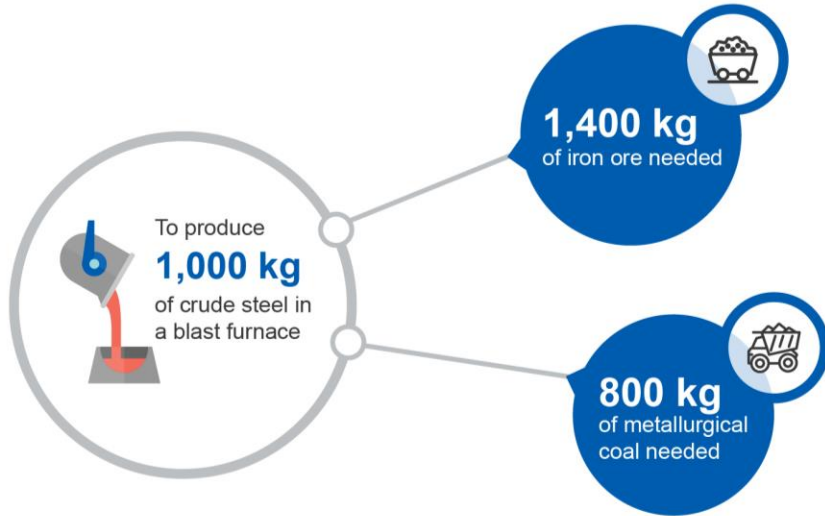
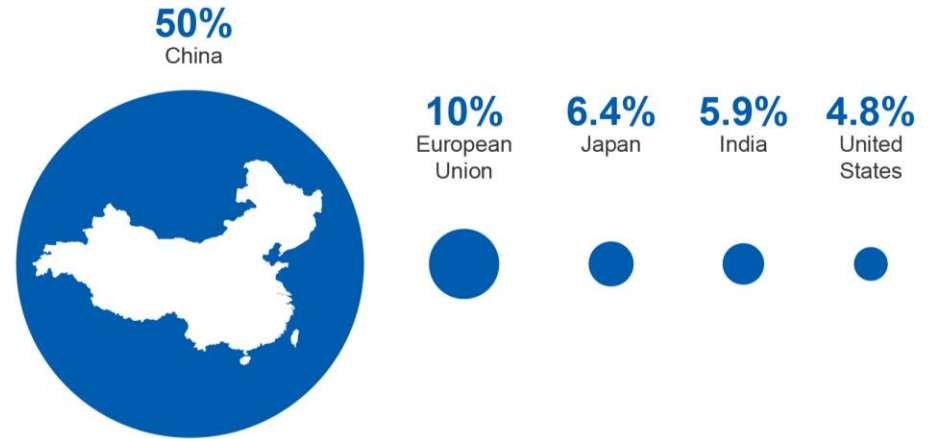


Steel

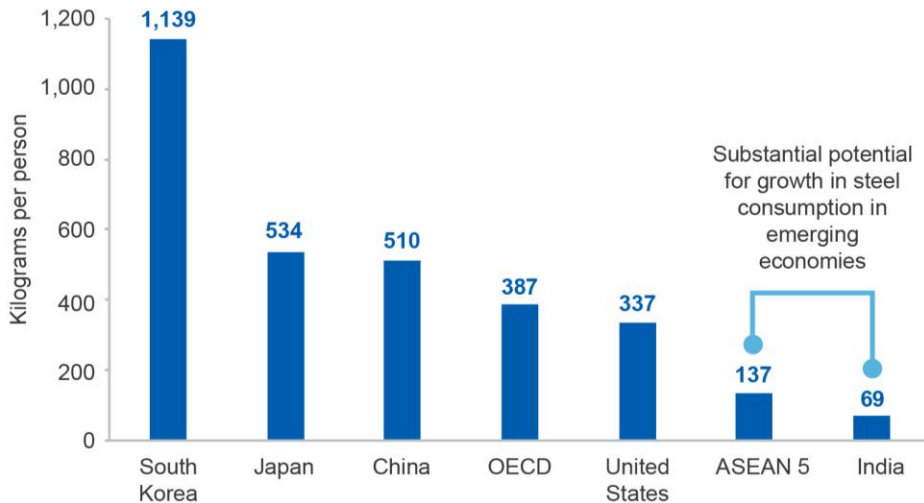
Resources and Energy Quarterly September 2017



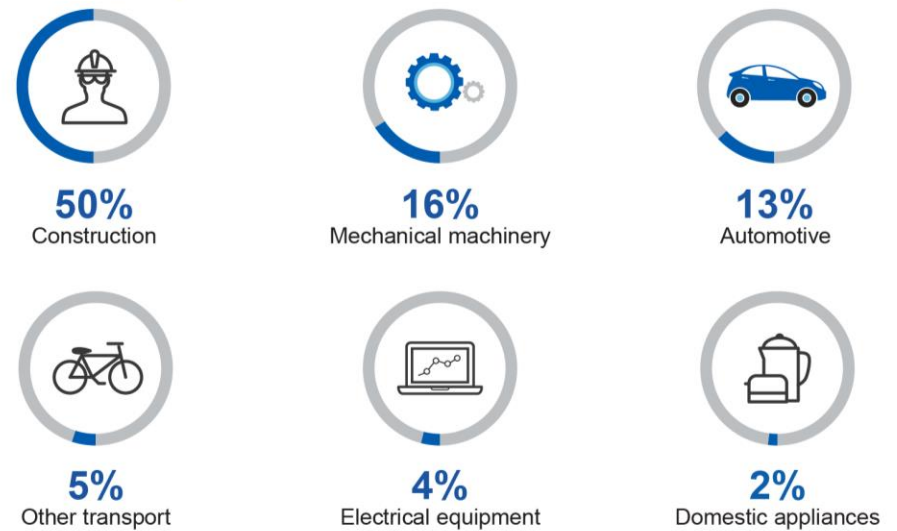
Key producers, 2016



Crude steel consumption per capita, 2015



Steel use by sector



Summary

- Robust world steel production in 2017 to date has been supported by an ongoing pickup in global economic growth, and strong steel production in China — in response to high prices.
- However, China's steel production and consumption is forecast to decline in 2018 and 2019, as a result of a renewed focus on managing financial risks and progressing supply-side reforms.
- Outside of China, strong economic growth is expected to continue to support steel production and consumption, particularly in India, supporting import demand for Australia's two largest commodity exports — iron ore and metallurgical coal.

World production and consumption

China's steel production increases in response to higher prices

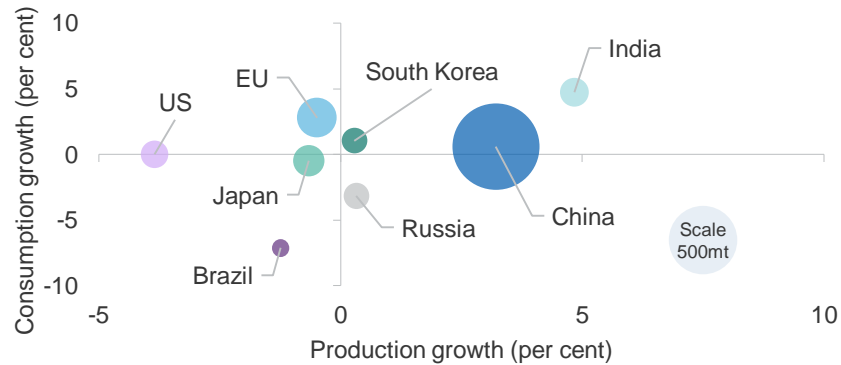
China's steel production was up 8.3 per cent year-on-year in the three months to August, and reached a new monthly record of 74.6 million tonnes in August 2017.

Steel prices and margins have increased sharply, as a result of ongoing cuts to outdated capacity and robust demand from construction and downstream consumption industries. Prices may have also been supported by speculative stockpiling and futures trading, due to concerns of supply shortages following government announcements on the winter curtailment policy and supply-side reforms.

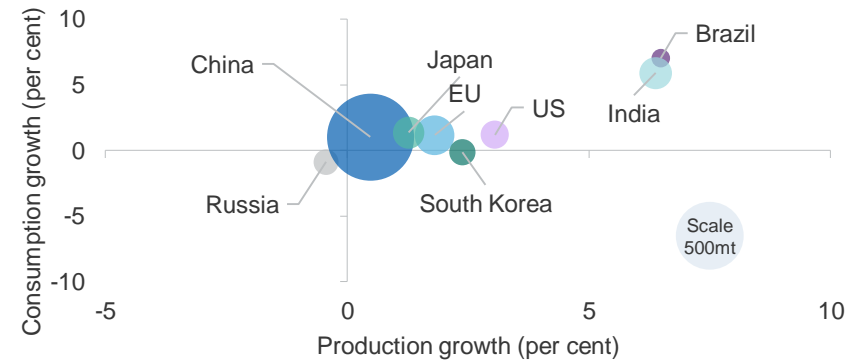
The winter curtailment policy, which takes effect from mid-November 2017 to mid-March 2018, requires a 50 per cent reduction in steel production in major steel producing cities, in order to improve air quality. It is highly likely that steel production has been brought forward, in order to stockpile for winter when production will be affected. Steel inventories have increased in the first half of September 2017, following several months of drawdowns. If shortages do not eventuate in line with expectations, there may be additional downward pressure on steel prices and production.

Figure 3.1: World trends in steel production and consumption, compound annual growth rates

2012 to 2015



2016 to 2019 (forecast)



Notes: Area of bubble represents absolute steel production in 2015 and 2019 (forecast), respectively.

Source: World Steel Association (2017); Department of Industry, Innovation and Science (2017)

China's steel consumption and production growth to gradually ease

China's steel production growth is expected to remain strong ahead of winter production curtailment in November. A strong August Steel Purchasing Managers Index (PMI) reading — a leading indicator of steel consumption — points to demand remaining robust in the short-term. The Central Government is also expected to continue to favour policies that maintain economic growth — ahead of the National Congress in mid-October — further supporting steel demand.

However, fixed asset investment (FAI) growth slowed in August, particularly in infrastructure, and the property sector has cooled in response to purchasing and lending restrictions, pointing to slowing demand towards the end of 2017.

Beyond 2017, a renewed focus on managing financial risks from the Central government is expected to dampen activity in investment and construction activity, leading to moderating steel demand in 2018 and 2019. Steel production is forecast to decline as a result of the winter curtailment and the progression of supply-side reforms, and in response to lower demand and prices.

India's steel production growth forecast to accelerate

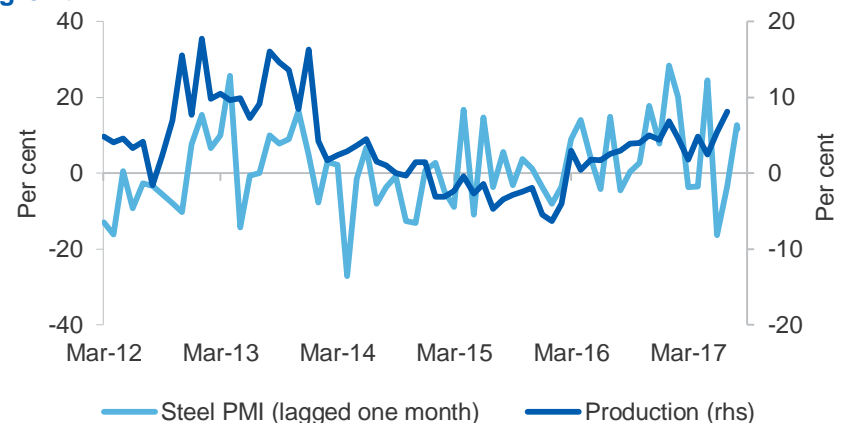
India's steel production growth has been relatively subdued, at 2.4 per cent year-on-year in the three months to July. This growth contrasts strongly with the double-digit growth of late 2016 and early 2017. India's steel sector has been under pressure, due to weak domestic demand and a high iron ore price.

Steel consumption is forecast to grow by 5 per cent in 2017, driven by stronger economic growth. Strong steel production growth is forecast for 2018 and 2019, supported by ongoing new additions to capacity, and accelerating demand growth from government investment in urban development and infrastructure. However, efforts to reach official targets laid out in the National Steel Policy 2017 will face challenges, including barriers in accessing infrastructure, raw materials and finance.

Japan and South Korea's steel production forecast to hold steady

Japan's steel production fell by 2.8 per cent year-on-year in the three months to July, affected by maintenance and other issues at mills. Japan's steel production is forecast to rebound and gain pace towards the end of 2017, in line with strong demand from the automobile and

Figure 3.2: China's monthly steel production and PMI, year-on-year growth



Source: Bloomberg (2017) Shanghai Metals Market; Bloomberg (2017) World Steel Association

construction sectors, as well as improved manufacturing indices.

Beyond 2017, Japan's steel production and consumption is forecast to be broadly stable, with the impact of improved prospects for growth and Olympics-related stimulus offset by other challenges, including slowing household income growth and an ageing and declining population.

South Korea's steel production increased by 4.5 per cent year-on-year in the three months to July. However, production growth is expected to slow and remain largely stable, weighed down by slower growth in industrial production, notably of vehicles.

Improved business conditions are supporting steel production elsewhere

There has been strong growth in steel production and consumption elsewhere in the world, with notable rises in Iran, Turkey, the EU and the rest of Asia. This has reflected an ongoing, steady improvement in global business confidence and industrial production indicators, and new additions to steel production capacity.

In 2018 and 2019 the pace of production growth across the rest of the world is forecast to slow but remain relatively robust, supported by an ongoing recovery in developed economies and accelerating growth in emerging markets and developing economies.

Table 3.1: World steel consumption and production

Crude steel consumption	Unit	2016 s	2017 f	2018 f	2019 f	Annual percentage change		
						2017 f	2018 f	2019 f
European Union 28	Mt	171	174	175	177	1.5	1.0	1.0
United States	Mt	103	105	106	107	1.4	1.2	1.0
Brazil	Mt	20	21	23	25	4.3	8.2	8.7
Russia	Mt	43	42	42	42	-0.9	-1.3	-0.4
China	Mt	712	760	748	734	6.8	-1.6	-1.9
Japan	Mt	67	69	69	70	2.5	0.9	0.7
South Korea	Mt	59	58	59	59	-2.0	0.7	0.9
India	Mt	93	98	104	110	5.0	6.3	6.3
World steel consumption	Mt	1,632	1,699	1,707	1,715	4.1	0.5	0.5
Crude steel production		2016	2017 f	2018 f	2019 f	2017 f	2018 f	2019 f
European Union 28	Mt	162	168	170	171	3.9	0.7	0.9
United States	Mt	78	80	84	86	2.1	4.2	2.8
Brazil	Mt	31	35	36	38	10.6	4.4	4.6
Russia	Mt	71	70	70	70	-0.5	-0.6	-0.2
China	Mt	808	841	830	820	4.0	-1.2	-1.2
Japan	Mt	105	106	107	109	1.4	1.0	1.4
South Korea	Mt	69	71	72	74	3.6	1.5	2.1
India	Mt	96	101	108	115	5.4	7.0	6.8
World steel production	Mt	1,629	1,697	1,708	1,720	4.1	0.7	0.7

Notes: *s* Estimate; *f* Forecast

Source: World Steel Association (2017); Department of Industry, Innovation and Science (2017)