

The new era in steel – Post China supply side reforms and the outlook for steelmaking in SE Asia

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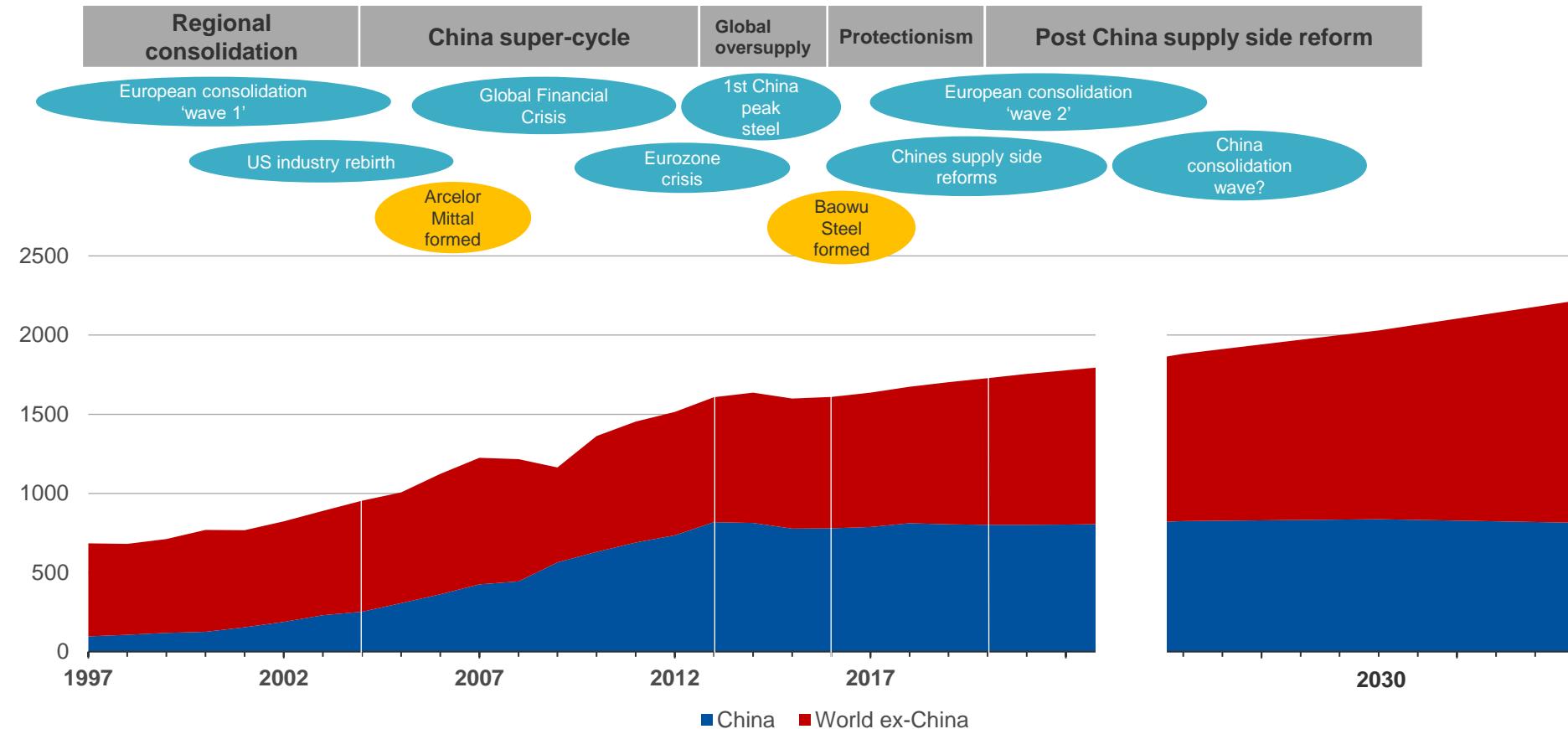
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The global steel timeline – have we moved into a new era for steel?

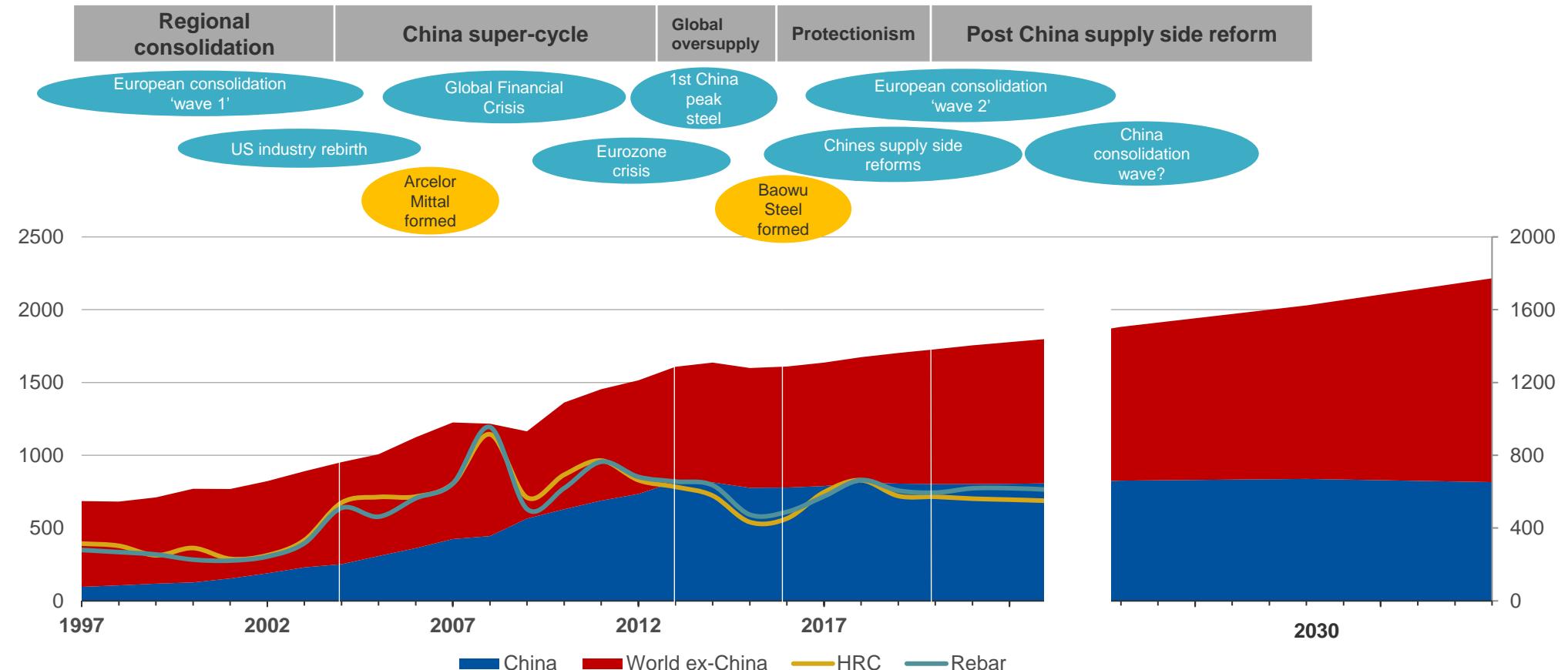
Global apparent steel consumption, Mt



The global steel timeline – have we moved into a new era for steel?

LHS: Global apparent steel consumption, Mt

RHS: German rebar and HRC prices¹, \$/t

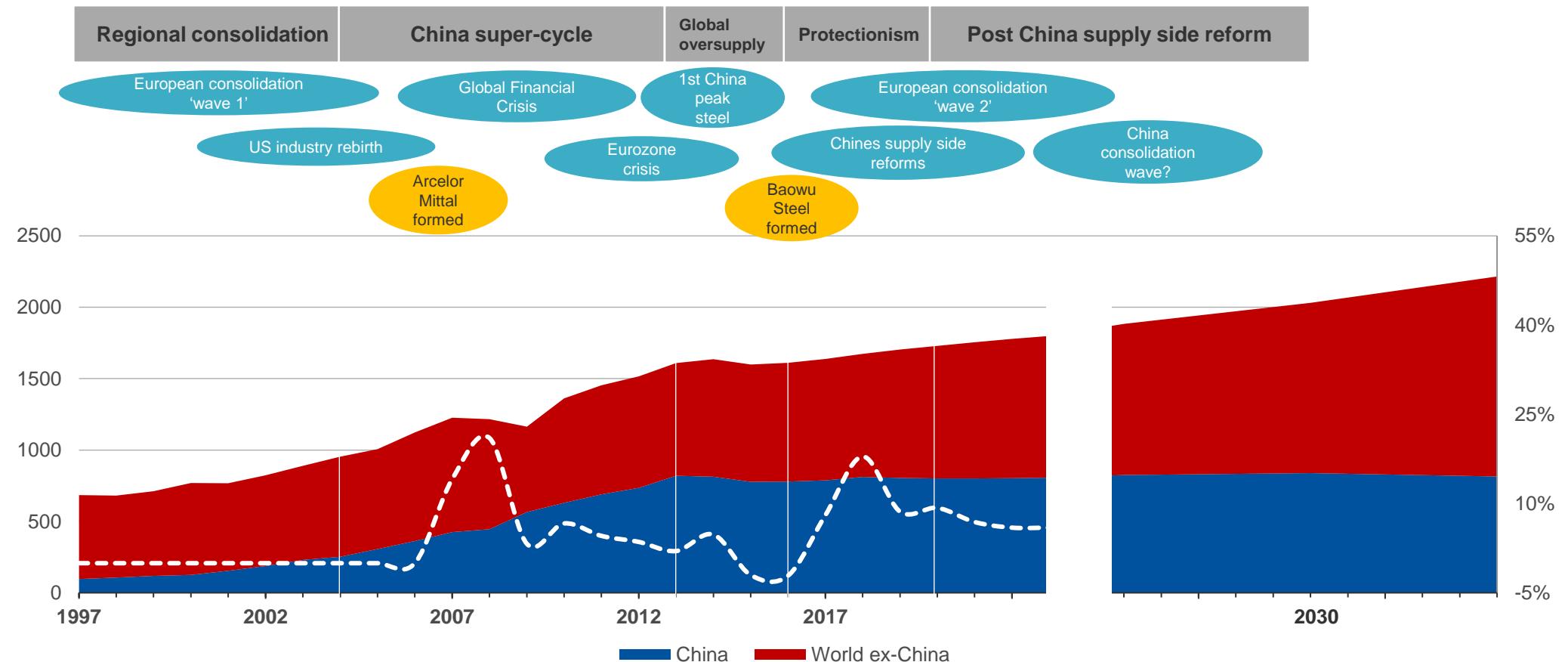


Note: price from parity point

The global steel timeline – have we moved into a new era for steel?

LHS: Global apparent steel consumption, Mt

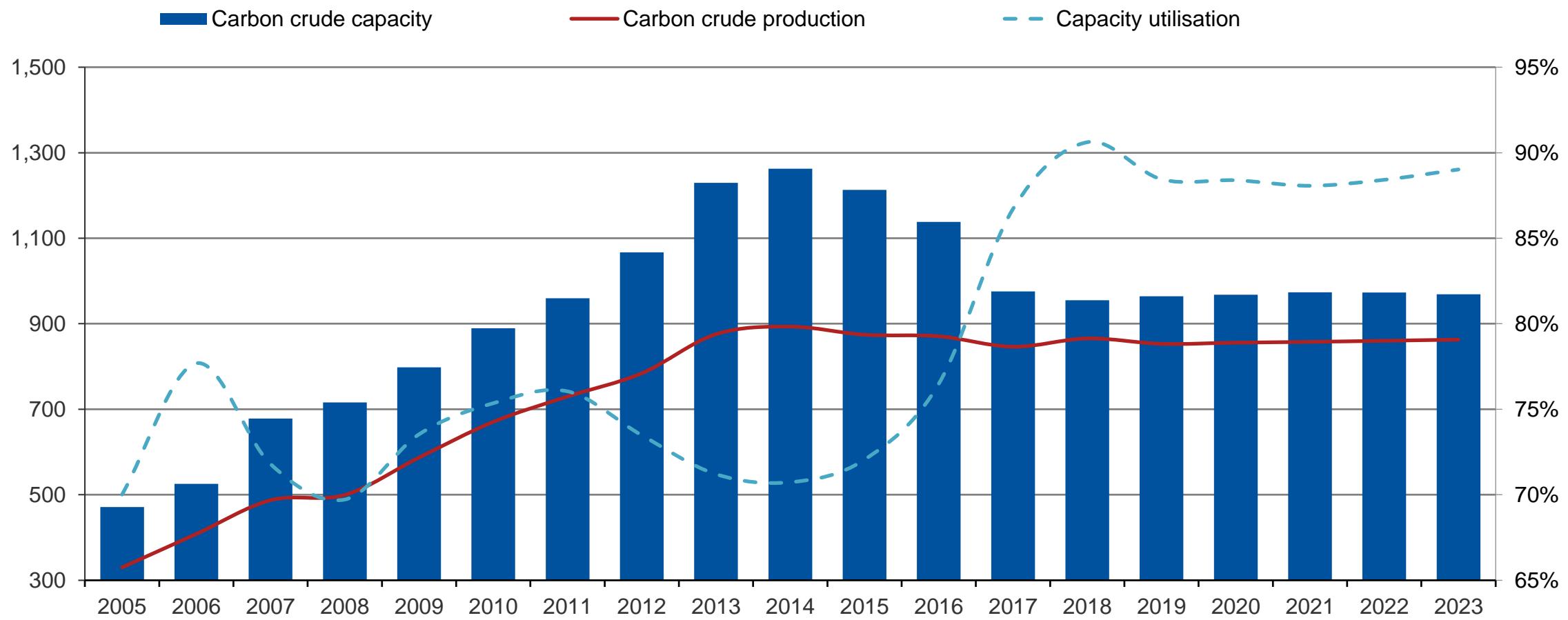
RHS: Industry profitability (% EBITDA/Sales margin)



China has achieved a remarkable supply side reform in recent years – this has been the main driver of improved industry profitability **globally**

LHS: Chinese capacity and crude steel production, Mt

RHS: Chinese steel capacity utilisation, %



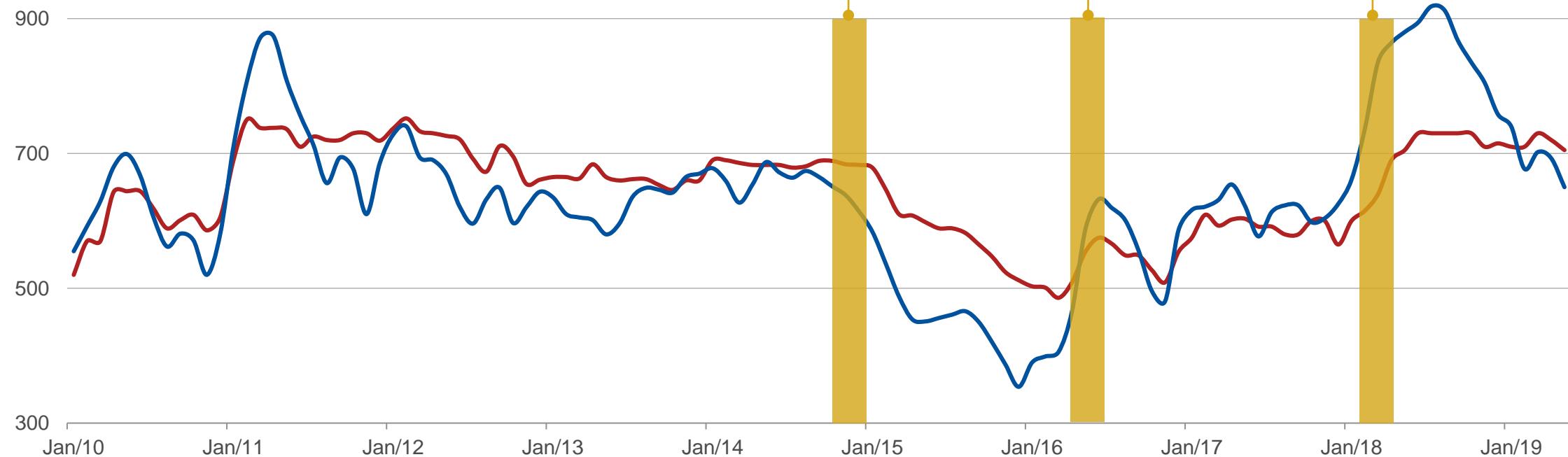
A new era of ‘protectionism’ has also come about, most notably in the USA which have helped lift domestic prices...

Rebar and HRC prices since 2010

Prices FOB Midwest, \$/st

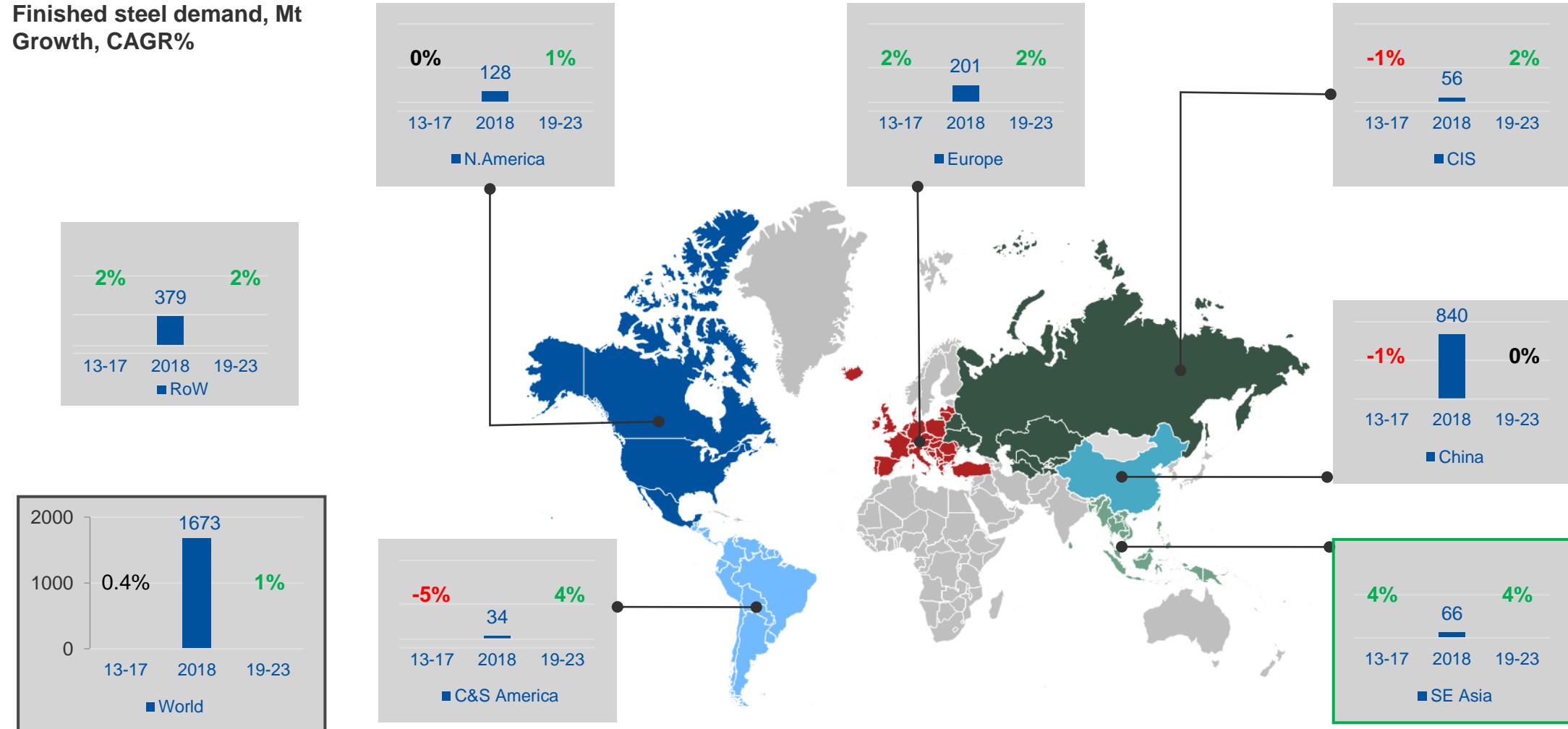
— Rebar

— HR Coil



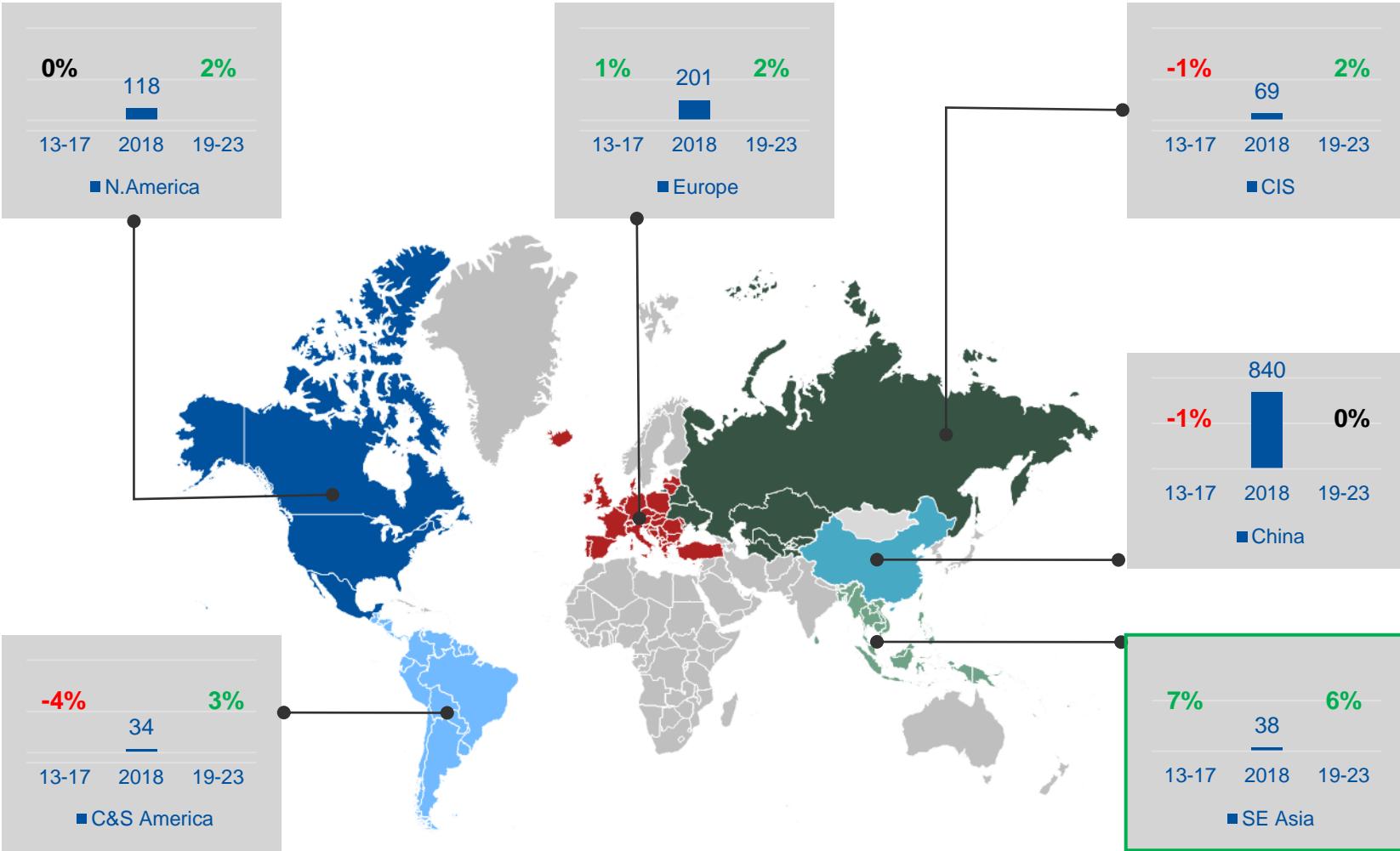
The global finished steel **demand** outlook is as follows....

Finished steel demand, Mt
Growth, CAGR%



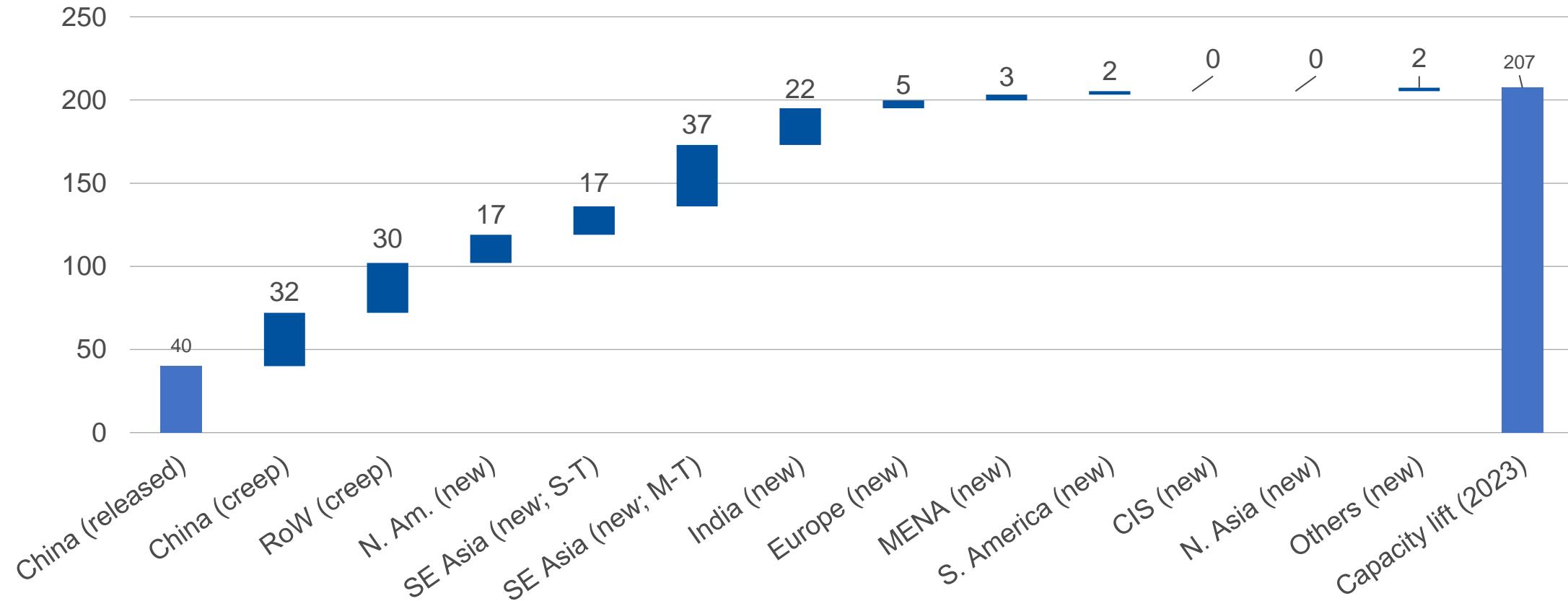
With the global **supply** outlook looking like this....

Finished steel supply, Mt
Growth, CAGR%



Over 200 Mt of capacity is to be added by 2023 which will reduce capacity utilisation globally...

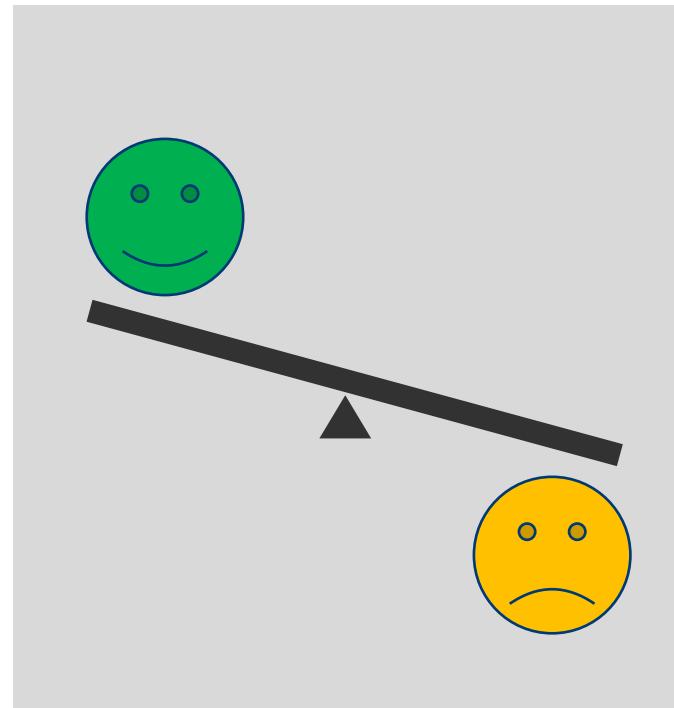
y-axis: added capacity, 2018-2023, Mt
x-axis: region



The next 5 years will tell us if the global steel industry has learnt from the past and has genuinely entered a new era of ***structurally*** improved returns

Reasons to be optimistic

- China supply side reforms here to stay.
- China's willingness to provide fiscal stimulus to support domestic demand
- Headroom for growth in steel consumption per capita in many countries / regions
- Trade protection measures boost (local) industry profitability in short to medium term
- Renewed appetite for consolidation



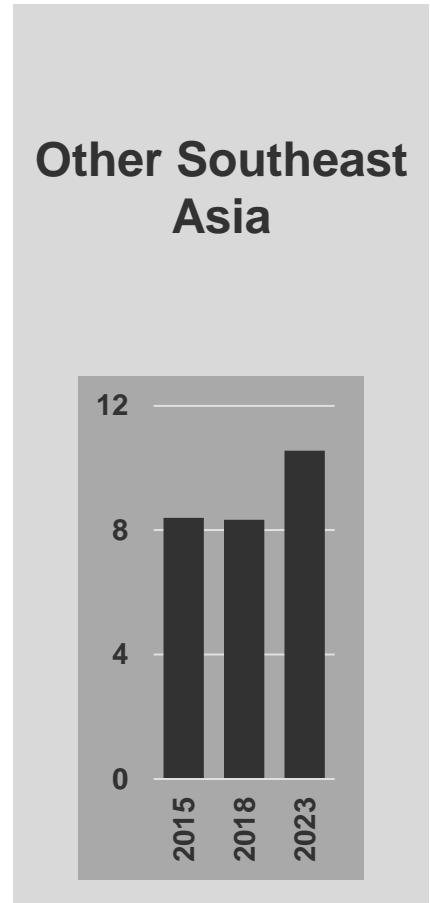
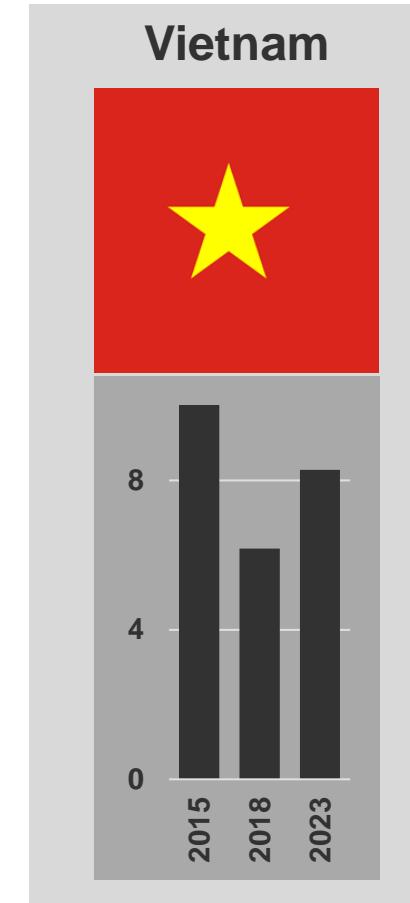
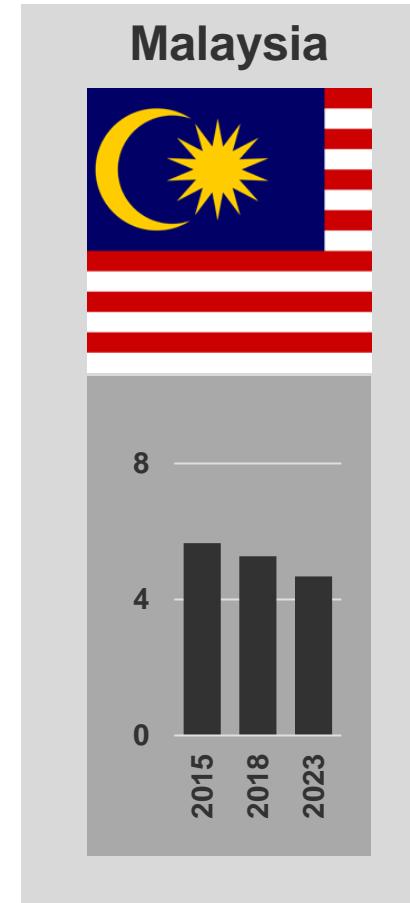
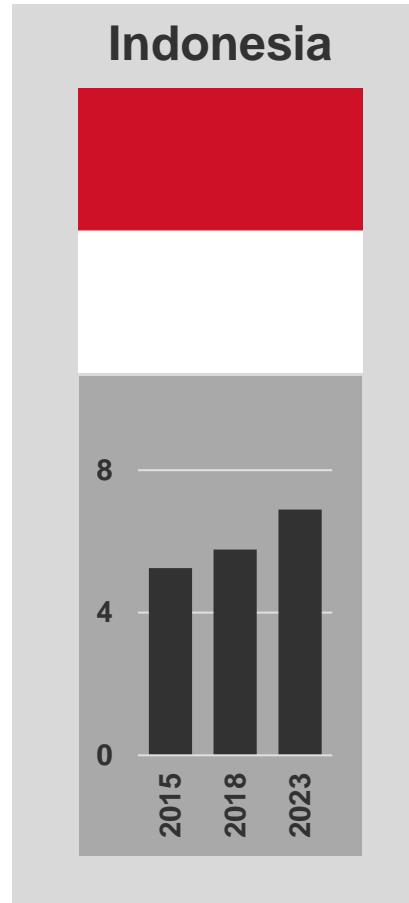
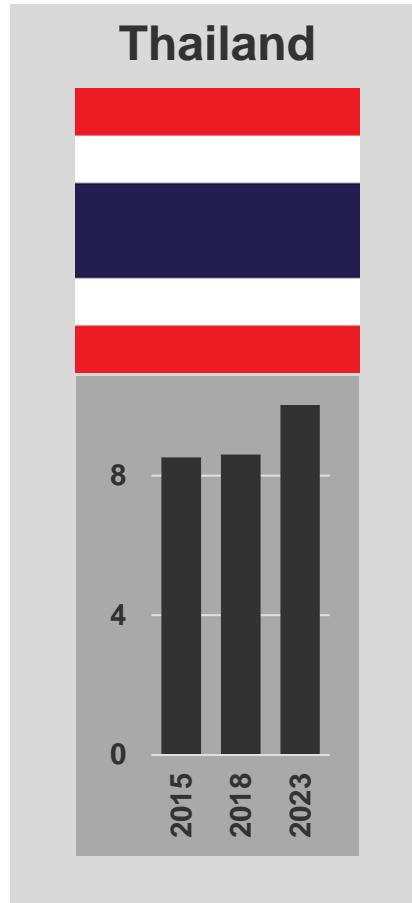
Words of caution

- Evidence of demand softening in some regions – having to absorb price increases in raw materials.
- China's 'room to manoeuvre' on fiscal stimulus reducing.
- Increases in capacity vs demand growth globally – resulting in lower capacity utilisation overall
- 'Over protectionism' can destroy demand in long term and encourage poor capital allocation decisions

Part II - Outlook for steelmaking in SE Asia

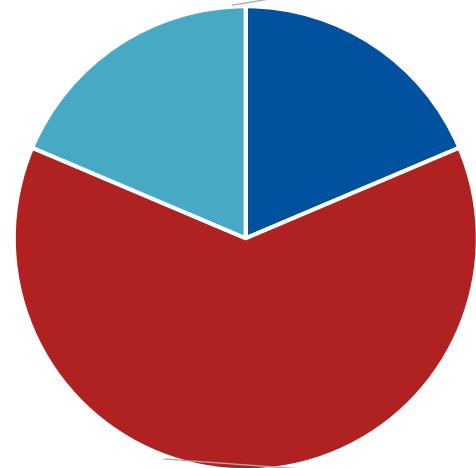
SE Asia will remain a net importer of steel over the next 5 years...

Net imports, Mt

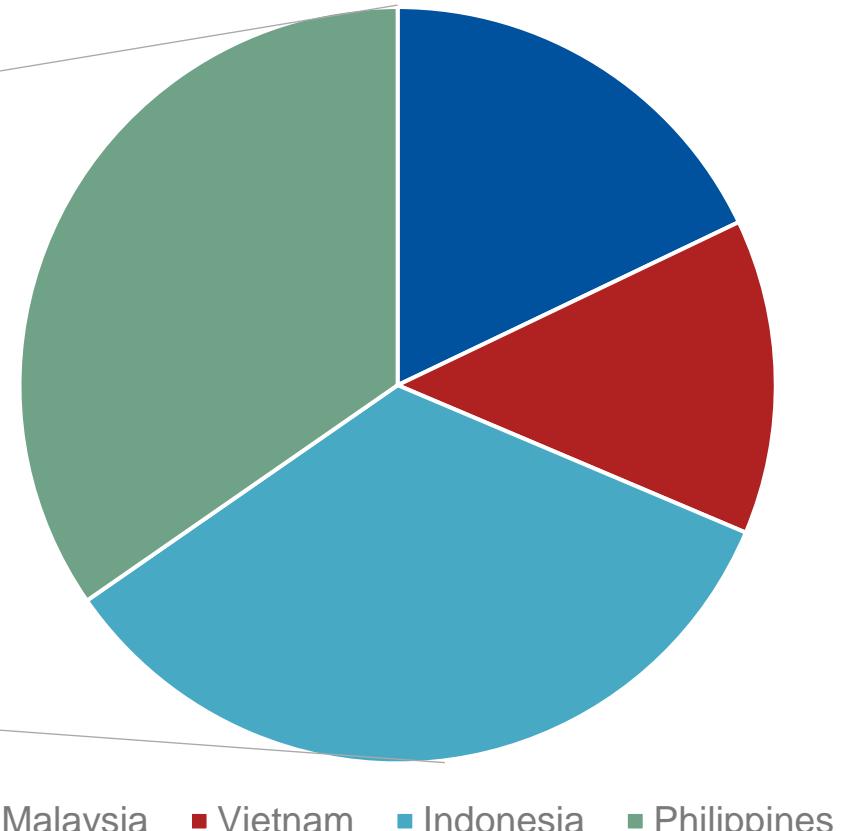


...but with potentially 52 Mt/y of crude steel capacity to come on stream in the medium to long-term...

18 Mt/y - Ongoing or completed (next 3 years)

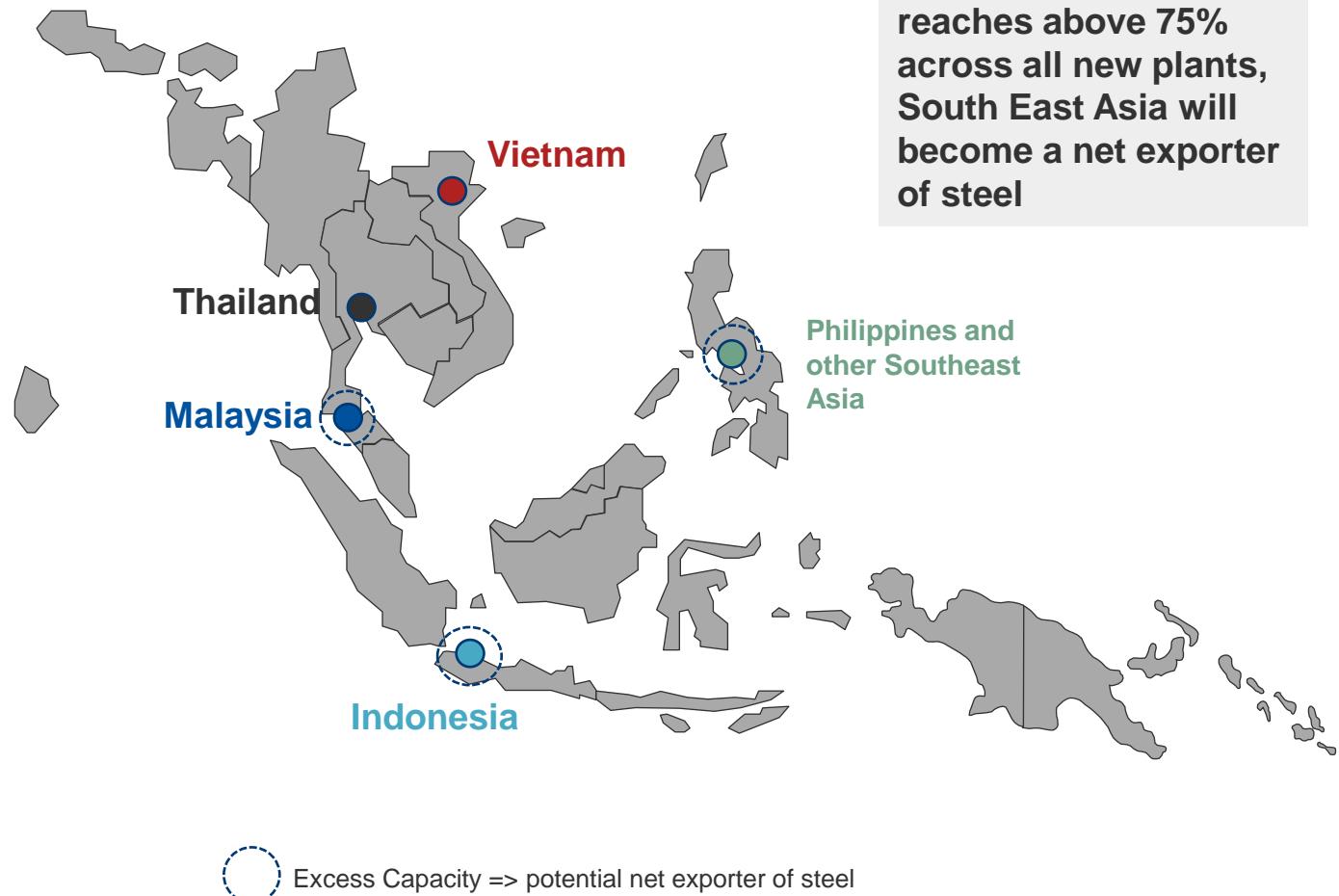
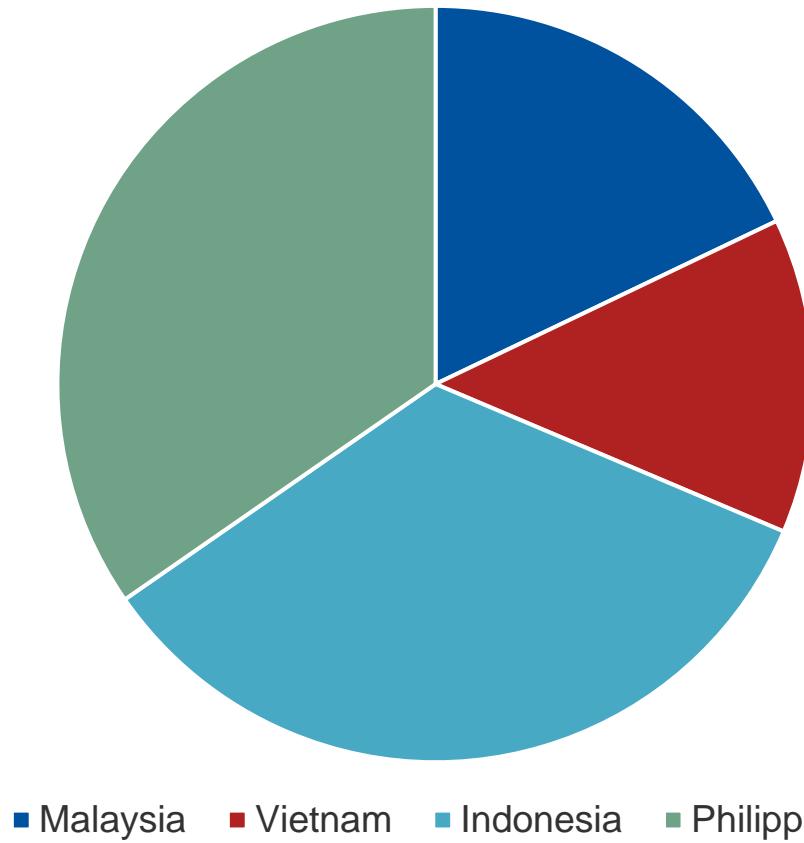


52 Mt/y - Total potential (long term)

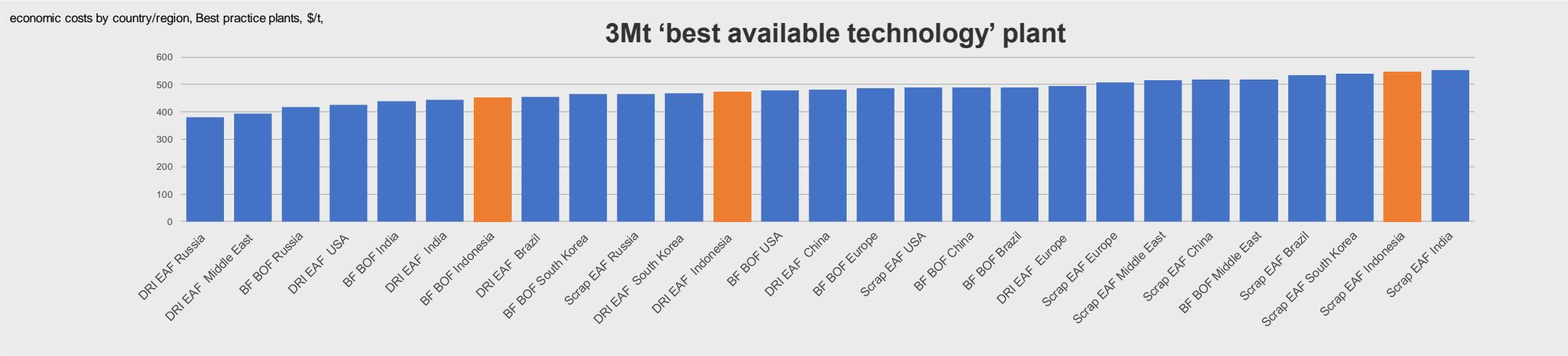
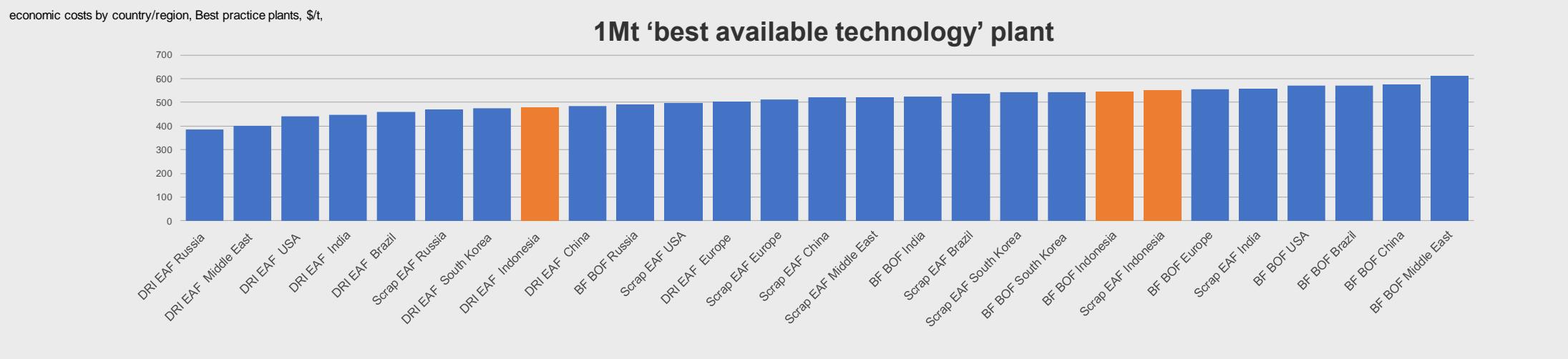


...the potential for over-capacity in the region exists - some countries could be net exporters of steel within 5 – 10 years

52 Mt/y – Total potential additional capacity



CRU's strategic cost analysis shows that technology and capacity choice can have an important bearing on cost competitiveness...



Creating a ‘world class’ SE Asian steel industry requires strategies in the following areas...

Critical Success Factor (CSF)

Potential Strategies

Comments

Cost competitiveness

- Technology selection
- Scale / capacity
- Invest in best available technology

Benchmark vs global competitors to be competitive in export markets

Product capability

- Identify long term needs of key end-use sectors
- Invest in product capability accordingly
- Strategic alliances and partnerships can accelerate development (eg Automotive)

Focus on product capability and mix as much as / more than volume and capacity

Market development

- Invest in ‘pre-competitive’ and collaborative market development with end-use sector partners

Look at other regions / countries for models of successful market development eg UK steel intensive construction sector?

Are we in a new era for steel?

- The history of the global steel industry over the past 20+ years indicates a number of ‘eras’, with varying degrees of industry profitability.
- We are in the era of ‘post China supply side reform and renewed protectionism’ – industry profits have rallied since the global over supply crisis of 2015/6 but are set to fall from a peak in 2018.
- The next five years will show if the industry can and has moved to a new era of structurally improved returns – there are forces both for and against this happening.
- SE Asia will account for 23% of the global growth in demand for steel and 26% of additional capacity globally over the next five years.
- Further new capacity proposed (c.34Mt) has the potential to tip SE Asia into being a net exporter of steel within 5 – 10 years.
- Technology selection will be key to delivering a globally competitive SE Asian steel industry.
- Other critical success factors include investment in product capability and market development – partnerships are essential!
- A ‘joined up’ industrial strategy with key end-use sectors in the region will help deliver a world class SE Asian steel industry.

Thank you.

Any Questions?

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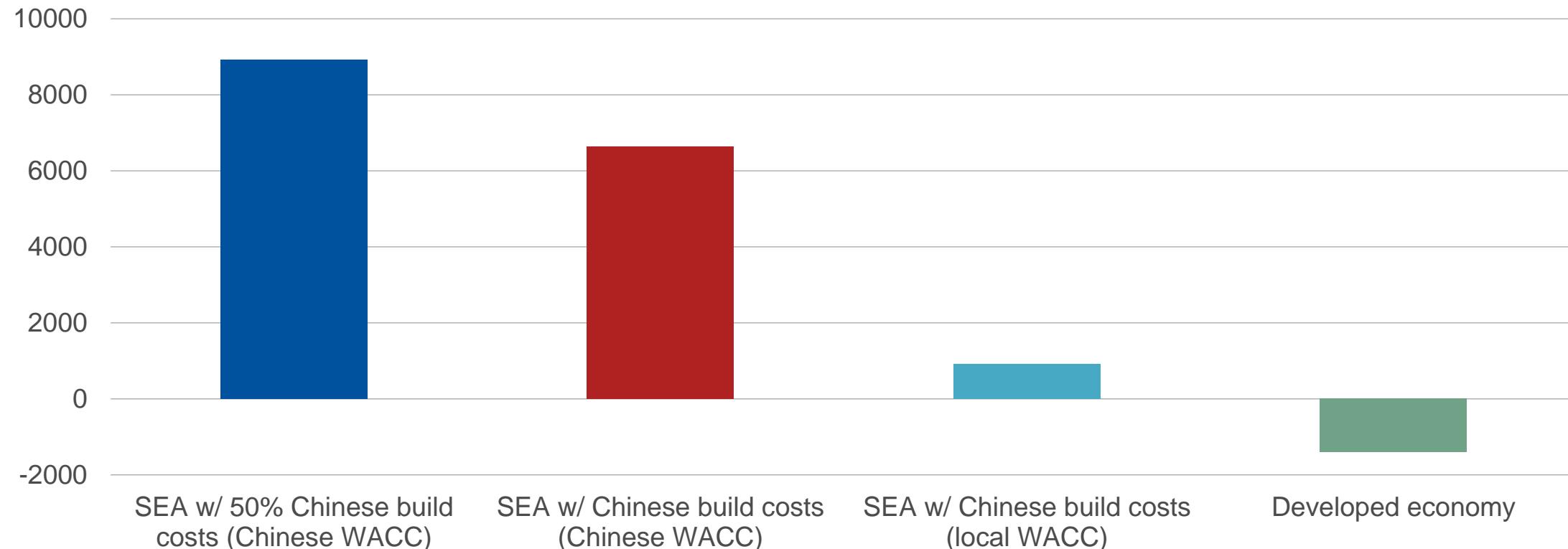
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Chinese led capacity investments in SE Asia show the highest return...

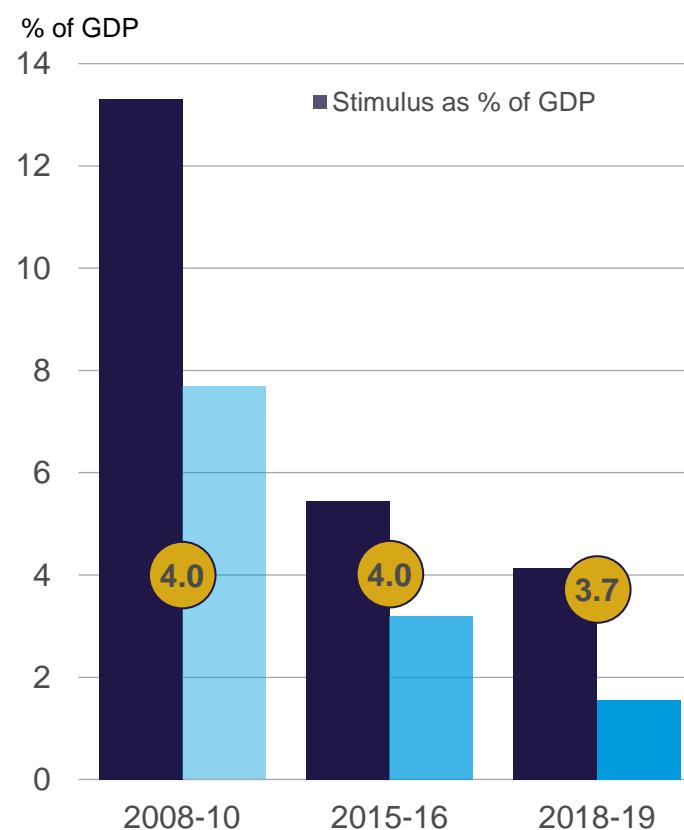
Net Present Value of Hypothetical projects (billet exporter) (post tax)

NPV, \$m

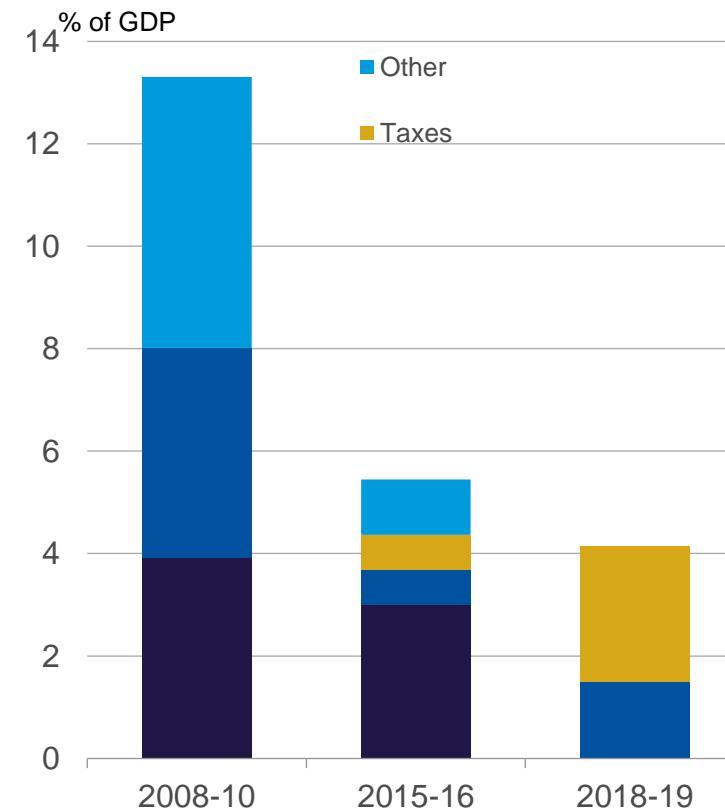


Short term: Stimulus is smaller % of GDP than past and is mainly in the form of tax cuts

The latest fiscal stimulus is considerably smaller than 2008-10 or 2015-16



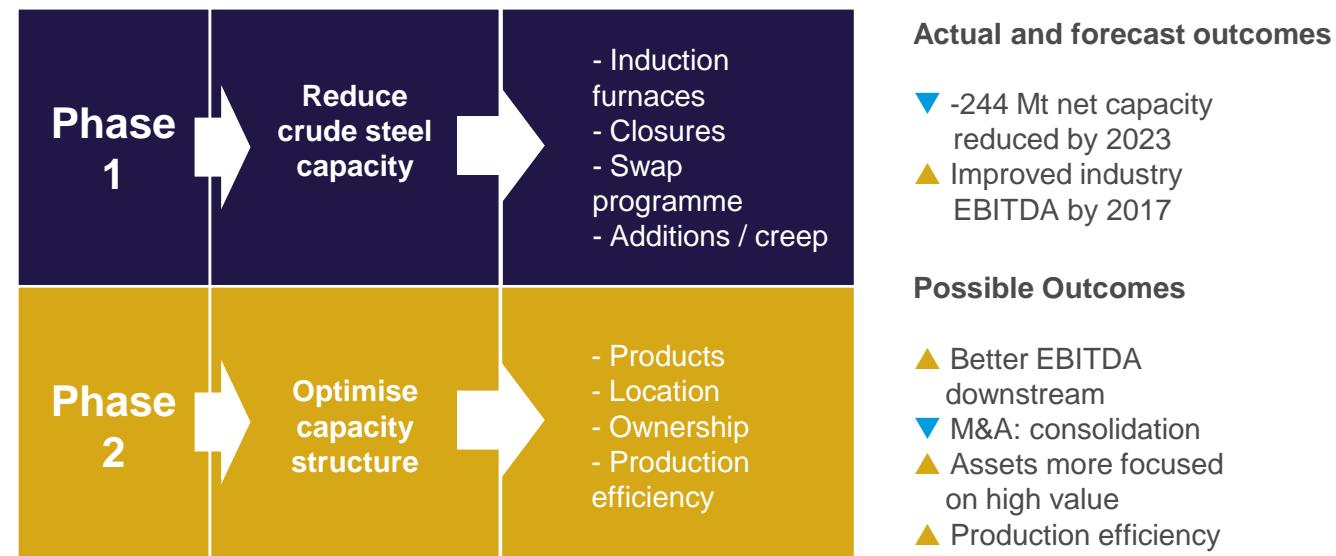
Type of fiscal stimulus matters: 2018–19 has a higher proportion of tax cuts than other stimulus



With the success of recent supply reforms, we expect a ‘Phase 2’ of reforms focused on optimisation of existing capacity

- Reforms have so far focused on crude steel, where utilisation rates have increased in the last two years, leading to higher industry profitability. Following a period of weak and unsustainable margins, industry EBITDA margins increased, on average, to 13% in 2017 and 17% in 2018.
- CRU’s current view is ‘**Industry Reform Phase Two**’ will probably begin in pilot regions, with policies revised before a full national rollout. Rules may be announced to restrict existing capacity as well as new additions, incentivising M&A to drive growth. This new phase of the reforms also looks set to support the ongoing “battle for blue sky” if facilities can be relocated away from areas suffering from poor air quality.

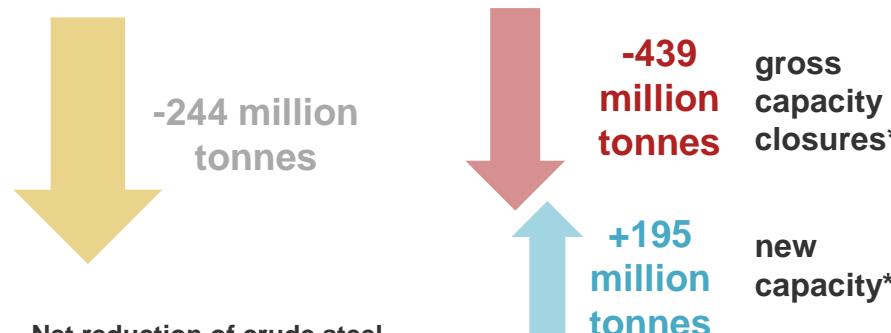
Phase 2 is expected to focus on optimising the downstream sector



With the success of the supply reforms, we expect them to enter 'Phase 2' and now focus on optimisation of existing capacity

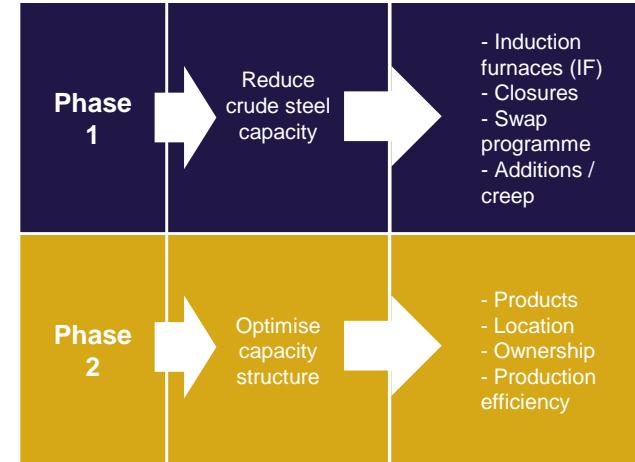
- In mid January 2019, the chairman of the Chinse Iron and Steel Association (CISA) was reported in the press saying how China's steel industry will this year switch from reducing overall capacity to **focusing on optimising capacity structure**, including the nature of products, location and ownership. This fills a missing link in the government's steel industry reform programme. The move to **optimise downstream assets** in the Chinese steel industry has been a topic mentioned often in recent months by steel industry participants and is aligned to CRU's current outlook for the Chinese steel industry.
- Reforms have so far focused on crude steel, where utilisation rates have increased in the last two years, leading to higher industry profitability. Following a period of weak and unsustainable margins, industry EBITDA margins increased, on average, to 13% in 2017 and 17% in 2018.
- In past years, the government's move to encourage higher-end steelmaking has supported additional rolling mill capacity. Nevertheless, slower domestic demand growth in China means a change of direction is now necessary. The effect has been greatest for flat products, where weaker consumption in 2018 from end-use sectors such as automotive and home appliances prevented higher margins from cold rolled and coated sheet products.
- CRU's current view is '**Industry Reform Phase Two**' will probably begin in pilot regions, with policies revised before a full national rollout. Although Chinese rolling capacity is large in size, the scattered nature of assets across the country makes it difficult to tackle. As such, a probable place to start the programme will be major provinces with these rolling assets such as Shandong and Guangdong. In addition, rules may be announced to restrict existing capacity as well as new additions, incentivising M&A to drive growth. This new phase of the reforms also looks set to support the ongoing "battle for blue sky" if facilities can be relocated away from areas suffering from poor air quality.

Phase 1 reforms focussed on utilisation rates & profitability



* The capacity swap programme so far includes 149 Mt of closures and 133 Mt of replacement capacity

Phase 2 is expected to focus on optimising the downstream sector



Actual and forecast outcomes

- ▼ -244 Mt net capacity reduced by 2023
- ▲ Improved industry EBITDA by 2017

Possible Outcomes

- ▲ Better EBITDA downstream
- ▼ M&A: consolidation
- ▲ Assets more focused on high value
- ▲ Production efficiency

