The implications of the supply side reform for aluminum industry—will curtailment sustain?

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Wan Ling, Head of Asia, Aluminium
Structure of presentation

1. Supply side reform
2. Aluminum capacity developments and closures
3. Restart of the closed capacity is slow
4. Demand to remain firm and help the supply side
5. Conclusions
What does supply reform mean for aluminium?
We have seen the explosive growth of Chinese capacity
China closed 3.8Mtpy aluminum smelting capacity in 2015

The capacity closures by aluminum smelter in China in 2015

Data: CRU
World production: Curtailments lower production in China and USA

Growth in world excluding China aluminium production, % y-o-y

Growth in Chinese aluminium production, % y-o-y

Source: CRU April Aluminium Market Outlook, 2016
**Restart pace is slow for the moment**

<table>
<thead>
<tr>
<th>Smelter</th>
<th>Capacity to restart ('000 tpy)</th>
<th>Restart date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zhaofeng</td>
<td>120</td>
<td>16-Apr</td>
<td>Restarted in early April</td>
</tr>
<tr>
<td>Shanxi Taiyuan</td>
<td>50</td>
<td>16-Mar</td>
<td>Restarted in late March - early April</td>
</tr>
<tr>
<td>Chongqing Qineng</td>
<td>50</td>
<td>16-Feb</td>
<td>Restarted in late February</td>
</tr>
<tr>
<td>Aba</td>
<td>67</td>
<td>16-Mar</td>
<td>Full restart by June 2016</td>
</tr>
<tr>
<td>Guizhou Tongzi</td>
<td>50</td>
<td>16-Apr</td>
<td>Full restart by June 2016</td>
</tr>
<tr>
<td>Qinghai Xinye</td>
<td>100</td>
<td>16-Mar</td>
<td>Full restart by June 2016</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>437</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
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Restart process is slow due to:

- Power tariff hike after the aluminum prices rallied
- The smelters find it difficult to get the amount of the money to get the idle capacity restarted
- Tightness of cathode block as the demand for the cathode block increased suddenly in a short time
Chinese smelters are heavily dependent on coal-fired electricity. The percentage of primary aluminium output based on self-generated power keeps rising. The data is from the CRU Aluminium Smelter Power Tariffs Report 2016.
The weighted average power tariff by province in 2016

Data: CRU Aluminium Smelter Power Tariffs Report 2016
World aluminium smelting Business Costs (BC) in January 2016

Source: CRU Aluminium Cost Service
World’s aluminum smelting capacity additions will be mainly from Shandong, Inner Mongolia, and Xinjiang.
Aluminium demand to grow strongly in OBOR countries

Primary aluminium consumption by region CAGR 2015 – 2025 (%)
China will increasingly turn to export aluminium products

There are more further final goods not captured in chart above e.g. motor bikes

Data: CRU, GTIS
Conclusions

- China closed 3.8Mtpy capacity in 2015 in respond to the low aluminum prices and supply side reform. The restart pace is slow for the moment.

- World’s smelting capacity additions will be mainly from the three provinces in China, Shandong, Inner Mongolia, and Xinjiang.

- Primary aluminum demand is expected to remain firm in China, which will help the supply side reform in China.

- China’s aluminum downstream is moving to high value added products. The majority of the products will be consumed in the domestic market, but the international market is a key target market for Chinese aluminum semis products.