CHALLENGES FACING THE SYNTHETIC RUBBER MARKET IN ASIA IN 2018

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  - Price history

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Agenda

- 2018 market overview & outlook
  - Key driving factors
  - Supply and demand structure
- Mid-term outlook
  - Butadiene supply and demand
  - Margin reallocation of the BD-rubber-tyre value chain
  - China tyre trend
Overview of butadiene-rubber market over the past decade

U Shape Price One-way downward price ?
China drives the rubber world

2017 PBR Consumption Share

- **NORTHEAST ASIA**: 45%
  - The largest consumption region
- **CHINA**: 32%
  - The largest consumption country
- **SE ASIA & INDIA**: 15%
  - Potential consumption area

![Circle chart showing consumption share by region]

3,631 KTA

Source: ICIS SUPPLY & DEMAND DATABASE
Challenges in 2018

**SUPPLY**
Seasonal maintenance, regional S&D

**DEMAND**
Absence of policy in automobile industry, uncertainties from trade barriers

**SUBSTITUTION**
Oversupply – high yield, high inventories

**UNCERTAINTIES**
Intensive introduction of environmental policies, trade war between China and US

- Butadiene
- China Tyre Demand
- Natural Rubber
- Policies
Rare price trend conflict within the region

China’s local butadiene (BD) prices are usually higher than import prices, but this is changing in 2018

Regional supply and demand is major reason

Source: ICIS
BD supply capped by maintenance in Q2 2018

BD capacity disruption due to maintenance in Asia

- BD supply drops due to maintenance in 2018, close to 2016 numbers
- More maintenance concentrated in Q2 2018

Source: ICIS
Supply from new BD plants lower than expectation

- **SHENHUA NINGXIA COAL**
  - 65 kta, Jan 2017
- **BLUESTAR**
  - 50 kta, Dec 2017
- **JIANGSU SAILBOAT**
  - 100 kta, Sep 2017
- **CSPC No 2**
  - 180 kta, Apr 2018

**TOTAL CAPACITY:** 395 kta

- Delayed delivery of some new plants due to technical issues
- BD production for the above four plants in 2018 is estimated at 235kta, utilisation rate around 60%

Source: ICIS SUPPLY & DEMAND DATABASE
Tyre: China’s demand may slow down in 2018, a period of adjustment

- Absence of policies will allow the **passenger car market** to show mild performance

- **Heavy truck market** is expected to remain weak after strong expansion in 2017

- If the global economic recovery continues, China’s **tyre exports** will stay at good levels

- **Trade barriers** add uncertainty to China tyres market, but mostly from an overall perspective rather than from the industry itself

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Source: CHINA RUBBER INDUSTRY ASSOCIATION
Mild performance in auto market

**Passenger car**
Expired purchase tax cuts of small-engine PV

**Commercial vehicle**
Management of overloading in 2016-2017
Eliminate yellow marking vehicles

### China auto production growth rate

- **PV**
- **CV**
- **TOTAL**

Source: CHINA ASSOCIATION OF AUTOMOBILE MANUFACTURERS
Sino-US trade war compounded existing trade barriers to China tyres

China's tyre market has extensive experience with trade barriers, and has adapted to it.

China's tyre factories have successfully set up overseas; these ventures could be replicated in other industries.

Most market uncertainties caused by the trade war between the US and China are from an overall perspective rather than from the industry itself.

Source: CHINA CUSTOMS, XE.COM

(USD to CNY)
NR: Impact to SR market deepens

2018 is **high-yield** year for NR, and **inventory problem** needs to be resolved

Overall **price** is expected to be weak, but unlikely to fall to the previous low point

**Substitution of NR to SR** returns, but limited

**Substitution impact on SR volumes** shifts to impact sentiment
Environmental policies: changing short-term S&D

- **Enforcement** differs in different provinces
- **Mismatch** between supply and demand
- After a period of time, **market elasticity** will stabilise this imbalance
- **Corporate operating cost** will increase
- Most synthetic rubber producers will complete installation of new environmental equipment after 2018; **Temporary shutdown will decrease** in the future
- Accelerate industry **reshuffling and reorganisation**
Asia’s rubber consumption recovering

- Asia’s consumption CAGR (2014-2018): PBR 5.1%, SBR & SBCs 2.0%

**Graphs showing consumption growth rates for PBR and SBR & SBCs from 2014 to 2018.**

Source: ICIS SUPPLY & DEMAND DATABASE
BD: more new plants coming, mostly from China

<table>
<thead>
<tr>
<th>Country</th>
<th>Site</th>
<th>Company</th>
<th>Craft</th>
<th>Capacity (kta)</th>
<th>Start-up</th>
<th>Note</th>
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<tr>
<td>China</td>
<td>Guangdong</td>
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**TOTAL** | **2422**
Trade flow is going to change – China has potential to be a net exporter

China has potential to be a net exporter; needs to keep an eye on ethylene balance

To export BD is more economical than to export elastomers for China due to tax refund policy

Source: ICIS SUPPLY & DEMAND DATABASE
After industrial adjustment, China’s tyre market will have a bright future

- **Regulation to introduce labelling requirement**
- **Industrial upgrading strategy focusing on high-tech fields**
- **Initiative focusing on regional connectivity and cooperation**

- **Opportunity for China’s tyre sector to upgrade**, improve production processes and quality
- **New opportunities to export** China tyres and the technology
Margin reallocation in the industry chain

NOW

- BD producers have larger margins, except on-purpose producers
- Difficult for stand-alone synthetic rubber producers to survive
- Tyre factories also suffer from the big rise and fall of rubber prices

FUTURE

- Competition among BD producers expected to more fierce
- SR producers will have better margins due to cuts in overcapacity and expansion of butadiene
- Tyre factories will enjoy profitable market after reorganisation
Conclusion

- In the near term, NR prices will determine sentiment/demand for SR, while BD’s fluctuating effect on SR will weaken.
- China’s environmental protection policies influence on short-term pricing, and trade war add uncertainties to the market.
- Synthetic rubber prices will remain stable in 2018.
- In longer term, new BD plants in Asia will change the global trade flow picture.
- Supply chain optimisation will be key objectives of synthetic rubber producers.
- China’s tyre industry is undergoing an adjustment period.
- Margins will be reallocated across the BD-rubber-tyre value chain.
THANK YOU!

Contact us

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