argus consulting services

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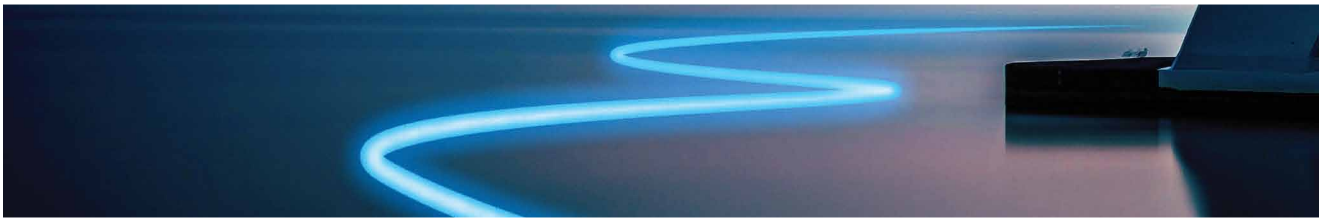
Argus Seaborne Thermal Coal Outlook



Near-term outlook

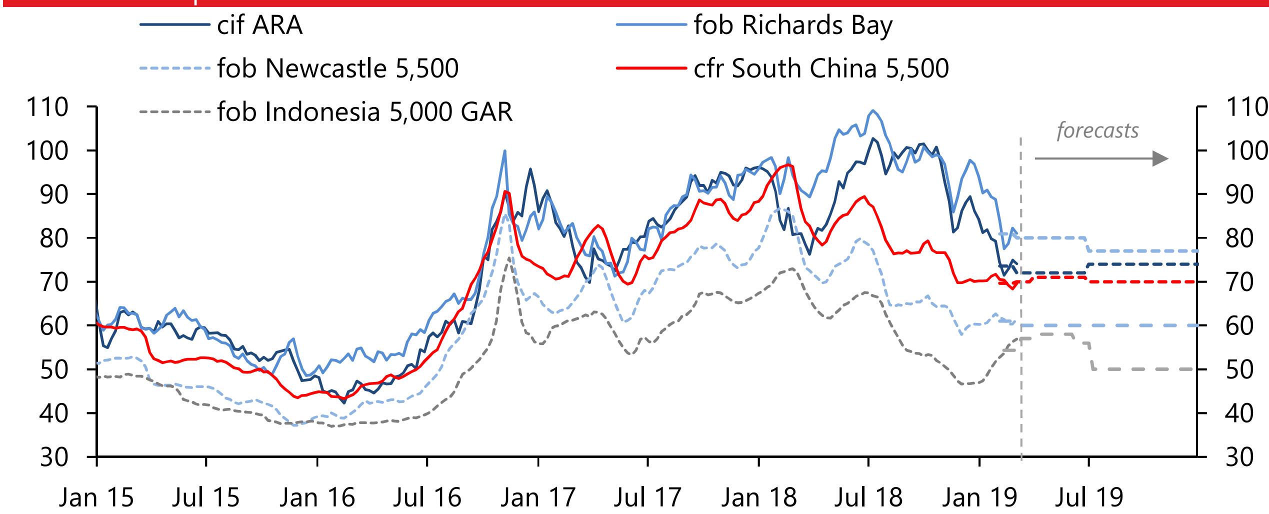
The near term outlook is mixed. Risks to prices in Europe are skewed to the downside, while pushback from China is affecting Australian 5,500kcal coal. But Chinese domestic markets have tightened and Indonesian prices look strong with supply disrupted.

12-month outlook

We think the recent strength in low-CV Indonesian coal should ease as recent supply disruptions fade and production plans remain strong. We are projecting flat prices into year end for other benchmarks, with the range of outcomes around this central scenario fairly wide.

Contents

Thermal coal price markers $/t



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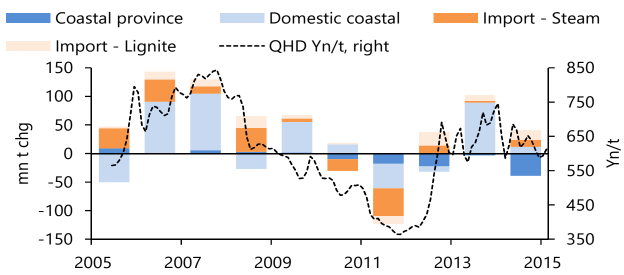
Forecast review

This month we have adjusted our price forecasts for Indonesian low-CV coal higher on the back of recent supply disruptions and continued solid demand. We have made some modest adjustments to our cfr ARA forecasts, with weak natural gas pricing and high inventory skewing the risks to our view to the downside.

The role of China in the seaborne market has been thrown into the spotlight by reports of tougher customs clearances for Australian coal in particular, with the theme of import restrictions not a new development. But with macroeconomic growth slowing and Chinese domestic coal prices lower, there is a growing view that policymakers will push for imports in decline in 2019.

China coastal province supply and prices



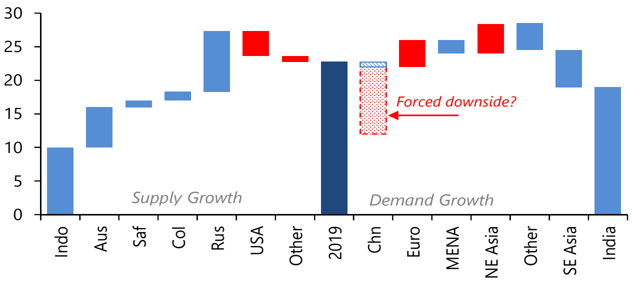
Source: CCTD, Argus

Understanding the path for Chinese imports is difficult given it is a relatively small part of the Chinese supply chain. When trying to forecast prices over the past few years, it has been more useful to understand the path of the overall Chinese demand and supply balance rather than imports specifically given the role of price arbitrages. Imports play an important role in shaping the balance in coastal regions, but so too does regional supply at flows from northern Chinese provinces. Critically, the path for prices and imports are not necessarily correlated. For example, prices fell sharply in 2012 and 2013 as imports continued to rise.

Looking at our assumptions for the seaborne market, at the moment it seems likely that Chinese imports will have to be modestly higher in order of the market to balance at our price assumptions. And in previous years this approach would have been OK, the price outlook right now is still conducive to the export growth we are forecasting.

But if government policy is to force a meaningful decline in imports, by say $10-15/t, it is clear there has to be a greater adjustment somewhere in the seaborne market. But for now, we are sticking with the approach that has worked in previous years, which also faced policymaker pressure to reduce imports.

2019 chg in demand and supply *mn t*

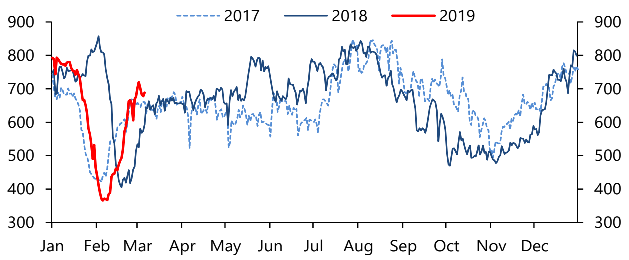


The Chinese market also looks pretty well balanced right now and domestic prices have strengthened. Data becomes a bit scarce around this time of year, but high-frequency coal burn suggests power demand has been solid. Supply growth has also come under some pressure as some major mining accidents has seen a ramp up in safety checks. So while inventory is higher than this time last year, this does not look overly problematic.

Price forecasts												*(period average prompt physical price) $/t*
	Jan	**Feb**	**% Chg**	**Mar**	**1Q19**	**2Q19**	**3Q19**	**4Q19**	**2017**	**2018**	**2019**	**2020**
cif ARA	83.0	73.6	-11.3%	72.0	76.2	72.0	72.0	72.0	84.5	91.7	74.0	75.0
fob Richards Bay	90.4	80.9	-10.5%	80.0	83.8	80.0	80.0	80.0	84.5	97.9	78.9	78.0
fob Newcastle 6,000	98.4	94.6	-3.9%	92.0	95.0	90.0	87.0	85.0	87.9	105.7	85.6	80.0
fob Newcastle 5,500	61.1	61.0	-0.1%	60.0	60.7	60.0	60.0	60.0	70.8	71.7	60.2	62.0
fob Indonesia												
5,800 GAR	66.8	69.4	3.9%	70.0	68.7	72.0	72.0	72.0	74.5	76.1	66.7	64.0
5,000 GAR	48.9	54.3	11.0%	57.0	53.4	58.0	58.0	56.0	61.3	61.0	52.2	48.0
4,200 GAR	31.7	35.3	11.4%	38.0	35.0	39.0	39.0	39.0	42.7	42.5	35.0	32.0
cfr Sth China 5,500	70.7	69.6	-1.5%	70.0	70.1	71.0	71.0	71.0	79.3	82.2	70.3	70.0

Forecast review

China 6 power groups coal burn '000t

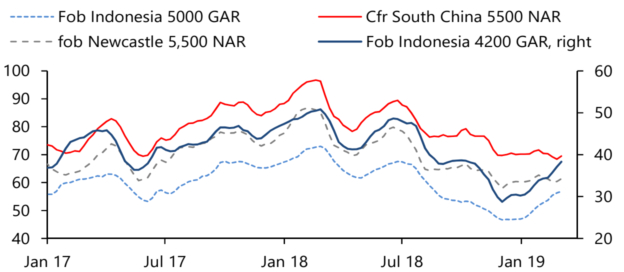


source: CCTD, Argus

The persistent strength of coal burn in the face of weakness in other leading indicators suggest heavy industry has been resilient to the loss of momentum in other aspects of the macroeconomy. And with monetary and fiscal policy moving decisively to support growth, optimism is rising that growth will stay solid. We remain concerned that aspects of construction and heavy industry will be a laggard to weakness elsewhere in the economy and this slow power demand into mid-2019 even as other aspects of the economy improve. The potential downside risks have eased though.

Solid coal demand in China and India along with weather related disruptions has seen Indonesian 4,200GAR and 5,000GAR prices rocket higher over the past month. This has erased the large discounts seen for these benchmarks, with ICI 4 prices tracking more strongly with Chinese domestic futures as 5,500kcal lags behind. This dynamic seems likely to persist while Australian coal faces greater headwinds at Chinese ports.

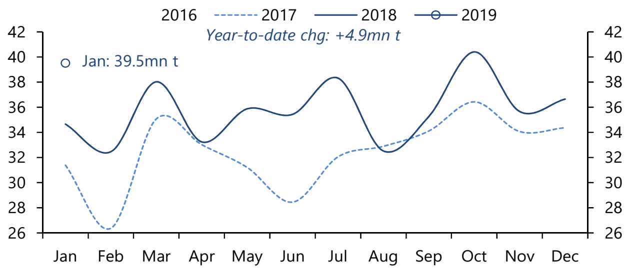
Coal prices $/t



Source: Argus

The disruption to Indonesian exports is not evident in January customs data, which were super strong in the month. It is hard to say just how much shipment disruption has contributed to the rally, with very large vessel ques also likely to be function of continued strong demand from China and India. Our export forecast growth of 10mn t for the full year suggests a significant slowdown will be needed given the extent of growth in January alone.

Indonesian exports mn t

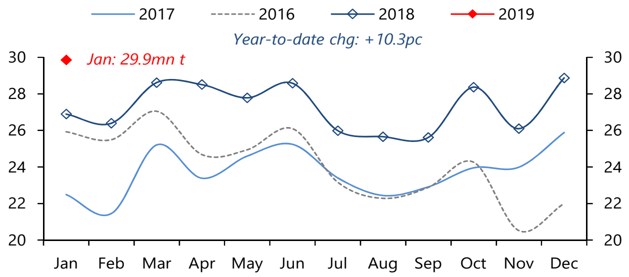


Source: BPS

The persistence of Indian demand may be tested in the next few months following weak power generation growth, which has led to a rebuild of inventory at power plants. This restock doesn't appear to be supported by stronger domestic supply; while production has improved, this appears to have just increased pithead stocks. Dispatches by CIL have actually fallen year-on-year in the past few months.

We still see stronger year-on-year demand from import-coal dedicated coal plants, while demand from industrials remains solid. Cement production continues to grow at a double digit pace, with the competition amongst imported solid fuels intensifying. Imported fuel-grade petcoke has increased, although this is partly due to a reduction in domestic supply availability. Demand for 5,500kcal coal from Richards Bay and Australia has increased and may displace US exports which are currently relative expense on an energy adjusted basis.

Indian cement production mn t

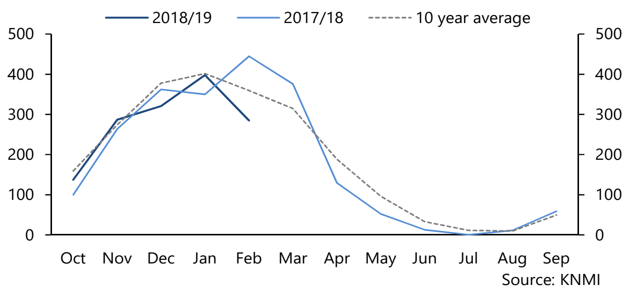


Source: DIPP, Argus

Forecast review

While Chinese prices have ticked up and Indonesian low-CV prices have shot higher, European prices have sagged at a faster rate than we were forecasting. A mild February has drastically impacted power, natural gas and coal markets, with Dutch heating degree days in February the lowest in many years. This is in stark contrast to the late cold snap last year that unexpectedly eroded natural gas stocks.

Dutch heating degree days *HDD*

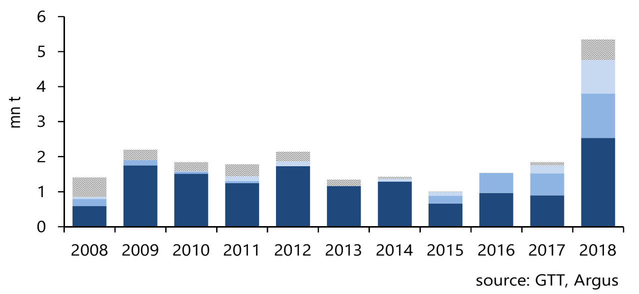


While the weather has played an important role, the decline in coal prices is broadly in line with factors that we expected to ultimately undermine prices. The surge in LNG availability has boosted LNG sendout across key markets to record levels in early 2019 contributing to natural gas stocks that are on par with 2016 levels.

API 2 prices made a similar dive this time last year, but ultimately rallied strongly into the summer months. But that was driven by the sharp rise in natural gas prices on the back of low-inventory, which remained uncomfortably low all the way up until October. With LNG supply continuing to expand, we see much less risk of this occurring, with the prospects of coal-to-gas switching in the summer months undermining the outlook for API 2 prices.

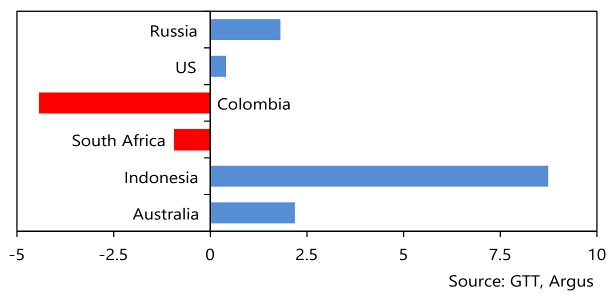
While European imports have declined overall, a rise in Polish seaborne imports has helped mitigate some of the this weakness in 2018. Imports from Russian Baltic ports, Colombia and the US have jumped as domestic hard coal mining has fallen sharply. Russian rail exports have also expanded significantly as well. We expect seaborne imports to remain high, although further strong growth may be limited by port constraints for now.

Poland seaborne imports *mn t*



Export growth has been fairly modest over the past three months. The expansion in Indonesian exports appears to have hit a roadblock in February, while increases in Russia, Australia and the US have been fairly modest. Colombian and South African shipments have been weak, although this partly seems due to weak demand. South African shipments to South Korea have been affected by changes in sulphur limits, while reports of record stock levels at some ports in Colombia points to a push back for this coal from Europe.

Change in exports: 3 months to Jan 2019 *mn t*

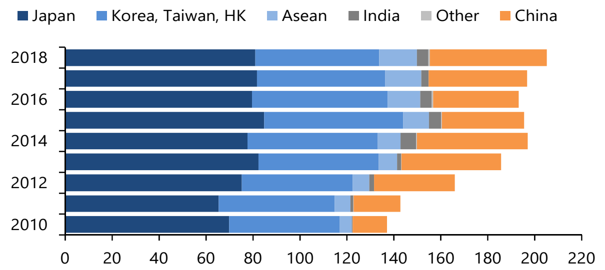


We still see Australian coal exports expanding in 2019, but the composition of exports may have to shift. Push back on Australian coal at Chinese ports has gathered a lot of attention in the broader context of the deterioration in Australia/Chinese relations, as politicians and lobbyists have lost positions and Chinese businessmen have been expelled from the country.

The risks are rising that China can no longer be a reliable market for Australian thermal coal, with China accounting for an increasing share of exports in the past few years. Much of this is priced relatively to API 5, with Australian suppliers now needing to diversify buyers of this coal. This has widened

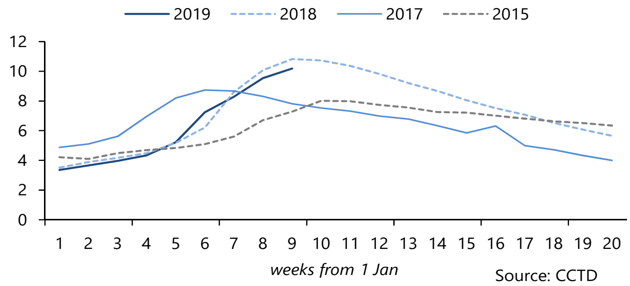
Forecast review

Australian exports *mn t*



Source: ABS, Argus

China trader rebar inventory *mn t*



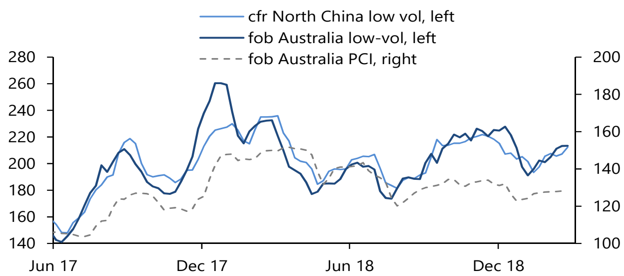
Source: CCTD

the discount of this coal on a landed China market, with this likely to remain wide as Australian producers seek other market markets like Indian cement producers.

Hard coking coal prices have been stronger in the past month as shipments from Australia were softer in February. Both PCI and semi-soft prices have been stable for months as premium coking coal prices have oscillated through wider band.

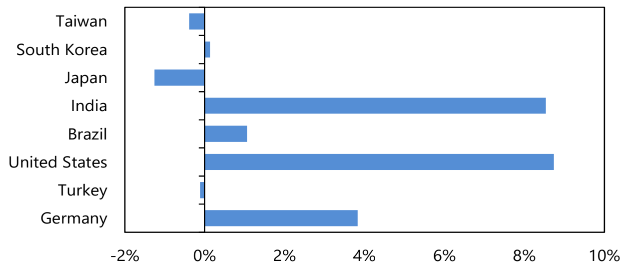
The push-back from Chinese buyers for coking is not too much of a problem for Australian sellers given demand in other markets for this is strong. The weakness in PMI data suggests that demand from some large traditional buyers will be weaker in 2019. But markets like Germany, Brazil, Japan and Korea didn't really contribute that much to growth last year, with the expansion in India and the start up of BOFs in Vietnam much more important. US usage of domestic coking coal demand should be a little bit higher in 2019.

Metallurgical coal prices *mn t*



Source: Argus

Iron production growth in 2018



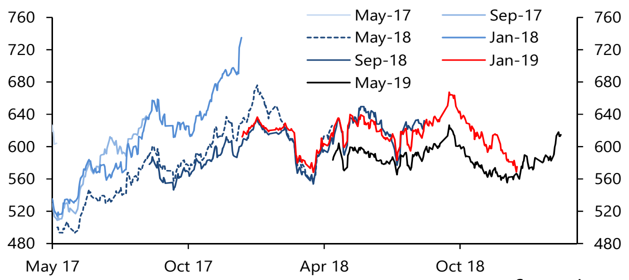
Source: worldsteel, Argus

For now it appears that Chinese steel demand growth has been reasonable, keeping steel prices high. Markets will be watching the trajectory of steel inventories to gauge whether there is any loss of momentum in demand from the construction industry in particular, given the risks from slower property sales and the extent of construction in the past 12 months. There is nothing about the build in steel trader rebar inventories over the past few months that suggests demand has changed.

Chinese coal futures strengthened over the month, with the most active May-2019 contract back over 600 Yn/t. Volumes have increased a bit following the Lunar new year holiday, with improved optimism about the outlook given the performance in the year to date and the measures from policymakers to ensure that growth does weaken.

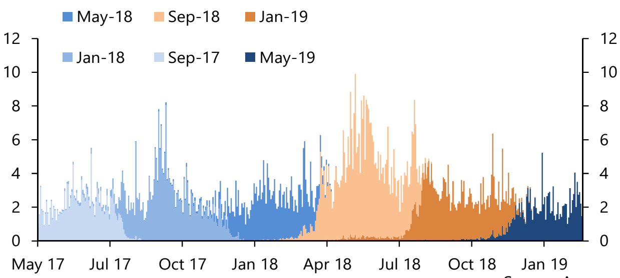
Forecast review

ZCE futures — *Yn/t*



Source: Argus

ZCE volumes — *mn t*

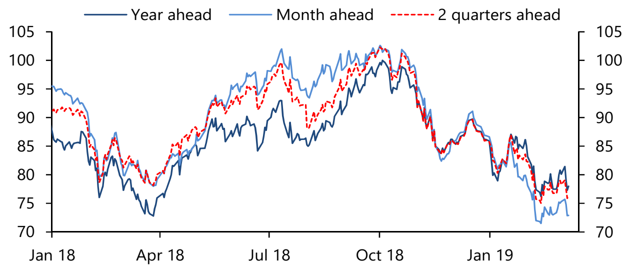


Source: Argus

Part of this strength is related to restrictions on imports, even though in the year so far, imports have not been particularly weak. Using these futures as a hedging tool for imported coal is becoming increasing problematic as restrictions have created large divergences in prices for different specifications over the past few months. Right now this relates to API 5 specification Australian coal, but ICI 4 spec coal was similarly very weak last year relative to other benchmarks.

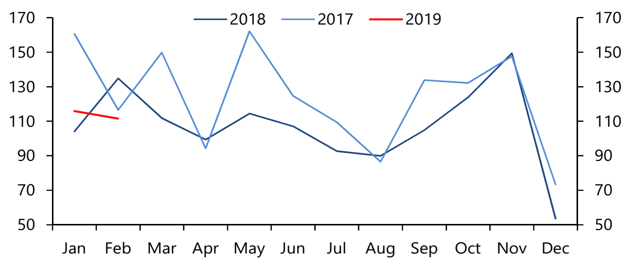
The API 2 swaps curve remains in contango, which for the summer months is creating additional pressure for coal-to-gas switching. So while the contango is a sign of weakness in prompt demand for coal, it is also helping to erode consumption heading into the peak summer period. This should perhaps narrow the degree of contango in prompt versus year-ahead contracts, which has been around Euro4-5/t over the past few months.

API 2 swaps — *$/t*



Source: Argus

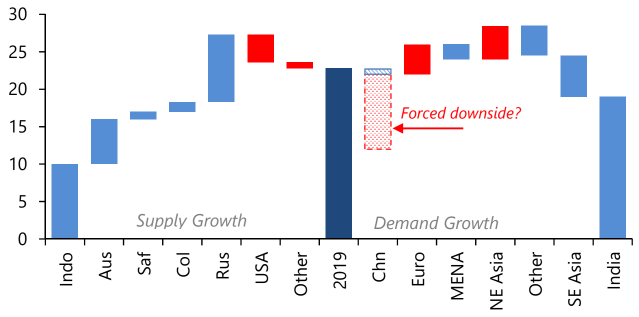
API 2 volumes — *mn t*



Source: ICE, CME, Argus

Three point summary - Key drivers of price forecasts

Estimated chg in supply and demand 2019 ***mn t***

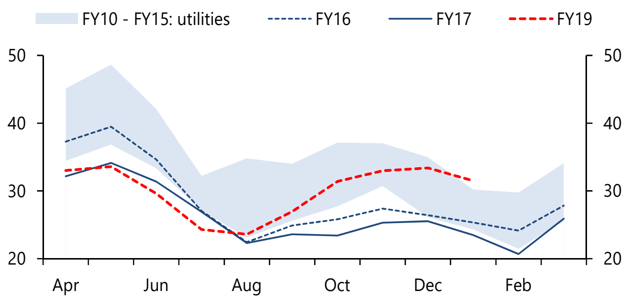


Searching for balance

Under our current assumptions, China needs to import a little more this year for the seaborne market to balance. In previous years this was not a problem as China absorbed tonnes available at a price that was competitive with domestic prices.

But with the government pushing back on imports as prices have shifted lower, there is a growing concern that Chinese imports will be forced lower. This will require adjustments elsewhere in the seaborne market, most likely on the supply side, which would require lower prices.

Japan generator inventory ***days of use***

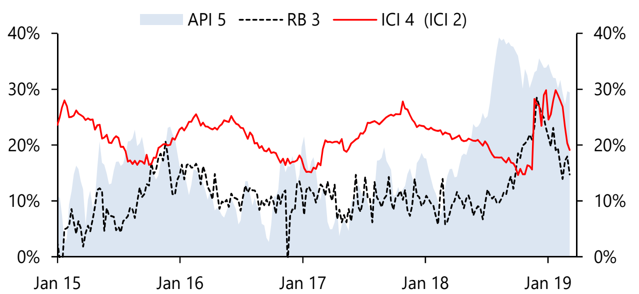


Source: METI

Inventory higher

Inventory is higher year-on-year just about everywhere in the seaborne market. The level of inventory in China does not seem too problematic given current prices and expected demand and supply. But in markets like Japan and Europe, higher inventory creates more of a headwind to price benchmarks in those regions.

Energy-adjusted price discounts



source: Argus

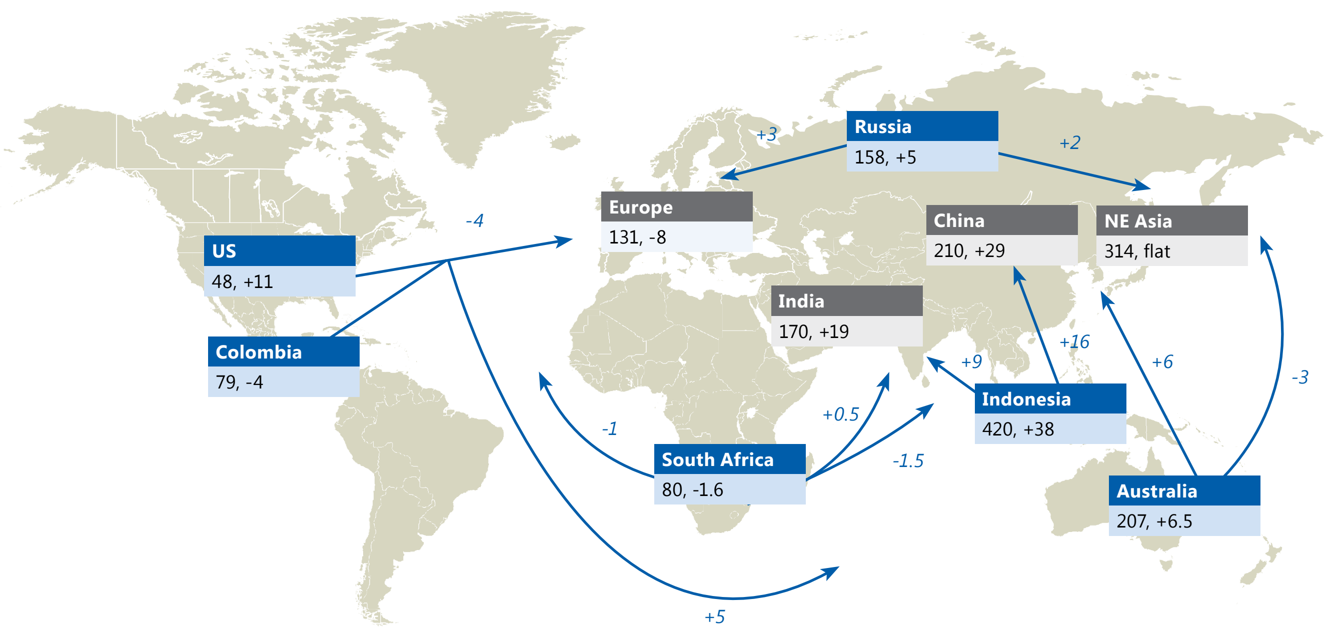
Relative price adjustments

The large discount for Indonesian coal has vanished in the past month with some support from the weather, but prices are now at a level that is likely to generate oversupply as producers retain aggressive expansion plans.

Discounts for 5,500kcal coal remain elevated as this segment becomes more competitive in India as China pushes back on Australian supply. Fob Newcastle 6,000kcal prices remain strong in the context of headwinds in Japan and Korea.

Seaborne demand and supply summary							mn t
	2014	2015	2016	2017	2018	2019	2020
Demand	936.7	881.0	904.7	957.4	1015.1	1036.0	1048.3
Europe	159.5	153.3	135.2	138.9	130.9	122.1	115.5
Middle East and North Africa	20.6	21.8	21.5	21.4	25.0	27.1	29.1
Americas	35.0	37.2	39.5	42.2	40.3	41.3	39.1
China	192.4	129.6	167.2	180.6	210.0	212.5	202.6
Northeast Asia	296.0	293.1	293.2	314.5	314.4	310.0	315.5
India	160.0	163.0	150.0	151.0	171.0	190.0	200.0
Southeast Asia	63.3	72.4	85.5	92.4	102.7	109.2	118.7
Other	9.9	10.8	12.6	16.5	20.8	23.8	27.8
Supply	933.8	876.9	899.0	952.1	1013.2	1036.0	1048.3
Indonesia	413.8	358.0	365.0	380.0	420.0	430.0	425.0
Australia	200.7	201.8	200.4	200.3	207.0	213.0	215.0
South Africa	74.8	75.5	72.9	78.5	77.0	78.0	78.0
Colombia	76.0	81.0	88.1	83.7	79.7	81.0	82.0
Russia	121.0	123.0	135.0	153.0	158.0	167.0	180.0
USA	28.9	23.9	15.8	37.0	48.1	46.0	45.0
China	2.5	1.1	3.7	3.8	2.8	2.5	3.0
Mozambique	2.6	1.9	2.5	5.0	7.0	7.0	9.0
Canada	2.6	2.2	2.5	2.0	1.5	1.5	1.5
Other	10.9	8.5	13.0	8.8	10.5	10.0	9.8

Trade flows, 2016



Demand breakdown *mn t*

	2016	2017	2018	2019
Europe	131.4	138.9	130.9	122.1
Germany	36.9	34.6	31.0	28.0
UK	4.6	4.8	6.4	4.0
Netherlands	12.1	10.2	9.0	8.0
Finland	2.4	2.3	2.3	3.0
France	8.0	11.0	9.0	9.0
Spain	11.3	16.6	13.5	12.5
Portugal	5.3	5.6	4.3	4.0
Italy	13.4	12.2	11.0	10.0
Turkey	30.4	33.0	31.5	30.5
Other	7.1	8.6	12.9	13.1
MENA	21.5	21.4	25.0	27.1
Israel	8.6	8.0	7.5	7.5
Morroco	6.7	6.8	8.4	10.5
Egypt	4.0	4.5	6.5	6.5
UAE	2.0	2.0	2.5	2.5
India				
Domestic production	647.6	673.5	734.0	774.4
Thermal coal imports	150.0	151.0	170.0	190.0
Pet coke imports	14.6	13.0	6.2	10.0
Indian Ocean				
Sri Lanka	2.3	2.3	2.3	2.3
Pakistan	5.9	9.2	13.0	16.0

	2016	2017	2018	2019
Northeast Asia	293.2	314.5	314.4	310.0
Japan	134.0	137.0	136.5	135.0
Korea	94.0	110.0	110.5	108.0
Taiwan	54.0	57.0	56.5	56.5
Hong Kong	11.2	10.5	10.9	10.5
Southeast Asia	85.5	92.4	102.7	109.2
Malaysia	32.2	33.3	36.0	39.0
Thailand	22.1	22.1	24	22.5
Philipppines	20.1	24.8	24.5	26.0
Vietnam	10.4	11.5	17.5	21.0
Americas	38.8	42.2	40.3	41.3
Mexico	7.5	10.4	9.2	9.2
US	8.3	7.7	6.3	6.0
Chile	11.0	10.4	11.0	12.0
Brazil	5.2	5.8	5.5	5.5
China				
Domestic coastal	599.2	688.0	710.0	705.0
Seaborne imports				
Thermal	95.0	98.1	110.0	107.5
Lignite	72.2	82.5	100.0	105.0
Anthracite	22.9	2.0	0.0	0.0

Demand and supply summary

We have updated our European import numbers to better reflect the rise of Polish seaborne imports, which we had underestimated up until this point.

We have revised some of our 2019 import assumptions lower in countries like Germany given the jump in natural gas stocks and persistently high ARA inventory. It is worth noting that 2mn t of domestic hard coal supply in Germany will be removed in 2019.

We have reduced our import assumptions in Korea and Japan for 2019, with the risks to our Korea expectation skewed to the downside given recent announcements on maintenance and plant closures.

We have cut our Colombian export forecast for 2019 with weaker demand likely to curtail the recovery in production at some operations from levels seen a few years ago.

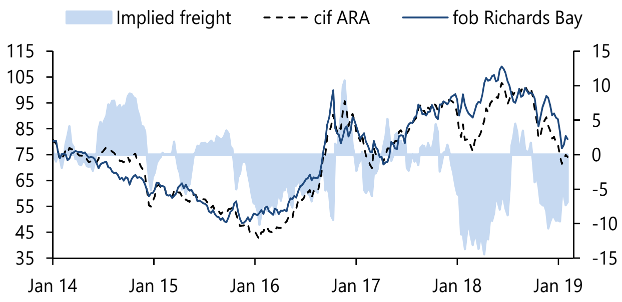
We have lowered our US export forecasts, with it likely that increased price competition from high-ash 5,500kcal coal and a weak European market will lead to some curtailment of shipments over the next few quarters.

Summary of forecasts by benchmark

cif ARA

The discount to Richards Bay prices remains wide as European demand remains weak in the face of competition from natural gas.

cif ARA minus fob RB $/t

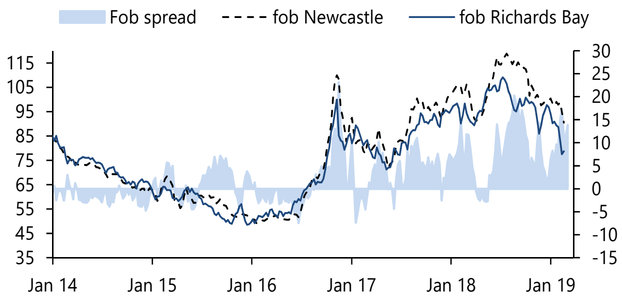


Source: Argus

fob Richards Bay

The introduction of sulphur limits has reduced South Korean demand for Richards Bay coal and helped widen the discount to fob Newcastle.

fob Newcastle minus fob Richards Bay $/t

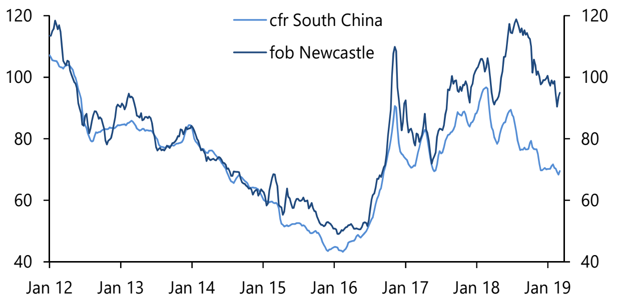


Source: Argus

fob Newcastle 6,000

The premium for this coal remains wide, with downside pressure building from headwinds to demand in the key markets of Korea and Japan.

fob Newcastle vs cfr S. China $/t

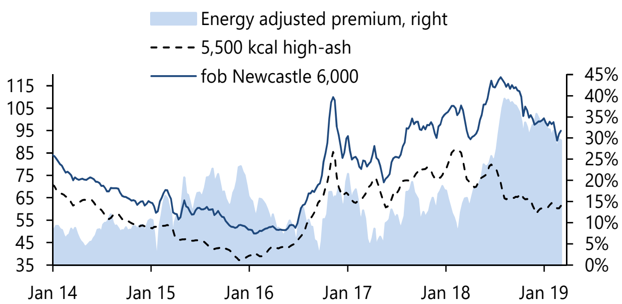


Source: Argus

fob Newcastle 5,500

This benchmark is facing new pressure from concerns about Chinese demand for Australian coal and the likely push to diversify into alternative markets. That said, the discount to 6,000kcal coal remains wide.

fob Newcastle 5,500 discount to 6,000 $/t



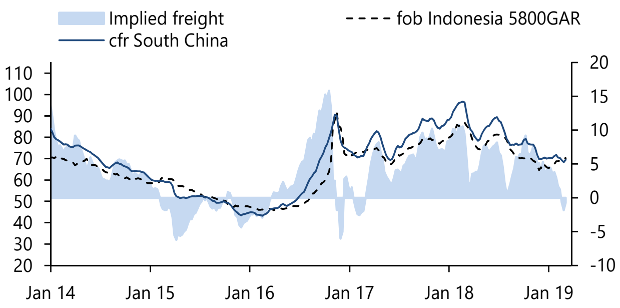
Source: Argus

Summary of forecasts by benchmark

fob Indonesia 5,800 GAR

This benchmark has strengthened and is outperforming 5,500kcal coal from Australia on a landed China basis given the growing concerns around Chinese restrictions on Australian coal.

cfr S. China minus fob Indonesia *$/t*

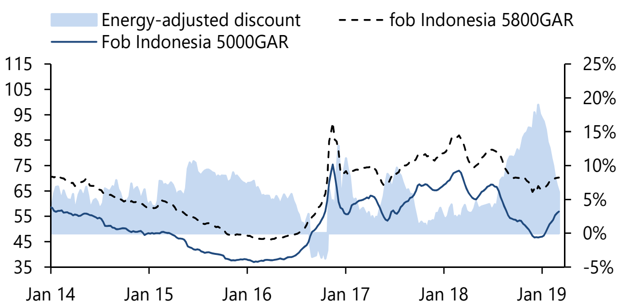


Source: Argus

fob Indonesia 5,000 GAR

The strong price rally has erased the large discount observed a few months ago, with supply disruptions supporting a tightening of the market.

fob Indonesia 5,000 discount to 5,800 *$/t*

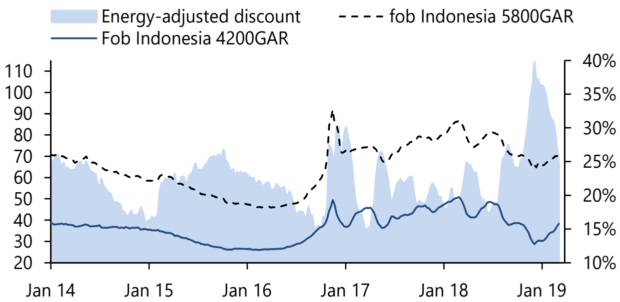


Source: Argus

fob Indonesia 4,200 GAR

This benchmark has rallied sharply compared to the rest of the seaborne market. Demand from China and India still remains strong, but the restraint on supply from weather has pushed prices to levels that are likely to generate oversupply later in the year.

fob Indonesia 4,200 discount to 5,800 *$/t*

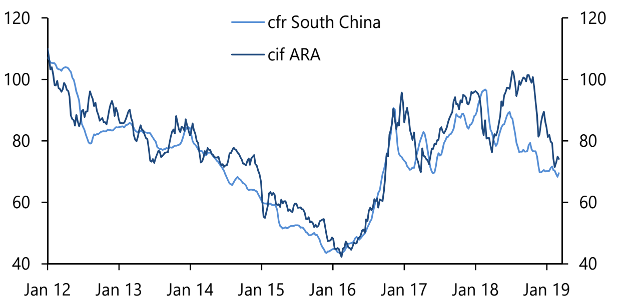


Source: Argus

cfr South China 5,500

This benchmark has underperformed Chinese domestic prices as importers remain wary of Australian coal that helps sets this price.

cfr South China vs cif ARA *$/t*



Source: Argus

In focus

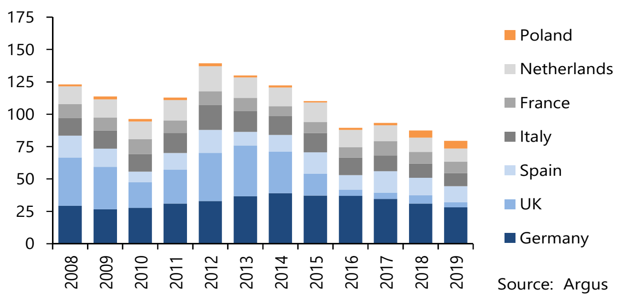
Environmental policy a growing headwind in Europe and Korea

After a few years of resurgent coal pricing, environmental policy is set to become a larger impediment to coal in Europe over the next few years as targets for phase-outs in several countries loom in 2025. This may be hastened by the increasing pressure from higher carbon prices and rising coal-to-gas switching. In Korea, coal burn is increasingly limited by air quality controls, with a push to boost LNG usage also putting coal burn at risk in the medium term.

The pace of carbon emission reduction compared to the business as usual case under the Paris Climate Agreement does not appear to be outside of the Nationally Determined Contributions (NDCs), but this pace of action is too slow if temperature goals are too be achieved and this may phrase the debate around the 2020 update of NDCs.

While the US has pulled out of the Paris Agreement and China is currently more focused on combating an economic slowdown than reducing emissions, the push in Europe to reduce emissions by phasing-out coal in power generation is gathering pace. While European imports have been dropping for some time, the pace is set to accelerate in the early stages of the 2020's.

European seaborne coal imports *mn t*



Source: Argus

Most of the key importing countries have set dates for the phase-out of coal-fired, with the exception of Poland, which has just recently emerged as a more important participant in seaborne markets. Those that have set the most aggressive targets in 2025 are mostly on the way already, with it likely that economics will force the closure of UK coal-fired generation more quickly than this plan. Italy has switched its target to 2025 from 2020, with some older less efficient plants likely to be retired sooner. In the Netherlands, older plants will be phased out by 2025, while efficient plants built more recently will remain online until 2030.

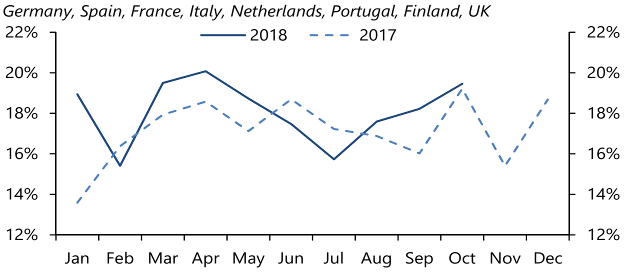
Selected Europe Coal capacity and burn 2018

	MW	mn t	Phase out
Denmark	2027	2.6	2030
Finland	1821	3.1	2029
France	3101	2.2	2025
Germany	25034	36	2038
Italy	8316	10.1	2025
Netherlands	4648	8.8	2030
Portugal	1756	4.5	2030
Spain	9534	15.1	2030
UK	13542	6.7	2025

Germany is the largest coal importer in the region and recent recommendations from the commission on growth, structural change and employment (WSB) aiming for a 2038 phase-out of coal generation seem likely to be adopted. Achieving a phase out of lignite, hard-coal and nuclear generation is particularly challenging. A total of 10GW of nuclear capacity is scheduled to be decommissioned by 2022, at the same time as the WSB has recommended that 3.1GW of lignite and 4.5GW of hard-coal generation be phased-out. While this will likely require more gas generation, it will also likely require higher utilization at those remaining hard-coal plants in the interim.

Overlaying this is the volatility created by uncertain generation trends from renewable sources. Renewables capacity is set to expand dramatically over the next 10 years, but as we have seen more recently, availability of wind generation can create huge swings in coal usage in a country like Germany. For example, the 5pc swing in renewables share of generation shown in the chart below between January 2017 and January 2018 was largely created by wind, during the seasonal peak for coal consumption.

Wind and solar net generation pc of total

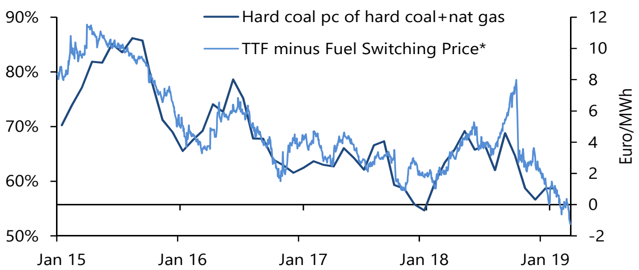


Source: Eurostat, Argus

The more immediate background of coal-to-gas displacement in the power sector has already raised the question of a phase-out in coal being achieved much faster than governments are aiming for. The chart below shows that hard-coal generation is losing share to natural gas, with total demand for generation from these sources currently weak thanks to mild weather. The deteriorating competitive of coal versus gas suggests a further decline into the summer months, with natural gas stocks continuing to build.

This scenario is partly a function of a mild European winter, with the opposite occurring just a few months ago in September when natural gas stocks were seen as too low in Europe heading into the winter. So assuming there are some risks in assuming these conditions remain the norm. But with this dynamic taking place against the backdrop of rising action to phase-out coal plants in Europe, we may see some plants retired sooner rather than later.

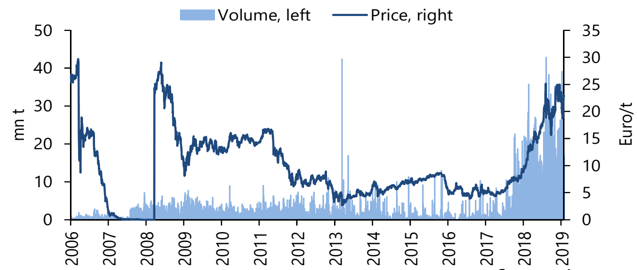
Germany hard coal pc of thermal generation



Source: Argus

Supporting coal-to-gas switching has been the rise in carbon prices, with the implementation of the Market Stability Reserve (MSR) in January of this year in the EU ETS scheme leading to a surge in trading and prices. Carbon prices have been volatile and few expected such a radical rally well in advance of the implementation of the MSR. So some caution is needed when projecting future prices. But with many countries discussing the use of a carbon floor price similar to what has been implemented in the UK, it seems unlikely the cost of carbon will remain high, either due to market forces or policymaker force.

EU ETS C02 prices

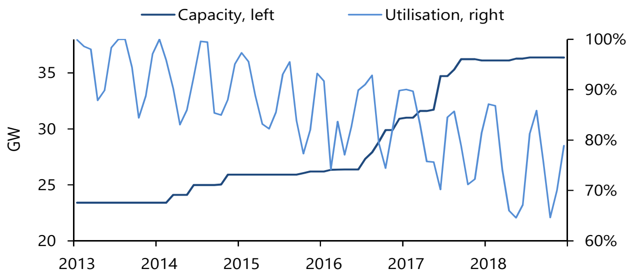


Source: Argus

So the path for coal imports is lower, but the range of outcomes over the next few years is pretty wide in any particular year. This has been the experience over the past 12 months, with Europe being both a tailwind and headwind to global prices during different points of the year as imports generally declined.

Europe is not the only market where government action to restrain coal output is weighing on the outlook. While Korea is far from looking to phase out coal-fired generation, utilization of coal plants in Korea has been dropping as restrictions on coal units have increased in order to improve air quality. Kepco plants will be subject to enforced maintenance during the spring period, while restrictions on coal-fired generation when fine dust alerts are triggered. Two 580MW units at the Samcheonpo plant will be retired at the end of this year, with a further 2GW scheduled to be closed by 2022. A further 1GW of capacity at Samcheonpo will be converted to run on LNG.

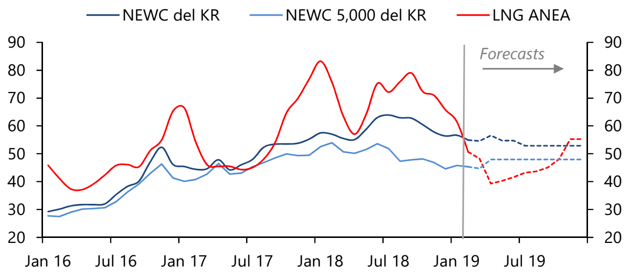
Korea coal plant capacity and utilization



Source: KEPCO, Argus

The prospect of coal-to-gas switching is another factor weighing on the coal outlook in Korea. Understanding fuel costs at particular plants given the blending of a wide range of coals is difficult, with the average plant running on bituminous coal likely to has costs somewhere between the 6,000kcal and 5,500kcal price shown on the chart below. A shift in taxation on both coal and LNG means that those plants that procure LNG on a spot basis have now moved up the merit order.

Korea LNG *$/MWh*



Source: Argus

But this pool of plants is small given the role of Kogas in buying and supply natural gas and the use of term contracts that mean procurement prices are much higher than spot prices. So the degree of displacement of coal by LNG seems likely to be fairly small.

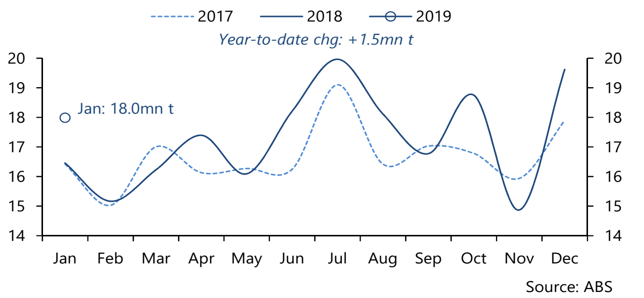
Over the next few years this should change as Kogas term contracts roll off and the supply of natural gas within Korea become more competitive. The role of Kogas as the monopoly supplier of natural gas in Korea will end in 2025, as do some long-term contracts between Kogas and utilities.

We are currently forecasting a modest decline in Korean imports in 2019, but the risks are building the imports are lower than we are currently projecting. This may not be totally apparent in the early stages of the year as some imports appear to have been front loaded this year ahead of the change in taxation on 1 April.

Exports

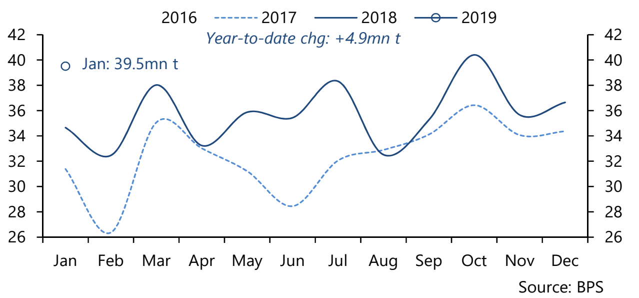
Export growth has been modest in the last few months. Colombia and South Africa have been a drag, while US growth has slowed. Australia and Russia have expanded while strong Indonesian growth will be crimped in February.

Australia *mn t*



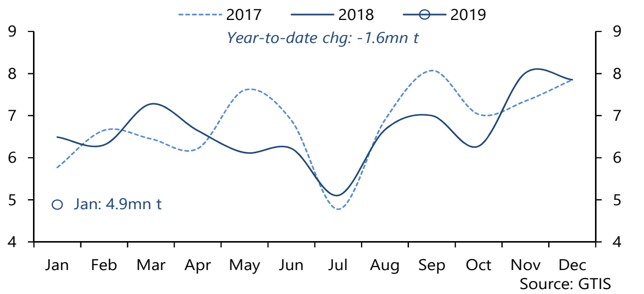
■ Exports look weaker in February after a strong January.

Indonesia *mn t*



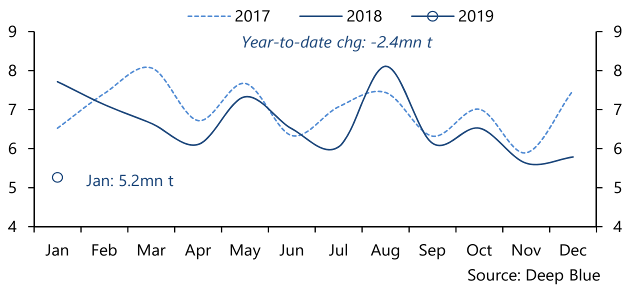
■ Indonesian exports were strong in January, but weather hampered February shipments.

South Africa *mn t*



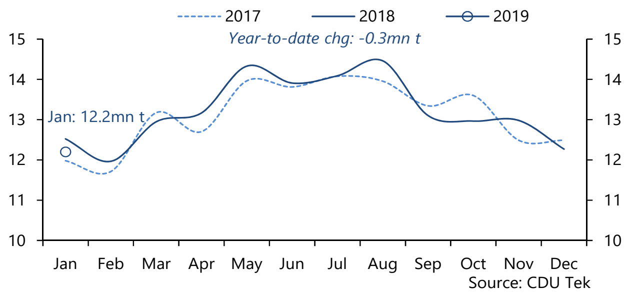
■ The weakness in South African shipments is also partly driven by soft demand.

Colombia *mn t*



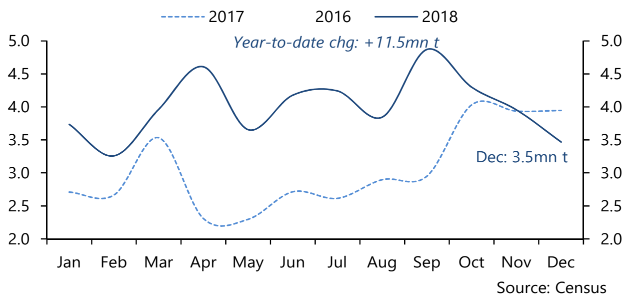
■ Colombian exports were weak in January, partly due to weak demand.

Russia *mn t*



■ These data are at odds with the pick up in port shipments.

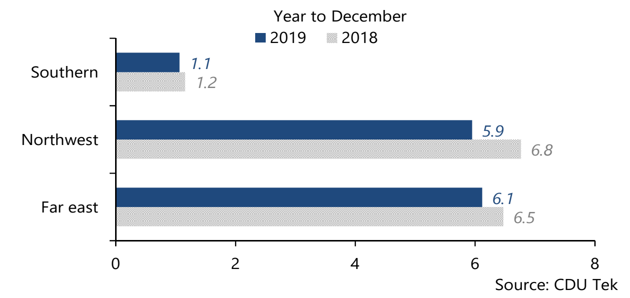
US ex-Canada *mn t*



■ US exports softened at end of 2018 but looked strong in January.

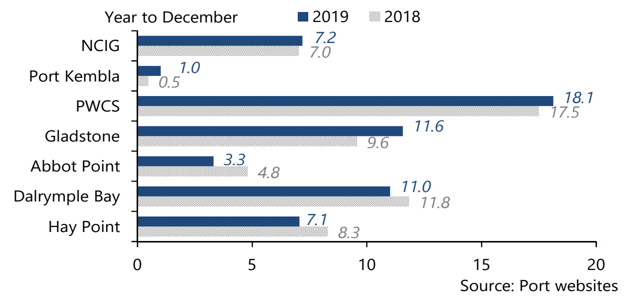
Exports

Russia port shipments *mn t*



■ Exports from Baltic ports have been strong despite API 2 weakness.

Australia port shipments *mn t*

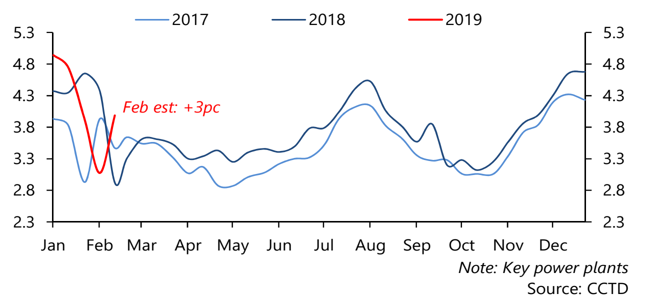


■ Shipments from Queensland have been disrupted but have been solid from NSW ports.

Key indicators, China

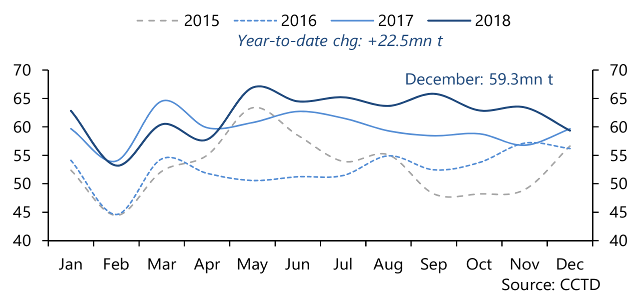
Information availability at the start of the year is usually spartan. High-frequency indicators suggest coal burn growth has been steady, while production has faced pressure from safety inspections.

China daily average coal burn *mn t*



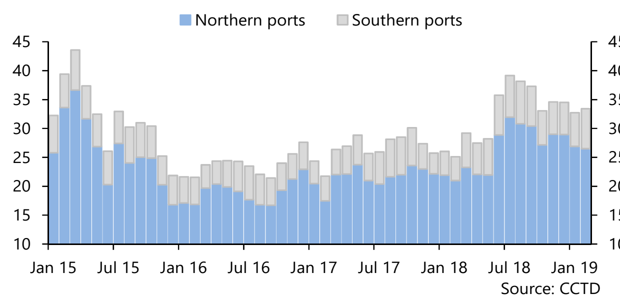
■ February appears solid considering the timing of the lunar new year.

China coastal coal shipments *mn t*



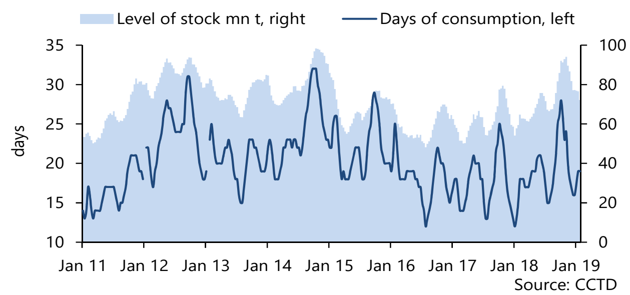
■ Coal shipments appear to have risen a little at the start of the year after growing strongly in 2018.

Coal stocks at N. China ports & GZ *mn t*



■ Port stocks remain elevated compared to year-ago levels.

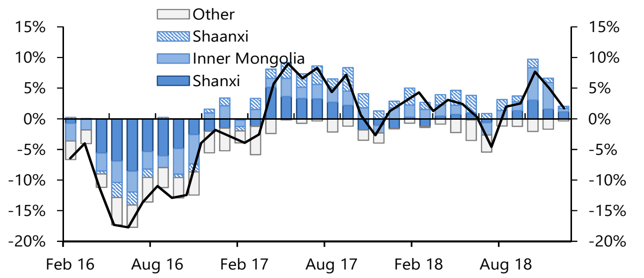
China stocks at key power plants



■ Coal stocks are higher than a year ago at power plants.

Key indicators, China

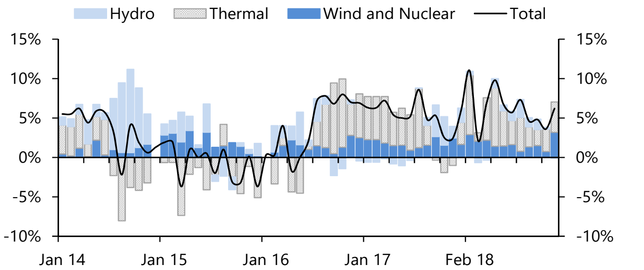
China coal supply growth *yoy% chg*



Source: NBS

■ Supply growth has likely contracted in the early stages of 2019.

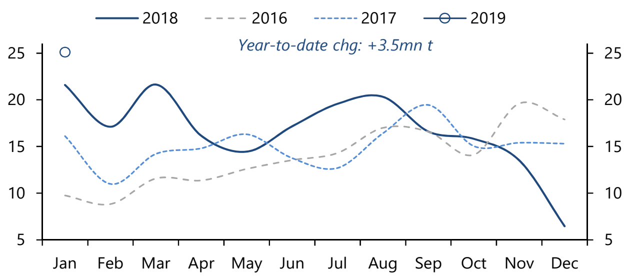
Contribution to power generation *yoy% chg*



Source: NBS, Argus

■ Coal burn has grown in early 2019, pointing to solid power generation.

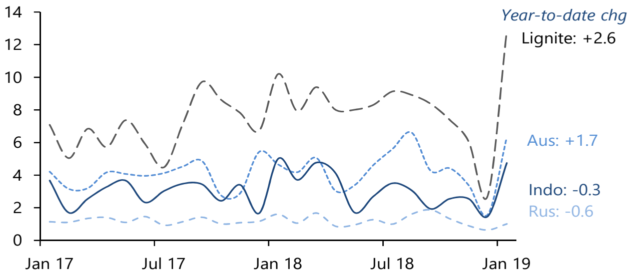
Imports - steam and lignite *mn t*



Source: China Customs

■ The year-on-year growth in January does not appear indicative of the trend in import demand.

Imports - by source *mn t*

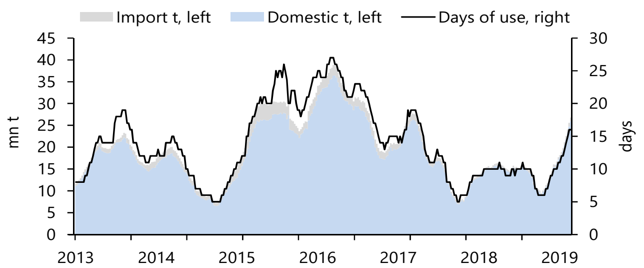


■ The surge in Australian and lignite imports suggest under-reporting in December.

Key indicators, India

Soft coal generation and rising imports have lifted stocks. Import growth should remain strong, with CIL deliveries not growing in the past few months despite stronger production.

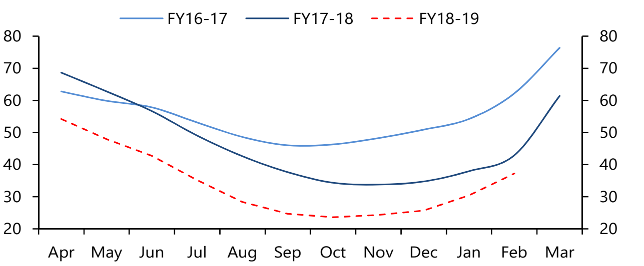
India power plant stocks



Source: CEA, Argus

■ Stocks at surveyed plants are the highest in more than a year.

India pithead stocks *mn t*

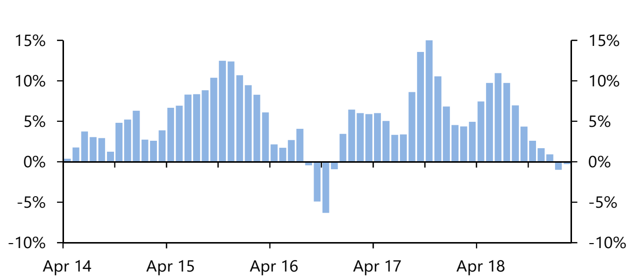


Source: CEA, Argus

■ Pithead stocks are approaching year-ago levels but are well below historical averages.

Key indicators, India

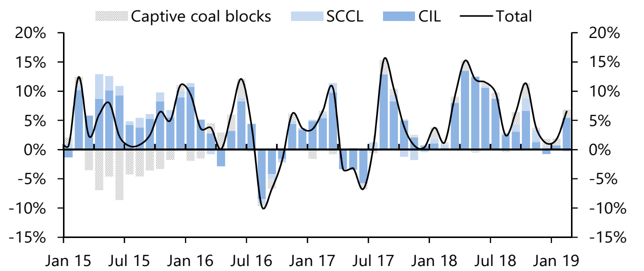
CIL monthly coal dispatch *3mma*



Source: CIL, Argus

■ Deliveries are weaker year-on-year after destocking propelled dispatches in 2018.

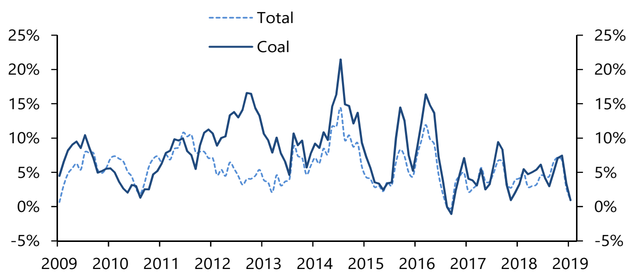
Contribution to coal production growth *ppt*



Source: CIL, Argus

■ Production at CIL and captive blocks has ratcheted higher as the end of FY approaches.

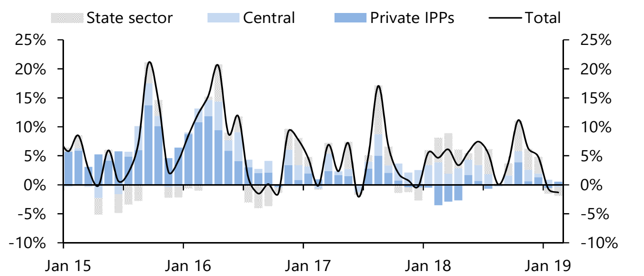
India coal-fired power generation *TWh*



Source: CEA

■ Power and coal-fired generation have been very weak in the past few months.

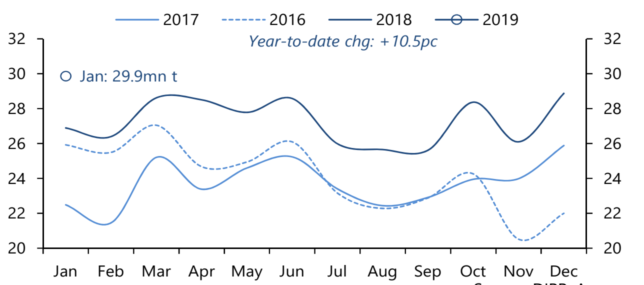
India coal-fired power by sector *ppt*



Source: CEA, Argus

■ State-sector coal burn was particularly weak in February.

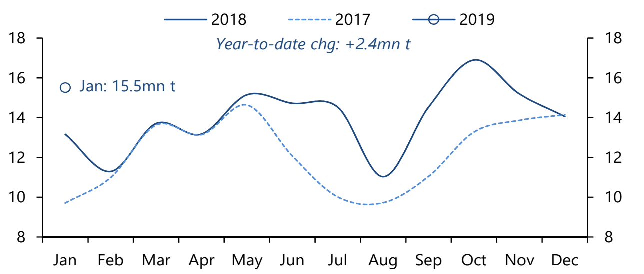
Indian cement production *mn t*



Source: DIPP, Argus

■ Indian cement production remains high in the context of strong growth last year.

Imports - steam coal *mn t*



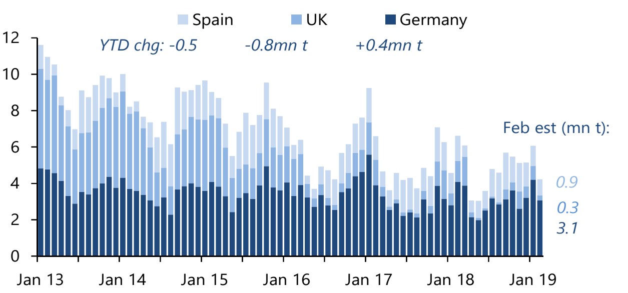
Source: GAC, Argus

■ Imports were strong in January, but delays in Indonesia may limit growth in February.

Key indicators, Europe

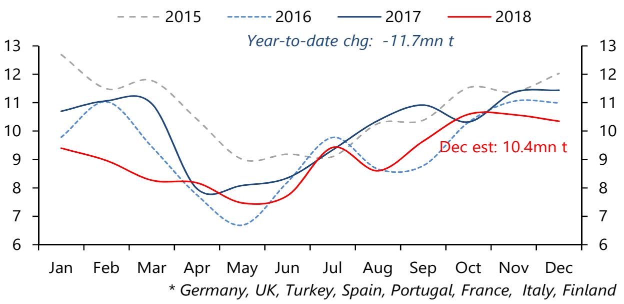
European coal burn has been soft, but it is the big decline in natural gas prices that has undermined API 2. With both gas and coal inventory high, pressure remains to the downside.

Selected Europe coal consumption *mn t*



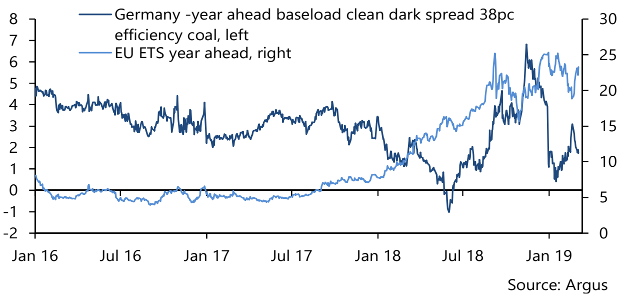
■ Coal burn was soft in Spain, Germany and the UK in February.

Selected European coal imports *mn t*



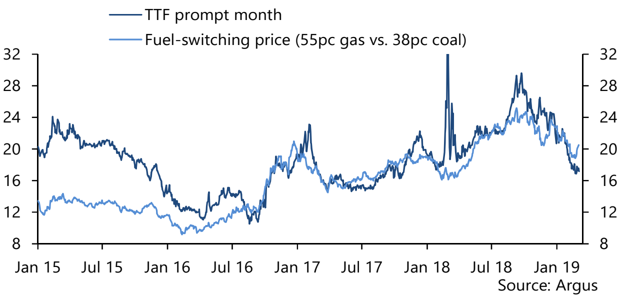
■ European imports finished the year softer as dark spreads weakened.

German dark spread and EU ETS *Euro/MWh, Euro/t*



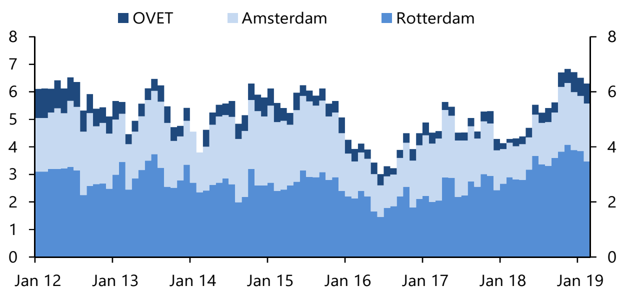
■ Dark spreads remain weak, while carbon prices have traded in a wide range recently.

TTF natural gas and fuel switching price *Euro/MWh*



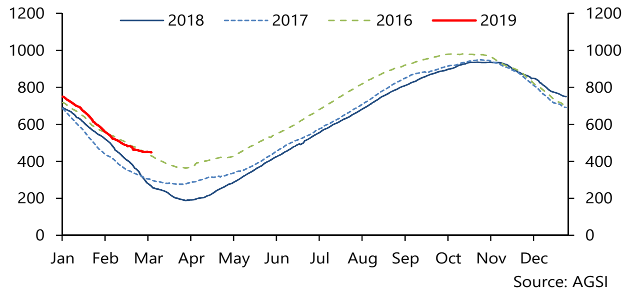
■ Low-efficiency power plants are at risk at current coal and natural gas prices.

Port inventories *mn t*



■ ARA inventory remains very high in the context of weak coal burn.

European natural gas storage *TWh*

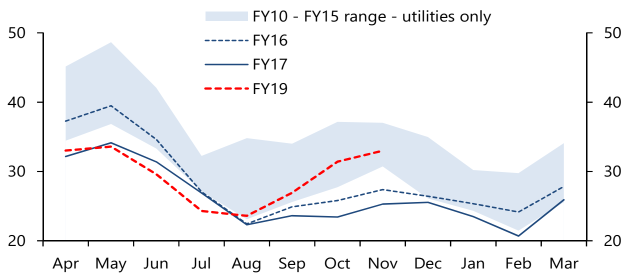


■ Strong LNG supply and mild weather have boosted gas stocks to 2016 levels.

Key indicators, north Asia-Pacific

Imports in north Asia were solid at the start of the year but face downward pressure. Vietnam imports have remained very strong in January, while Thailand posted growth as well.

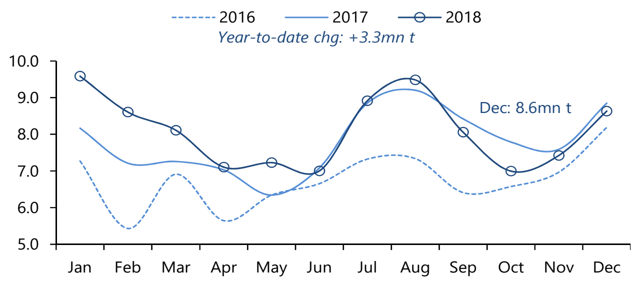
Japan inventory ***days of use***



Source: METI

■ Inventory in Japan is well above levels seen in the past few years.

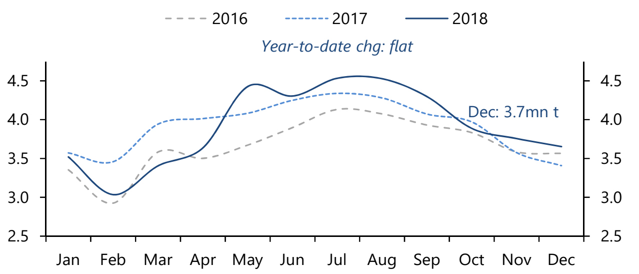
Korea coal used in power generation ***mn t***



Source: KEPCO

■ Coal burn at the end of 2018 was a touch lower than 2017.

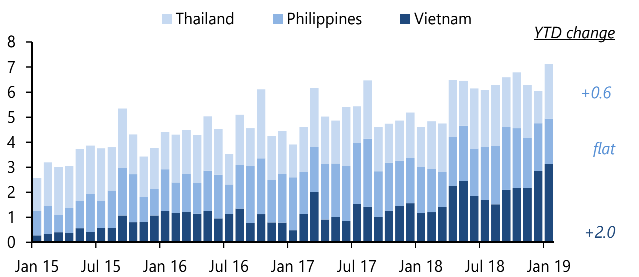
Taiwan coal used in power generation ***mn t***



Source: Bureau of Energy

■ Coal burn in Taiwan was solid at year-end.

Asean thermal coal imports ***mn t***



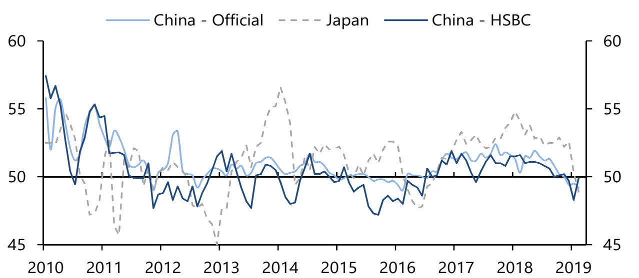
Source: Customs data, Argus

■ Vietnam imports have been very strong at the start of the year.

Key indicators, macroeconomic indicators

Macroeconomic momentum is poor globally. Europe is sliding toward another slowdown, while there is more optimisim in China given the extent of policymaker efforts to offset current weakness.

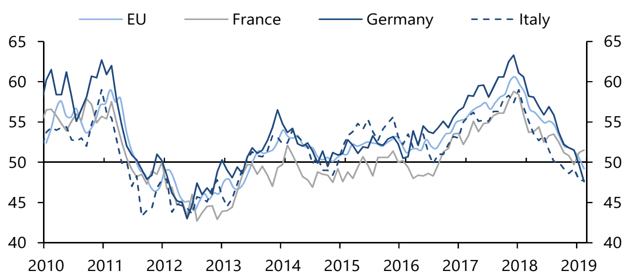
China, Japan manufacturing indices ***index***



Source: Markit

■ Japan's PMI crashed in February, while PMIs in China were a little better.

Europe manufacturing indices ***index***



Source: Markit

■ The deterioration in the PMIs is indicative of the downward economic pressure that has forced the ECB to act.

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