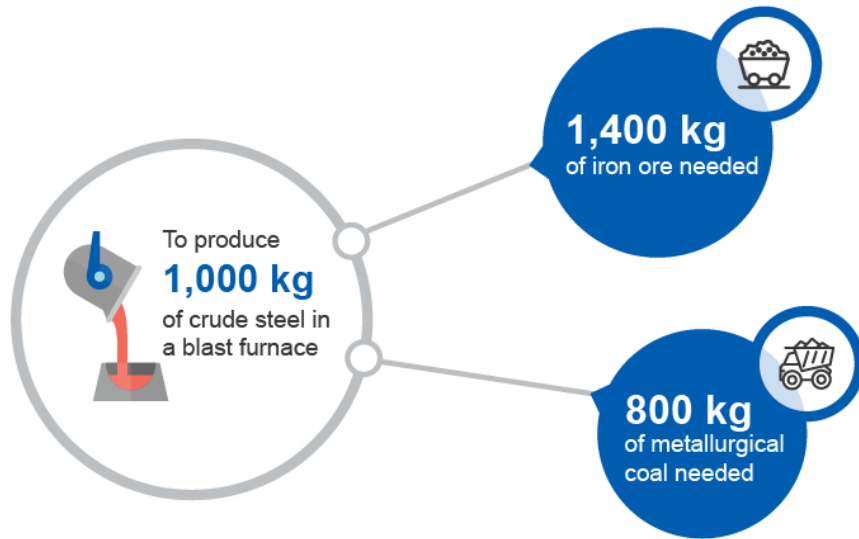
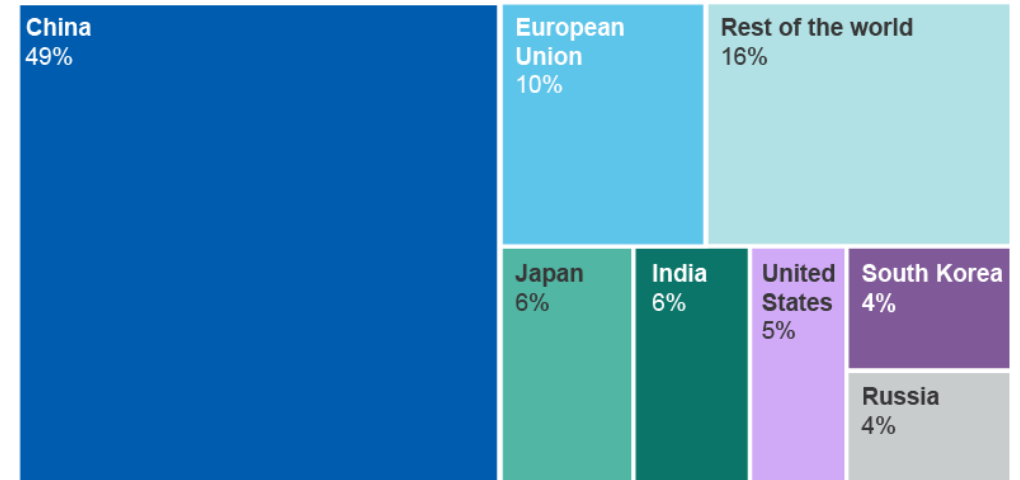


Steel

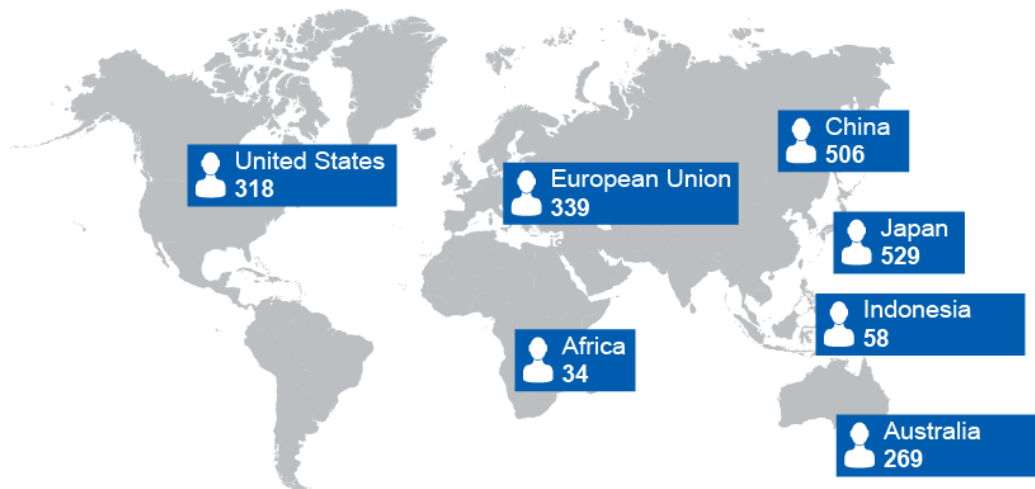
Resources and Energy Quarterly June 2018



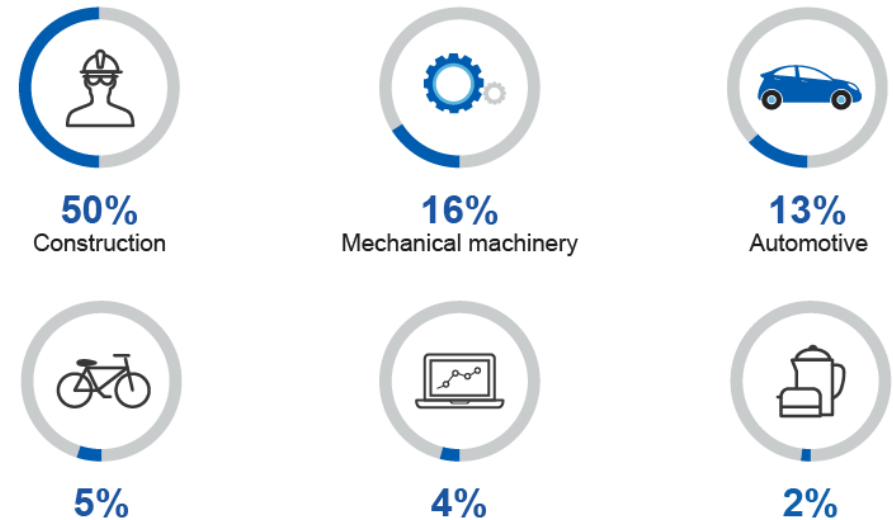
Major steel producers, 2017



Steel consumption per capita (kilograms per person), 2016



Steel use by sector



3.1 Summary

- World steel production increased in the five months to May 2018, driven by firm global economic growth, high steel prices and margins, and robust production in China.
- China's steel production and consumption is forecast to taper off over the outlook period, reflecting a slow-down in construction activity, stricter environmental policies and supply-side reforms.
- The threat of escalating protectionist policies by the US Administration remains a risk to the outlook for major steel exporters.

3.2 World consumption and production

China's steel production boosted by high prices and strong demand

Chinese steel production grew by 5.4 per cent year-on-year in the March quarter 2018, driven by high prices and margins. China's steel price index increased 15 per cent year-on-year in the five months to May 2018. China's steel prices were buoyed by falling inventories driven by shortages (stemming from production restrictions over winter) and strong domestic demand.

Chinese production continues to gradually shift towards electric arc furnace (EAF) steelmaking and higher (government-mandated) scrap utilisation in basic oxygen furnaces. China's pig iron production declined by 1.1 per cent in the same period, as a result of winter restrictions on blast furnaces.

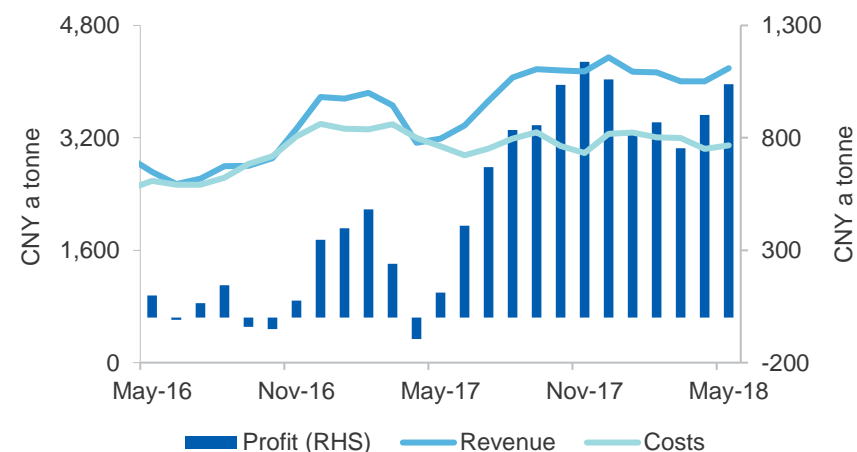
China's apparent steel consumption increased by 7.0 per cent year-on-year in the first four months to April driven by stronger end user demand across a broad range of industries and partly due to data revisions as some previously illegal production is now captured in official statistics (apparent consumption is derived from production minus net exports).

China's steel production projected to gradually decline

China's steel production — accounting for 49 per cent of world steel production — is forecast to decline by 1.0 per cent in 2018, largely due to elevated 2017 production figures (2017 production data captured

increased output at 'legal' facilities which replaced previously unreported production at 'illegal' induction furnaces that were closed last year). Production is expected to ramp up in the absence of pollution controls (which hit winter production) over the July and September quarters — allowing steelmakers to take advantage of currently high profit margins. Production is expected to be absorbed by domestic consumption in 2018 — the purchasing Managers' Index (PMI) for China's steel industry reached a two-year high in March and remained expansionary in April and May, pointing to robust demand for steel over the coming months.

Figure 3.1: Profit margins for Chinese steel makers



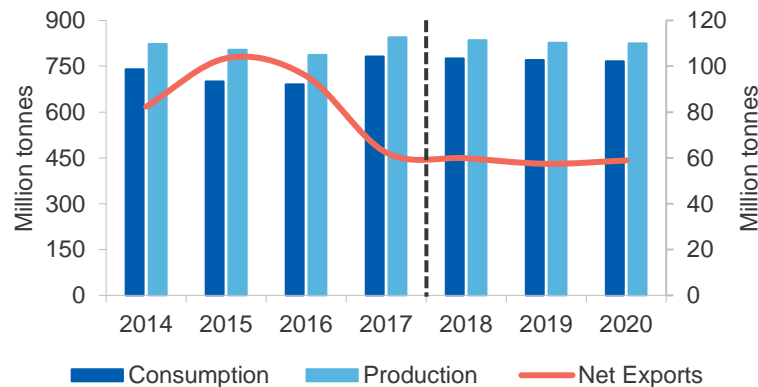
Notes: Monthly averages for integrated BOF steel mills
Source: Bloomberg (2018) China BOF Steel Profit Index

China's steel consumption is forecast to taper in 2019 and decline by 0.5 per cent year-on-year, to 766 million tonnes in 2020, largely driven by an expected slowdown in urban residential construction and infrastructure investment. Government efforts to cool the property market — including purchasing restrictions, caps on prices on new properties, and increased down payment requirements — are expected to weigh on steel consumption.

China's steel production is expected to decline over the outlook period to 2020, driven by moderating consumption, and a suite of government policies, including stricter environmental regulations, supply-side reforms, a shift in focus from 'quantity to quality', and reducing debt.

China's steel exports decreased by 17 per cent year-on-year in the first five months of 2018 to 29 million tonnes, driven by higher domestic consumption. Exports are expected to pick up towards the end of the outlook period, supported by new trade routes opened up by the One Belt One Road Initiative and growing demand in South East Asia.

Figure 3.2: China's steel consumption, production and exports



Source: Bloomberg (2018) World Steel Association; Department of Industry, Innovation and Science (2018)

India set to become the second largest steel producer in 2018

India is expected to overtake Japan as the world's second largest steel producer in 2018, with production reaching 108 million tonnes. Higher production will be driven by the ongoing expansion of steel-making capacity. India's steel consumption is forecast to grow over the outlook period, driven by rapid urban population growth, substantial government investment in infrastructure, housing and urban development and the expansion of the manufacturing sector. India's steel production is forecast to grow by 6.7 per cent annually to reach 123 million tonnes in 2020, representing 7.1 per cent of world production.

Favourable economic conditions supporting the steel industry elsewhere

Japan's crude steel production started the year steady, growing 0.7 per cent year-on-year in March quarter 2018. Steel production is forecast to grow modestly in the short-term, supported by a rebound in capital expenditure, export growth in the automobile and manufacturing sectors, and demand from 2020 Olympics-related projects.

South Korea's steel production grew by 2.8 per cent year-on-year, in the March quarter 2018, supported by high prices, and is expected to remain stable in the short-term. Growth is expected to be supported by robust domestic consumption, rising exports and a recovery in the shipbuilding industry — on the back of improvements in the number of new orders of ships.

Steel output in United States to be boosted by tariffs on imports

Steel production in the United States grew by 2.2 per cent year-on-year in the March quarter, to 21 million tonnes — the highest quarterly production since late 2014. US steelmakers have benefited from rising domestic steel prices, driven by import tariffs and, to a lesser extent, by higher domestic demand. US steel makers will benefit from a 25 per cent tariff on some imported steel. The steel products subject to the tariff are estimated at around 18 per cent of total iron and steel imports to the US and will impact most US steel trade partners — only Australia, Argentina, Brazil and South Korea are currently exempt from the tariffs.

Emerging economies to increasingly drive steel demand growth

Steel production in emerging economies (ex-China) grew by 3.4 per cent in the March quarter 2018, driven by improved global economic conditions and industrial production, and a recovery in prices and profitability — on the back of a sharp decline in steel exports from China.

Steel production in emerging economies (ex-China) is forecast to grow at a modest annual average rate of 2.6 per cent a year to 2020, driven by a positive outlook for global economic growth and ongoing urbanisation and infrastructure investment in emerging economies.

Table 3.1: World steel consumption and production

Crude steel consumption	Million tonnes				Annual percentage change		
	2017 ^s	2018 ^f	2019 ^f	2020 ^f	2018 ^f	2019 ^f	2020 ^f
European Union 28	172	175	177	179	1.8	1.2	1.0
United States	107	111	112	111	4.0	1.0	-1.0
Brazil	22	23	23	23	0.7	1.7	1.5
Russia	43	42	42	42	-0.9	0.3	0.0
China	785	776	770	766	-1.1	-0.8	-0.5
Japan	75	73	73	72	-3.1	0.5	-1.8
South Korea	59	59	59	59	-0.1	-0.3	-0.4
India	96	102	108	115	5.3	6.1	6.3
World steel consumption	1698	1726	1737	1748	1.6	0.7	0.6
Crude steel production	2017 ^s	2018 ^f	2019 ^f	2020 ^f	2018 ^f	2019 ^f	2020 ^f
European Union 28	168	172	176	178	2.4	1.8	1.2
United States	82	86	90	90	5.4	4.3	0.1
Brazil	34	34	34	34	-1.2	0.3	0.8
Russia	71	72	72	72	0.6	0.2	0.0
China	844	836	827	825	-1.0	-1.0	-0.3
Japan	105	106	108	109	1.5	2.1	0.8
South Korea	71	71	71	70	-0.2	-0.3	-0.4
India	101	108	115	123	6.5	6.8	6.9
World steel production	1684	1721	1736	1745	2.2	0.9	0.5

Notes: ^s estimate ^f forecast.

Source: World Steel Association (2018); Department of Industry, Innovation and Science (2018)