, 2016)



NR composite on canvas
(Hudry Hayat, 2016)

Summary

- Rubber industry has to embark on initiatives towards innovation and sustainability of the entire rubber value chain
- Active participation and collaboration with the industry towards innovative eco-system through R&D and key industry enablers
- Key industry strategies provide guidance for implementing innovative approaches or initiatives for rubber industry
- Empowering smallholders through engagement in upstream and midstream activities by establishing cooperatives for forward vertical integration approaches
- Meaningful collaboration through application of collective knowledge and targeted research, mutually beneficial collective solutions to realize new opportunities for value additions at specific rubber value chain.

IISRP NEWS**IISRP ELECTS PRESIDENT INTERNATIONAL FOR 2018 – 2019**

Brian Chapman, General Manager of the Elastomers Business Unit of Kuraray America Inc., was elected President International of the International Institute of Synthetic Rubber Producers (IISRP) for the year 2018 – 2019 at the association's 59th Annual General Meeting on May 9. He succeeds Mr. Enrico Lucchese, who now becomes the Institute's Past – President International.



Brian Chapman

Chapman has extensive experience in the polymer industry where he has held positions in the technical area, marketing, sales as well as key management positions.

Chapman joined Kuraray in 2003 with the role of manager of technical service and

development in the elastomer business unit of Kuraray America, where he has held different positions in different areas of the company until reaching his current position of

General Manager. Chapman holds a BS in chemical engineering from Purdue University in West Lafayette IN. He also holds an MS and a Ph.D. in chemical engineering from the University Notre Dame in South Bend IN.

In addition to Lucchese, who is now the Past – President International and Chapman,

who will also serve as President of the Americas Section, the other members elected to the Institute Executive Committee for the year 2018-2019 are:

- Brad Iorger of Goodyear Tire and Rubber, Vice-President, Americas Section
- Larisa Bondar of Sibur, President EMEA Section
- Abdullah Al-Otaibi of SABIC, Vice President EMEA Section
- Hayato Hirano of JSR Corporation, President Asia Pacific Section
- Jong-Hoon Baek of Kumho Petrochemical Co., Vice-President Asia Pacific Section
- Hendrick Lam of TSRC, Member of the Finance Pension & Audit Committee.
- Ralf Irmert of Trinseo, Member of the Finance Pension & Audit Committee.
- Juan Ramon Salinas, IISRP Managing Director, Assistant Treasurer, and Recording Secretary.

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DIARY OF WORLD EVENTS

SEPTEMBER 2018

► 9th International Rubber Glove Conference & Exhibition

04 – 06 September: Kuala Lumpur Convention Centre, Malaysia

Contact: Chan Wone Fu, MARGMA

Tel: +603 7727 3197

Fax: +603 7727 3191

Email: ceo@margma.com.my

Web: www.margma.com.my

► REIFEN 2018

11 – 15 September: New Hall 12 at the Frankfurt Fair & Exhibition Centre.

Contact: Dr. Ann-Katrin Klusak
Director Marketing Communications
Mobility & Logistics

Messe Frankfurt Exhibition GmbH

Tel: +49-69-7575-5621

Fax: +49-69-7575-6337

Email: ann.katrin.klusak

@messefrankfurt.com

Web: https:

automechanika.messefrankfurt.com

► Rubber Tech China 2018 & Tire+ China 2018

19 – 21 September: Shanghai New International Expo Centre, Shanghai

Contact: CURC - Ella Liu / Willow Sun

Tel: +86-10-58650277

Fax: +86-10-58650288

Email: expo@chrubber.com

Web: http://en.rubbertechnology-expo.com/

► Carbon Black World 2018

25 – 26 September: Hilton Dusseldorf, Germany

Contact: Adriana Lobo

Tel: +44 (0) 1372 802085

Email: aalobo@smithers.com

Web: www.carbonblackworld.com

► Asia Rubtech Expo 2018

27 – 29 September: Hotel Lalit Ashok, Kumara Krupa High Grounds, Bengaluru-560 001

Contact: S.Vasudeva Rao, Hon.Sec.

Indian Rubber Institute, IRI

Tel: 91-9886758930, 91-7290050669

Email: irikarnataka1@gmail.com

NOVEMBER 2018

► 2018 Rubber Recycling Symposium

07 – 08 November 2018: Sheraton on the Falls Hotel, Niagara Falls, Ontario, Canada

Contact: Michal Majernik - Tire and Rubber Association of Canada

Tel: +11 519 249 0366

Email: info@tracanada.ca

Web: www.tracanada.ca

► Africa Rubber Expo & Summit 2018

20 – 21 November 2018: Sandton Convention Center, Johannesburg, South Africa

Contact: Peram Prasada Rao - TechnoBiz

Tel: +66 2 933 0077

Fax: +66 2 955 9971

Email: peram@technobiz-asia.com

Web: www.rubbertechnology-expo.com

► TPE & Silicone Elastomers 2018

27 – 28 November: Milan - Italy

Contact: Joana Gibson

Tel: +44 (0) 1372 802000

Email: jgibson@smithers.com

JANUARY 2019

► 10th India Rubber Expo 2019

17-19 January: NESCO Complex, Goregaon(E), Mumbai.

Contact: Sandeep Sanyal, Coordinator

Email: sales@indiarubberexpo.in

Tel: + 022-28392095 /2107

Web: www.indiarubberexpo.in

MARCH 2019

► Tire Technology Expo 2019

05-07 March

Deutsche Messe, Hannover, Germany

Contact: Colin Scott, UKIP Media & Events,

Tel: +44-1306-743744

Email: colin.scott@ukipme.com

Fax: +44-1306877411

Web: www.tiretechnology-expo.com

► Tyrexpo Asia 2019

19 - 21 March at Singapore Expo Hall 1 & 2, Singapore

Contact: Darren Tay - Project Manager

Tel: +65 64032100

Email: darren.tay@singex.com

Web: www.tyrexposeries.com

OCTOBER 2019

► Arab Rubber Expo 2019

16-17 October 2019

Sharjah Expo Centre

UAE

Contact: Peram Prasada Rao - TechnoBiz

Tel: +66 2 933 0077

Fax: +66 2 955 9971

Email: peram@technobiz-asia.com

Web: www.rubbertechnology-expo.com

► K- 2019

16-23 October: Duesseldorf, Germany.

Contact: Fr. Eva Rugenstein/
Desislava Angelova/Sabrina Giewald

Tel: +49-211-4560 240 /

Fax: +49-211-4560 8548

Email: AngelovaD@messe-duesseldorf.de

GiewaldS@messe-duesseldorf.de

MARCH 2020

► Global Rubber, Latex & Tyre Expo 2020

11-13 March 2020, Bangkok

International Trade & Exhibition Centre, Bangkok, Thailand

Contact: Peram Prasada Rao - TechnoBiz

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Carl-Dietrich-Harries-Medal awarded to DKG Prof. Ulrich Giese

● On July 2, 2018, the German Rubber Society (Deutsche Kautschuk-Gesellschaft e.V., DKG) has awarded its Carl-Dietrich-Harries-Medal to Professor Ulrich Giese.

With this medal, offered every three years, exceptionally commendable scientific achievements in the field of rubber and elastomers are honoured. The conferment took place during the opening ceremony of the German Rubber Conference 2018 (DKT 2018) in Nuremberg, Germany.

Ulrich Giese is one of the leading figures in the field of international elastomer sciences, having influenced them as scientist as well as director of the Deutsche Institut für Kautschuktechnologie DIK (German Institute for Rubber Technology) in Hannover, Germany.

At the moment, Giese is holding the position of Professor for Applied Polymer Chemistry at Leibniz University Hannover. He is also scientific spokesperson for the European Rubber Research Laboratories (ERRLAB), an European network of laboratories for research and testing in rubber applications.

His global activities and his scientific work are interlinking academic fundamental research and industrial applications.



(Left to right): Dr. Cristina Bergmann (incoming Chairwoman DKG), Prof. Ulrich Giese (Laureate), Dr. Joerg Boecking (outgoing Chairman DKG)

The name given to this price, Carl Dietrich Harries (5.8.1866 to 3.11.1923) was a German chemist and forerunner in the production of synthetic rubber. The price is awarded since 1933. Among the recipients were Nobel laureates.

The DKG, founded in 1926, is supported as a non-profit network by 900 personal members and 100 companies in the field of rubber and elastomers. Personalities with outstanding achievements in the field are documented in the DKG 'Rubber Hall of Fame' (Internet: www.dkg-rubber.de).

Deutsche Kautschuk-Tagung (German Rubber Conference) DKT 2018 opens in Nuremberg

● DKT 2018, the leading trade fair on rubber and elastomers, opened on July 2 in Nuremberg, Germany. The demand for exhibition space and tickets record in advance.

300 enterprises coming from all over the world presented their products and novelties from July 2 to 5, 2018, including raw materials, machinery, laboratory and research equipment as well as IT-solutions.

In a parallel scientific programme and conference, 139



lectures as well as several special events were presented, including a focus on new technologies and markets.

Young professionals and students presented their works in a "University Session". They were also offered advanced knowledge in an "Educational Symposium" as well as financial assistance during "Recruiting Days", sponsored by the Federations of the German Rubber Industry, wdk und ADK.



(Left to right): Dr. Volker Boerger (Struktrol), Dr. Fritz Nimtz (BASF), Guido Robbe (Struktrol), Colin Clarke (Struktrol), Bernhard Mohr (BASF) and Dr. Axel Kistenmacher (BASF)

A TPE-Forum as well as a Tire Day were part of the event, too.

Over 3.000 visitors were expected at DKT 2018, making it the largest meeting of experts in rubber and elastomers in Germany and a global hotspot of advanced rubber technology.

Dr. Cristina Bergmann, chairwoman of the German Rubber Society (Deutsche Kautschuk-Gesellschaft DKG), emphasised in her opening statement the goal of the DKT 2018: The promotion and distribution of knowledge about rubber and elastomers. The professional knowledge of all participants should be revived, innovations presented, networks renewed and the dialogue between experts and

young professionals should be encouraged.

The highlight of the opening ceremony was a lecture by Professor Konrad Paul Liessmann, Professor for Methodes of Conveying Philosophy and Ethics at Vienna University. His topic: I. The individual in his or her networks.

Three outstanding persons were honoured during the opening ceremony for their contribution to the rubber network. Prof. Ulrich Giese received the Carl Dietrich Harries Medal, Dr. Manfred Achenbach was awarded the Erich Konrad Medal and Dr. Rainer Panenka received DKG Medal of Merits, all prizes offered by the German Rubber Society DKG.

Two companies received prominent DKG Product Awards in due course of the opening on July 2nd:

- »Freudenberg Process Seals for clamp sealings, securing hygienic pipe connections and
- »Kloeckner DESMA Elastomertechnik für their Industry 4.0" project and software SmartConnect 4.U.

Hosts of DKT 2018 were:

- »The Deutsche Kautschuk-Gesellschaft e.V. DKG (German Rubber Society), founded in 1926, a non-profit network supported by 900 individuals and 100 companies,
- »The Rubber Business Development Corporation, an enterprise of the Wirtschaftsverband der deutschen Kautschukindustrie e.V. wdk (German Rubber Industry Federation), founded in 1894, an economic-political network of 160 companies.

Both organisations are based in the House of the German Rubber Industry in Frankfurt, Germany.



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India's Automobile: Production, Domestic Sales & Exports data for the month of June 2018 and Growth

Category	Production			Domestic Sales			Exports		
	June			June			June		
	2017	2018	% Change	2017	2018	% Change	2017	2018	% Change
I Passenger Vehicles (PVs)									
Passenger Cars	202,537	218,141	7.70	137,012	183,885	34.21	46,691	46,336	-0.76
Utility Vehicles (UVs)	79,467	87,430	10.02	50,066	73,654	47.11	15,266	10,060	-34.10
Vans	12,796	13,901	8.64	11,958	16,220	35.64	312	196	-37.18
Total Passenger Vehicles (PVs)	294,800	319,472	8.37	199,036	273,759	37.54	62,269	56,592	-9.12
II Commercial Vehicles (CVs)									
M&HCVs									
Passenger Carriers	3,691	3,951	7.04	3,071	3,909	27.29	1,103	718	-34.90
Goods Carriers	19,751	30,260	53.21	18,104	26,443	46.06	1,976	3,961	100.46
Total M&HCVs	23,442	34,211	45.94	21,175	30,352	43.34	3,079	4,679	51.96
LCVs									
Passenger Carriers	5,590	5,386	-3.65	4,815	6,157	27.87	303	479	58.09
Goods Carriers	33,892	51,018	50.53	30,900	44,115	42.77	3,217	5,006	55.61
Total LCVs	39,482	56,404	42.86	35,715	50,272	40.76	3,520	5,485	55.82
Total Commercial Vehicles	62,924	90,615	44.01	56,890	80,624	41.72	6,599	10,164	54.02
III Three Wheelers									
Passenger Carrier	57,408	93,654	63.14	28,229	46,513	64.77	27,967	47,234	68.89
Goods Carrier	9,785	11,127	13.71	8,262	10,371	25.53	534	467	-12.55
Total Three Wheelers	67,193	104,781	55.94	36,491	56,884	55.89	28,501	47,701	67.37
IV Two wheelers									
Scooter/Scooterette	554,666	636,758	14.80	497,478	601,761	20.96	24,618	36,864	49.74
Motorcycles/Step- Through	1,197,743	1,455,296	21.50	964,729	1,199,332	24.32	175,065	240,474	37.36
Mopeds	70,215	76,940	9.58	65,302	66,791	2.28	742	2,822	280.32
Total Two wheelers	1,822,624	2,168,994	19.00	1,527,509	1,867,884	22.28	200,425	280,160	39.78
Quadracycle	150	621	314.00	0	0	-	132	366	177.27
Grand Total of All Categories	2,247,691	2,684,483	19.43	1,819,926	2,279,151	25.23	297,926	394,983	32.58

Society of Indian Automobile Manufacturers (10/07/2018)



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Technical Conference in the 9th International Rubber Glove Conference and Exhibition 2018

Following the success of eight conferences and exhibitions since 2002, the Malaysian Rubber Glove Manufacturers Association once again presents the 9th International Rubber Glove Conference and Exhibition (IRGCE) 2018, themed **Transforming Technology, Driving Innovation**. This time, the 9th IRGCE 2018 will be held concurrently with the International Rubber Conference (IRC) 2018, encompassing the entire Rubber Industry.

The 9th IRGCE 2018 & IRC 2018, which will be held from September 4-6, 2018 at the Kuala Lumpur Convention Centre (KLCC), serves as the landmark point of convergence for key players within the entire rubber glove and rubber industry. It also serves as a common platform for the latest industry news and updates, innovations and developments, whilst fostering closer industrial rapport amongst them.

The conference will provide a platform to review, analyse and present information on the latest trends and developments within the rubber glove and medical devices industries.

The 9th IRGCE 2018 will cover technical papers on the improvements in processing technologies, new and innovative products, new usage of gloves in medical and non-medical settings, advances in lattices & environmental-friendly compounding ingredients, updates on regulatory compliance, green technology and waste management.

Industry analysts and market players will present relevant technical and professional papers on the dynamic glove and medical devices industries.

A half-day seminar on **"Compounding Ingredients and Materials for Rubber Gloves"** will be held on the last day of the event. The seminar is designed to equip chemists, production engineers and QA professionals with better

understanding, knowledge and skills on how to innovate and improve product quality in their manufacturing facilities.

With the 9th IRGCE 2018 focusing on the rubber glove industry, the IRC 2018 will look at the rubber industry in general with an estimated 200 papers from over 20 countries on topics such as rubber novelty, rubber materials, rubber science, biotechnology, polymer synthesis, rubber modern processing technology, applications and services, tire technology, rubber engineering, environment management and sustainability in rubber as well as progress in test methods and development amongst other related topics.

Don't miss the opportunity to network and move your business forward at the 9th IRGCE 2018 & IRC 2018.

For more information on the 9th IRGCE 2018 technical conference, please contact the organiser at IRGCE@margma.com.my or contact@margma.com.my. Meanwhile, for IRC 2018, please contact the organiser at primy@prim.org.my or secretariat@irc2018.com.



Dr Tan Ah Seng, the Technical Committee Chairman for the 9th International Rubber Glove Conference and Exhibition 2018 (9th IRGCE 2018)



Prof Dato' Dr Azanam Shah Hashim, the Technical Committee Chairman for the International Rubber Conference 2018 (IRC 2018)



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World Largest Rubber Glove Event!

The exhibition booths in the prestigious 9th International Rubber Glove Conference & Exhibition 2018 (9th IRGCE 2018), organised by the Malaysian Rubber Glove Manufacturers Association (MARGMA), has doubled that of its predecessor, with 545 booths.

The exhibition will run for 3 days from September 4-6, 2018.

"There has been an overwhelming response for the 9th IRGCE 2018 exhibition with companies from over 14 countries gathering to showcase various products such as gloves, catheters, chemicals, packaging materials, machinery equipment and services, automation, burner, boiler, oven, formers, condoms, painting boxes, industrial brush, consultancy, innovation and traders.

According to Patrick Leong, Exhibition Chairman for the 9th IRGCE 2018, enquiries for the booths booking started even before the conclusion of the previous event in September 2016 and with the International Rubber Conference 2018 (IRC 2018) held concurrently, this has spurred great interest from parties related to various sectors of the Rubber Industry.

"This premier event with both conference and exhibition

will serve as a one-stop centre not only for the Glove Manufacturing industry and its supporting industries but also the entire Rubber industry. We will be having most of the world's leading glove manufacturers showcasing their expertise, knowledge, and their products at the exhibition. Companies from important supporting industries and educational institutions will also participate in the exhibition," he adds.

"We will be targeting an estimated 10,000 trade visitors for the event. We will also invite Bankers, Local and International Fund Managers to visit this exhibition for them to understand the depth and progress in the Rubber Glove Industry," he states.

With the support of the MARGMA Secretariat, Patrick Leong has been actively promoting the 9th IRGCE 2018 since its launch.

With the support from fellow MARGMA member-companies and exhibitors, the 9th IRGCE 2018 & IRC 2018 was aggressively promoted in the foreign exhibitions such as MEDICA, Arab Health, Florida International Medical Exhibition (FIME) and China International Medical Equipment Fair (CMEF).

India Rubber Expo 2019 -An update

The 10th edition of IRE 2019 – Asia's Largest Exhibition & Conference on Rubber Machinery, Equipment, Raw Materials, & Products is being held from January 17 - 19, 2019, at the Bombay Convention & Exhibition Centre, Goregaon, Mumbai, India.

India being on a high-growth trajectory, IRE 2019 is a milestone event bringing immense opportunities to the rubber fraternity from India & Overseas. We are committed to provide an appropriate platform for one and all to

EXPO 2019 is probably amongst the three largest exhibitions in the world on rubber.

The 10th Edition of the India Rubber Expo 2019 is expected to maintain its momentum and scale up to greater heights with active participation envisaged from :

● **Key Government bodies, such as:** Ministry of Transport / Railways / Commerce & Industries / Defence / Power & Mines / etc.

● **Participation / Presence of Select OEM's:** From Various Rail Companies / Auto Companies / OEM from other sectors relevant to rubber use.

● **10th Edition of IRE-2019 will have more than one overseas pavilion**

● **WORKSHOPS**

● **International Reverse Buyer Seller Meet**

● **Domestic Buyer Seller Meet**

If not booked already, we encourage you to expedite and book your space at the earliest, space is getting sold out very fast.

● **Exhibitors have already committed approximately 11,000 sqm of exhibition space.**

● **Approximately 2000 Sqm booth space is available for exhibitors.**

The IRE - 2019 Committee have planned to conduct approximately 15 Road Shows to promote Rubber Expo across India among the Rubber Products Manufacturers and various stakeholders.

In the first phase, road shows were held at the following cities:

● Ahmedabad on May 26, 2018 attended by 96 delegates.

● Vasai on June 2, 2018 attended by 89 delegates.

● Nashik on June 7, 2018 attended by 100 delegates.

● Pune on June 11, 2018 attended by 110 delegates.

● Jalandhar on June 13, 2018 attended by 188 delegates.

For Further details please visit : www.indiarubberexpo.in



**Vishnu Bhimrajka, Chief
Convenor – IRE 2019**



**Vikram Makar, Chairman
-IRE 2019**

maximise these opportunities to their advantage at the show. It would be by far the largest-ever held IRE and we would be closing around 14,000 sqm of actual exhibition space taken by exhibitors. Since the time, we opened the first booking mailer on 1st November 2017, we have received an overwhelming response and support from stake holders/ Fraternity of Rubber Sector from India and overseas. INDIA RUBBER

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Tyrexpo India 2018

More than 4,000 trade visitors from across India and other countries attended the 6th Edition of the Tyrexpo India alongside Expo located shows Garagexpo India 2018 and RubberTech India 2018 from June 21-23, 2018 at Pragati Maidan, New Delhi.

Over 100 global brands including those from peripheral businesses such as tire equipment and tools for manufacturing, tire distribution, tire re-treading and fleet operations were exhibiting at Tyrexpo India 2018. This dedicated platform explores new business opportunities, exchanges ideas, and showcases products, technologies and solutions relevant to the Indian automotive market. In addition, the trade show extends its reach beyond the tire industry ecosystem to support other industries such as construction, agriculture and mining.

The second edition of GarageXpo India, a highly-specialised automotive repair and maintenance trade show in India, co-located with Tyrexpo India 2018. It served as one of the event highlights to foster business relationships amongst the automotive repair and maintenance community in the Indian

sub-continent. Building on the success of the first show, this edition continues to positively engage trade visitors, as well as manufacturers and distributors of workshop equipment, safety gears, speciality tools and related products, workshop management service providers, and technology developers.

At Tyrexpo India, key exhibitors included renowned national and international players like Balkrishna Industries Limited (BKT), Pirelli Tyre (SUISSE) SA, Elgi Rubber, together with some well-known Chinese companies.

In addition, collaborative partnerships between Tyrexpo India 2018 and some of the most influential and prominent industry associations have been formed to facilitate knowledge transfers and community building. These include Automotive Tyre Manufacturer's Association (ATMA), Automotive Research Association of India (ARAI), International Centre for Automotive Technology (ICAT), Chemical and Allied Export Promotion Council of India (CAPEXIL), All India Automobile Workshops Association (AIAWA) and Indian Tyre Technical Advisory Committee (ITTAC).



The lighting of lamp by dignitaries (Left to Right) - Adrian Sng, General Manager- SingEx Exhibitions, Wei Yun, Chairman, China United Rubber Corporation, Rajiv Budhraj, Director General, Automotive Tyre Manufacturers' Association, PK Ganguly, Head of Marketing -Balkrishna Industries Limited and Sudarsan Varadaraj, CMD, Elgi Rubber



Darren Tay- Senior Manager (Events Business), PK Ganguly, Head of Marketing -Balkrishna Industries Limited, Adrian Sng, General Manager – SingEx Exhibition Rajiv Budhraj, Director General, Automotive Tyre Manufacturers' Association, Wei Yun, Chairman, China United Rubber Corporation, Baldeep Singh Pahwa-India Head, SingEx Exhibitions India and Coco Chen,China United Rubber Corporation



Balkrishna Industries Limited (BKT) stand



Elgi Rubber stand



Meetings underway at the Samson-Taiwan stand



Wei Yun with Farida Bharucha of IRJ



Wei Yun and Coco Chen at the CURC stand



Pirelli Tires stand



(Right to Left) Ms. Rebecca Peng, Lin Kun - Te President, Ms. Marian Hung - Sales Of Samson Machinery at their stand



Automotive Tyre Manufacturers' Association (ATMA) stand



Dalian Rubber & Plastic Machinery stand



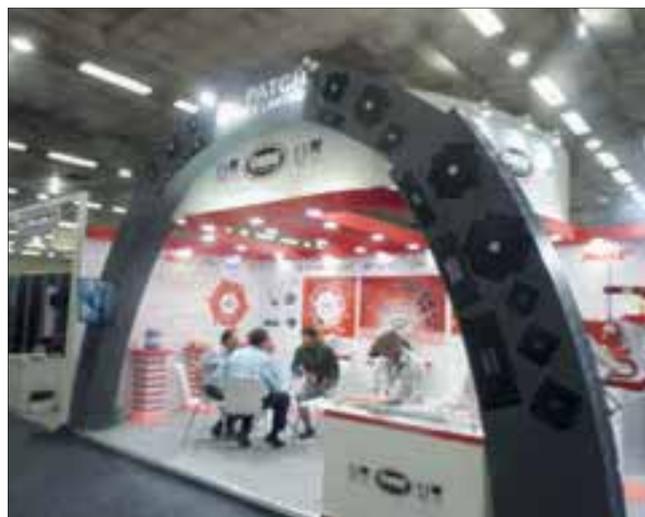
Wei Yun visiting IRJ stand



Dalian Baofeng Machinery Manufacturing Co Ltd stand



China Wanda Group NICEST stand



Unipatch Rubber Limited stand



Sentury Tire stand



IRJ- Indian/International Rubber Journal stand

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Rubber manufacturing plant starts operation in Liberia

● The first locally Liberian rubber manufacturing plant has started work in the country on 4th June. The Cooper Rubber Processing Plant (CRPP), will manufacture natural rubber materials for retreaded tires, roofing, electrical insulators as well as rubber gloves. Located in Blagai, Bomi Highway, the plant is headed by James Cooper. CRPP “purchases rubber from local farmers across the country and process them into crepe technically specified rubber (TSR 10).” This, is then exported to tire makers in Asia and the US, the report added. The plant also has the capacity to produce ribbed smoked sheets for export.

Bridgestone Announces New Polymer to Improve Tyre Abrasion Resistance & Durability

● Bridgestone Corporation has claimed a world first with the development of a polymer that bonds rubber and resins at the molecular level. It believes this High Strength Rubber (HSR) polymer will lead to tyres that require fewer raw materials to deliver the performance expected from them.

Introducing HSR as a material that “combines the pliability of rubber with the toughness of resin”, Bridgestone says the new polymer “boasts unprecedented durability” with crack

resistance over five times higher (based on tests using JIS K 6270), abrasion resistance more than 2.5 times higher (based on tests using JIS K 6264-2), and tensile strength at least 1.5 times higher (based on tests using JIS K 6251) than natural rubber, which itself has higher destruction resistance than common synthetic rubber.

HSR is a hybrid material for the molecular-level bonding of synthetic rubber components such as butadiene and isoprene with resin components such as ethylene.

It utilises Bridgestone’s proprietary novel gadolinium (Gd) catalyst (via copolymerisation) and was developed by further evolving Gd catalyst technologies used to synthesise polyisoprene rubber.

“HSR boasts levels of durability and abrasion resistance that eclipse those of natural rubber,” Bridgestone Corporation reported.

“For this reason, HSR is a promising next-generation tyre material with the potential to create tyres that achieve the required levels of performance while using less materials. Bridgestone therefore anticipates that HSR will be a powerful asset for the accomplishment of the goal of working towards 100 per cent

sustainable materials set for 2050 in the Bridgestone Group’s Long-term Environmental Vision.

Bridgestone also intends to examine the possibility of utilising HSR in non-tyre products.

Performance elastomers market to grow 7.5% through 2024

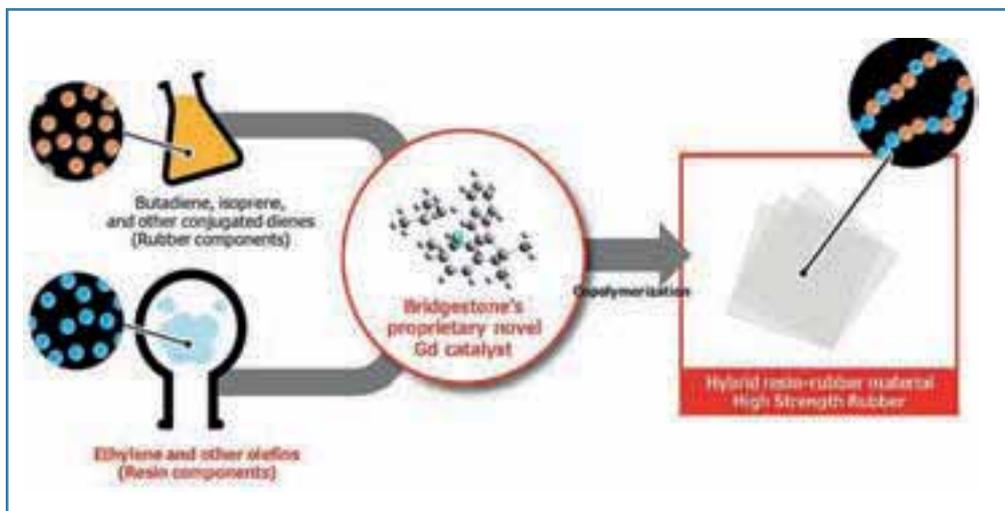
● The performance elastomers market is set to grow at a CAGR rate of 7.5% through to 2024, according to Global Market Insights Inc (GMI). In a report-release, published 22 June, GMI predicted that the market will exceed \$14 billion (Euro 12 billion) by 2024.



Elastomers studied in this report include silicone, thermoplastic nitrile based, fluoroelastomers, acrylate, and chlorinated elastomers. These products provide resistance to extreme temperature, and are highly reactive chemicals, gases such as ozone, as well as fuel and other hydrocarbons.

The automotive and transport segments will drive the use of such materials. Such properties make the materials suitable for use in critical applications such as aerospace fuel systems and automotive fuel-emission controls. However, volatility in the raw material prices may adversely affect the market in coming years, warned the GMI report. Many manufacturers, it added, will find it difficult to maintain a regular supply.

Also restraining the market in coming years will be the demand-supply dynamics, crude oil price fluctuations and its impact synthetic substitutes’ prices, as well as currency rates.



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The report foresees silicone elastomers generating revenue worth more than \$6.5 billion in 2024, with a growth of over 8% CAGR in the forecast years. Fluoroelastomers are the fastest developing product segment and likely to be worth more than \$1.5 billion by the end of the forecast years. Demand for such materials is driven by its high resistance to temperature and chemical reactions.

High performance elastomers such as fluoroelastomers, fluoro-silicone rubber, and hydrogenated nitrile rubber (HNBR) are among the costliest product segments, having strong influence on the market revenue in spite of low volumetric demand.

The automotive and transport segments will drive the use of such materials, with their under-the-hood application. The sector is forecast to reach \$8 billion by the end of 2024. Geographically, Asia Pacific will be the largest performance elastomers market over the forecast years with more than 55% of the overall industry by 2024.

India rubber industry 'over-reliant' on NR imports

● India's rubber manufacturing industry is becoming over-reliant on imports of low-cost natural rubber (NR), the Rubber Research Institute of India (RRII) has warned. The warning is based on an RRII study that valued the industry's output – 66% of which is based on NR – at close to Rs.750 billion per annum, and exports nearing \$ 2.5 billion a year.

In recent years, however, low NR prices have discouraged rubber growers from tapping trees leaving imports to meet growth in demand from India rubber product manufacturers.

The report went on to that that this growth "is losing its momentum" and that the industry had "started to become overly dependent on imported NR."

"Indian rubber industry is too important for the economy to be left to the uncertainties and vagaries of NR supply in the global market for long," the RRII concluded in a 7 June release.

EXHIBITIONS & EVENTS

SILICON ELASTOMERS & TPE WORLD SUMMIT

Elastomers Professionals from across the Silicone Elastomers and TPE industries to gather in Milan this November at the 'home' of the elastomers industry

Over 250 key professionals from across the global elastomers industry will come together in Milan, Italy on November 27 – 28, 2018 to attend the renowned Silicone Elastomers and Thermoplastic Elastomers World Summits.

Over the years, there have been a number of new developments across both the silicone elastomers and TPE industries, driven by increasing performance requirements across various sectors; from automotive and healthcare to consumer and industrial applications. With so many important developments, it's vital for all areas of the supply chain to stay

up-to-date with what's happening in the industry and get ahead of the competition. This is why so many industry experts come together to attend this yearly gathering, known widely as the 'home' of the elastomers industry.

Organised by Smithers Rapra, this summit covers the full scope of the global elastomers industry and provides valuable information on new developments and initiatives, as well as delivering an insightful forecast into the future.

Sessions have previously included advanced research and development updates, additives, the view of the OEM, materials; biomaterials and renewables, TPEs and their properties and much more.

Described as an "Excellent opportunity for networking and improvement of market and technology knowledge" by OCSiAI, both summits offer delegates the opportunity to gain the knowledge to boost their business, increase profit, meet new industry contacts, build relationships and develop an increased understanding of customers' needs. Not only that, by purchasing a ticket to either conference, delegates will gain full and unfiltered access to the other event as desired, providing double the content and double the ROI.

For more information on Silicone Elastomers and TPE World Summits visit www.elastomer-forum.com or contact Joanna Gibson via jjgibson@smithers.com



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Bidar Rubber & Reclaims (P) Ltd.,
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Eswar Rubber Products (P) Ltd.,
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(2014-15)

30 Years
in
Rubber Reclaiming



Production Capacity

55,000 M.Ton
per annum

www.rubberreclaim.com



The Rubber Economist Quarterly Report

Highlights

- The growth estimate for world rubber consumption in 2017 has been revised upward to 3.3% but may slow down to 2.5% a year during 2018-2020.
- Last year, the weakest link was North America. This forecasting period, the EU may be the weakest link.
- A discussion of the latest estimates of rubber consumption for the world and regions per capita.
- NR should continue to have an edge and show a slightly faster rate of growth than SR over the next few years, sending global SR shares down to 53.3%.
- World NR production increased sharply last year, but is expected to slow down because of lower demand.
- Output in the major NR producing countries increased sharply last year, but the sharpest growth came from smaller producing countries.
- There is a discussion on the recent sharp increase in NR acreage around the world and its impact on the NR sector.
- Updated information on NR export by types – there is a large amount of compound rubber.
- The opposite to NR, world SR output showed a small increase last year and there may be little change over the next few years.
- There were declines of SR output in North America and the EU last year, but a positive growth is expected in all regions.
- A large surplus has pushed NR stocks to new record levels in 2017 and the situation may get worse. The opposite is true for SR as the deficit pushed global SR stocks down last year and the trend may continue.
- The stocks to consumption ratio for NR is forecast to increase and the opposite is expected for SR.
- NR prices may have stopped falling, but there have been no significant increases as yet while there was clear evidence of a turnaround for SR prices – as a result. NR price was less than 80% of SR in April.
- There are more analyses on what determines NR prices such as comparing prices of NR to oil, distinguishing between nominal and real factors and the influence of the increase of NR acreage to rubber prices.
- The outcome of this discussion provides a pessimistic outlook for the short-term NR price forecast.

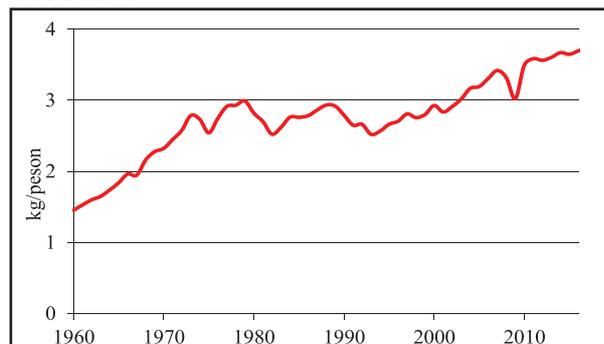
Box 1: Rubber consumption per capita

For almost 40 years from the early 1970s to early 2000s, world rubber consumption per capita fluctuated at just under 3 kg/person as saturation of the rubber industry in the West was taking place (Figure 4). Since then, the China effect and the shift of the centre of gravity of the rubber industry from the West to the East has brought the rubber consumption per capita to almost 4 kg/person, with an interruption in 2008-2009. One can say that with an expected rise in population, the rubber demand should continue to rise as well over the coming years.

Dr. Prachaya Jumpasut, Managing Director of The Rubber Economist



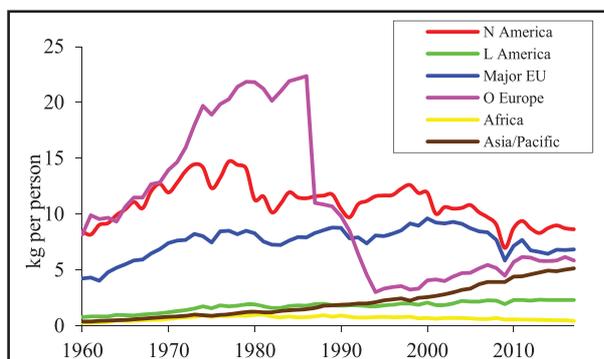
Figure 4: World rubber consumption per capita, 1960-2017



Comparing the regional trends shows that while rubber consumption per capita in North America and the major European Union (EU) countries may have fallen or stabilised, those in other regions, particularly Asia/Pacific have been rising (Figure 5).

Figure 5: Regional rubber consumption per capita, 1960-2017

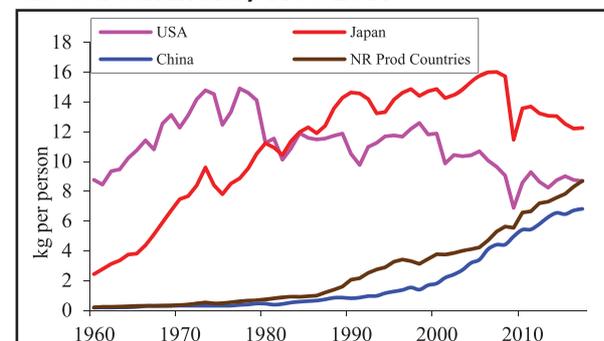
Even though much of the pickup in global rubber



consumption can be contributed to China, per capita rubber consumption in the three major NR producing countries, namely Thailand, Indonesia and Malaysia, have been rising relatively more rapidly and higher than that of China

(Figure 6). Notice the declining trend in the USA, which has occurred since the late 1970s and for Japan, where decline has occurred at a slightly later period but increasingly rapidly over recent years.

Figure 6: Rubber consumption per capita of selected countries, 1960-2017





INDIAN RUBBER INSTITUTE

(Registered under West Bengal Societies
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Telephone: 033-2248 4413/ 2243 0218/ 6534 3103
Email: achi0218@bsnl.in/ akhourl@vsnl.com/ rm@hasetri.com

APPEAL

DR. D. BANERJEE CENTRE OF EXCELLENCE FOR RUBBER TECHNOLOGY EDUCATION, TRAINING, RESEARCH, TESTING AND SKILL DEVELOPMENT AT JSS SCIENCE & TECHNOLOGY UNIVERSITY, MYSORE

Indian Rubber Institute (IRI) is a non-profit organization involved into education of Rubber Industry Operatives and Professionals for several decades. The experience and knowledgeable faculty of Rubber Industry, Polymer & Rubber Institutes have come forward voluntarily to participate and impart knowledge to the professionals.

IRI also conducts regular courses and have instituted Diploma (DIRI) and Post Graduate Diploma (PGD-IRI) courses for upgrading knowledge of people associated with Rubber & Allied industry while working. The examinations are conducted at eight branches all over India. The Controller of Examination is Rubber Technology Centre, IIT Kharagpur. So far more than 3000 qualified rubber technologists were provided to Indian Tyre and Rubber Industries since its inception.

In order to substantially enhance this activity and to impart knowledge as well as to support rubber industry, small and medium scale in particular, IRI has undertaken setting up this "Centre of Excellence" which will house all types of facility for training, education, hands on experience besides undertaking development and testing for various industrial rubber products and tyres. This centre will be one of the approved training providers in India for Skill Development for the rubber sector under RSDC/NSDC, Govt. of India and an NABL accredited Rubber Product and Tyre Testing Centre.

This centre is being set up at the premises of JSS Science and Technology University, Mysore who were kind enough to provide IRI 10000 sq.ft area on long lease (62 years).

The construction of 32000 sq.ft building is under progress. It will have an auditorium with a seating capacity of 250, training halls (three Nos.), full-fledged Library cum Documentation centre, different laboratories for On the job training & testing like Rubber Processing Lab (Intermixer, 2 Roll Mill, Extruder, Baby Calender, Moulding, Auto clave etc.), Physical Testing Laboratory, Chemical testing Laboratory, Analytical & Characterization Laboratory, Rubber Product Failure Analysis Lab, Rheology Lab, Reverse Engineering facility, Tyre Testing Lab, Pilot Plant for new product development etc. The estimated cost of establishing the centre is Rs. 500 million (Rs. 100 million for Building, Furniture/fixtures, utilities etc. and Rs. 400 million for equipment & machinery).

The construction, commissioning and smooth running of this institute will be possible only with whole-hearted support from well-wishers from the global rubber fraternity. We are appealing individuals/organisations/society/ Universities/ Institutes/raw material suppliers/ equipment suppliers to whole heartedly support this noble cause by way of donation or adopting a Laboratory/Lecture Hall/Library cum Documentation Centre etc.

Your contributions in the form of cheque/DD in favour of "INDIAN RUBBER INSTITUTE", payable at Kolkata may please be sent to above address or may please transfer to account through NEFT/RTGS.

Account Details:

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Address : Rasoi Court, 20, R N Mukherjee Road, Kolkata 700 001
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Your contributions will be acknowledged.

(DR. R MUKHOPADHYAY)
CHAIRMAN

(V.K.MISRA)
VICE CHAIRMAN

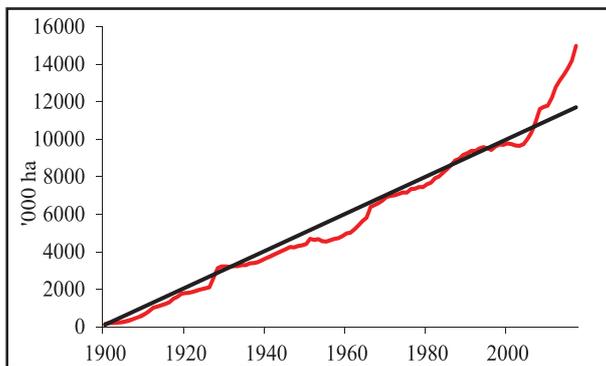
(P.K.MOHAMED)
PAST CHAIRMAN

(AP AKHOURI)
HON. SEC.& TREASURER

Box 2: Natural rubber acreage, 1900-2017

NR price started to increase steadily in 2002 to reach its peak in early 2011. This has influenced a rapid increase in global NR acreage to over 14 million hectares (Figure 30). The increase over 2004-2017 alone was more than 5 million hectares. This is equivalent to the rise in production capacity of 6-7 million tonnes worldwide. The sharp increase in the rubber area has no doubt contributed to the increase in global rubber production, stocks and surplus over recent years (discussed further in a later section).

Figure 30: Global natural rubber acreage, 1900-2017



As expected, most of the acreage is currently in Asia – led by Indonesia and Thailand (Figures 31 and 32). However, the sharp increase during 2004-2017 has come from smaller producers such as Cote d'Ivoire (13.7%), Cambodia (16.4%), Myanmar (9.2%), the Philippines (8.2) and Laos (38.6%). Notice the size of acreage in Africa is relatively large compared to its current production. This indicates a potential rise in output from this region, along with the smaller Asian producers, in the future.

Figure 31: Natural rubber acreage, 2017

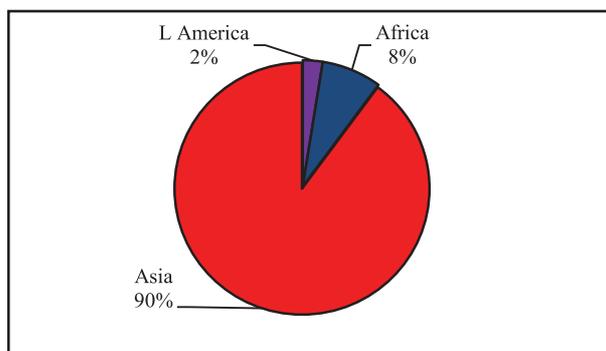
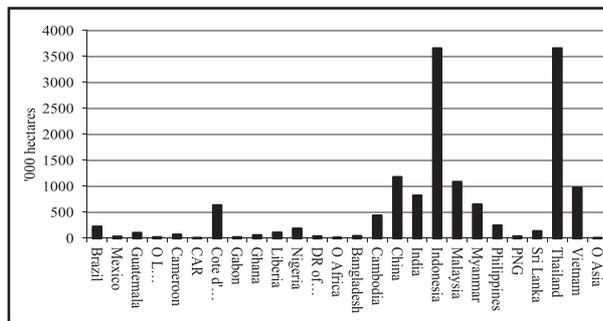


Figure 32: Natural rubber acreage by countries, 2017

There was also quite a sharp increase of 4.5% from the largest-producing country, Thailand, during this period. The total rubber acreage in Thailand is now about the same as that in Indonesia. A few years ago, the Thai rubber area was only about three quarters of that of Indonesia.

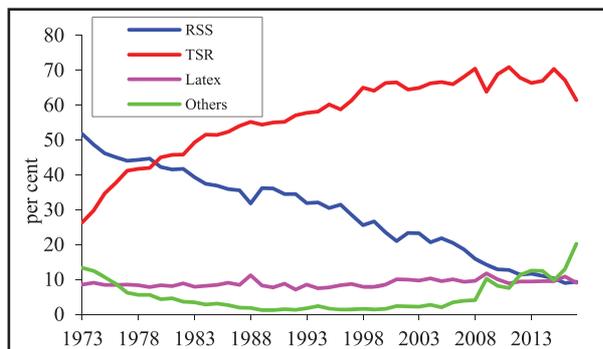
Box 3: Exports by types and grades of Statistics for natural



rubber (NR) export by type and grades are only available for Thailand, Indonesia and Malaysia. Thailand and Indonesia are the top two exporters of NR and export more than 60% of the world total. Malaysia is the fourth-largest 'gross' exporter of NR, but imports a large amount of NR for domestic use and re-exports. Statistics available are broken down to Ribbed Smoke Sheet (RSS), Technical Specified Rubber (TSR), latex concentrate and others. The latter includes other types of rubber including compound rubber. The graph below shows the trends of RSS, TSR, latex and 'Others', the aggregate of the three countries.

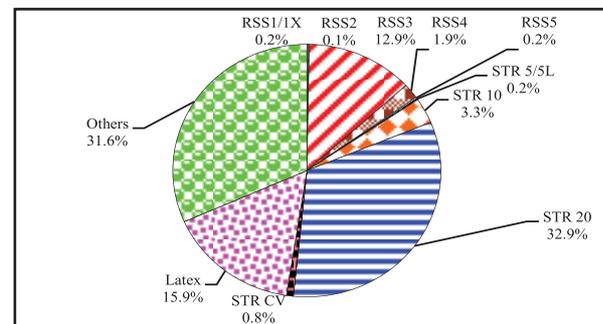
Figure 34: Percentage of exports by types of Thailand, Indonesia and Malaysia, 1973-2017

In recent years while the share of RSS has continued to



decline and latex has generally remained relatively stable, the increasing trend of TSR has reversed slightly and there was a sharp increase in the exports of 'Other' rubber. In 2017 alone, there was a decline in the share of TSR and latex to 61.4% and 9.1% respectively and a marginal increase of RSS to 9.3%, but a big jump of other rubber to 20.2%. For Thailand, the exports of 'others' took 31.6% – almost the same size of STR20 in 2017 (Figure 35).

Figure 35: Distribution of NR exports by types and grade of Thailand, 2017



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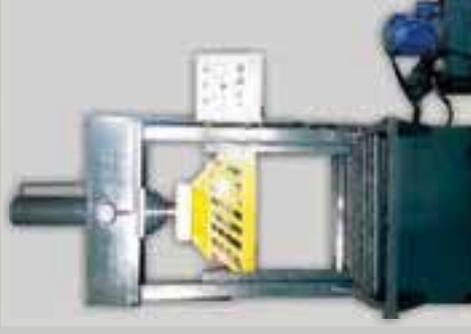
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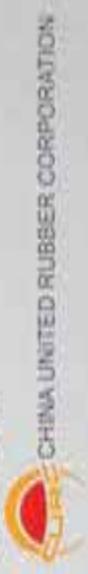
Driving Success Through Technology



More information

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Organizer:



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18th

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September 19-20-21

The 18th International Exhibition on Rubber Technology

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September 19-21, 2018

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More Information



Driving Success Through Technology

India's largest rubber stakeholder meet in KOCHI, Kerala

Theme Towards a Sustainable Rubber Value Chain



INDIA RUBBER MEET 2018

KOCHI, KERALA, INDIA. 30&31 AUGUST 2018
TOWARDS A SUSTAINABLE RUBBER VALUE CHAIN

VENUE

**Grand Hyatt
Kochi Bolgatty
Kerala, India**

DATE

**30 and 31
August 2018**



Organisers

- The Rubber Board (Ministry of Commerce & Industry, Govt. of India)
- | All India Rubber Industries Association (AIRIA)
- | Association of Latex Producers of India (ALPI) | Automotive Component Manufacturers Association of India (ACMA)
- | Automotive Tyre Manufacturers Association (ATMA)
- | Block Rubber Processors Association of India (IBRPA)
- | CAPEXIL (Ministry of Commerce & Industry, Govt. of India)
- | ExxonMobil | GRP Ltd. | Harrisons Malayalam Ltd.
- | Indian Cycle and Rikshaw Tyre Manufacturers Association (ICRTMA)
- | Indian / International Rubber Journal
- | Indian Rubber Dealers Federation (IRDF)
- | Indian Rubber Growers Association (IRGA) | Indian Rubber Institute (IRI)
- | Indian Rubber Manufacturers Research Association (IRMRA)
- | Indian Synthetic Rubber Private Limited (ISRPL)
- | Kerala State Co-operative Rubber Marketing Federation (Rubber Mark)
- | Latex Rubber Thread Manufacturers Association (LARTMA)
- | National Federation of Rubber Producers Societies (NFRPS)
- | Reliance Industries Ltd. | Rubber Asia | Rubber Skill Development Council (RSDC)
- | The Cochin Rubber Merchants Association (CRMA)
- | United Planters Association of Southern India (UPASI) |

For correspondence

Chairman, Organising Committee
INDIA RUBBER MEET 2018
Rubber Board, Kottayam-686 002,
Kerala, India.

Phone: 91-481-2301231
Fax: 91-481-2574902

indiarubbermeet@gmail.com
www.indiarubbermeet.in

Registration fee*			
	INDIAN DELEGATES		OVERSEAS DELEGATES
	Small growers [#]	Others	
Early bird registration (until 31 st July 2018)	Rs. 3,500 + GST	Rs. 7,500 + GST	US\$ 200 + GST
Registration (after 31 st July 2018)	Rs. 3,500 + GST	Rs. 10,000 + GST	US\$ 250 + GST

(* Registration fee does not include travel and accommodation; # - To be certified by Rubber Board's Field Officer)

The Trend

India produced 52,000 tonne of natural rubber (NR) during February 2018 compared to 62,000 tonne produced during the same month a year ago. The total output during the 11 months ended February 2018 is estimated at 649,000 tonne with a growth of 2.0% on year. Accounting a quantity of 45,000 tonne estimated to have produced during March 2018, the total output of 2017-18 would be 694,000 tonne up only by 0.4% from 2016-17.

The country consumed 95,800 tonne of NR during February 2018 as against 99,350 tonne consumed during January 2018. The total quantity of NR consumed during the 11 months ended February 2018 was increased by 6.4% at 1,009,210 tonne compared to 948,075 tonne during the same period a year ago. This represents a 9.4% rise in the auto-tyre sector and 0.2% rise in the general rubber goods sector. Preliminary estimate suggests that a quantity of 102,000 tonne was consumed during March 2018 making the total consumption during the year ended March 2018 at 1,111,210 tonne, up 6.4% on year.

India imported 45,722 tonne of NR during February 2018 compare to the quantity of 15,690 tonne landed during the

same month a year ago. The total volume imported during the 11 months ended February 2018 was 421,061 tonne as compared to 400,893 tonne imported during the same period a year ago. India exported 33 tonne of NR during February 2018 as against 6,212 tonne during February 2017.

The quantity of NR exported during the 11 months ended February 2018 was 5,053 tonne compared to 16,063 tonne exported during the same period in the previous year.

Base on the above estimated figures of production, consumption, imports and exports, the total stock held by all stakeholders of the industry at the end of February 2018 is estimated at 288,000 tonne.

As regards synthetic rubber (SR), a quantity of 30,265 tonne was produced during February 2018. A total quantity of 296,771 tonne was produced during April to February 2018 representing a 44.2% rise on year. The country consumed 53,295 tonne of SR during February 2018 making the total SR consumption during April to February 2018 at 575,775 tonne, up 5.4% on year

PRICE OF NATURAL RUBBER (Rupee per 100 Kg)

Month / Year		RSS-5	RSS-4	RSS-3	Latex	(60% drc)	ISNR 20	SMR 20
		Domestic		International	Domestic	International	Domestic	International
April	2017	13939	14339	14625	15688	15885	12522	10701
May	"	12815	13073	14165	15595	15940	11916	9859
June	"	11971	12238	11627	15410	14623	11089	9228
July	"	13027	13300	11315	15290	13178	12495	9706
August	"	12571	13063	11775	13685	13747	11414	9783
September	"	13102	13424	11977	13993	14313	11743	10269
October	"	12767	13060	10889	13807	12772	11200	9414
November	"	12290	12587	10298	13788	12508	10689	9184
December	"	12794	13082	10455	15283	12633	11365	9309
January	2018	12285	12746	10755	14787	12937	11352	9602
February	"	12054	12413	10963	14385	12733	10993	9421
March	"	12137	12438	11286	14090	13297	11426	9389
Average 2017-2018		12646	12980	11678	14650	13714	11517	9655
April	2018	11790	12012	11343	13678	12742	10787	9077

Note: Domestic price refers to Kottayam market, international RSS 3 refers to Bangkok market and international price of latex and SMR 20 to Kuala Lumpur market.

PRODUCTION & CONSUMPTION OF NR & SR

Type-wise Production & Consumption of NR & SR	(Tonnes)					Percentage increase (+)/decrease (-) of (3) & (4)
	Feb 2018	Feb 2017	April 2017 to Dec 2018	April 2016 to Feb 2017	April 2016 to March 2017	
	(1)	(2)	(3)	(4)	(5)	
PRODUCTION						
NATURAL RUBBER (NR)						
Ribbed Smoked Sheet (RSS)	32435	41020	455435	348585	473375	
Solid Block Rubber	11230	11200	102860	94635	106560	
Latex Concentrates(DRC)	6735	8130	66365	76255	83200	
Others	1600	1650	24340	26425	27865	
Total	52000	62000	649000	636000	691000	2.0
SYNTHETIC RUBBER (SR)^P						
Styrene Butadiene (SBR)	19426	8257	187592	91312	96637	
Poly butadiene (BR)	9988	9320	102312	105707	116557	
Others	851	850	6867	8802	9550	
Total	30265	18427	296771	205821	222744	44.2
Total NR & SR	82265	80427	945771	841821	913744	12.3

CONSUMPTION*

NATURAL RUBBER (NR)						
Ribbed Smoked Sheet (RSS)	44405	43350	467125	438325	486470	
Solid Block Rubber	42395	35615	447120	412400	451240	
Latex Concentrates(DRC)	6950	6645	72090	75265	82100	
Others	2050	1890	22875	22085	24265	
Total	95800	87500	1009210	948075	1044075	6.4
Out of which Auto Tire Manufactures	65304	59439	701230	640734	707335	9.4
SYNTHETIC RUBBER (SR)^P						
Styrene Butadiene (SBR)	27245	22250	281565	254220	278800	
Poly butadiene (BR)	14940	14125	167475	169395	184720	
Others	11110	11615	126735	122915	135060	
Total	53295	47990	575775	546530	598580	5.4
Out of which Auto Tire Manufactures	35364	33051	397485	380697	417728	4.4
Total NR & SR	149095	135490	1584985	1494605	1642655	6.0
Out of which Auto Tire Manufactures	100668	92490	1098715	1021431	1125063	7.6

PRODUCTION & CONSUMPTION OF RR

(Metric Tonnes)

Feb 2018 Feb-2017 April 2017 April 2016 April 2016
to Feb 2018 to Feb 2018 to March 2017

	(1)	(2)	(3)	(4)	(5)
RECLAIMED RUBBER (RR)					
Production @	10850	9685	119895	112510	122895
Consumption	10700	9480	118850	109965	120235
Out of which Auto Tire Manufactures	4168	3834	46369	45196	49635
Stock with Manufacturers	11845	10685			

(end of the Month/Year)

@:Indigenous purchase by Manufacturers

IMPORT / EXPORT & STOCK OF NR & SR

Natural Rubber	45722	15690	421061	400893	426188
Synthetic Rubber	25950	30823	309699	340884	379791
Total NR & SR	71672	46513	730760	741777	805979
Natural Rubber	33	6212	5053	16063	20920

IMPORT OF DIFFERENT FORMS OF NR DURING FEBRUARY 2018^P

(Tonnes)

TYPE	Quantity	% Share
RSS Grades	10503	22.97
Solid Block Rubber	34729	75.96
Latex Concentrates (drc)	490	1.07
Others	0	0.00
Total	45722	100

^P: provisional

TYPE-WISE EXPORT OF NR DURING FEBRUARY 2018^P

(Tonnes)

Type	Quantity	% share
RSS Grades	0	0.00
Solid Block Rubber	0	0.00
Latex Concentrates (drc)	33	100.00
Others	0	0.00
Total	33	100

^P: provisional

Productivity & Quality : Opportunities for the Supply Chain in Viet Nam



Dr. Tran Thi Thu Hoa
Vietnam Rubber Association

CONTENT

- 1 Natural Rubber Supply Chain in Viet Nam
- 2 Improving the Productivity of Rubber Tree and Rubber Plantations
- 3 Quality Improvement of Natural Rubber
- 4 Conclusions

WRS 2018 - Productivity & Quality: Opportunities for the NR Supply Chain in Viet Nam



About Vietnam Rubber Association (VRA)

- Operating since 2004
- A voluntary organization of enterprises and units operating in the Viet Nam rubber industry and related industries with the purpose of assisting its members' business and legal rights towards the sustainable rubber industry.
- Members: 136 (NR producers, processors, traders, exporters, manufacturers and supporting organizations (research, training, information, finance, logistics, services...))
- Membership: Member of VCCI, IRA and ARBC; Member in the Panel of Associates of IRSG; Strategic Collaborator of ANRPC.

WRS 2018 - Productivity & Quality: Opportunities for the NR Supply Chain in Viet Nam

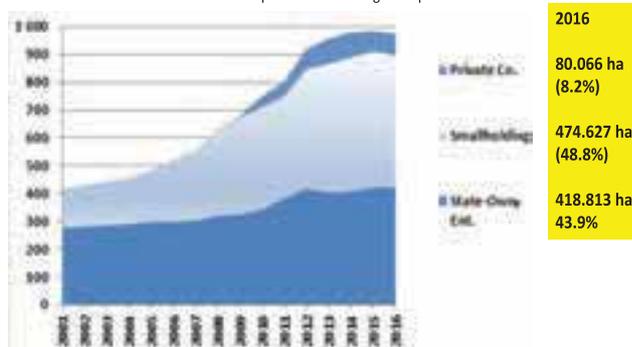
Main products in Vietnam Rubber Supply Chain



WRS 2018 - Productivity & Quality: Opportunities for the NR Supply Chain in Viet Nam

Rubber Areas by sector in Viet Nam, 2001 – 2016 ('000 ha)

Rubber smallholding sector has been developed rapidly from 2005 to 2015, accounting for 34.4% in 2005 up to 49.5% in 2015 and 48.8% in 2016. Their area reduction resulting from shifting to other crops or other economic activities due to low natural rubber price in 2015 – 2016. However, most smallholders maintain their rubber plantations for long-term production.



Source: Provincial Department of Agriculture and Rural Development; Compilation of VRA

WRS 2018 - Productivity & Quality: Opportunities for the NR Supply Chain in Viet Nam

Key factors to improve the productivity of rubber tree in Viet Nam

- Planting Recommendation suitable for each regions with the improvement every 3 – 5 years.
- Using advanced planting material to shorten immature period
- Leguminous cover crops for green manure and soil moisture preservation
- Silt pits to conserve water, green manure and control erosion
- Effective control of leaf diseases and trunk diseases
- Using rain guard for tapped rubber trees to avoid the loss of production due to rains
- Applying stimulation to increase productivity

WRS 2018 - Productivity & Quality: Opportunities for the NR Supply Chain in Viet Nam

Improving the Productivity of Rubber Plantations in Viet Nam

- Increasing and diversifying income of growers with intercropping, animal husbandry, beekeeping...
- Increasing productivity of wood by using timber-latex clones and intercropping with forest trees
- Saving production cost by less fertilization and less weeding in mature period, adoption of less tapping days (from d/2, d/3 to d/4, d/5, d/6)

Productivity & Quality: Opportunities for the NR Supply Chain in Viet Nam

Using advanced planting material to shorten immature period



Multi-whorl polybag



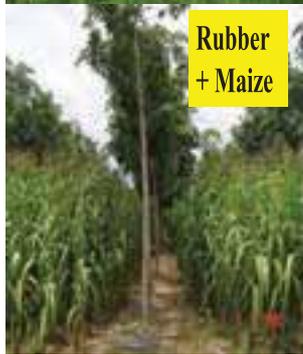
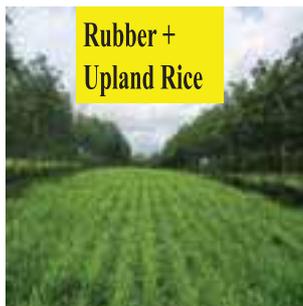
Productivity & Quality: Opportunities for the SNR supply Chain in Viet Nam

Leguminous cover crops for green manure and soil moisture preservation



WRS 2018 - Productivity & Quality: Opportunities for the NR Supply Chain in Viet Nam

Intercropping to increase income and soil protection



WRS 2018 - Productivity & Quality: Opportunities for the NR Supply Chain in Viet Nam

Effective Control of Leaf Diseases



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Using rain guard for tapped rubber trees to avoid the loss of production due to rains



WRS 2018 - Productivity & Quality: Opportunities for the NR Supply Chain in Viet Nam

Applying gas stimulation to increase productivity



WRS 2018 - Productivity & Quality: Opportunities for the NR Supply Chain in Viet Nam

Improving Natural Rubber Quality in Viet Nam

- Currently, Viet Nam is P-member of ISO/TC45 (*rubber and rubber products*) and 2 Sub-Committees: ISO/TC45/SC 2 (*Testing & Analysis*); ISO/TC45/SC3 Committee (*Raw material including latex for use in rubber industry*). Thus, Viet Nam has opportunities to participate in the standardization of terms and definitions, test methods and specifications for rubber and rubber products.
- Viet Nam also participate in the Rubber-based Product Working Group (RBPWG) of ASEAN to contribute the harmonization of standards, technical regulations and conformity assessment procedures - a key role in trade facilitation to remove technical barriers to trade (TBT) in order to realize the ASEAN Free Trade Area (AFTA).

WRS 2018 - Productivity & Quality: Opportunities for the NR Supply Chain in Viet Nam

Improving Natural Rubber Quality in Viet Nam (cont.)

- To improve the quality of NR according to international standards, Viet Nam has been building the national standards, revising 3 - 4 times to meet standards of ISO and advanced countries. So far, TCVN 3769:2016 has been applied on the basis of ISO 2000: 2014 with some higher indicators for technically specified rubber and TCVN 6314:2013 on the basis of ISO 2004: 2010 for latex concentrate.
- In addition, to adapt current requirements of consumers, the Vietnam Rubber Association (VRA) and the Vietnam Rubber Group (VRG) have been building standards on the basis of the national standards with some higher indicators for natural rubber made by their members.

WRS 2018 - Productivity & Quality: Opportunities for the NR Supply Chain in Viet Nam

NR Processing in Viet Nam



WRS 2018 - Productivity & Quality: Opportunities for the NR Supply Chain in Viet Nam

CONCLUSIONS

- In the period of low prices, high yields in latex and rubberwood and intercropping are key factors to adapt to low prices, generate income and acceptable profit for growers to maintain their rubber plantation. The world and Viet Nam have made great progress in improving the productivity of rubber trees by 2 - 3 times compared to the 1980s to reach more than 2 - 3 tonnes/ha/year, which is important supports for farmers to have sufficient incomes and profits in low price period if any. In addition, diversified sources of incomes and sustainable development will reduce risks for growers facing climate changes.
- Consistent and progressive quality standards to meet the requirements of users are the potential of natural rubber to attractive users choosing this raw materials in the long-run.



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Automotive Tyre Manufacturers' Association



Rajiv Budhraja
Director General, ATMA

Editorial

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ATMA Tyre Safety Pavilion emerges centre of attraction at Tyrexpo India 2018



Having touched 7.7% growth in the last quarter of FY18, the momentum seems to be continuing in Indian economy if macroeconomic and auto sector numbers are to be believed. International Monetary Fund (IMF) has projected a growth of 7.4 % in FY18-19 and 7.8 % in FY19-20. RBI too has retained GDP growth for FY18-19 at 7.4%.

However currently the economy is reeling under geopolitical tensions and shooting up of crude oil prices putting the rupee under pressure. In fact, the rupee recently plunged to its lowest level. Capital flows to emerging markets have slowed and oil is firming up. Rise in oil is threatening to worsen the country's trade deficit.

Amidst this, Prime Minister's assertion that India should double its share in global exports from the current 1.6% to 3.4% represents a strategic move and can go a long way in helping the country manage its trade deficit vulnerabilities. Prime Minister has also urged the industry to raise domestic manufacturing output so as to reduce imports.

Prime Minister's assertion finds much resonance with the vision of Tyre industry in India as the industry is aspiring to double its exports in the next 3-4 years. Currently about 20% of India's tyre production is exported. Indian manufactured tyres are exported to more than 100 countries in the world. The industry has asked for policy enablers such as access to raw materials at internationally competitive prices to increase its export footprint.

At the ATMA Convention held earlier this year, Commerce Minister Mr Suresh Prabhu appreciated the growth achieved by the industry. Initiatives taken by the Government have certainly removed some of the bottlenecks to growth. Trust the coming months will witness policy environment turning further conducive for growth.

Here is wishing you Happy Monsoon which the Met has projected to be a good one for third consecutive year.

Rajiv Budhraja
Director General

ATMA Member Companies





Vehicle Production - India

Apr-May FY19 & YoY Comparison

Base effect is at full play as production in **M&HCVs** went up by robust 176% in May 2018. Pre-buying in view of transition to BSIV led to tapering of production in the first quarter of previous year.

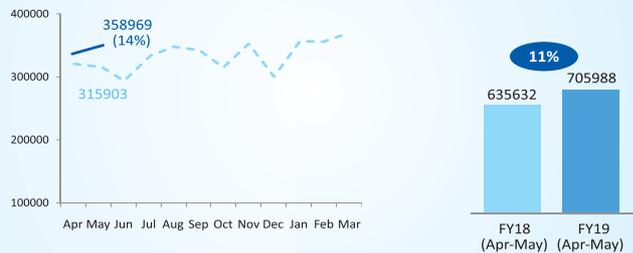


All Figs in Nos
■ FY 18 ■ FY 19

LCV production is also significantly up though sequentially it came down in May.

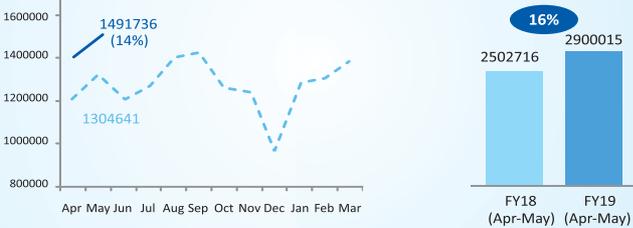


Fy19 has begun on an upbeat note for **Passenger Vehicles**. Production has gone up in double digits in the first two months.

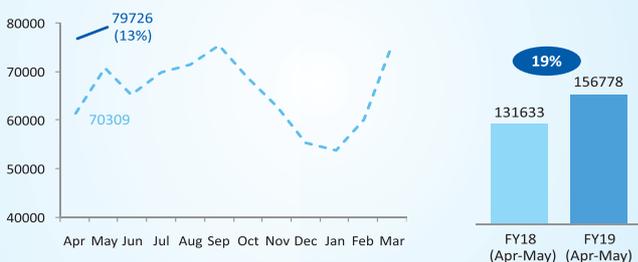


+ Including P. CAR, MUV/SUV/VANS.

Motorcycle segment has witnessed a steady production growth during the first two months. Production nearly touched 1.5 million units in May'18.



Tractors have continued with upward trajectory. News of third consecutive year of good monsoon has been a booster.



Production growth in **Scooters (2/3 Wheelers)** was moderate at 5% in May'18.



Note: Figs in brackets indicate % change YoY

Unit(s): 1 Lakh = 100,000; 10 Lakhs = 1 Million; 100 Lakhs/10 Million = 1 Crore.

Natural Rubber - INDIA

Apr- Mar (FY18) & YoY Comparison

All Figs in Nos
 ■ FY 17 ■ FY 18

After a promising start to the year, the **NR Production** lost momentum in the last quarter. Overall NR Production has remained fairly static in FY 2017-18 against previous year.



NR Consumption has maintained a comfortable lead over previous year. Overall NR Consumption went up by 6% leading to widening gap between production and consumption.



NR Imports which have remained largely lower than previous year's level went up in the last quarter in view of domestic shortfall. **NR exports** have petered out.



NR Prices in Mar'18 stood 16% lower in comparison to Mar'17. **NR Stock** at the end of Mar'18 stood higher at 292,000 tonnes.



Note: Figs in brackets indicate % change YoY



Industry Trends - NR Global

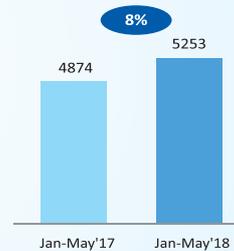
Global NR Overview (ANRPC* Countries)

Jan - May'18 & YoY Comparison

All Figs in '000 Tonnes

2017 2018

After a moderate start to the calendar year, the months of April and May witnessed double digit growth in **NR production** amongst ANRPC countries taking the total growth up by 8% in the Jan-May period.

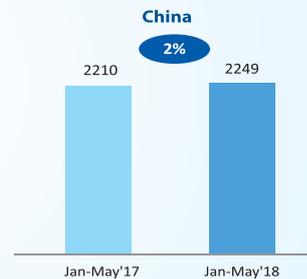


NR Consumption has maintained a steady growth during the year with 5% growth witnessed in each of the three months from April-May'18.



In the Jan-May period, **India** witnessed 11% growth in NR consumption which nearly touched 5 million tonnes. **China** recorded a consumption growth of 2% during the period. However China's consumption of NR is 4 times that of India.

NR Consumption YoY (INDIA vs. CHINA)



Figs in brackets '()' indicates % change (YoY).

*ANRPC - Association of Natural Rubber Producing Countries

(Member countries : Cambodia, China, India, Indonesia, Malaysia, Papua New Guinea, Philippines, Singapore, Sri Lanka, Thailand & Vietnam)

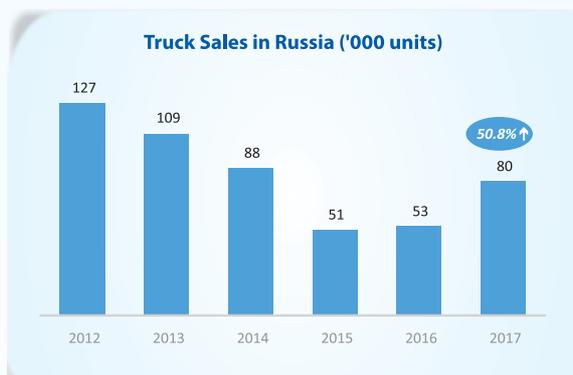


Russian Automotive Market

After rebounding in 2010–11, the Russian automotive market slowed in 2012 and saw sales declining from 2013 against a backdrop of general macroeconomic decline. **The overall trend in 2017 was one of recovery.** A total of 1,600,000 passenger cars and light commercial vehicles (LCVs) and 80,000 trucks were sold in Russia in 2017.

The Russian economy followed a trajectory of growth in 2017, with GDP increasing 1.5% after a decline in 2015–16. Growth was driven by *rising oil prices, an appreciating exchange rate and adaptation to imposed economic restrictions* and accompanied a *rise in real wages, a stronger Ruble and increased consumer lending.*

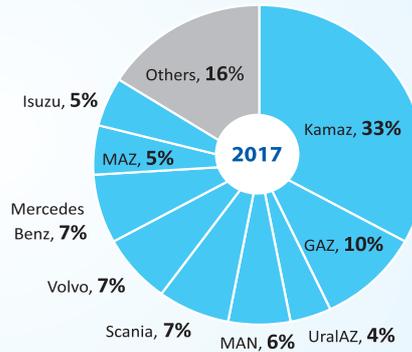
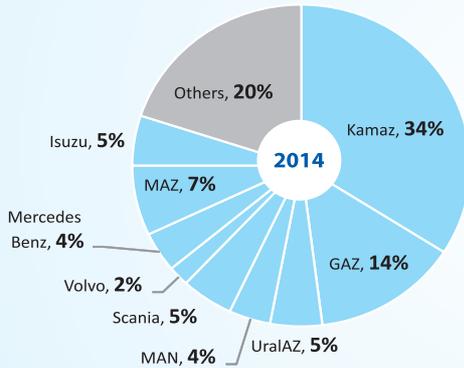
Truck Market in Russia



- Truck sales in Russia, after witnessing a downward trend from 2012 till 2015, posted a recovery from 2016 onwards.
- Growth in truck sales — 3.9% in 2016, accelerating to 50.8% in 2017 driven by:
 - Increased freight traffic
 - Pent-up demand for commercial vehicles
 - Improvement in macroeconomic indicators affecting truck sales



Top 5 Truck OEMs in Russia account for 60% of the market share (2017)



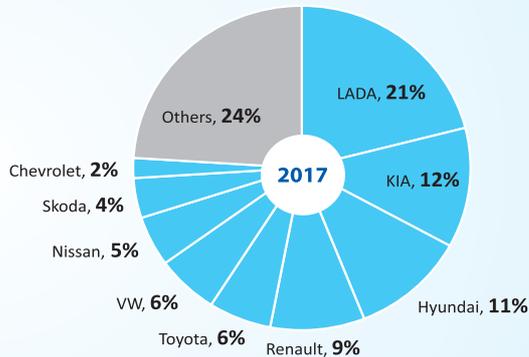
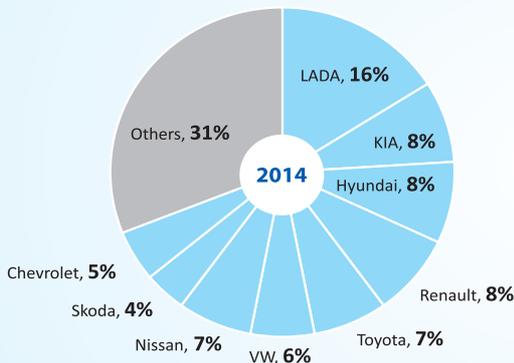
Russian P.Car + LCV Market

P.CAR+LCV Sales in Russia ('000 units)



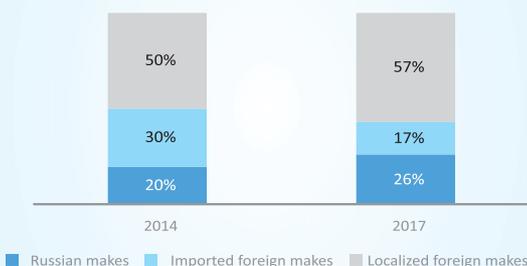
- P. Car + LCV Sales in Russia have, after witnessing a downward trend from 2012 till 2016, posted a recovery from 2017 onwards.
- P. Car + LCV sales growth in 2017 driven by:
 - Rising oil prices
 - Improving macroeconomic situation
 - Pent up demand for cars against a backdrop of increasing consumer activity and strong Government support.

Top 5 P.Car + LCV OEMs in Russia account for ~60% of the market share (2017)





Composition of P.Car + LCV sales in Russia (by origin)



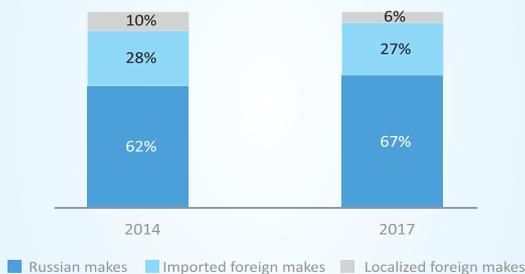
- Between 2014 and 2017, the structure of the Russian P.Car + LCV market has witnessed a **shift towards higher localization**.
- The **share of fully imported vehicles have declined from 30% in 2014 to 17% in 2017** while that of localized foreign makes and Russian makes have increased to 57% and 26% respectively

- Bus sales in Russia, after witnessing a downward trend from 2013 till 2015, posted a recovery in 2016 followed by a minor decline in 2017.
- Growth drivers in the Bus segment:
 - Pent up demand for buses to renew the fleet.
 - Orders ahead of 2018 FIFA World Cup (2150 buses purchased in 2016)

Bus Sales in Russia



Composition of Bus sales in Russia (by origin)



- Unlike the P.Car + LCV market in Russia, the Bus market in the country is dominated by Russian makes.
- Most of the foreign makes in the Bus market are imported into Russia (with a minimal percentage being manufactured locally).

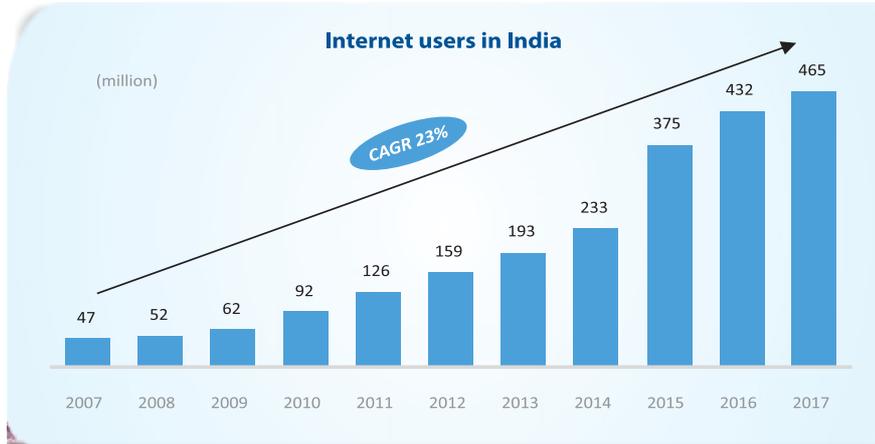
Government Support (in 2018) for the Russian Automotive Market

Incentive	Max. Financial Support (RUB Billion)
Programs: My First Car, Family Car, Russian Truck, Russian Farmer, My Own Business	16.0
Subsidies for purchases of gas-powered vehicles	2.5
Subsidies for purchases of electric vehicles	1.5
Subsidies for the leasing of wheeled vehicles	2.1



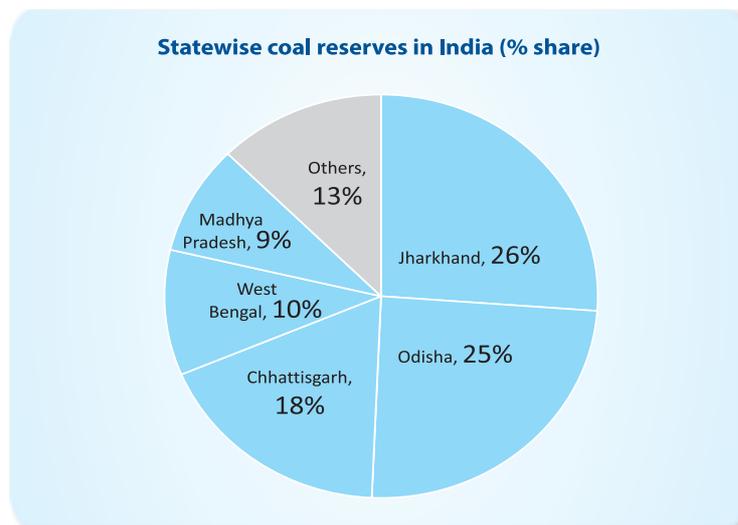
India Stats

Internet users in India cross 460 million in 2017



The number of Internet users in India is estimated at 465 million (as of June 2017), growing at a CAGR of **23%**. Rural India, with an estimated population of 906 million as per 2011 census, has only 163 million (**17%**) Internet users. **77%** of urban users and **92%** of rural users consider mobile as the primary device for accessing the internet, largely driven by availability and affordability of smartphones.

Top 5 Coal Rich States in India account for ~88% of total Coal Reserves in the Country



India holds a total of 315 billion tonnes of Coal Reserves (as of 31st Mar'17). Jharkhand and Odisha, the two largest states with coal reserves in the country, account for more than half of India's total coal reserves.

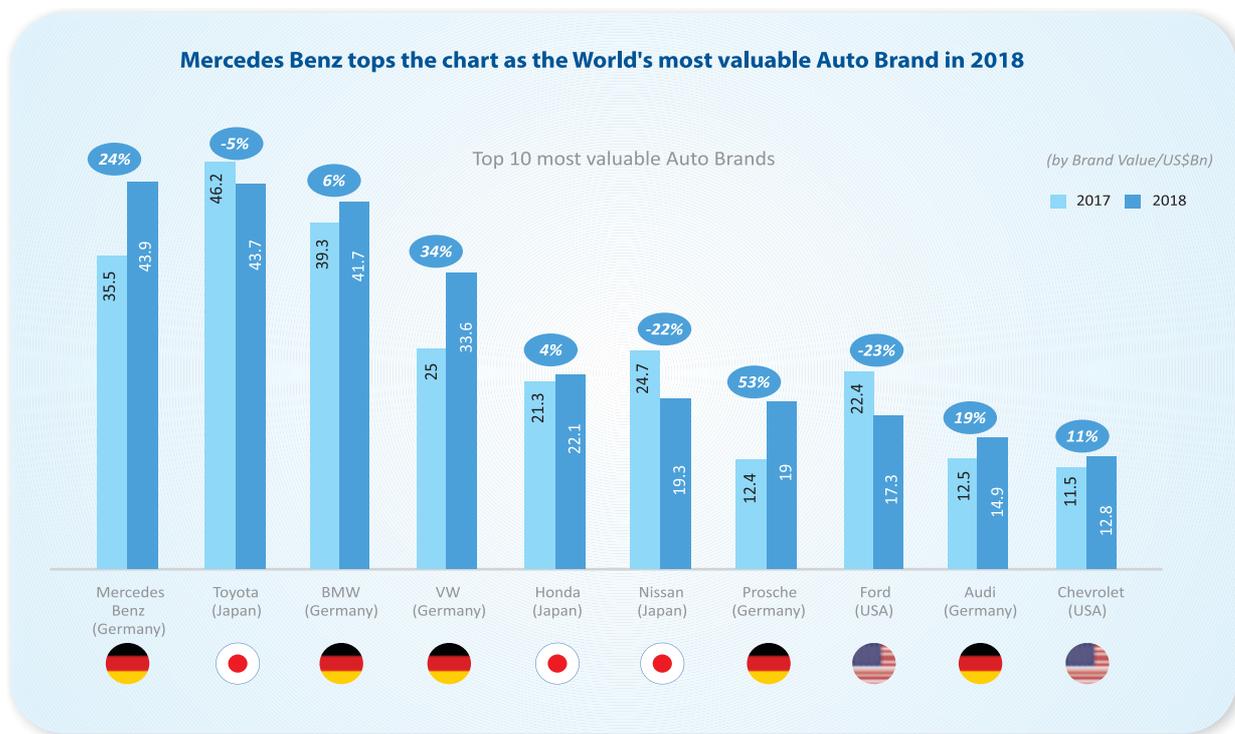
Brand Finance
study

World's most valuable Auto & Auto Component Brands

Brand Finance puts thousands of the world's biggest brands to the test every year, evaluating which are the strongest and most valuable. Each brand is assigned a Brand Strength Index (BSI) score out of 100, which feeds into the brand value calculation. Based on the score, each brand is assigned a corresponding rating up to AAA+ in a format similar to a credit rating.

Automobiles

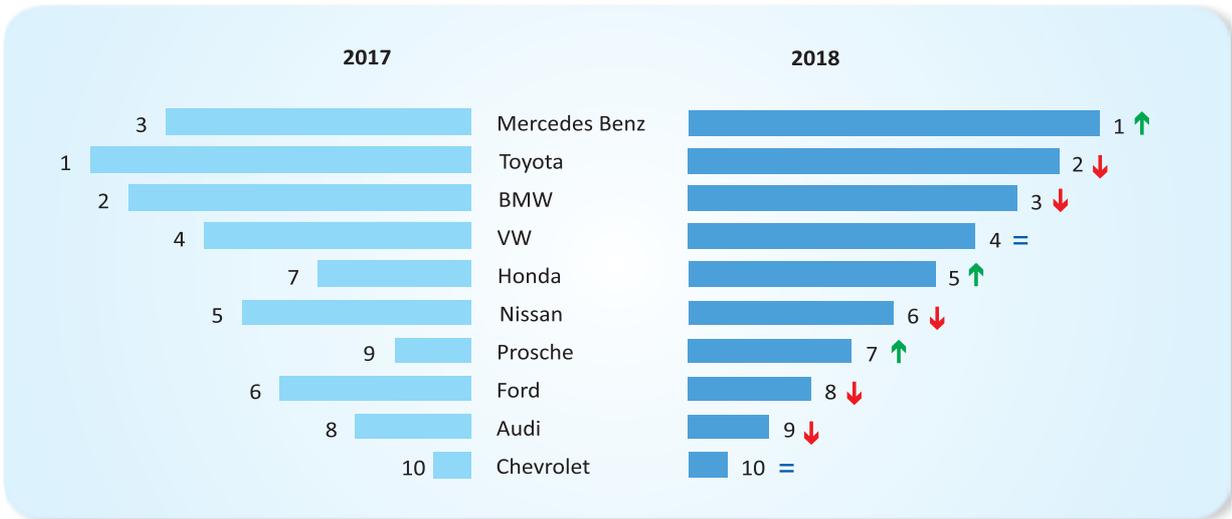
Mercedes Benz tops the chart as the World's most valuable Auto Brand in 2018



Figs. in indicate YoY% Change

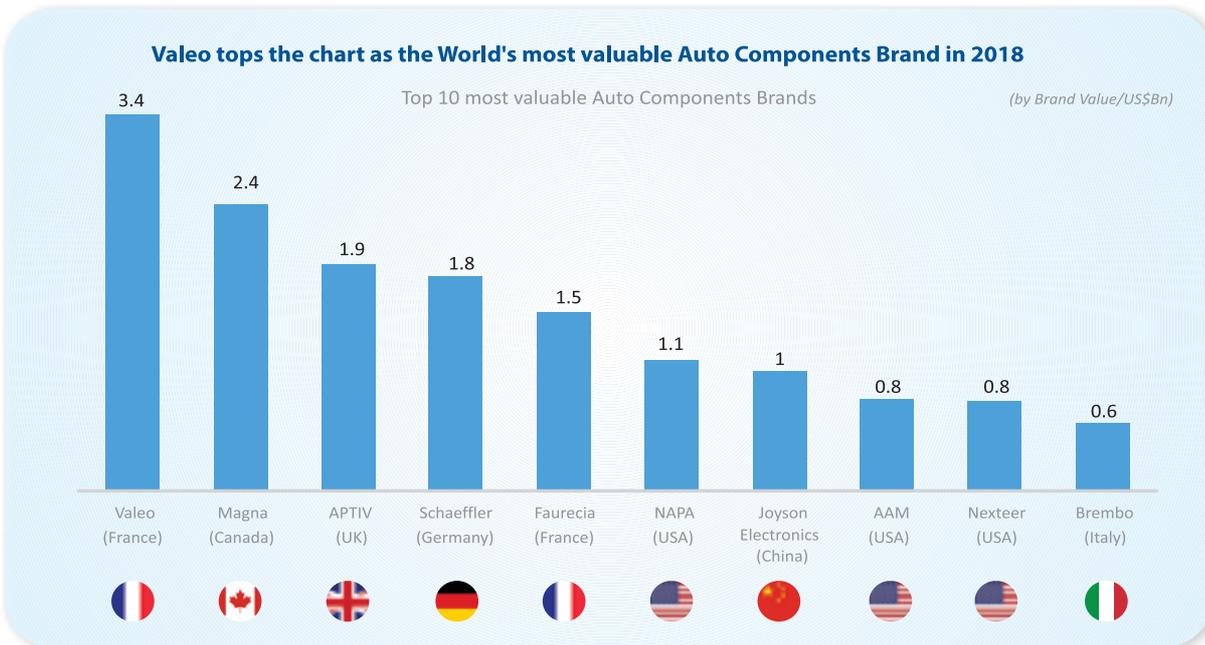
- **Mercedes-Benz** has overtaken Toyota and BMW to claim pole position as the world's most valuable automobile brand in 2018, following 24% year-on-year growth to US\$43.9 billion.
- **5 out of the Top 10** World's Most Valuable Auto Brands are from Germany, 3 from Japan and 2 from the US.
- **Toyota** faces a challenging brand landscape, largely due to a weaker position in China as consumers in that market have shied away from the Japanese manufacturer and in favour of more aspirational brands, such as Mercedes-Benz.

Rank (by Brand Value) of World's Top 10 Most valuable Auto Brands



Auto Components

Valeo tops the chart as the World's most valuable Auto Components Brand in 2018



- French-based manufacturer Valeo is the world's most valuable brand in the auto component industry, valued at US\$3.4 billion and ranked well ahead of the Canadian brand Magna (brand value US\$2.5 billion).
- Fierce competition in the Auto Components Brand rankings indicate growing importance of interconnected suppliers in the Auto sector.

Auto Inc cruising at over 3-lakh rate

● Vehicle makers across segments posted strong sales for the second straight month in May. Driven by a growing economy and new launches, customers advanced buying expecting price hikes.

The Indian passenger vehicle market is estimated to have broken the 30 lakh-units-a-month barrier after eight months, with dispatches close to the peak volumes seen in last September which was a festive month. Commercial vehicle makers and two-



Maruti Suzuki Swift

wheeler companies, too, joined the party with strong dispatches.

New launches like Maruti Suzuki Swift, Honda Amaze, Toyota Yaris and Hyundai Creta along with stable inflation and interest rates have driven passenger vehicle sales to 3-3.05 lakh units with a growth rate of 19-21% over a year ago, according to wholesale data issued separately by companies. The Society of Indian Automobile Manufacturers publishes the industry numbers in the second week of every month.

Industry executives and experts also attributed the strong double digit growth to a low base a year earlier, dispatches were modest due to uncertainties over GST rates ahead of an official announcement.

As has been the story over the last few years, industry growth was driven by market leader Maruti Suzuki, which posted a 25% increase in sales on the back of strong demand for Swift, Baleno and Vitara Brezza. New car launches at Honda Cars India (Amaze), Toyota Kirloskar (Yaris) and Ford India (Freestyle) drove their volumes by 41%,

20% and 35%, respectively, whereas sustained demand for the Nexon SUV and the Tiago hatchback accelerated Tata Motors' passenger vehicle sales by 61%. Only Mahindra & Mahindra among the top seven carmakers posted muted growth, 2%, due to competitive intensity.

Rakesh Srivastava, director, sales and marketing at Hyundai Motor India, said the strong volume growth was on account of a low base. He predicted demand to remain strong, but also cautioned about certain risks, "Currently, the sentiment is positive

especially towards established brands and new launches from various carmakers have further added to the excitement. There has been pre-buying on anticipated price increase from various car makers. We expect the

momentum to sustain. However, rising interest rate may have an impact," he said.

Anurag Mehrotra, president at Ford India, said the outlook was positive at a macroeconomic level thanks to good monsoon forecast.

"However, the industry needs to exercise caution given the rising commodity and fuel prices that are expected to result in higher inflation.

Sustained investment on infrastructure and growing economy ensured sustained demand for commercial vehicles in the country Tata Motors, Ashok Leyland, VE Commercial Vehicle and Mahindra & Mahindra all registered strong double-digit growth in May.

Girish Wagh, president of commercial vehicle business at Tata Motors, said factors like improved industrial activities, infrastructure development and robust demand in private consumption-led sectors contributed to growing volumes.

The medium and heavy-commercial vehicle segment performed strongly, recording a 90% expansion, driven by infrastructure development and

irrigation projects.

Strong growth momentum continued in the two-wheeler segment. Market leader Hero MotoCorp posted a 13% increase in local sales while Bajaj Auto, the country's largest premium-motorcycle maker, registered a 23% rise in domestic sales. At Royal Enfield, sales increased 24% and at Suzuki Motorcycle, the growth was 37%. But at Honda Motorcycle & Scooter and TVS Motor, sales growth was tepid around 2%.

Tesla's Musk says Germany a front runner for Europe Gigafactory

● US electric carmaker Tesla favours Germany as the location for its first European Gigafactory, its chief executive said, in what would be the latest move by an outside firm into the European battery market.

Industry experts expect a green car revolution to boost Europe's battery market to around 250 billion euros (\$290 billion) by 2025. Asian companies including CATL and Samsung have already signed up companies or set up their own European operations, prompting European politicians and business leaders to call for more home-grown investment.

"Germany is a leading choice for Europe. Perhaps on the German-French border makes sense, near the Benelux countries," Tesla's billionaire boss Elon Musk said on Twitter responding to a public tweet.

Tesla already has operations in Pruem, Germany, which is only 30 kilometers from Belgium, and about 100 kilometers from the French border.

Pruem is the headquarters for Tesla's Grohmann Engineering division, which specialises in automated manufacturing systems for battery making plants. Grohmann recently built a production line for Tesla's U.S. battery factory in Reno, Nevada, to speed up production for its Model 3 electric sedan.

In a sign of the strength of Asia's position in the market, Volkswagen – Europe's biggest carmaker – recently picked LG Chem, Samsung and China's Contemporary Amperex Technology Co Ltd (CATL) to deliver \$25 billion of batteries.

CATL is also considering an

investment in Germany, the economics ministry of the local state of Thuringia said. "We are negotiating with Chinese battery manufacturer CATL about localising production in Thuringia. As far as we know several locations across Europe are being considered for such an investment," a spokesman for Thuringia said.

Germany's TerraE and Sweden's Northvolt have plans for large lithium-ion battery factories in Europe, but face a battle against companies like Tesla and CATL that have established technical expertise and supply chains.

VW puts Skoda behind the wheel to drive India Growth

● The world's largest auto maker, Volkswagen, has approved its India 2.0 project and entrusted its sister brand, Skoda, to drive the growth in the coming years. It has also asked the Czech carmaker to kick off its Russia plan in the next few months.

A letter sent by Volkswagen Group CEO Herbert Diess and Skoda Auto CEO Bernhard Maier to the Indian employees on June 22 mentions that the group is and will be investing in it substantially. The first Skoda model, based on the MQB-A0-IN platform, will be introduced as early as 2020, they said, adding that more vehicles from both Volkswagen and Skoda will roll out.

The approval would mean that the group is likely to infuse an additional investment of close to a billion euros in India, which will go into products (SUVs and sedans), manufacturing line and a new technical centre.

The project will be helmed by managing director of Skoda Auto India Gurpratap Boparai, who has a deep

understanding of the Indian car market.

"It is a great plan and one that the group's board of management and supervisory board have approved. It sets the agenda for a successful future for both the Volkswagen passenger car and Skoda brands in one of the largest growing markets in the automotive industry. Volkswagen is committed to India and is staying in the market,"

They informed the employees that all the models designed and produced locally in India in the future will be based on the Volkswagen Group's MQB platform, which meets the stricter legal requirements for India that come into force in 2020.

With the 'India 2.0' project, Skoda is also taking over responsibility for the sub-compact MQB A0 platform, initially with a focus on India (MQB-A0-IN). In fact, preparations for the India-based development and production of the new, technologically

pioneering volume models for Skoda and Volkswagen brands are in full swing. The introduction of the first Skoda model based on the A0-In platform is scheduled for 2020, stated the Skoda press release.

The fundamental advantages of the MQB allows for standardising of components, dimensions and production processes, costs are lowered and production times are reduced. Besides, the MQB increases flexibility when developing new vehicles. Most of the technical developments will take place in India, said the statement.

This means that VW Group is bringing state-of-the-art technology to India, both for local vehicles and in production.

'We are investing substantially in this key market. As part of this, the Skoda team is further developing the MQB-A0 platform with a focus on India (MQB-A0-In); it is also

conceivable that this will be used in other markets and regions in the medium term," elaborated the letter on the global potential of expanding the development work out of India to global markets.

Suzuki races past a milestone: 20 million units produced in India

● At 34 years and a bit, it's the auto company's fastest clip in any country. Suzuki Motor Corporation (Japan) said it has achieved cumulative automobile production of 20 million units in India.

"India becomes the second country after Japan in which Suzuki has reached this milestone, and the fastest country

5 million units	April 2005	
10 million units	March 2011	
15 million units	May 2015	
20 million units	June 2018	

Top 5 models			
Top	Model	Displacement	Units
1	Alto	800/1000cc	3.17 million
2	Maruti 800	800cc	2.91 million

to reach 20 million units in just 34 years and five months since starting production in December 1983, breaking the record of 45 years and nine months in Japan," the company said in a statement. Of the 20 million units, Alto was the most produced model, with around 3.17 million units. After Alto, Maruti 800 (2.91 million) and WagonR (2.13 million) rank second and third, respectively.

The company had celebrated its 'first million' in 1994, its 10th million in March 2011 and 15th million in 2015.

In 2016, the company had said it is eyeing sales of two million (20 lakh) cars annually in India by 2020. India has already sped past Germany to become the world's fourth-largest car market, and Maruti Suzuki has played a bigger role in it.

Maruti Suzuki sells around 1.50 lakh passenger vehicles every month in the domestic market and the number is growing year-on-year.

For instance, the company sold 1,61,497 units of passenger vehicles in May, up 24% compared with 1,30,248 units in the same month last year.



Skoda

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Forex reserves dip to \$406 billion

● India's foreign exchange reserves declined by \$1.76 billion to \$406.1 billion in the week to June 29 owing to a fall in foreign currency assets, which decreased by \$1.78 billion to \$380.7 billion, according to RBI data. Gold reserves rose by \$38 million to \$21.37 billion over the week.

Lucky 7: Economy grows at 7.7%, fastest in 7 Quarters

● India's economy grew at its fastest in seven quarters in the January-March period, bolstered by strong performance in construction, manufacturing and public services, pointing to a persistent revival trend and bringing cheer to the government ahead of next year's general election.

The full FY18 growth estimate was revised upward to 6.7% from 6.6% in the second advance estimate released in February. This is in line with the 6.75% growth forecast by the Economic Survey and down from 7.1% in FY17 with the slowdown being attributed to the lingering effect of demonetisation and the rollout of the goods and services tax (GST) in July last year.

Gross domestic product rose a better-than-expected 7.7% in the fourth quarter, retaining India's ranking as the world's fastest-growing major economy, outstripping China by nearly a percentage point. The

economy grew at the highest rate since September quarter of FY17, ahead of the demonetisation drive that began November 2016.

Jet Airways to buy 75 Boeing jets

● Indian airline Jet Airways has entered an agreement to buy 75 Boeing 737 MAX aircraft in a deal that could be worth more than \$7 billion. The country's second-largest airline made the announcement to the Mumbai stock exchange.

The company did not specify which model of the narrow-body jet it planned to purchase, or whether it had placed a firm order rather than a memorandum of understanding.

The deal could be worth anywhere between \$7.2 billion and \$9.7 billion, depending on the type of jet acquired and based on list prices. Airlines often negotiate discounts on major orders. India is witnessing a boom in air travel as its growing middle class takes to the skies. Airlines are rapidly expanding their fleets to capture a slice of this market.

There has been a six-fold increase in passenger numbers over the past decade as Indians take advantage of better connectivity and cheaper fares thanks to a host of low-cost airlines. The Centre for Aviation based in Australia predicts India will overtake Britain as the world's third-largest market by 2025 and will have 478 million fliers by 2036.

India's largest airline IndiGo last year

Around the World With ₹80,000

India's outbound tourism grew at 9.3% annually in the past five years to 21.3 million travellers in 2016

In comparison, inbound tourism (foreign arrivals in India) grew 5.9% according to the data released by Ministry of Tourism

Some travel companies say, in the last three years, average amount spent by an outbound traveller has doubled to ₹80,000

Average amount spent by a foreign tourist in India has grown in the range of 13-20% to close to ₹1.5 lakh during the period

Travels in and out of India

Year	Inbound	Outbound
2006	4.43	6.46
2007	5.08	6.89
2008	5.20	10.00
2009	5.33	11.33
2010	5.70	13.00
2011	6.30	14.00
2012	6.90	16.00
2013	6.90	16.00
2014	7.60	16.30
2015	8.03	16.40
2016	8.80	21.30
2017	10.1	NA

announced a deal to buy 50 small planes from French manufacturer ATR.

The majority of Jet Airways' fleet are Boeing aircraft. Boeing says the 737 MAX is the fastest-selling airplane in its history, with more than 4,300 orders received.

Vinay Dube, Chief Executive Officer, Jet Airways. "This additional order re-emphasises our trust and confidence in Boeing and also reaffirms our commitment to operate extremely modern, reliable and fuel efficient aircraft as part of our fleet.

"Jet Airways' partnership with Boeing goes back 25 years ever since the airline was conceived and took to the skies. This order underscores Jet Airways' commitment to the growth and sustainability of the Indian aviation market.

Japan overtakes China, US in investing in Indian start-ups

● Even as much of the attention last year was around the massive investments flowing into Indian start-ups from China, Japan was silently establishing its pole position in the ecosystem in 2017.

According to data collated by research and analytics platform Tracxn, Japan led venture capital investments in India surpassing both China and the US in 2017.

At \$4.9 billion, Japan's investments in 2017 increased about 13 times from a mere \$387 million the previous year. Investments from the US and China were at \$4.6 billion and \$3.5 billion, respectively, last year compared to \$3.2 billion and \$662 million in 2016, respectively. However, American



investors pumped in money in more number of rounds compared to their Japanese and Chinese counterparts. Tracxn data also showed that against five venture capital firms for China and the US, about a dozen Japanese investors showed interest in the emerging outfits of the world's fastest growing economy.

Air India sale in present form is off; but govt keen on strategic divestment: Sinha

● The divestment of Air India in its present form is off, as the Centre did not receive a single bid, but the government is committed to its strategic divestment, Jayant Sinha, Minister of State for Civil Aviation, said here on 20th June.

"Nobody expressed interest in that (divestment of Air India) during the process. Now we have to move forward and consider other options," he said when asked whether the government is still actively looking for a strategic investor for Air India.

This is the first time that a Minister has spoken at an open forum about the status of Air India's divestment since May 31, when it was announced that not a single bid had been received for the 76 per cent stake in the airline.

Both Sinha and Union Civil Aviation Minister Suresh Prabhu felt Air India is suffering from legacy issues in terms of the huge interest burden that the airline has to service. The two Ministers indicated that the strengthening of the rupee, rising interest rates, hike in oil prices, and the external environment were among the reasons the airline failed to attract any bidders.

A high-powered committee has been set up under Finance Minister Arun Jaitley to look at the various options available with regard to Air India, Prabhu said.

Globally competitive Pointing out that Air India is the national flag carrier, and has an important role to play the nation's aviation sector, Prabhu said the government will do everything to ensure its health and progress.

Sinha added that the government is committed to make Air India an independent, globally competitive and successful airline.



India's tourism, revenue rose by 10% to \$230b in 2017

● The travel habits of Chinese citizens are changing the world. Taking about 145 million overseas trips a year, the Middle Kingdom's middle class is moving—and spending—more than that of any other nation.

India's own swelling, monied middle class, 250 million smartphone-toting young professionals out of a population of 1.3 billion is starting to emulate its regional rival. In less than 10 years, the World Travel & Tourism Council expects India to become the fourth-largest travel and tourism economy behind China, the U.S., and Germany.

More domestic travellers

Although more people are visiting India than ever before—two decades ago about 2.4 million international tourists came to India a year; in 2017 there were five times that—the real boost is coming from domestic travel.

Almost 90 percent of travelers in India are Indians. For the last three years, their most popular destination has been Tamil Nadu, for its temples. Tourism in India generated more than \$230 billion in 2017, up from almost \$209 billion in 2016.

"Indians are discovering their own country," says Ahmed Chamanwala, the founder of the Fringe Ford, a five-room lodge in Kerala state, which sits on a 527-acre forest home to more than 400 kinds of animals. "In our

initial years, most of our tourists were inbound travelers. But over the years we have seen an increase in the domestic weekend travelers from the major cities in India. Now the business is more dependent on the Indian market."

The country's natural beauty is part of its marketing campaign, and wildlife is a huge draw. But one concern being discussed in hushed tones, Chamanwala says, is that the country's weak infrastructure and stretched bureaucracy could allow certain areas to lose what makes them special before they ever reach their potential. In some areas, tiger reserves no longer have tigers, and nature safaris can feel like crowded parking lots where there are more shutterbugs than subjects to shoot.

Tourism in places such as Ladakh hinges on a pristine environmental image, but visitors produce thousands of pounds of trash each year. More than 30,000 plastic water bottles are dumped in open-air landfills in Ladakh each summer. On Mt. Everest, in neighboring Nepal, there's an estimated 8 to 10 metric tonnes of everything from empty oxygen canisters to tents and even bodies.

RATES OF INDIAN RUPEE

Currency	11.07.18	28.05.18	27.03.18
1 US \$	0.01454	0.01485	0.01539
1 Euro	1.17048	0.01275	0.01241
1 Pound	1.32429	0.01114	0.01091

Amazon CEO becomes world's richest man

● Amazon founder and CEO Jeff Bezos has become the richest man in the world with a net wealth of



Jeff Bezos

\$141.9 billion the Forbes World's Billionaires list showed on June 25.

Bezos' wealth has grown more than \$5 billion since June 1 to beat Bill Gates, the principal founder of

Microsoft Corporation, who is the second-richest man in the world with 92.9 billion dollars.

Warren Buffet, one of the most successful investors in the world, trailed in the third place with a total of wealth of 82.2 billion.

Bezos officially became the richest person in the world earlier this year, and his business behemoth of online retailing, Amazon, grew into the second-most valuable company in the world after Apple.

Draghi says ECB will be patient in timing of first rate hike

● Mario Draghi promised that the European Central Bank (ECB) will take its time to lift interest rates, reinforcing last week's agreement by policy makers to keep borrowing costs unchanged at least through the summer of 2019.

"We will remain patient in determining the timing of the first rate rise and will take a gradual



Mario Draghi

approach to adjusting policy thereafter," the ECB president said in a speech in Sintra, Portugal. "The path of very short-term interest rates that is implicit in the term structure of today's money-market interest rates broadly reflects these principles."

The euro extended declines after Draghi's speech. The single currency was down 0.7% against the US

It's war: China, US trade blows through tariffs

● Duty-bound Beijing imposes retaliatory tariff post US import duty on \$34 b of goods

The United States and China hiked tariffs on billions of dollars of each other's goods, launching what Beijing called the "biggest trade war in economic history" in a spiraling dispute over technology.

The Trump administration is confronting Beijing over development tactics it says include stealing or pressuring foreign companies to hand over technology. American officials worry Chinese plans to create tech champions in fields including robotics, biotech and artificial intelligence will erode US industrial leadership.

Washington imposed 25% duties on \$34 billion of imports from China in the first of a possible series of increases that President Donald Trump says could affect up to \$550 billion of Chinese goods.

The Chinese foreign ministry said "retaliatory tariffs" took effect. The Communist Party newspaper People's Daily said they were imposed on a \$34 billion list of goods issued last month that included soybeans, pork and electric vehicles.

Washington has "ignited the biggest trade war in economic history," said a commerce ministry statement.

Companies worry the spiraling dispute could chill global economic growth. Chinese exporters have reported US orders fell off ahead of the tariff hike. But Asian financial markets took Friday's developments in stride.



The Risks

Six months of wrangling has wiped out roughly a fifth of China's stock market value Shanghai's benchmark share index is down 22% since Jan, when solar panel tariffs were announced

Economists reckon every \$100 billion of imports hit would take away around 0.5% of global trade

Beijing could make it difficult for US cos to operate in China

Sell down of US Treasuries would probably be a last resort-China is currently the biggest foreign owner

dollar at 11.17am Frankfurt time, trading at US\$1.1536.

Draghi made it clear that the ECB's plan to halt its bond-buying program this year, closing an extraordinary chapter in a decade-long struggle with financial crises and recession, doesn't mean the central bank is ready to withdraw its support. Governing Council member Erkki Liikanen said that economic developments remain key in determining the path of interest rates.

"The timing is important but also that the future depends on data," he told reporters in Helsinki, adding that the ECB may keep borrowing costs at current lows even after the end of summer next year "if it is needed, to ensure monetary policy provides adequate support to reaching the price stability target."

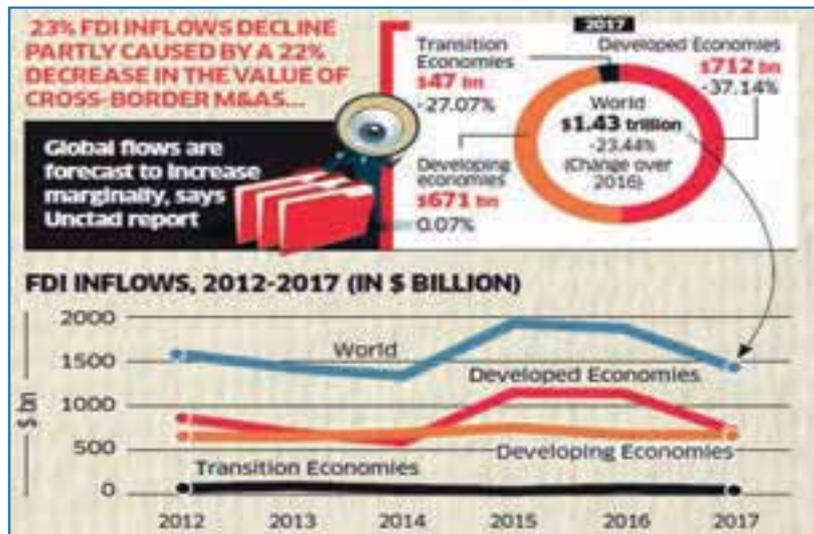
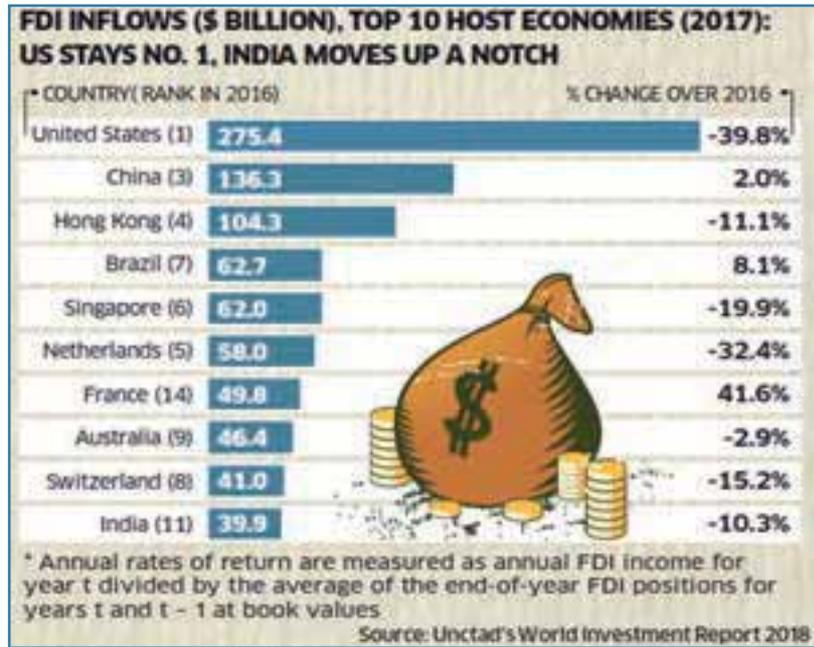
Growing uncertainty

In his speech in Sintra, Draghi said euro-area inflation is finally picking up and the economy is showing underlying strength, while he also cautioned that uncertainty has grown.

"The downside risks to the outlook come from three main sources," he said. "The threat of increased global protectionism prompted by the imposition of steel and aluminum tariffs by the US; rising oil prices triggered by geopolitical risks in the Middle East; and the possibility for persistent heightened financial market volatility."

Global FDI Inflows fell 23% in 2017: Unctad

● Global foreign direct investment (FDI) flows fell by 23% to \$1.43 trillion in 2017 from \$1.87 trillion in the previous year, a decline that is in stark contrast to the improvement seen in other macroeconomic variables, such as GDP and trade, according to the World Investment Report 2018. Cross border investment in developed and transition economies dropped sharply, while growth was near zero in developing economies. This negative trend is a long-term concern for policymakers worldwide, especially or developing countries, where international investment is indispensable for sustainable industrial development. Here's a snapshot.



...But discounting large M&As that inflated FDI in 2016, the 2017 decline remained significant. The value of announced greenfield investment – an indicator of future trends – also fell by 14%, to \$720 billion

NEGATIVE FDI TREND ATTRIBUTED IN LARGE PART TO A DECREASE IN RATES OF RETURN*

US DOLLAR RATES

Currency	11.07.2018	28.05.2018	27.03.2018
1 INR	0.01454	0.01485	0.01539
1 Euro	1.17048	0.01275	0.01241
1 UK £	1.32429	0.01114	0.01091
1 Yen	0.14980	0.00915	0.61452

NATURAL RUBBER (INDIA)

(Rs./Quintal, Ex-Kottayam)

Grade	July 2018	May 2018	March 2018	January 2018
RSS 4	12800	12850	12200	12311
RSS 5	12550	12650	11850	11750
ISNR 20	12700	11795	11100	10850
Latex (60% drc)	8240	8694	8085	8610

(Source: Rubber Board)

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(BASIC SELLING PRICE w.e.f. 01-01-2015)
Basic price excluding excise duty/cess, sales tax
and any other charges.

Product	Price (Rs./Kg)
Accelerators	
Pilcure MBT	290.00
Pilcure MBTS	310.00
Pilcure F	330.00
Pilcure CBS	360.00
Pilcure NS	410.00
Pilcure DCBS	480.00
Pilcure MOR	425.00
Pilcure ZDC	200.00
Pilcure TMT	190.00
Pilcure ZMBT	300.00
Pilcure ZDBC	275.00
Pilcure ZBzDC	405.00
Antioxidants/Antidegradants	
Pilflex 13	350.00
Pilnox TDQ	235.00
Pilnox SP**	219.10
Prevulcanisation Inhibitor	
Pilgard PVI	415.00

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NOTE:

- 1) All prices except Pilnox SP are basic prices, exclusive of excise duty, education cess.
- 2) Price of Pilnox SP is inclusive of excise duty and education cess.
- 3) Sales tax and other levies will be extra as applicable.

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(Price of Rubber Chemicals as on 15-03-2017)

Material	RATE(Rs./KG)
ACCELERATOR TMTD	200.00
ACCELERATOR ZDC	224.00
ACCELERATOR CBS	360.00
ACCELERATOR MBT	250.00
ACCELERATOR MBTS	285.00
ACCELERATOR ZDBC	297.00
ACCELERATOR ZMBT	305.00
ANTIOXIDANT SP	219.00
ANTIOXIDANT TDQ	225.00
ALUMINIUM SILICATE	13.00
BITUMIN	41.00
BONDING AGENTS	ON REQUEST
CALCIUM SILICATE	13.50
CHINA CLAY	6.50
CALCIUM CARBONATE PRECIPITATED	15.00
CALCIUM CARBONATE ACTIVATED	17.00
CRUMB RUBBER-TRC 40	23.00
CARBON BLACK-ORDINARY	40.00
CARBON BLACK-	ON REQUEST
(HAF/GPF/FEF/SRF/ISAF)	
D.O.P./D.B.P.	ON REQUEST
EBONITE DUST-(BROWN)	55.00 95.00
EBONITE DUST-(BLACK)	32.00
FACTICE - BROWN	99.00
FACTICE - WHITE	90.00
GRAPHITE POWDER	50.00
LIGHT MAGNESIUM CARBONATE	ON REQUEST
LIGHT MAGNESIUM OXIDE	ON REQUEST
PINE TAR - Synthetic	68.00
PARAFFIN WAX	ON REQUEST
PROCESS OIL	ON REQUEST
PETROLEUM JELLY (WHITE)	100.00
PETROLEUM RESIN	86.00
PRECIPITATED SILICA	52.00
RECLAIM RUBBER-BLACK	35.00
SULPHUR	24.00
SYNTHETIC RUBBERS	ON REQUEST
SYN.RED OXIDE	50.00
SOLVENTS-MEK, TOLUENE ETC.	ON REQUEST
STEARIC ACID(GODREJ)	78.00
SILICONE EMULSION	70.00
TALCUM POWDER	10.00
TITANIUM DIOXIDE	ON REQUEST
WHITING POWDER(P&W)	6.50
WOOD ROSIN	108.00/115.00
ZINC HYDROXIDE	20.00
ZINC STEARATE	65.00
ZINC OXIDE-(RUBBER GRADE)	125.00
ZINC OXIDE (WHITE SEAL)	199.00

**Please note it is difficult to stick to prices especially minerals and petroleum products as they fluctuate widely on weekly basis.



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