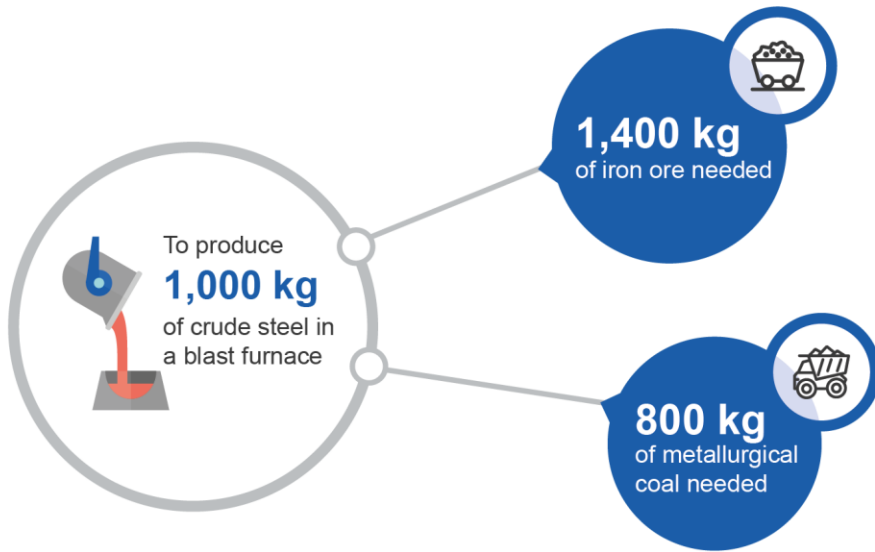
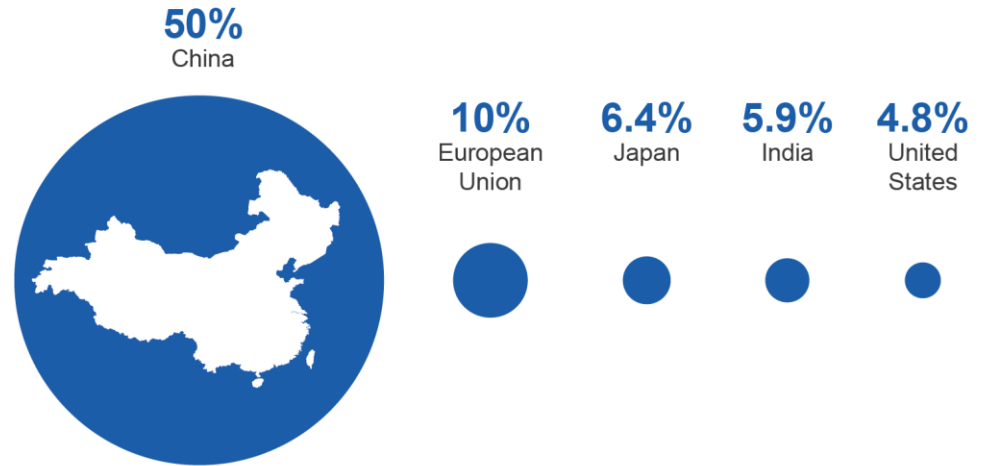


Steel

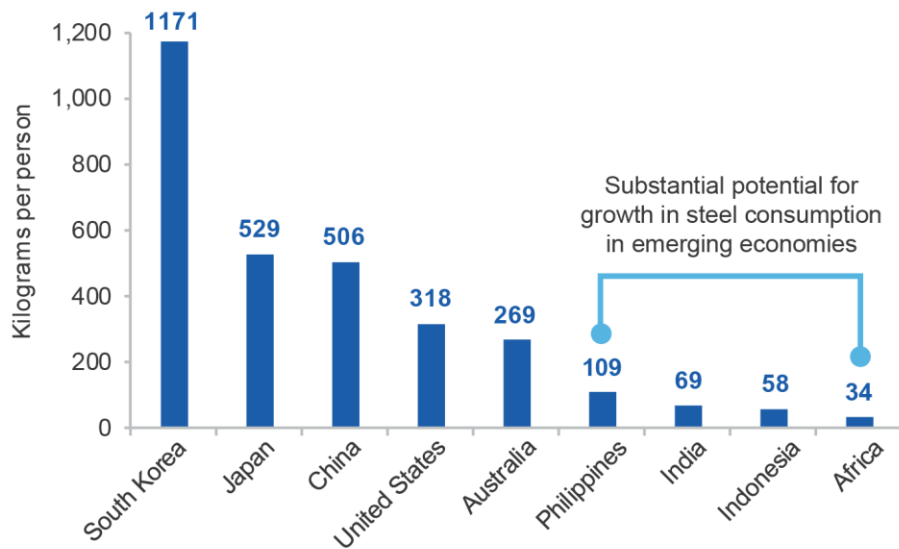
Resources and Energy Quarterly December 2017



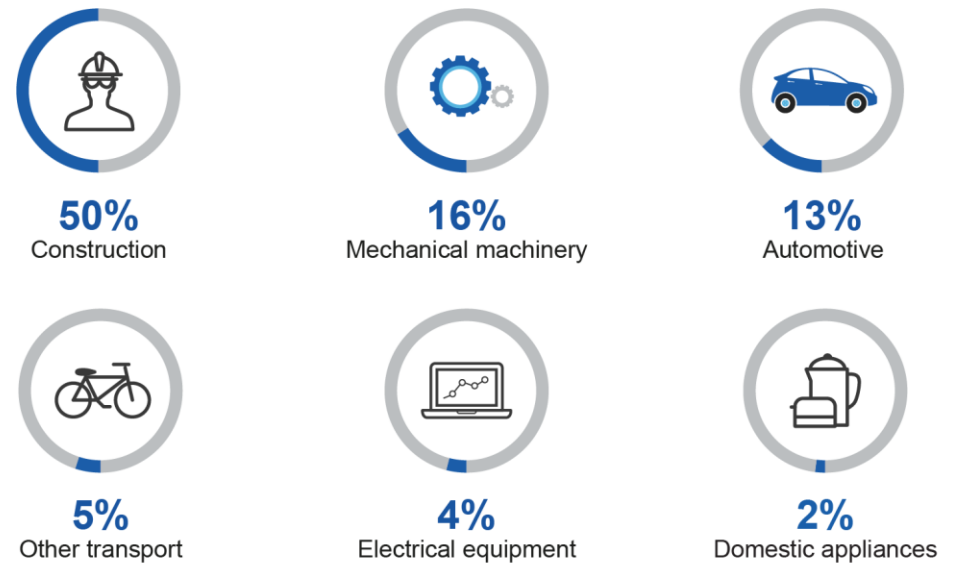
Key producers, 2016



Crude steel consumption per capita, 2016



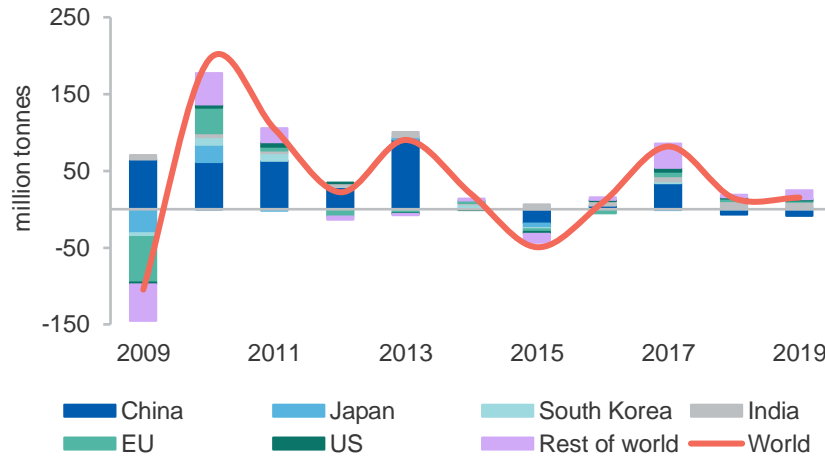
Steel use by sector



3.1 Summary

- Robust growth in world steel production and consumption in 2017 was supported by stimulatory policies in China (aimed at maintaining firm economic growth), and growing momentum in economic activity in the rest of the world.
- The pace of production and consumption growth is forecast to slow in 2018 and 2019, as the gradual effects of economic reforms and increasingly stringent environmental regulations in China outweigh an ongoing pick-up in growth elsewhere in the world.

Figure 3.1: Annual growth in world steel production



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

3.2 World production and consumption

China's steel production and consumption forecast to gradually ease following strong growth in 2017

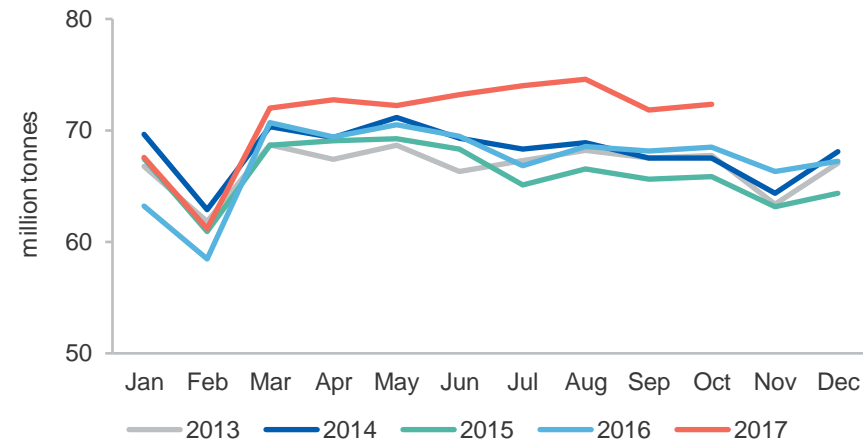
China's steel sector was buoyed by strong margins and robust demand in 2017. The government-mandated closures of outdated capacity and illegal induction furnaces, and more recently, winter production restrictions, has

tightened the domestic market and supported higher steel prices.

Domestic steel consumption has been supported by government stimulus spending, infrastructure investment, and strong growth in the real estate and manufacturing sectors.

Capacity utilisation at the remaining mills has increased in response to higher prices and in anticipation of the winter production restrictions. While reported steel production growth has been strong — up 5.6 per cent in the year to October — this is also partly the result of the closure of induction furnaces. Production from closed illegal induction furnaces — an estimated 30 to 50 million tonnes of annual capacity — were not captured in official production statistics, and have since been at least partially replaced by increased production from reporting steel mills.

Figure 3.2: China's monthly steel production



Source: Bloomberg (2017) World Steel Association

China's steel production is expected to slow, as a result of restrictions imposed on northern steel mills from November to March to reduce air pollution. The loss in production in the north is expected to be partly offset by increased capacity utilisation in unaffected southern steel mills.

Steel production is expected to rebound after winter. Steel inventories going into winter are very low, which should provide some ongoing price support and incentivise output after the production restrictions are lifted. Beyond the first half of 2018, steel production is forecast to gradually ease. Steel production is expected to be weighed down by increasingly stringent environmental regulations and weaker demand, due to slowing fixed asset investment and a cooling property market.

Government policy will continue to drive the outlook for steel, with strong signals that environmental protection and economic reforms will be a key priority going forward. A renewed focus on a rebalancing of the sources of economic growth is expected to result in a shift away from (more steel-intensive) investment-led growth to (less steel-intensive) consumption-led growth. Ongoing urbanisation and opportunities stemming from the 'One Belt One Road' initiative is expected to continue to support steel demand, resulting in a gradual, rather than sharp, decline in steel demand.

[India to become world's second largest steel producer in 2018](#)

The ongoing expansion of India's steel capacity has driven strong output growth in 2017, up 5.8 per cent in the year to October. India's steel production is forecast to grow at an annual average rate of 6.6 per cent to reach 115 million tonnes in 2019, driven by new additions to capacity.

Most of the additional steel production is expected to be consumed domestically, underpinned by substantial government investment in infrastructure and urban development. India's steel consumption increased by 4.3 per cent in the six months to September. Steel demand is expected to improve as a result of economic reforms currently underway, and is forecast to accelerate over the next two years.

[Improved economic conditions supporting the steel industry elsewhere](#)

Japan's steel production has been broadly stable in 2017. Despite positive demand conditions from government stimulus and relatively strong economic growth, production was affected by scheduled maintenance and technical glitches at several mills throughout the year. Japan's steel production is forecast to increase over the next two years after these

temporary halts to production. The outlook for Japan's steel demand remains positive, and is expected to be supported by growth in the automobile, construction and manufacturing sectors, in addition to increased demand from Olympics-related projects.

South Korea's steel output grew by 3.7 per cent in the year to October, with the sector benefiting from higher prices and exports. Steel output in South Korea is forecast to grow at an average of 1.8 per cent a year to reach 74 million tonnes in 2019. While demand is expected to be propelled by improvements in construction investment, government spending and private consumption, the nation's shipbuilding sector remains depressed.

Elsewhere in the world, steel production has increased, reflecting a steady improvement to global business confidence and industrial production indicators. Steel producers in developed countries, particularly in the US and EU, have also benefited from plunging steel exports from China, which has supported global steel prices. New additions to capacity have supported production growth in countries such as Iran and Vietnam.

In 2018 and 2019, the pace of global output growth is forecast to slow but remain relatively robust, supported by accelerating growth in developing economies and emerging markets and a further recovery in economic activity in the OECD.

[Australia's steel production buoyed by strong demand](#)

There has been increased optimism in Australia's steel industry. The sale of Arrium to the GFG Alliance has provided more certainty regarding the steelmaking operations, now trading as Liberty OneSteel. Australia's steel production is expected to be buoyed by strong domestic demand coming from the domestic construction sector, which has recently rebounded after several years of contraction.

Table 3.1: World steel consumption and production

Crude steel consumption	Million tonnes				Annual percentage change		
	2016	2017 s	2018 f	2019 f	2017 f	2018 f	2019 f
European Union 28	172	175	178	179	1.9	1.3	1.0
United States	103	104	107	107	1.6	2.7	-0.1
Brazil	20	21	24	26	5.9	10.6	8.5
Russia	42	42	42	41	-1.1	-0.9	-0.3
China	709	773	765	757	8.9	-1.0	-1.0
Japan	68	69	71	72	1.8	3.2	1.6
South Korea	59	59	58	58	-0.8	-1.0	-1.0
India	92	96	102	110	5.0	6.5	7.5
World steel consumption	1630	1710	1725	1738	4.9	0.9	0.8
Crude steel production							
European Union 28	162	168	172	173	3.7	2.0	0.8
United States	78	82	86	88	3.9	5.6	2.5
Brazil	31	34	36	38	8.5	6.0	4.9
Russia	71	73	73	72	3.0	-0.4	-0.2
China	808	842	835	826	4.2	-0.8	-1.1
Japan	105	105	107	108	-0.2	1.9	0.9
South Korea	69	71	72	74	3.7	1.7	1.9
India	96	101	108	115	5.8	6.6	6.6
World steel production	1,629	1,711	1,725	1,740	5.0	0.8	0.9

Notes: **s** Estimate; **f** Forecast

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