

Synthetic Rubber Overview

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International Institute of Synthetic Rubber Producers

Goa, India, March 2016



Proprietary & Confidential

Topics

- About IISRP
- SR Market Structure
- SR Supply & Demand – Zoom in China
- SR Market Drivers
- Tire Technology Driver – Emissions Legislations



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About IISRP



Mission

....fostering the growth and consumption of the synthetic rubber...

Members

- +50 Corporate Members
- +20 Countries
- 70% SR global production



About IISRP

International President
2015-2016

- Established in 1960...
- Leadership – International President
- Executive Committee
- Managing Director & CEO



Gregory Nelson

EW Copolymer



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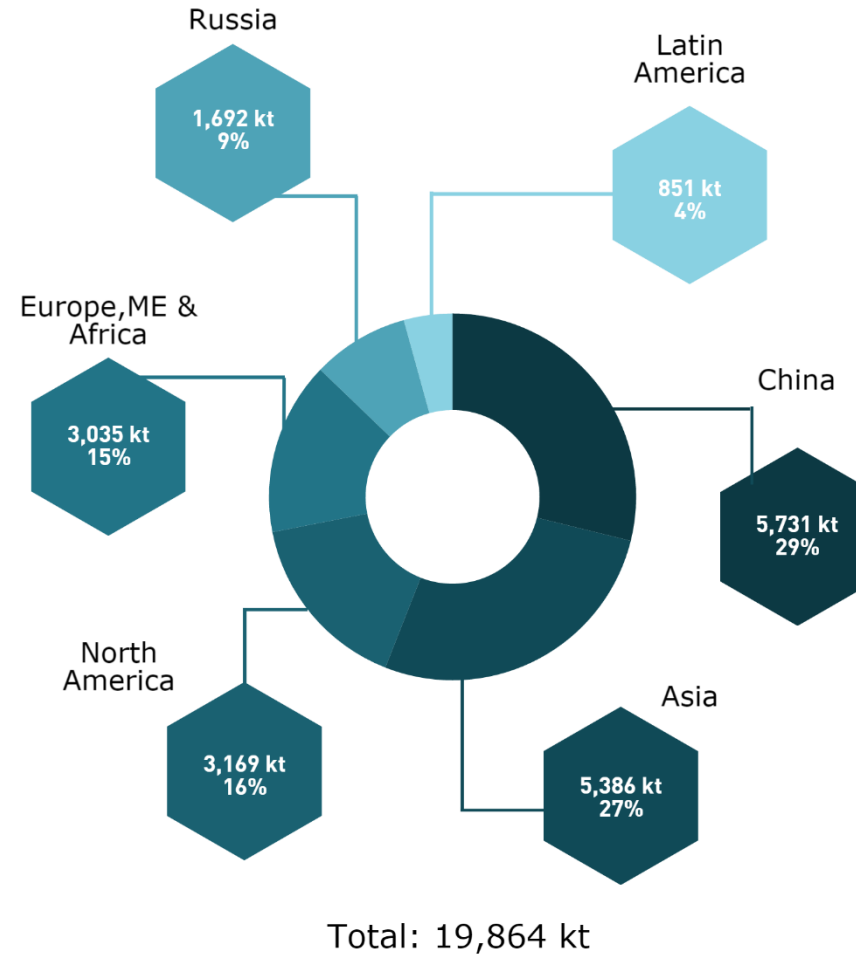
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SR Market Structure

2015 Global Capacity

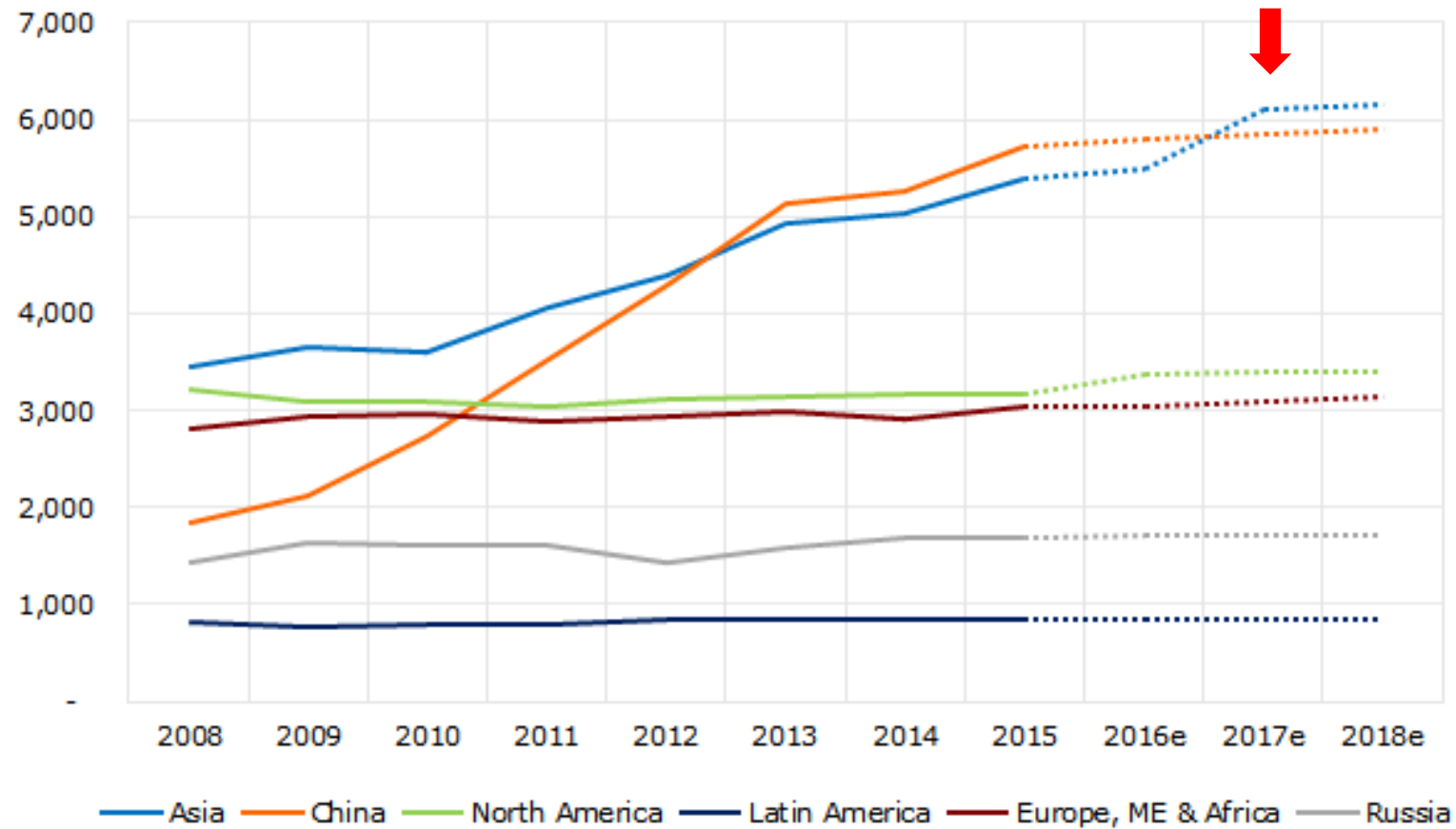


Source: World Rubber Statistics 2015 - IISRP



SR Market Structure

Capacity Expansions, kt

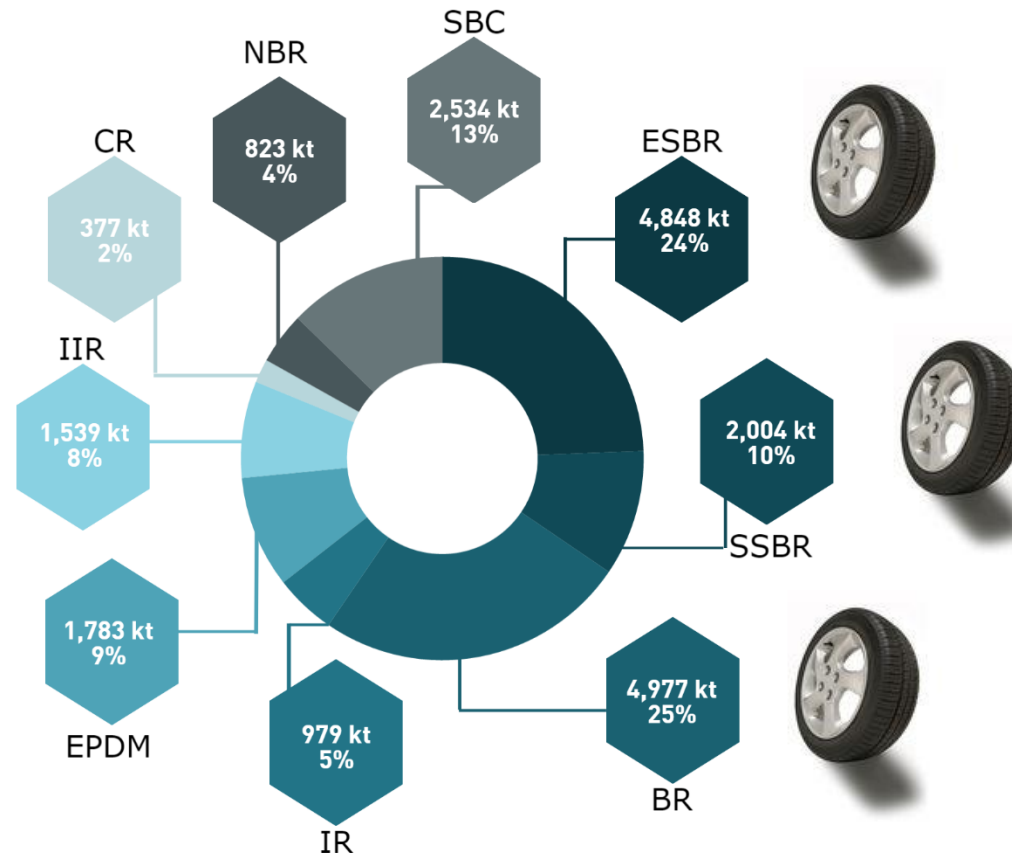


Source: World Rubber Statistics 2015 - IISRP



SR Market Structure

2015 Global Capacity



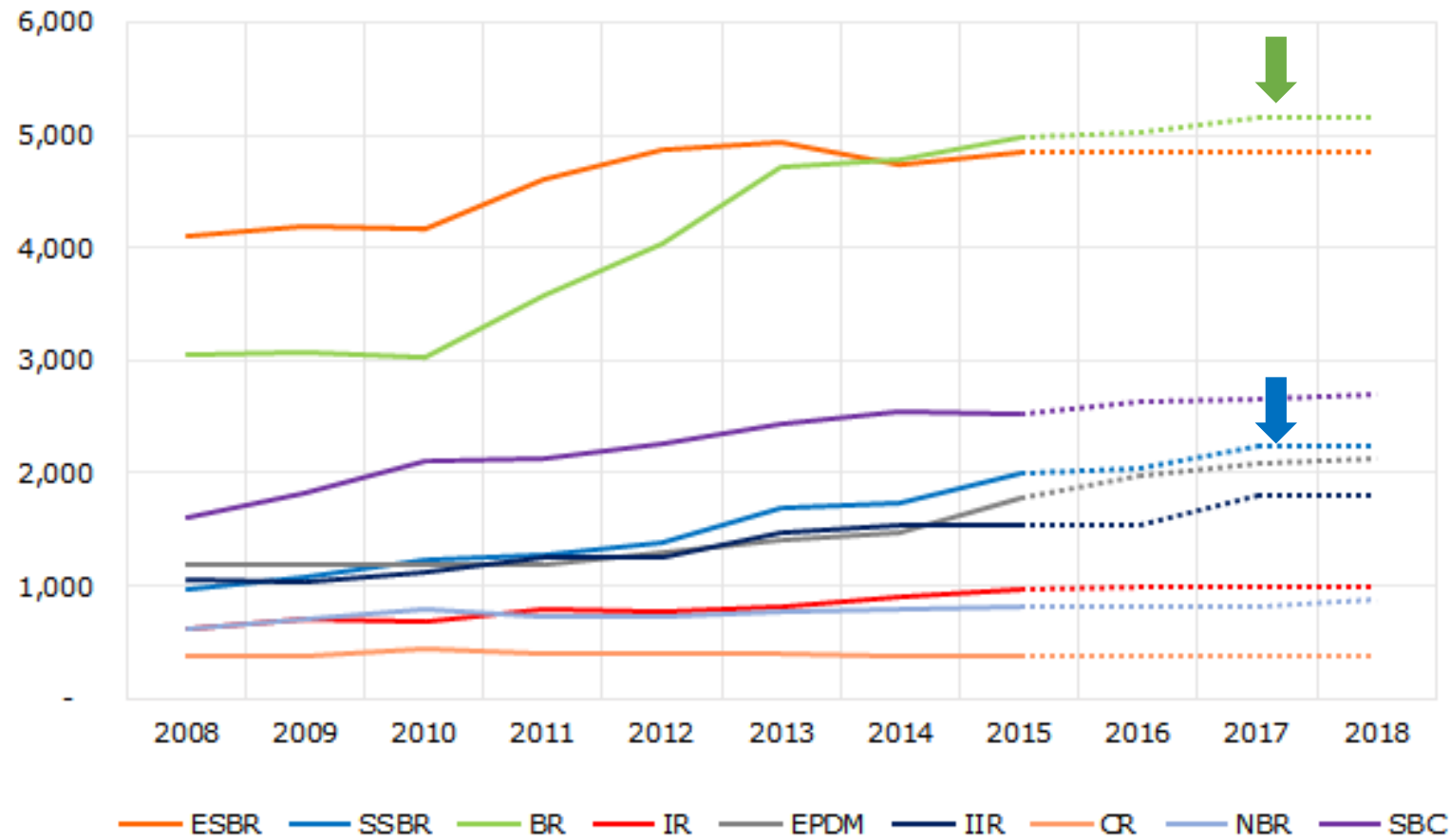
Total: 19,864 kt

Source: World Rubber Statistics 2015 - IISRP



SR Market Structure

Capacity Expansions, kt



Source: World Rubber Statistics 2015 - IISRP

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SR Market Structure

2015 Major SR Producers by Capacity
(23 Companies - 80%)



Source: World Rubber Statistics 2015 - IISRP



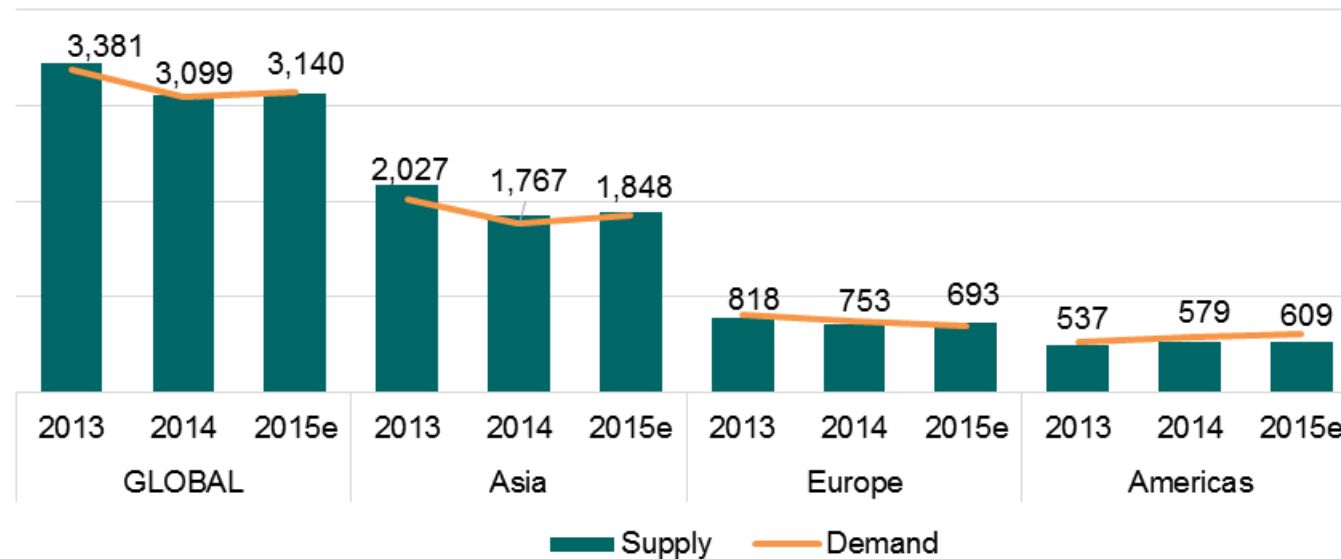
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SR Supply & Demand

BR Supply & Demand, kt

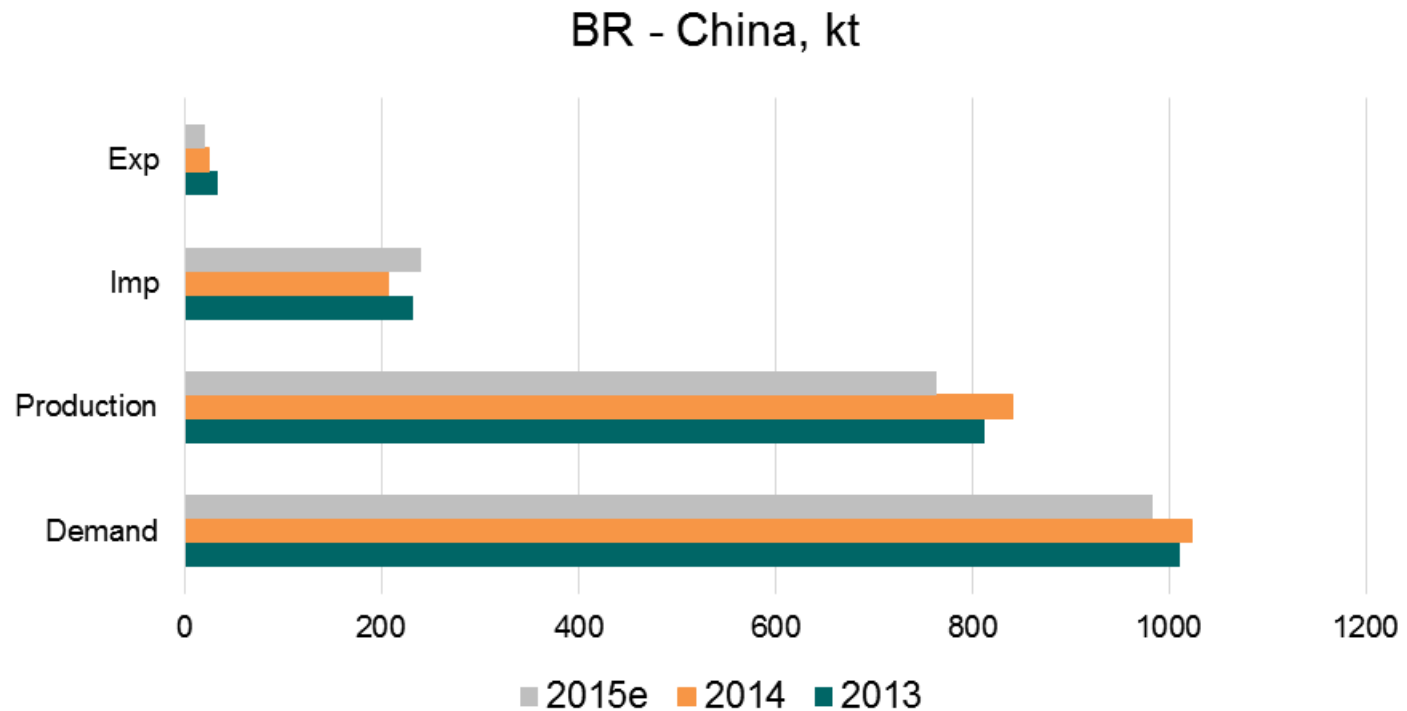


BR 2015 Global Capacity = 4,977 kt (63% operating rate)

Source: Quarterly Report – IISRP.



SR Supply & Demand



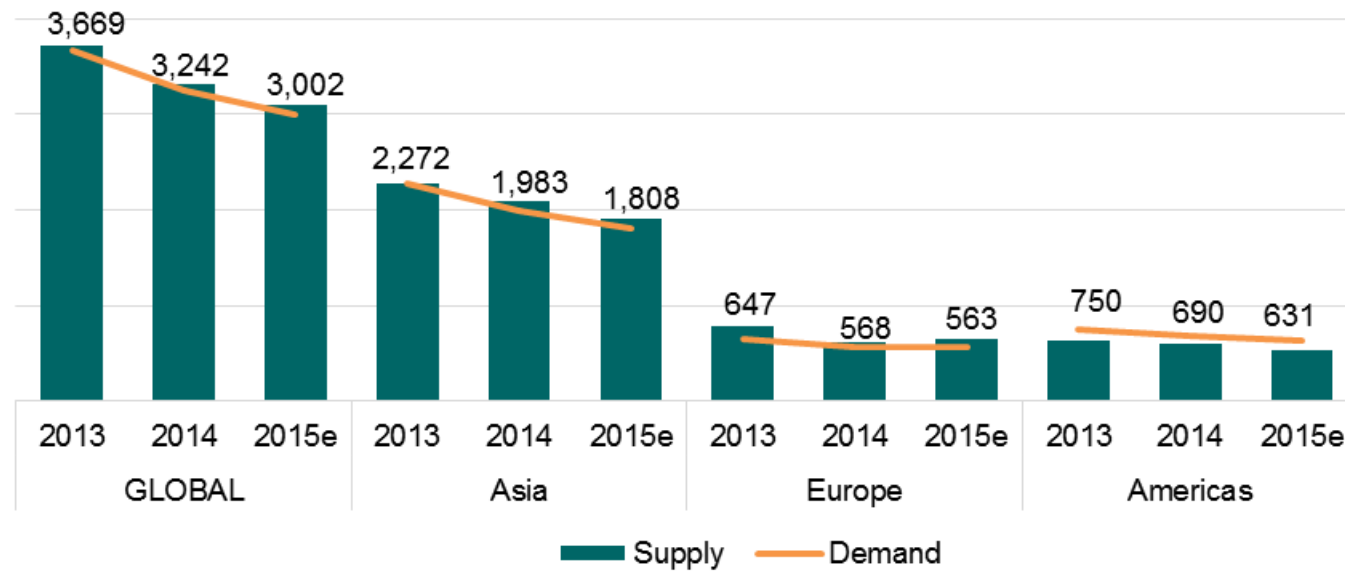
BR 2015 China Capacity = 1,740 kt (44% operating rate)

Source: IISRP - China.



SR Supply & Demand

ESBR Supply & Demand, kt

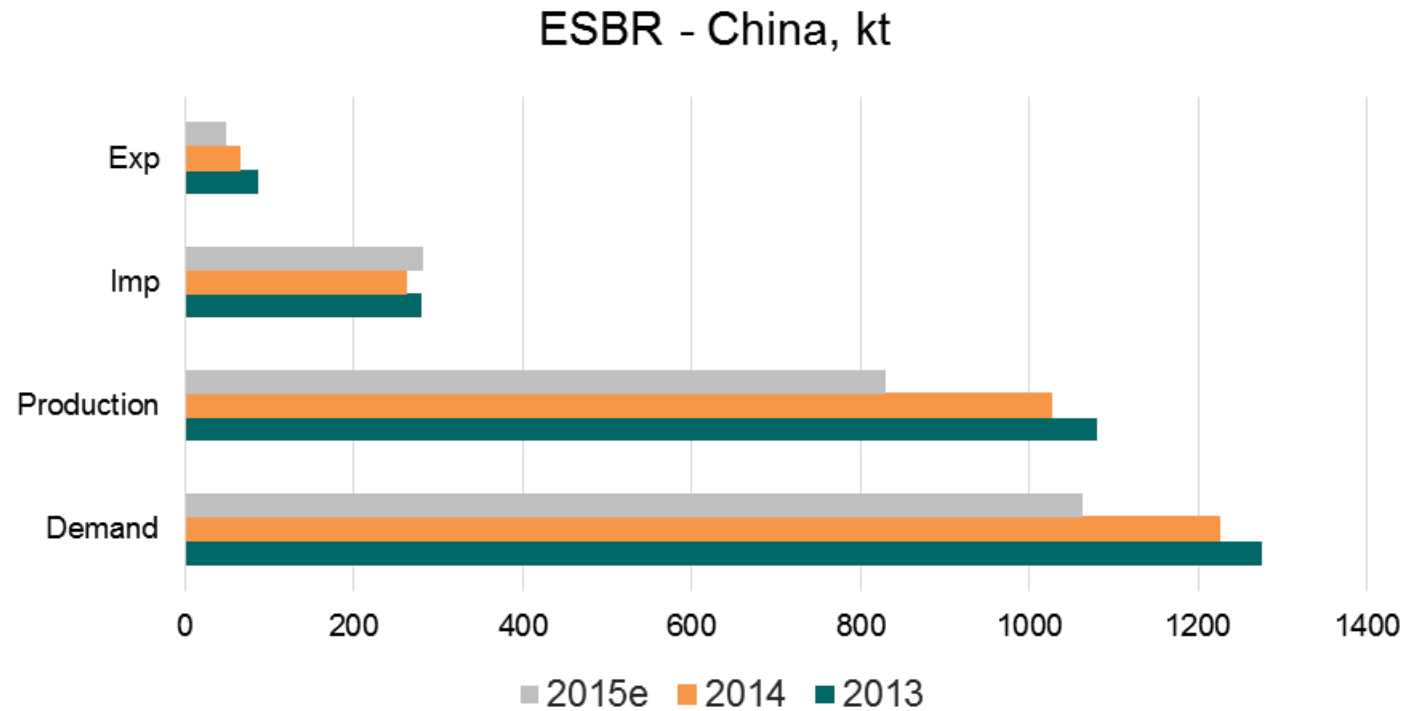


ESBR 2015 Global Capacity = 4,848 kt (64% operating rate)

Source: Quarterly Report – IISRP.



SR Supply & Demand



ESBR 2015 China Capacity = 1,450 kt (57% operating rate)

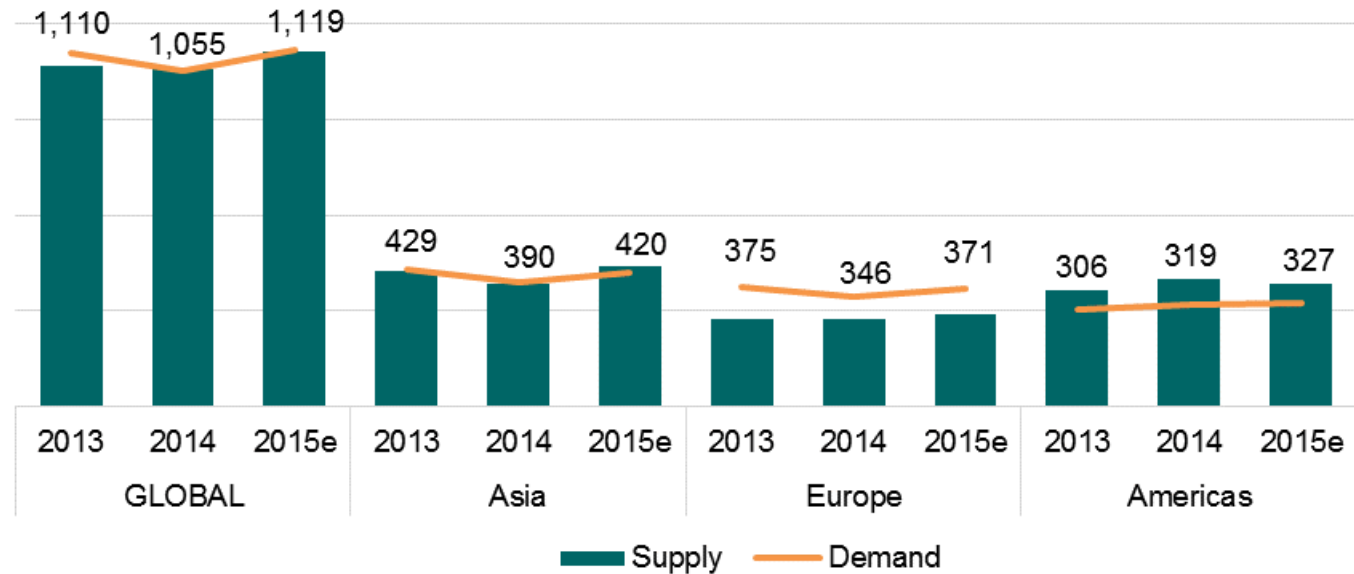
Source: IISRP - China.



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SR Supply & Demand

SSBR Supply & Demand, kt

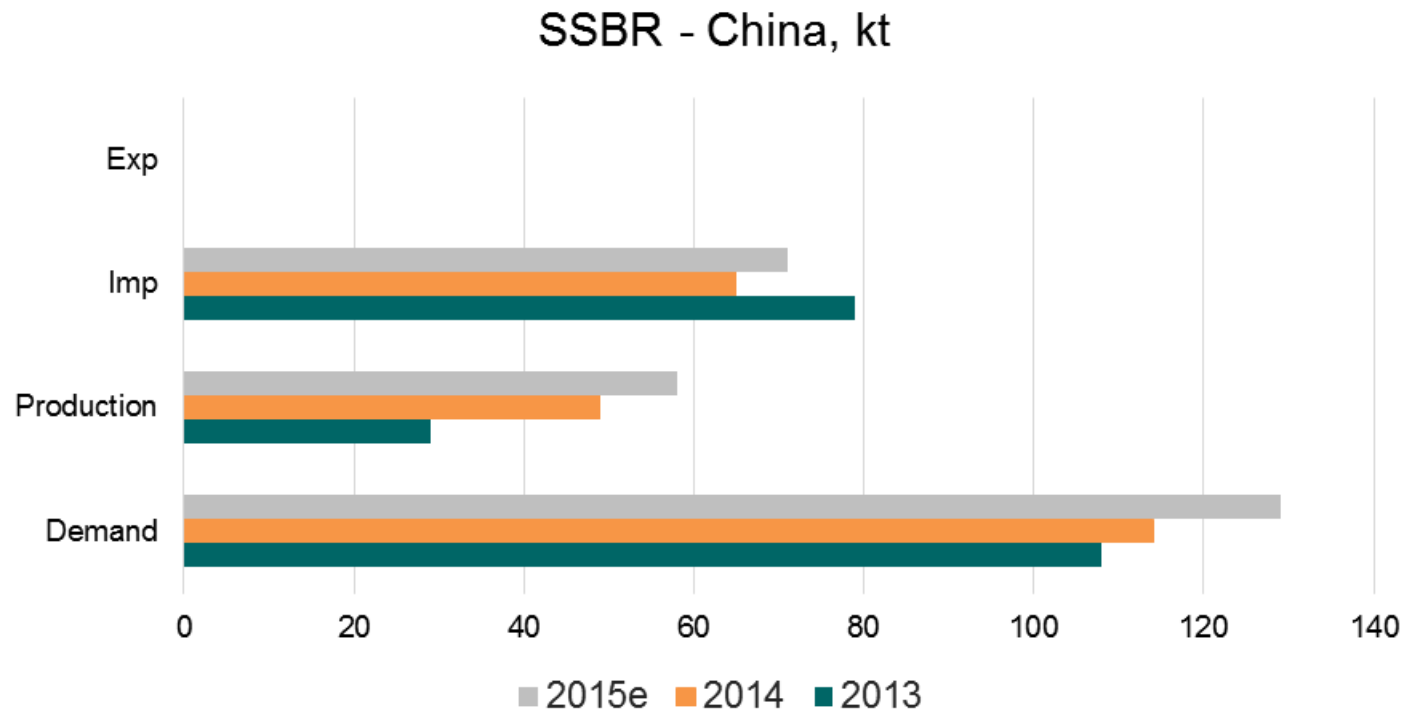


SSBR 2015 Global Capacity = 2,004 kt (56% operating rate)

Source: Quarterly Report – IISRP.



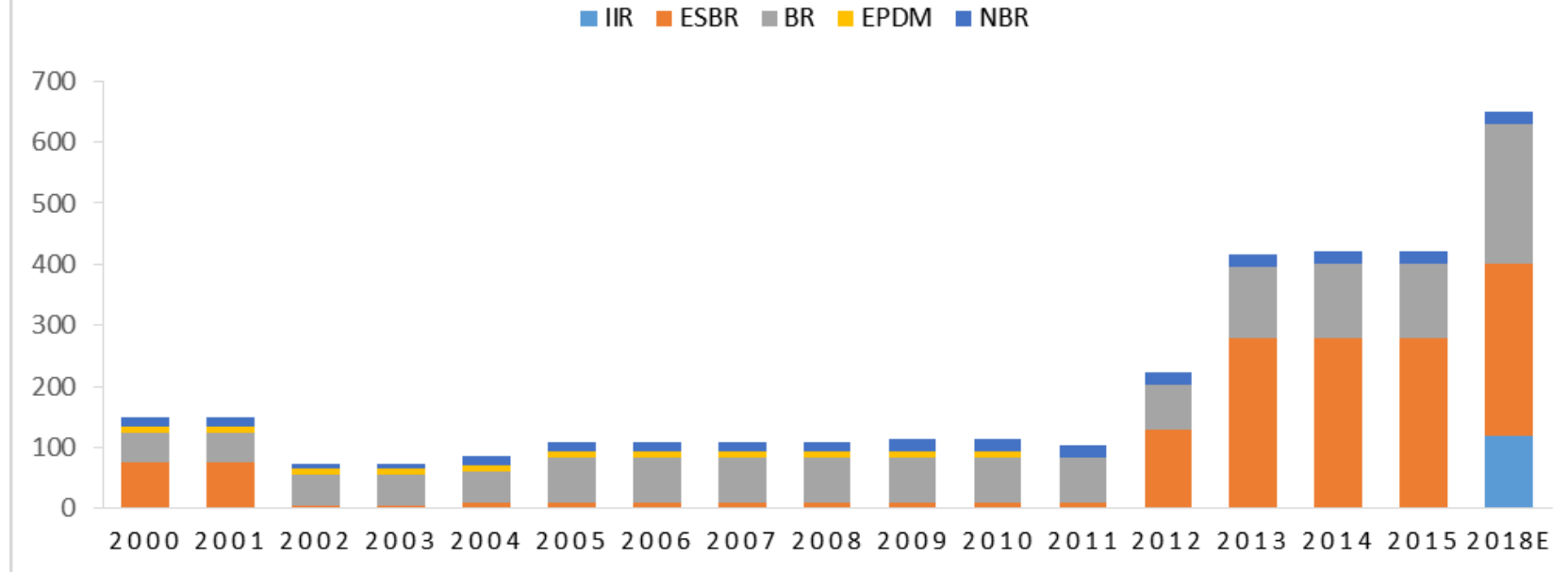
SR Supply & Demand



SSBR 2015 China Capacity = 263 kt (22% operating rate)

Source: IISRP - China.

INDIA- SR CAPACITY 2000-2015

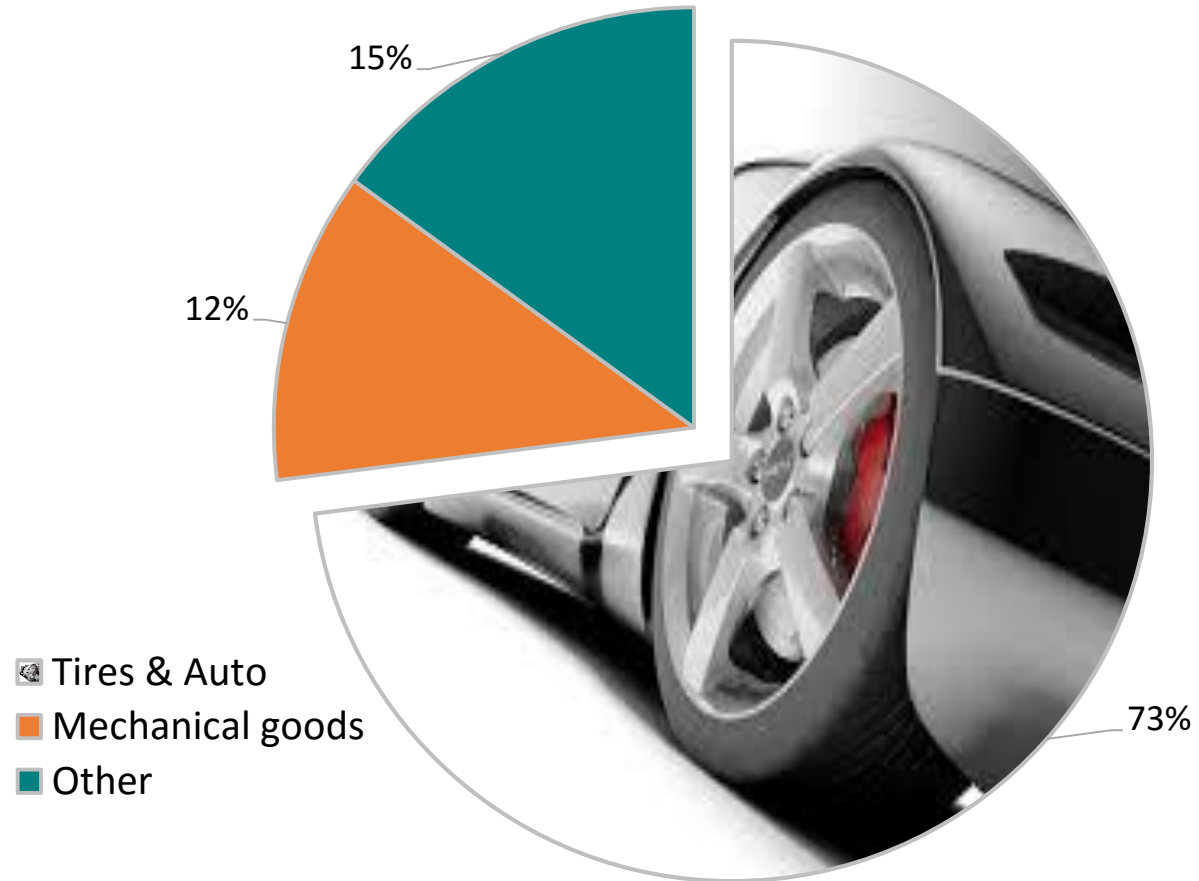


- By the end of 2015 SR Capacity in India reached around 420 kt/year
- Domestic SR producers are ramping-up production based on approvals from tire markets
- India is expected to become self-sufficient between 2017 – 2018 reaching around 650 kt/year (+120 kt IIR JV Reliance/Sibur, +110kt BR Gail).
- India's SR Consumption estimations by IISRP: 480 kt 2014 , and 500 kt by the end of 2015
- India is importing around 300 kt of SR, so imports will decrease as the new capacity operating rates ramp-up.
- SR Consumption trend is driven by the GDP (higher exports and investor confidence boosted by new structural reforms)



SR Supply & Demand

Commodity SR Demand



Topics

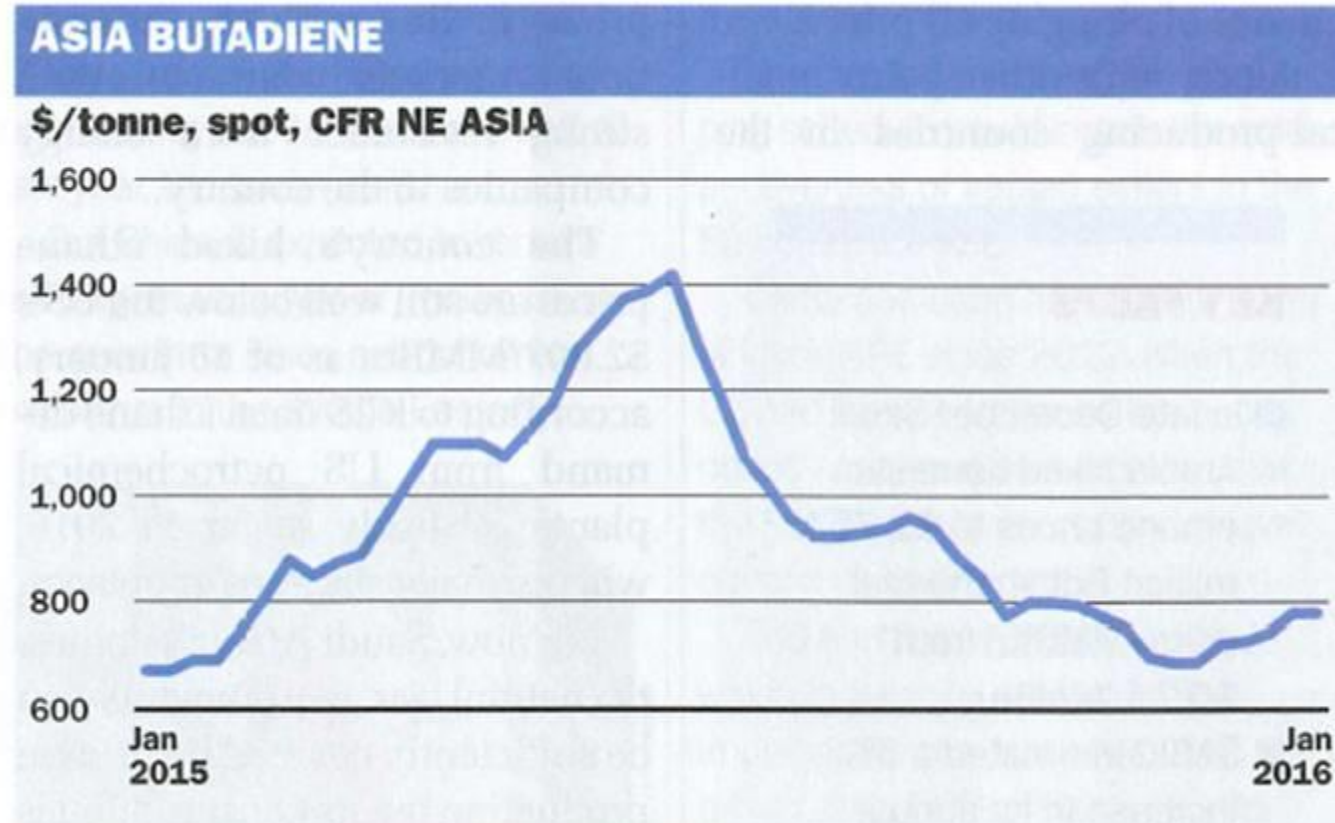
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SR Market Drivers



SR Market Drivers

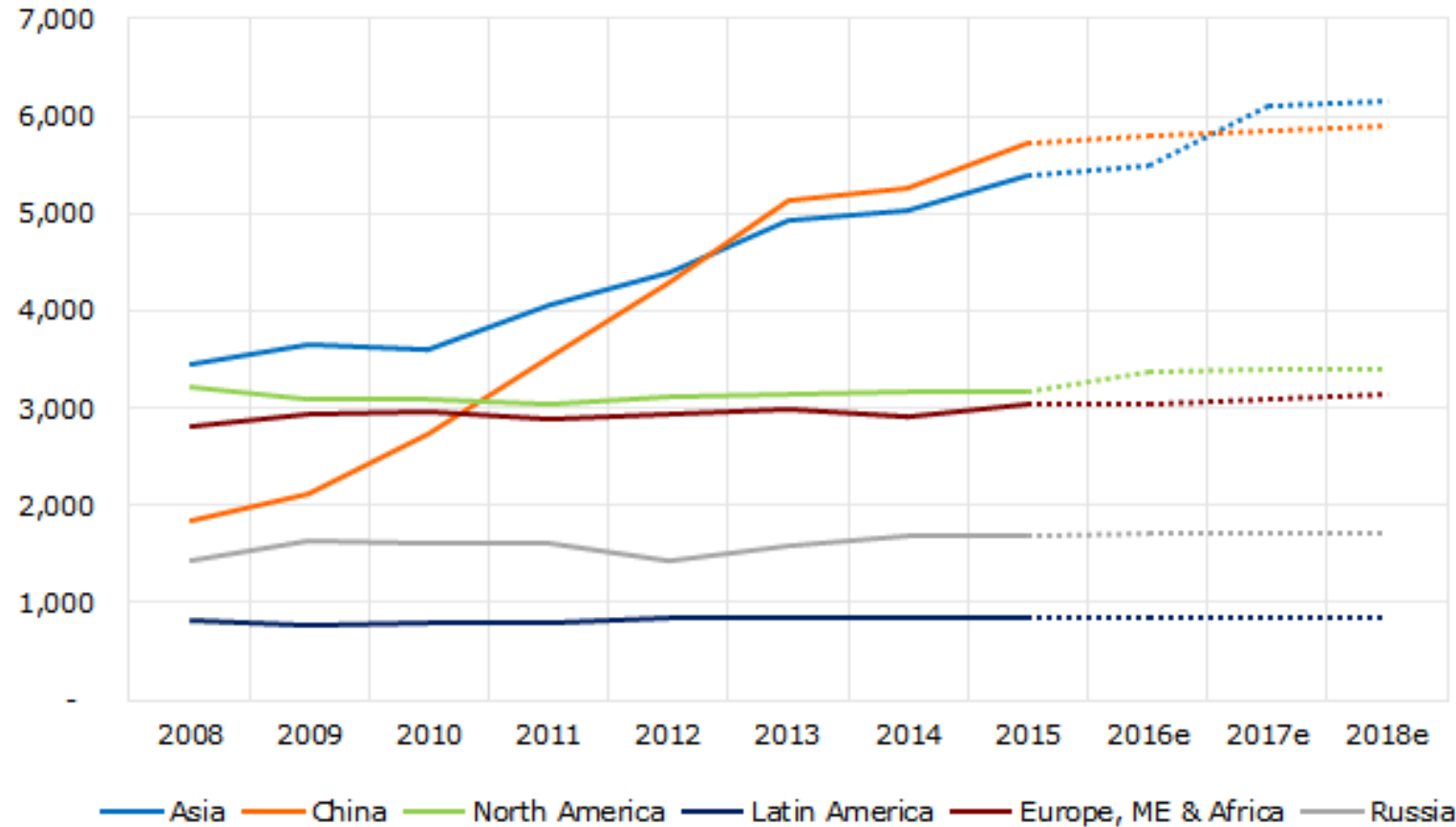


SR Market Drivers



SR Market Drivers

Capacity Expansions, kt



SR Market Drivers



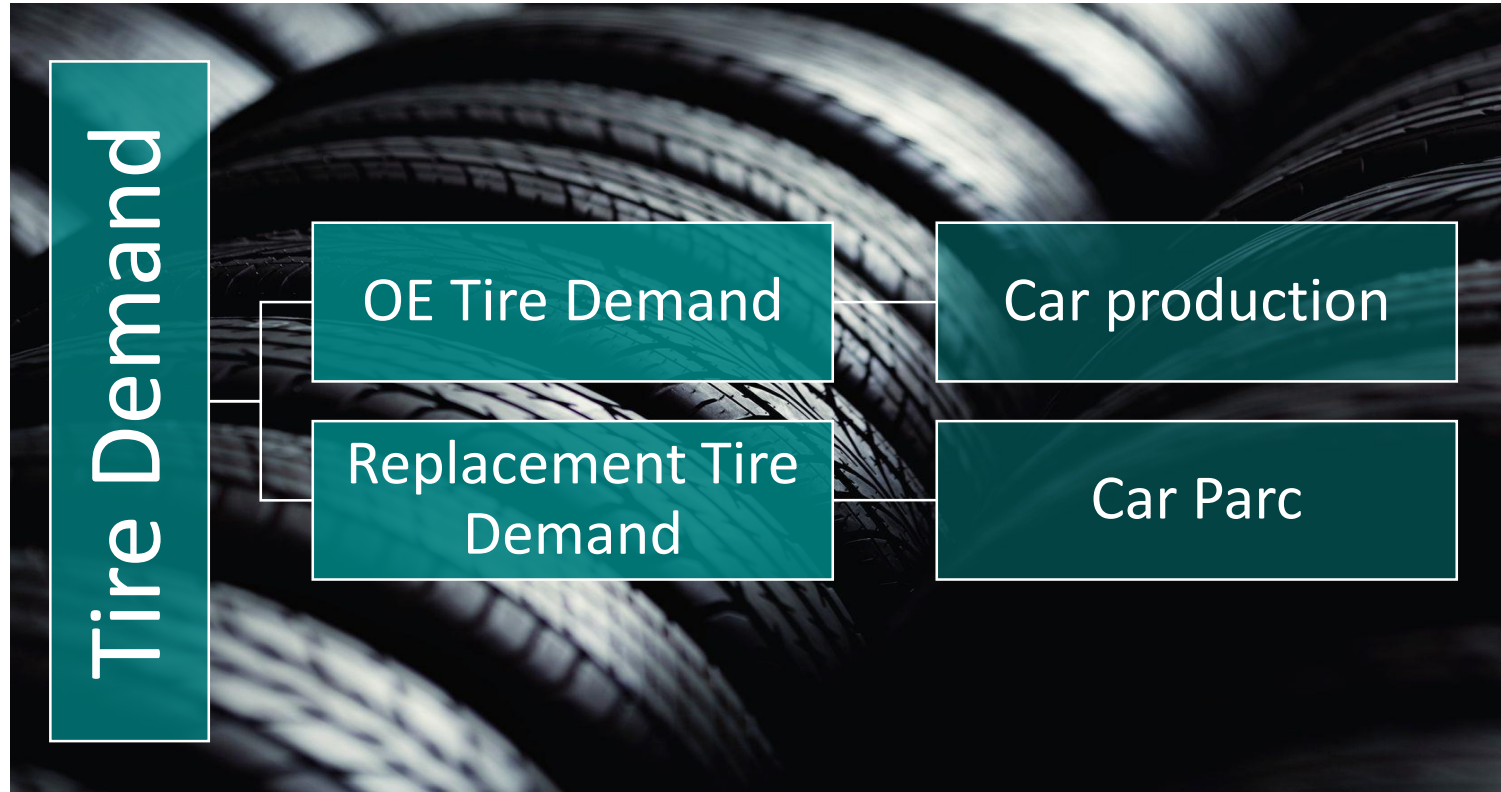
SR Market Drivers



SR Market Drivers

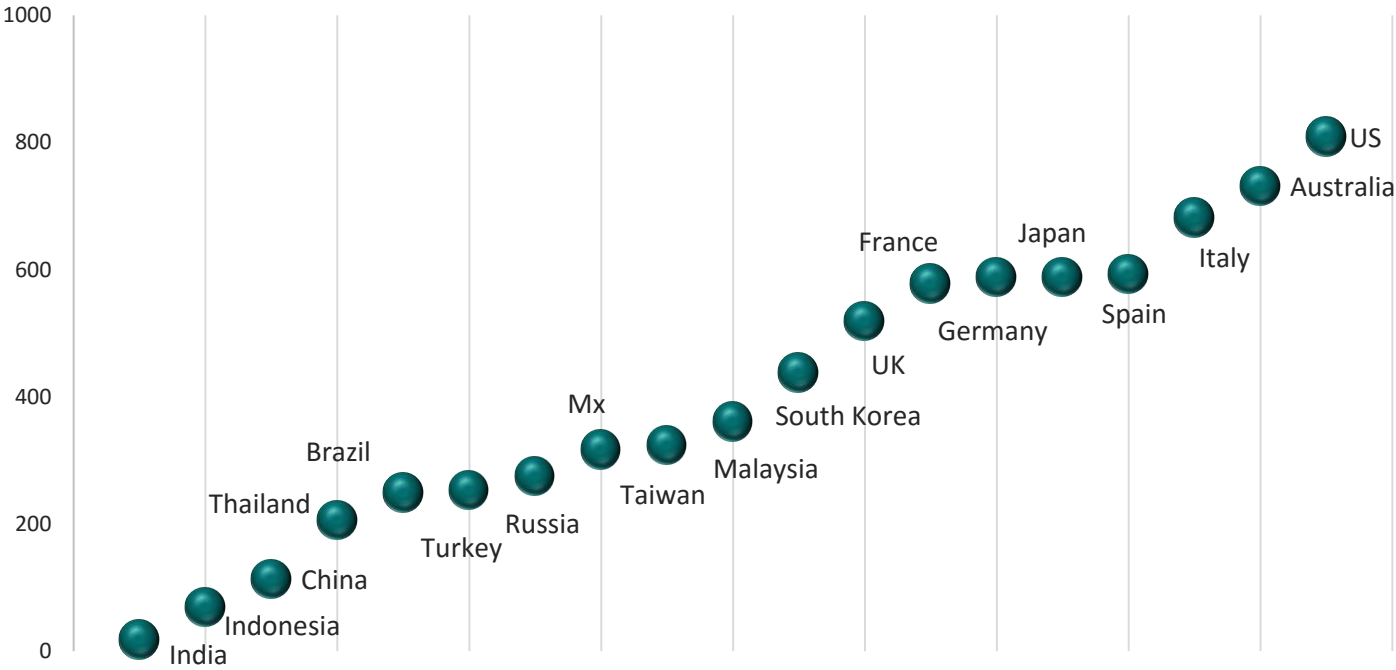


SR Market Drivers



SR Market Drivers

Vehicles per capita (vehicles/1000 people)

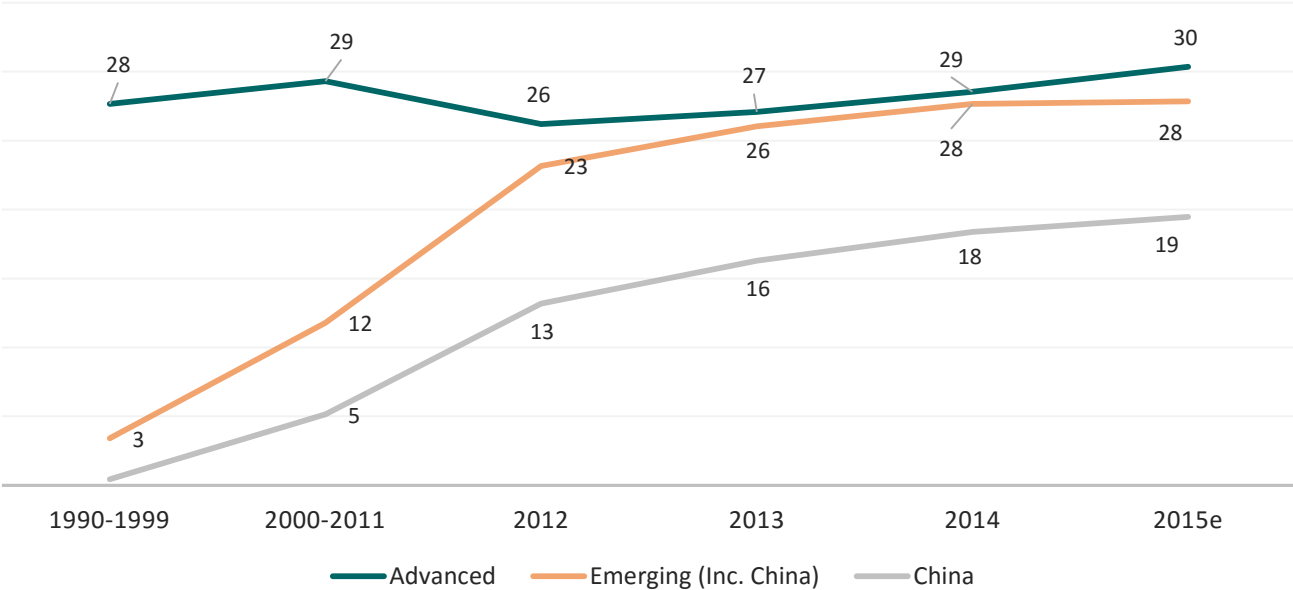


Source: Wikipedia.org



SR Market Drivers

Car Sales (millions of units)



Source: Scotiabank Economics – Global Auto Report - Nov 2015.



Topics

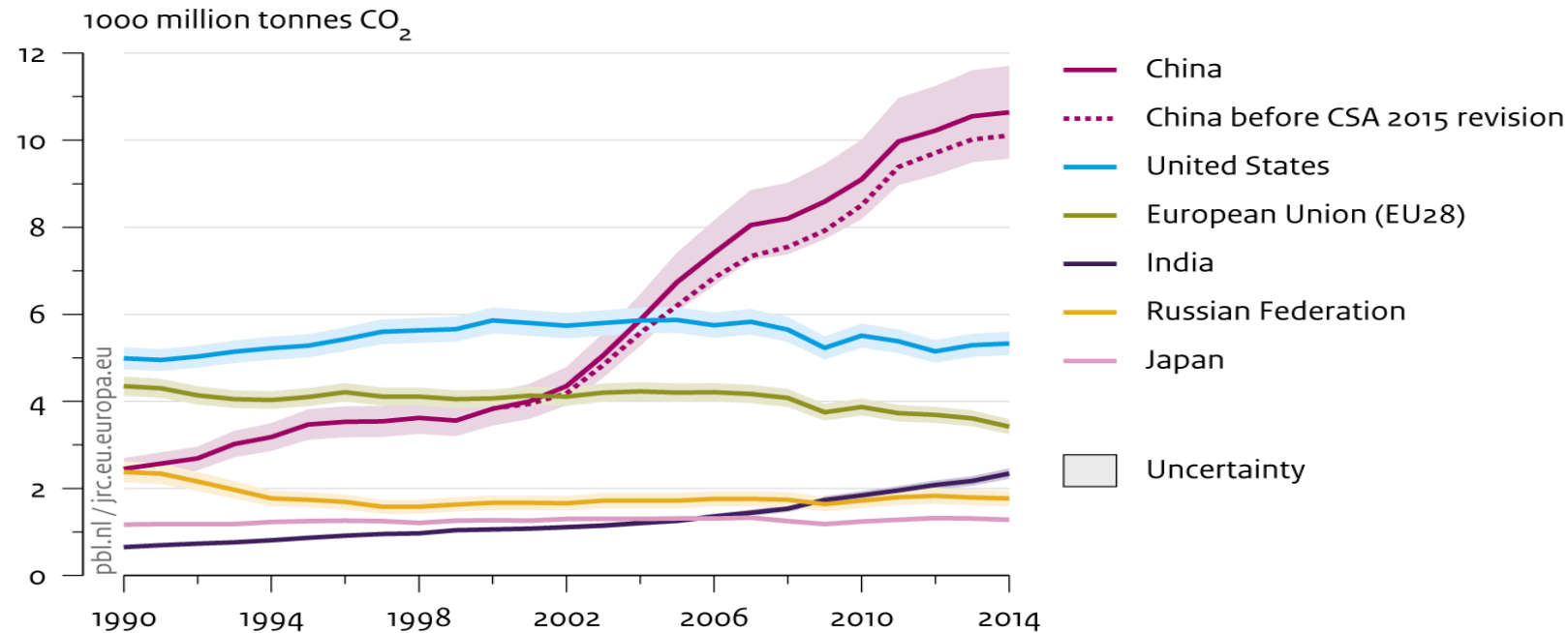
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Tire Technology Driver - Emissions Legislations

Top 5 emitting Countries and - EU 1990 - 2014

CO₂ emissions from fossil-fuel use and cement production in the top 5 emitting countries and the EU



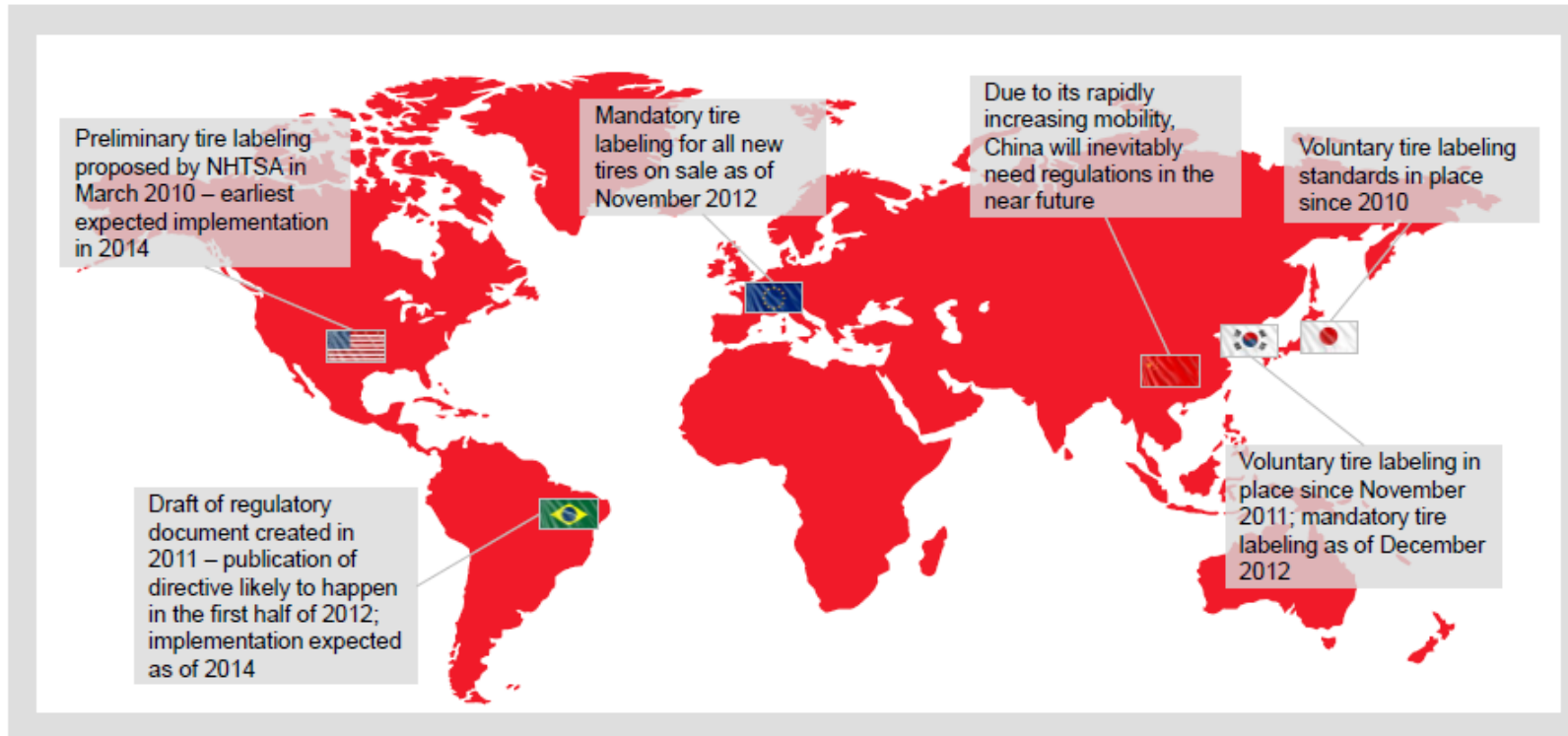
Source: EDGAR 4.3 (JRC/PBL, 2015) (1970-2012; notably IEA 2014 and NBS 2015); FT2014 (2013-2014): BP 2015; GGFR 2015; USGS 2015; WSA 2015

Source: Emissions database for Global Atmospheric Research (European Commission).



Tire Technology Driver - Emissions Legislations

Emergence of worldwide adoption of tire regulations and implementation of tire labeling



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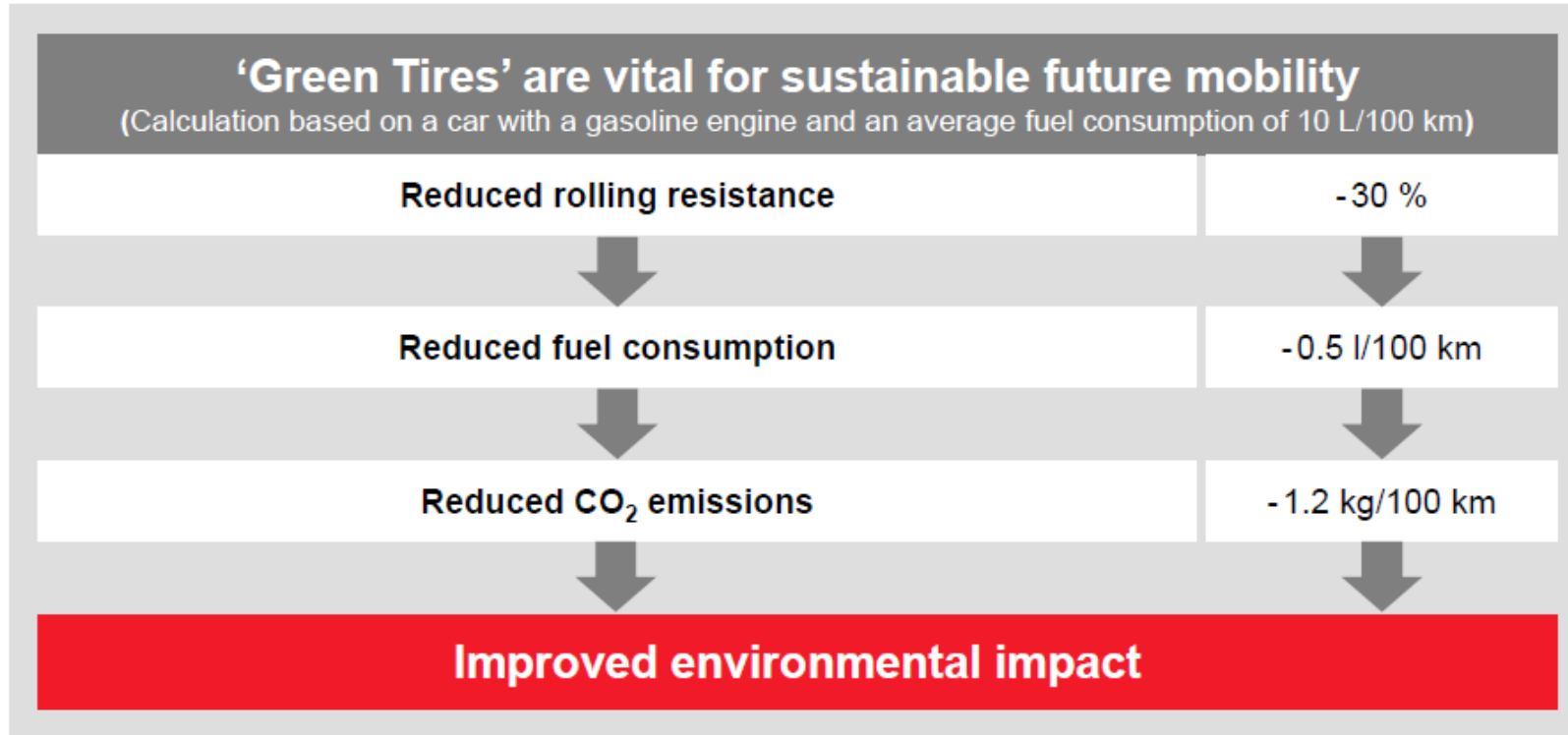
LANXESS

Source: Green Tires Fact Book – Lanxess (http://ebooks.lanxess.com/Fact_Book/)



Tire Technology Driver - Emissions Legislations

Environmental impact of 'Green Tires'



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Source: www.auto-motor-und-sport.de/eco/verbrauchsreduzierung-rollwiderstandsoptimierte-reifen-alles-ueber-den-reifen-rollwiderstand-1899808.html

LANXESS

Source: Green Tires Fact Book – Lanxess (http://ebooks.lanxess.com/Fact_Book/)



Closing

Questions ?



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**Thank You /
आपको बहुत बहुत धन्यवाद**



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