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Argus White Paper:

Indonesia and India lift global thermal coal trade in 2019

Global thermal coal trade grew by around 11mn t on the year in the first half of 2019, driven by greater Indonesian exports and rising Indian demand. The growth in Asia offset weaker trade in the Atlantic, where EU imports slumped to more than a decade low.

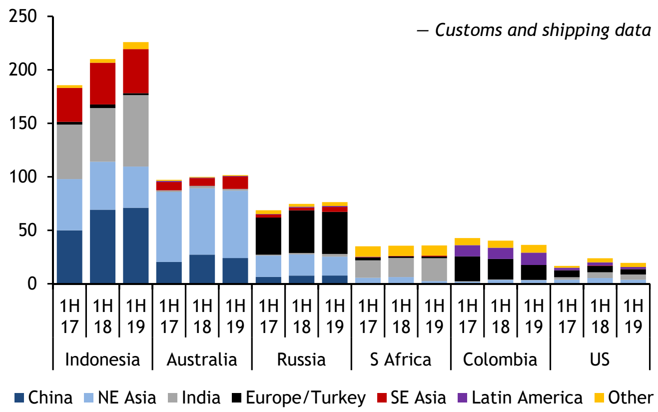
East Asia and Australia

Thermal coal trade in east Asia and Australia continued to expand in the first half of 2019, driven by export growth from Indonesia in particular.

But demand growth in China has slowed significantly and declining coal consumption elsewhere in northeast Asia has accelerated as a result of greater nuclear availability, with India and southeast Asia absorbing much of the increase in seaborne supply.

Supply-side pressures have weighed on key prices in the region and uncertainty about Chinese imports pose a further downside risk in the second half of this year, although high-grade coal demand in Japan and South Korea could recover as growth in nuclear output begins to slow.

Global thermal coal exports *mn t*



Indonesia

Indonesian thermal coal export growth has slowed in 2019 but continued to account for most of the overall rise in global supply.

Coal exports remain a key source of foreign currency reserves for the Indonesian government and a cornerstone of the national economy, which has helped support exports despite falling global prices this year. Producers are expected to boost annual seaborne supply overall in 2019, barring a significant further downturn in prices in the second half of this year.

Indonesian exports rose by nearly 16mn t year on year to 225.9mn t in the first half of 2019, with the growth driven entirely by shipments of sub-bituminous coal. The pace of growth slowed following a 24.4mn t year-on-year increase in the first half of 2018, but Indonesia remained the key driver of the expansion in global trade.

Combined exports from Indonesia, Australia, Russia, Colombia, South Africa and the US rose by 11.2mn t year on year in the first half of 2019, but when Indonesia is excluded, total shipments were nearly 5mn t lower as a result of declines in US and Colombian exports.

Granular export data by destination is incomplete for January-June, but most of the increased Indonesian shipments in the first half of 2019 sailed for India. Shipments to India increased by more than 16mn t year on year to about 67mn t in the first half of 2019, under Argus estimates.

Indian coal-fired power generation in January-June this year grew by 2.2pc year on year to 512.2TWh — an increase of about 7.43mn t to 325.02mn t of coal burned, data from government agency the Central Electricity Authority show — and the country continues to rely on imports to meet demand as a result of domestic supply constraints. But a 22pc year-on-year drop in the average value of fob Indonesian GAR 4,200 kcal/kg coal prices and steady declines since May suggest that strong supply-side pressures have driven the market in 2019, rather than a greater pull from key demand hubs.

Indonesian exports to China have also increased this year, with half-year shipments increasing by about 2mn t to more than 71mn t. Growth in Chinese imports from the seaborne market slowed significantly this year, but Indonesia has benefited from Chinese restrictions on competing Australian imports.

Annual Indonesian exports are likely to grow year on year in 2019 following a strong performance in January-June, but increases in the second half of this year could be less pronounced than in January-June as a result of a lower annual production target, softer seaborne prices and uncertainty surrounding Chinese import demand.

Indonesia is targeting output of 490mn t in 2019, which would be down from 528mn t in 2018. The country's producers are on track to reach this goal, with provisional and incomplete ministry of energy data showing that miners produced 237.6mn t in January-July, or about 47.9pc of the target for this year.

Producer sales to domestic customers reached 68.8mn t, or 29pc of total output, in the first seven months of this year, data show — comfortably exceeding the 20-25pc domestic supply obligation quota that miners are required to meet. Meeting domestic supply obligations is a key requirement when the government considers producer applications to increase output. But Jakarta is likely to be wary of sanctioning output increases this year, as it did in 2018, because of the potential pressure it would apply to seaborne prices.

Indonesian exports vs fob GAR 4,200 prices *mn t, $/t*

Rising domestic coal demand is another headwind for Indonesian exports, with power-sector consumption potentially rising by 7mn t on the year to 97mn t in 2019 and then to 109mn t in 2020, state generator PLN head of coal procurement Harlen En said at a conference in June.

Indonesian exports reached 428.8mn t in 2018 and *Argus Seaborne Thermal Coal Outlook* forecasts a 20mn t increase in 2019. This would imply exports of about 223mn t in the second half of this year, down from nearly 226mn t in the first half but up from about 219mn t in July-December 2018.

There is a precedent for lower second-half exports from Indonesia, as shipments fell by 6.3pc and 5.2pc in the July-December period of 2014 and 2015, compared with the first half, as fob Indonesia coal prices trended lower in those years. Exports showed signs of dropping in June as shipments fell year on year for the first time in 10 months to a 2019 low of 33.6mn t.

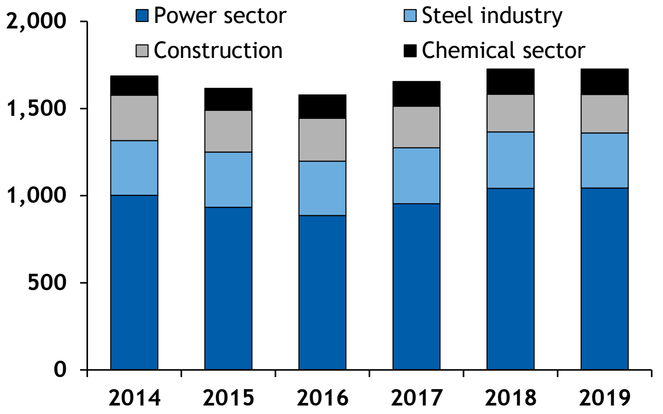
China

Chinese imports rose sharply in 2018 but that growth has levelled off in 2019, as the government seeks to limit intake from the seaborne market to last year's level. January-June thermal coal receipts totalled 113.4mn t, Chinese customs data show, up by only 1mn t year on year.

Australian coal has borne the brunt of tighter restrictions on Chinese imports this year, with receipts falling by 4mn t year on year to 21.2mn t. Combined imports from smaller exporting countries fell by 2.6mn t from the previous year, driven largely by low overland flows from Mongolia.

Imports from Indonesia and Russia both increased, helping to offset declines from other origins. Receipts from Indonesia rose by 6.8mn t year on year to 76.4mn t, while Russian deliveries increased by 1.2mn t to 9.4mn t. Receipts from

Chinese 1H coal consumption by sector *mn t*



Colombia were nominal as of the end of June, but at least 1mn t could be imported early in the second half of this year following sales agreed in April.

Production of all types of coal in China rose by more than 57mn t year on year to 1.75bn t in the first half of 2019, and growth in thermal power generation — which is predominantly coal-fired — slowed as a result of increased nuclear and hydroelectric output and weak economic conditions. This helped China to limit its recourse to the seaborne market for additional coal supply.

Thermal power generation rose by 2.5pc on the year to 2,435TWh in January-June 2019, representing a marked slowdown in growth compared with increases of 9pc and 7.8pc, respectively, in the first half of 2017 and 2018.

Growth was slower in power-sector coal consumption specifically, which increased by 2mn t to 1.04bn t in the first half of 2019, compared with an 88mn t increase in 2018, government data show. Total coal consumption across all sectors — including the chemical, construction and steel industries — was flat year on year, at 1.73bn t.

Coal stocks at key Chinese plants, ports and mines were at a four-year end-of-June high of more than 45 days of consumption, which could alleviate demand for seaborne coal as the year progresses.

But the arbitrage for imported coal into China has remained open in recent months, supporting annual growth in seaborne receipts of 6pc in June and 13pc in July. The discount held by cfr south China prices for imported coal over domestic fob Qinhuangdao prices, including freight, port charges and value-added tax, doubled year on year in the first half of 2019 and was 140pc wider in June.

As year-to-date imports continue to grow, the threat of further government intervention to curb receipts increases and downside price risk builds in the global market.

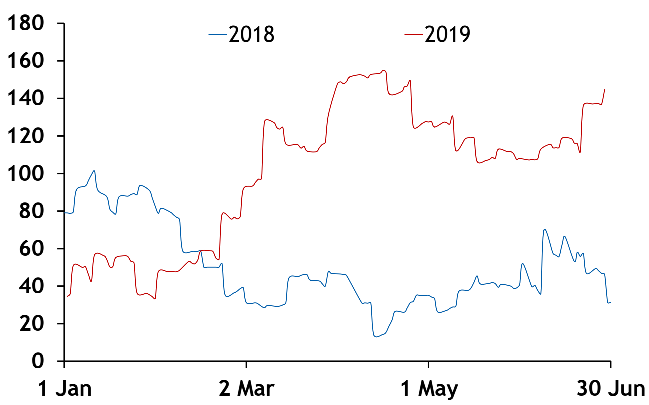
Northeast Asia

High-grade coal demand from Japan, South Korea and Taiwan — which together make up the world's biggest coal demand hub — slipped by 4pc from last year to 133.8mn t in the first half of 2019, marking a slight acceleration in the downtrend observed in 2018.

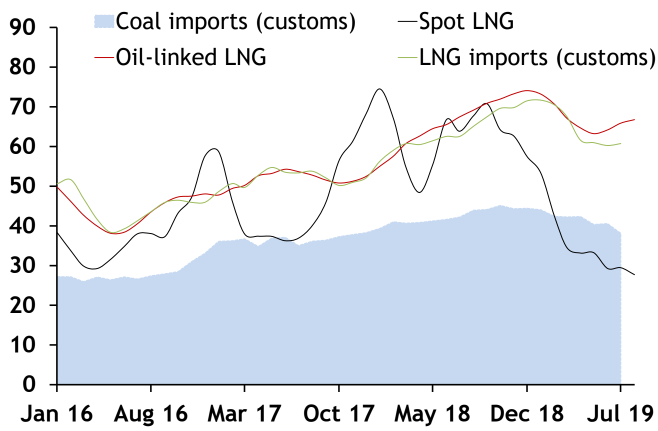
Demand for fossil fuels in Japan and South Korea has been pared by recovering nuclear availability in 2019, although growth in nuclear is expected to slow in the second half of this year, which will ease the downward pressure on coal and gas demand.

Coal remains highly competitive with natural gas for thermal generation in both markets, despite plunging spot LNG prices in the region, because of contractual constraints faced by Japanese and South Korean buyers.

China imported coal discount to domestic supply *Yn/t*



Japanese generation costs (38% coal, 55% gas) *$/MWh*



The majority of Japanese and South Korean LNG imports are delivered under long-term oil-indexed supply agreements, the prices of which are influenced by oil prices with a six to nine-month time lag. Buyers' flexibility to reduce offtake from these contracts is limited by contractual terms, meaning the average import price of LNG to both countries is significantly higher than the prevailing spot LNG price in northeast Asia and the fuel remains, on average, uncompetitive with coal.

In Japan, this cost advantage has helped to insulate coal demand from some of the impact of the 114pc increase in nuclear generation to 36TWh in January-June 2019, with thermal coal imports slipping by 1.2mn t, or 2pc, to 53.9mnt, compared with a comparatively steeper fall of 3.5mn t, or 8pc, in the country's LNG imports.

But South Korean coal imports have fallen more sharply, by 10pc compared with last year to 51.4mn t in January-June, as enforced coal-plant shutdowns have constrained available capacity and curbed power-sector consumption, amid a government drive to improve air quality. So the 33pc increase in South Korean nuclear generation to 80TWh in January-June weighed more heavily on coal burn in the first five months of this year.

South Korean coal restrictions eased significantly in June 2019, resulting in a marked shift back from gas to coal-fired generation, and the potential for fewer restrictions in the second half of this year could support coal burn compared with January-June 2019. South Korean coal capacity faced restrictions in the summer-winter shoulder period in 2018, but if the government has front-loaded restrictions to the first half of this year — they were 2.3GW higher year on year, at 8.8GW, in January-June 2019 — then utilities may be able to make fuller use of coal-fired plants in the months ahead.

The country increased imports in July year on year for the first time since January, with receipts climbing by 1.2mn t to a six-month high and a July record of 10.7mn t as plant restrictions eased.

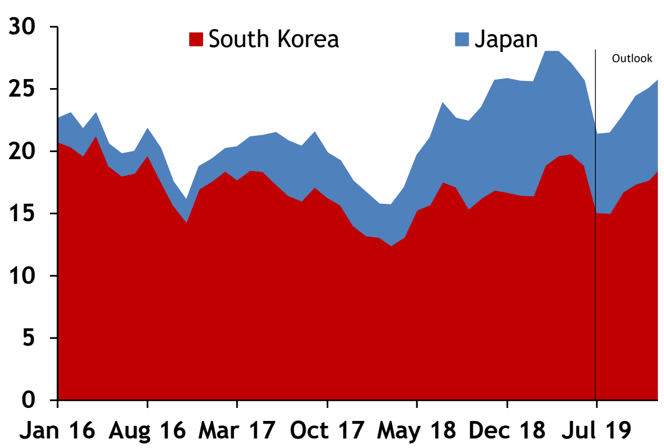
But nuclear remains a headwind to South Korean fossil fuel demand more generally. A new 1.4GW reactor is expected to begin operations in the coming months and maintenance schedules are less onerous than in recent years, which could support a small year-on-year increase in output in July-December. A further 2.8GW of new nuclear capacity is scheduled to be added in 2020.

Four older coal-fired plants with a combined capacity of 2.24GW are scheduled to close at the end of the year, which could also temper winter coal burn into 2020.

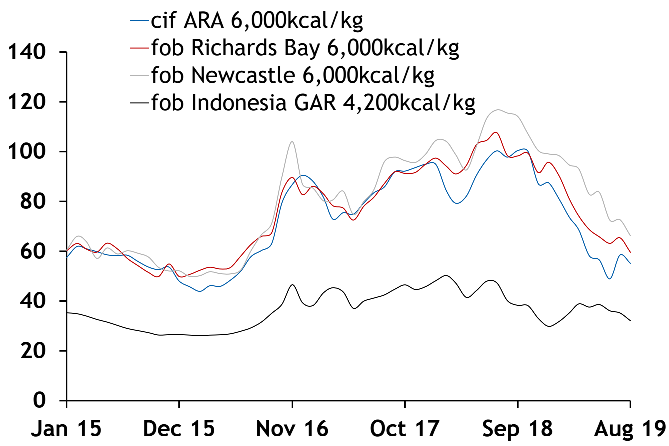
In Japan, nuclear generation availability is now receding from its 9.1GW peak in the first quarter, as mandatory maintenance sets in at reactors following 13 months of continuous operation. Second-half availability is expected to be 6.7GW, compared with 8.3GW in January-June 2019 and 7.2GW in July-December last year, while first-quarter 2020 availability could be 2.4GW lower year on year. This should support demand for fossil fuels compared with the first half of 2019, with the extent of the growth determined by weather-driven power demand.

As coal-fired plants have largely served as a source of baseload generation — running at more than 80pc of available capacity in the past 18 months — coal demand may have less scope to rise, just as it has been slower to fall in recent months. LNG is likely to remain a key source of flexibility to meet peak seasonal demand, with Japanese gas plants comparatively underutilised, having run at only 55pc of available capacity in the past 18 months.

Japanese/South Korean nuclear generation GW



Selected seaborne thermal coal prices $/t



That said, Japanese thermal coal imports in July rose more strongly year on year than LNG imports, with receipts up by 5pc to 10.4mn t.

Australia

Australian thermal coal exports have grown from last year, despite being hit by restrictions into China, with suppliers intensifying their focus on other Asian markets. Total exports increased by 1.7mn t to 101.6mn t in January-June this year, as a 4.3mn t rise in shipments to Southeast Asian markets offset the decline to China.

Australian competition also stepped up in South Korea and Taiwan, with an additional 1.5mn t sent to both markets, offsetting a 1.6mn t drop in exports to Japan. Stronger competition from Australian producers in the region squeezed out product from other key exporting countries, including Indonesia and the US, but particularly South Africa and Russia. Northeast Asian imports of South African and Russian coal fell by nearly 5mn t and 3mn t, respectively, compared with a year earlier.

But low demand for high-grade Australian coal in the key Japanese market and restrictions on shipments clearing Chinese customs have weighed on fob Newcastle coal prices. Argus' NAR 5,500 kcal/kg and NAR 6,000 kcal/kg fob Newcastle assessments averaged $58.67/t and $87.48/t, respectively, in the first half of 2019, down from $78.02/t and $102.55/t in the same time last year.

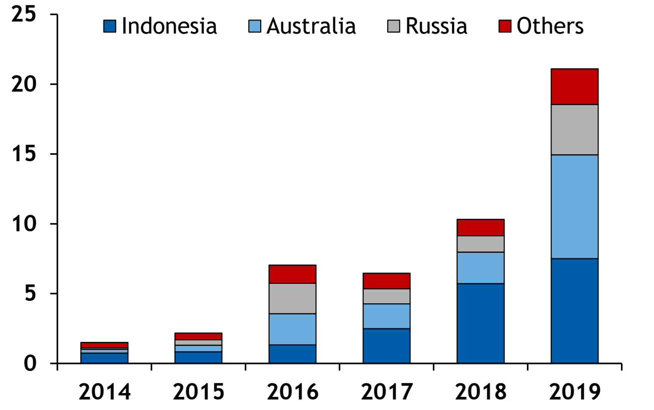
Semi-soft coking coal premiums to NAR 6,000 kcal/kg Newcastle material were slightly narrower on average through January-June compared with 2018, although the spread did widen to nearly $47/t in June, potentially driving some producers to wash high-grade thermal coal to make semi-soft coking coal.

The premium narrowed to about $42/t in July, reducing the incentive to wash high-grade coals, and annual thermal coal exports are still expected to rise by about 4mn t year on year in 2019. This growth is likely to be contingent on suppliers capturing any recovery in demand in Japan and South Korea in the second half of this year and further growth across southeast Asia.

Southeast Asia

Southeast Asian coal demand growth accelerated in the first half of 2019, as most countries in the region continue to expand their coal-fired capacity to meet rising power demand. Southeast Asian countries imported about 61mn t in January-June 2019, up by 10mn t from the same period in 2018 and representing the second-biggest regional growth increase in the global market after India.

Vietnamese 1H thermal coal imports *mn t*



Vietnamese imports of all coal grades doubled to 21mn t in January-June from the same period last year, following additions to the country's coal-fired fleet. Import demand is expected to continue growing in the years ahead as new coal-fired projects come on line.

The 600MW Vinh Tan 4 extension and 600MW Duyen Hai 3 extension are scheduled to start operations this year, according to the state-owned utility EVN. The country's coal imports are expected to exceed 90mn t by 2030, as domestic coal output will not be sufficient to meet power-sector demand, EVN deputy director Le Van Luc said in August.

The Philippines was the second-biggest driver of demand growth in the region, with imports rising by about 2.4mn year on year to 12.5mn t in the first six months of 2019.

Last year, the country's coal-fired capacity increased by 720MW to reach 8.8GW, as the Pagbilao plant's third 420MW unit, the Luzon plant's second 150MW unit and the second unit of the 150MW Malita plant came on line. The country plans to build another 15.5GW of coal-fired capacity in the long term, with committed projects, accounting for 5.1GW of this total.

Elsewhere, Malaysian receipts dropped year on year, following low deliveries in June. Coal imports in June alone fell by 1.4mn t from first-half 2018, bringing first-half 2019 imports down by 1.1mn t to 15.49mn t. Thai imports fell by about 500,000t year on year to less than 12mn t as a result of low power-sector and industrial consumption.

South Asia, Africa and the Atlantic

Indian demand for seaborne thermal coal imports accelerated in the first half of 2019, helping absorb rising Indonesian coal supply and offsetting weaker demand in the Atlantic and northeast Asia.

Imports have fallen recently in response to a seasonal slowdown in industrial activity and monsoon-driven disruption, but power sector demand is likely to be firm again later this year and Indian imports could be key to balancing a well-supplied global market.

In the Atlantic, European thermal coal demand has sunk to historic lows, with gas prices falling through coal-to-gas fuel-switching thresholds as a result of a spike in LNG supply to the continent and unseasonably high post-winter gas inventories.

The decrease in coal demand and prices in Europe has weighed on Colombian and US exports, which have also struggled to increase their reach in Asia because of greater competition from Pacific suppliers and declining demand in key markets.

India and Pakistan

India's thermal coal imports rose by 17.6mn t on the year to 98.8mn t in the first half of 2019, shipping data show. Receipts hit a record high of just over 19mn t in April, when Indonesian receipts surged to 12.1mn t.

Stronger power sector demand and greater seaborne availability boosted imports of Indonesian coal by 16.1mn t on the year to account for 64pc of receipts in the six-month period. Indian power sector imports rose by 9.6mn t to 35.5mn t in January-June, according to data from the Central Electricity Authority (CEA).

Imports made up 10.6pc of the power sector's first-half deliveries, up by 2.4 percentage points on the year. This suggests power sector imports accounted for 36pc of India's overall seaborne receipts in January-June.

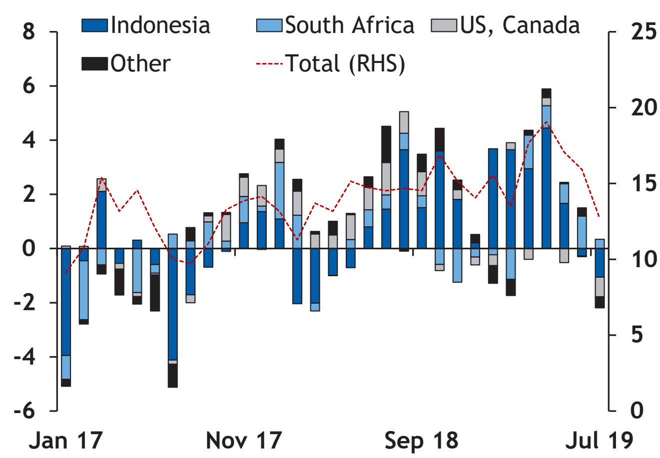
The private sector — particularly two major plants in Gujarat — drove India's imports. Private-sector utilities' seaborne receipts rose by 6.8mn t, or 31.4pc, on the year to 28.3mn t.

Imports for Adani's 4.62GW Mundra plant surged to 9mn t, up from just 2.2mn t. And Tata's 4GW Mundra plant imported 6.1mn t, up by 360,900t.

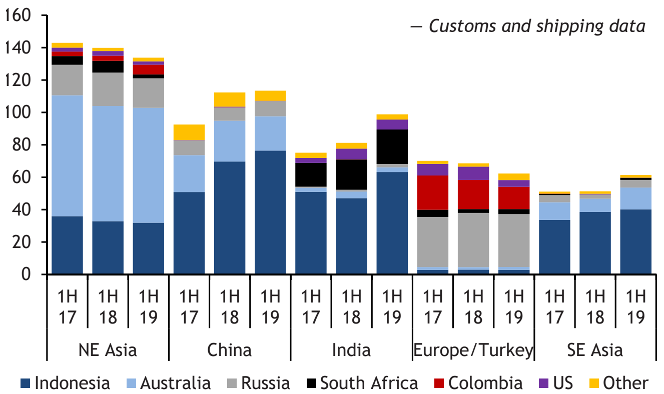
Mundra coal burn rose following a Supreme Court decision in October 2018 to amend the plant's power tariffs in response to rising fuel costs. The Central Electricity Regulatory Commission (CERC) approved amended power purchase agreements (PPAs) on 12 April, which were applied retrospectively from 15 October 2018. These changes allowed the Adani Mundra operation to increase its capacity under two PPAs to 2.43GW from an original 2GW — improving utilisation rates and cash flow, it said.

Strong industrial activity ahead of May's elections also supported seaborne demand early in 2019, particularly for

Annual change in Indian imports by origin *mn t*



Global thermal coal imports *mn t*



South African supplies, which rose by 2.6mn t to 21.3mn t in the first half of 2019.

But import-demand has weakened more recently and overall imports in July slipped to their lowest since February 2018, at just 12.7mn t. This was also the first annual decline since December 2018, according to shipping data.

And power sector demand could be subdued early in the second half of 2019. Output from 15 majority seaborne coal-fired plants — with a combined capacity of 21.77GW, or 11pc of the country's coal-fired fleet — rose by 1.31TWh on the year to 8.73TWh in July. This is a slowdown from annual growth of 2.21 TWh/month in the first half of the year.

In addition, a seasonal slowdown during the June-September monsoon and a lack of funding for infrastructure projects has resulted in the limited uptake of port coal stocks by industrial consumers.

In Pakistan, weaker industrial demand cut thermal coal receipts by 328,800t on the year to 6.8mn t in January-June, according to the Federal Board of Revenue (FBR), although the power sector has offered growth opportunities.

Lower domestic cement sales and a depreciating currency have weighed on industrial demand for seaborne coal. The value of the rupee slipped to around Rs157 against the US dollar in late June — close to historical lows — following an IMF bailout deal in May.

Industrial coal demand may continue to be limited in the second half of the year, with domestic cement sales currently down by 15-20pc. Some coal procurers with operations in the north are also taking more competitively priced Afghan supplies or local coal, cement producers have said.

On the other hand, new imported coal-based operations coming on line have supported South African and Indonesian imports. The 1.32GW China Power Hub Generation Company's Balochistan plant recently became fully operational, after coal imports to feed the plant began in September 2018.

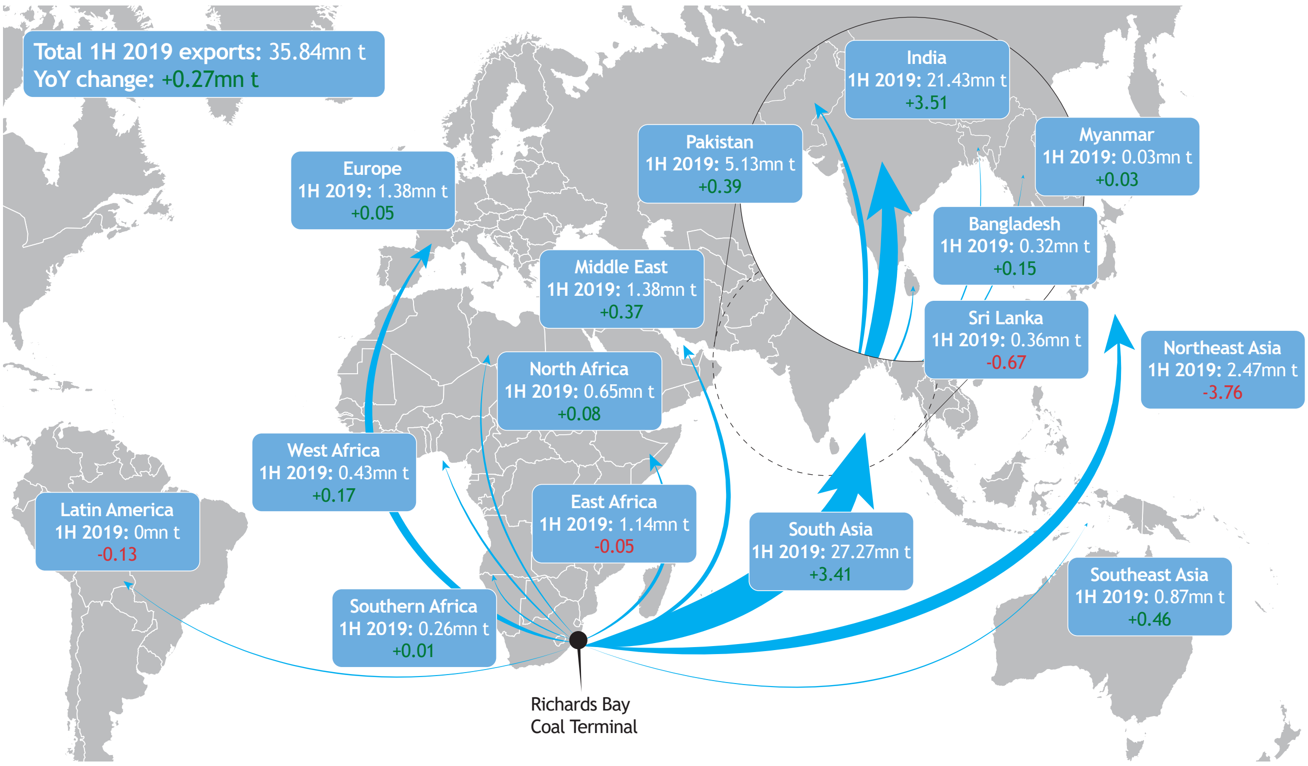
Power-sector receipts gained by 277,700t from the first half of 2018 to just under 3.2mn t — receipts from South Africa accounted for 72.6pc and Indonesian coal the remainder.

South Africa and Mozambique

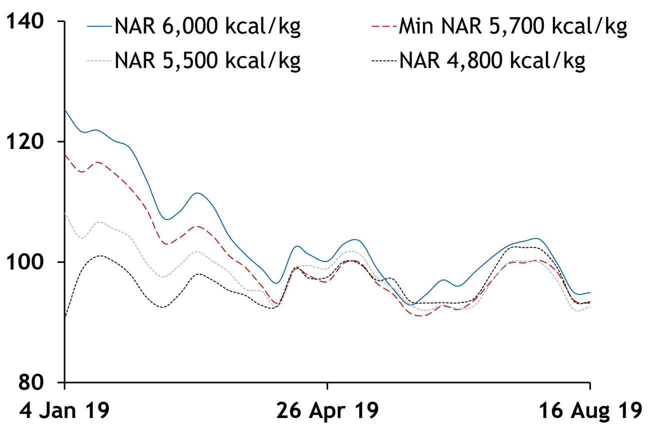
South African thermal coal exports were steady on the year in January-June, but shippers sent more coal to India at the expense of northeast Asian markets amid rising demand in the former market and greater competition from Australian coal in the latter.

South African exports dipped by 186,900t to 38.8mn t, according to Sars customs data. The key Richards Bay hub shipped 37.7mn t, Sars data show, with Richards Bay Coal Terminal (RBCT) accounting for 35.8mn t of this.

RBCT exports to India rose by 3.5mn t to a three-year high of 21.4mn t in January-June. Loadings for India accounted



India-delivered, energy adjusted South African coal *$/t*



for 59.8pc of RBCT's first-half exports, up from a 50.4pc a year earlier and 46.5pc in January-June 2017. The increase in deliveries to India helped offset some of the 3.8mn t decline in combined shipments to northeast Asia.

Loadings for India fell by 481,700t on the year to 3.7mn t in June, down from a 17-month peak of 5mn t in May. Volumes were probably curtailed as some buyers turned to high-grade coals, which established a cost advantage.

The minimum NAR 5,700 kcal/kg product held a $1.15/t energy-adjusted price advantage for delivery into India — including taxes and rail delivery — over NAR 5,500 kcal/kg coal in the two months to mid-June, *Argus* calculates. By contrast, at the start of 2019, minimum NAR 5,700 kcal/kg coal was at around a $10/t premium on an energy-adjusted, India-delivered basis.

Moreover, domestic demand for lower-grade supplies reduced NAR 4,800 kcal/kg availability for export, most of which would go to India. This in return tightened lower-grade differentials against API 4 swaps, lifting the grade to a premium to NAR 5,500 kcal/kg coal on an energy-adjusted and India-delivered basis since late-May.

South African state-operated utility Eskom received 62.9mn t of coal in January-June, of which 56.5mn t was burned over the period. Eskom sought to boost plant inventories after 10 facilities held less than 20 days' inventory in late 2018.

South African exports to Mozambique — probably loaded at Maputo for the seaborne market — fell to 912,200t in the first half of the year from 1.5mn t in January-June last year. Loadings of Mozambican coal held steady. Brazilian mining firm Vale sold 1.1mn t of thermal coal in January-June, steady on the year.

Beira, which mostly ships coal mined by two India-based companies, loaded 1mn t of thermal and coking coal in January-June, of which thermal coal accounted for 40pc. Total exports edged up from 975,000t of both types of coal in the first half of 2018. Most of the 400,000t or so of thermal coal loaded was delivered to India, while two cargoes were bound for Senegal, a source close to the port said.

EU and Turkey

EU members and Turkey imported a combined 62.3mn t in the first half of 2019, down by 6.3mn t — the biggest year-on-year decline for any importing region over the period.

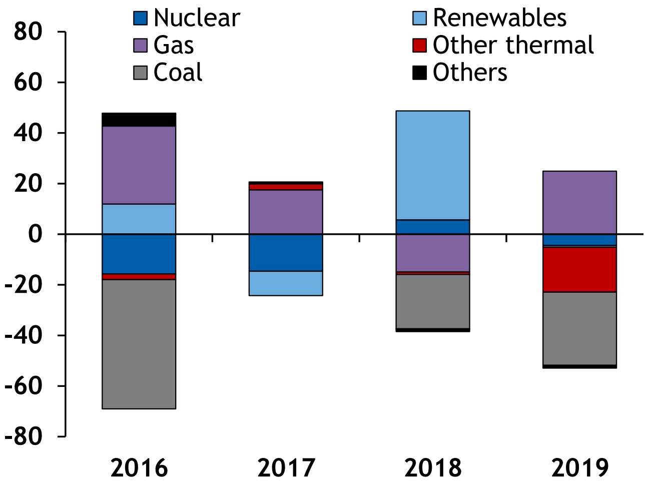
Port stocks in northwest Europe began January much higher than in previous years, but seaborne imports were initially strong as utilities sought to replenish stocks at power plants that were depleted last year, when low river levels disrupted barge shipments inland. But coal burn has been pressured by strong generation from increasingly cheap gas, keeping coal stocks high and squeezing out imports.

EU members' net monthly coal receipts from outside of the bloc slipped to 6.5mn t and 6.2mn t in May and June, respectively — 18-year lows in both cases.

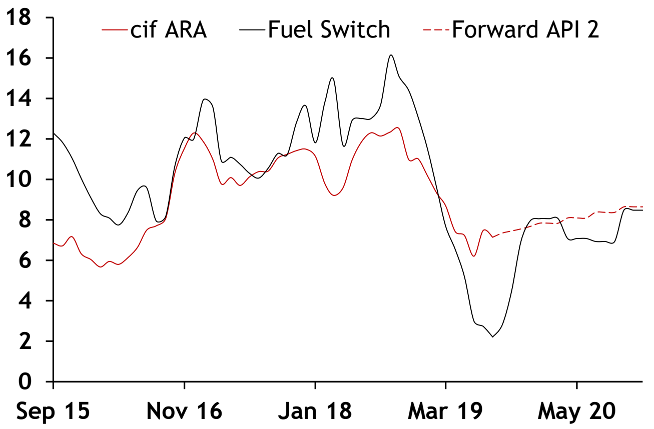
Day-ahead gas prices in Germany have fallen sharply in 2019 and have been weak enough to allow even low-efficiency combined-cycle gas turbine units to compete with 40pc-efficient coal-fired plants in recent months.

Competitive gas prices for thermal power generation — driven by unseasonably full storage sites and a sharp increase in LNG imports — have helped gas displace coal for thermal generation this summer. Coal burn in Germany, Spain, the UK and France fell by 9TWh on the year in the second quarter and by 4.1TWh in July, while gas burn in the

Annual change in Jan-Jul output (DE, ES, UK, FR) *TWh*



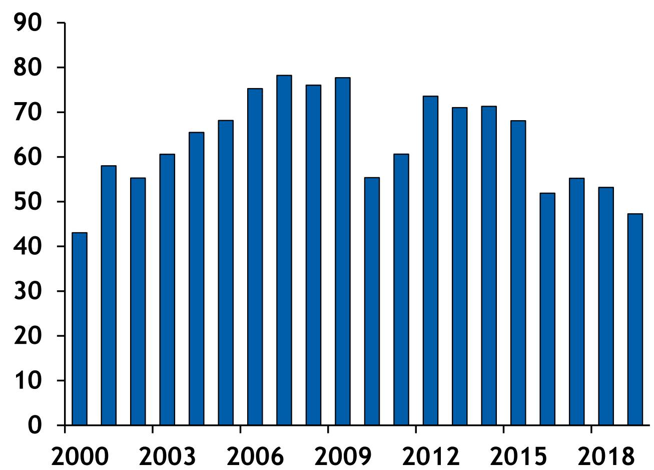
cif ARA vs German coal-gas fuel switch (40:55) *€/MWh*



same markets rose by nearly 14TWh in the second quarter and by almost 8TWh in July. This reduced coal's share of thermal generation to 12pc in April-July, down from 22pc a year earlier.

And forward prices suggest that gas will continue to take a share from coal for the rest of the year. The API 2 fourth-quarter swap was €1.12/MWh ($8.68/t) higher than the ceiling at which 40pc-efficient coal-fired plants can compete with 55pc-efficient gas-fired units on 19 August. Last year, spot coal prices were on average €2.69/MWh lower than the same coal-gas fuel switch threshold during the fourth quarter, when coal accounted for 27pc of all thermal generation in Germany, Spain, the UK and France. This share is set to slide in 2019 and depress coal imports through to the year's end.

Net 1H thermal coal imports to the EU *mn t*



Italy drove the 5.9mn t drop in net EU coal imports in January-June, with receipts falling by nearly 1.6mn t, at 3.7mn t. Poland, France, the UK and Ireland also dragged the total down, each importing 0.8mn-1.2mn t less. Receipts in Germany and the Netherlands partly offset the trend, with imports up by 382,000t and 187,000t, respectively, to 5.9mn t and 15.7mn t.

Russian supply to the EU fell by less than 800,000t on the year in the first half of 2019 to 27.2mn t, boosting the country's share of EU imports by five percentage points to 57pc. Imports from the US and Colombia fell by 3.9mn t and 3.6mn t, respectively, accounting for much of the overall decline in thermal coal receipts in January-June.

In Turkey, thermal coal imports fell on the year because of a weaker economy and firm hydro output. Imports of 14.1mn t in January-June were down by around 200,000t on the year.

The demand outlook is subdued for the rest of this year because of high stocks held by power utilities. Some coal-fired utilities have deferred deliveries under their term deals as their generation was lower than projected in the first half of 2019, signalling that spot demand is likely to be limited this year.

Turkish utilities are expected to leave more space for spot cargoes in their procurement strategies next year, as they wait to see if they will have the option to book Capesize cargoes of Russian coal from Taman port next year. The port is to start loading Capesize vessels from late 2019, owner Oteko said.

US and Colombia

Exports from Colombia and the US fell by 4mn t and 4.3mn t on the year, respectively, to 36.3mn t and 19.5mn t.

Weaker demand in Europe and Turkey was the key driver, as suppliers struggled to compete on cost with Russian supply and as hedged US exports continued to flow early in 2019.

Colombian exporters did have some success, with shipments of around 1mn t to China in the second quarter, although this was countered by a similar drop to other markets in northeast Asia. Colombia also increased shipments to Latin America by around 1.1mn t, but this only slightly offset the 5.3mn t drop in exports to Europe and Turkey.

US exports to Europe, by contrast, fell by only 1mn t in the first half, but this drop is due to accelerate in the second half as hedged volumes are worked through and with US high-sulphur coal no longer pricing into Europe at a wide discount to other origins on a delivered basis.

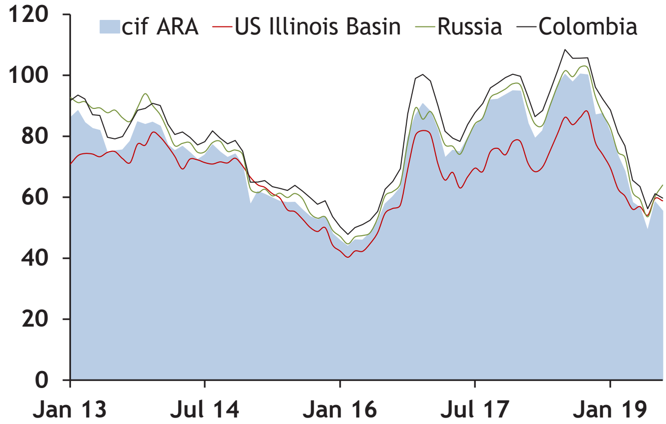
Europe-delivered US high-sulphur coal priced at a $13/t energy-adjusted discount to the cif ARA benchmark and a $15/t discount to landed high-grade Russian supply in 2018, but those spreads have evaporated in 2019, reducing the incentive for utilities to create a blended US-Russian feedstock for power plants.

US coal lost more ground in northeast Asia and exports also fell to Latin America, India and southeast Asia, with total shipments in 2019 due to fall by 13mn t to around 35mn t.

Russia

Russian firms sustained exports to Europe and Turkey at last year's level in the first half of 2019 and made incremental gains in Asia, boosting total shipments by 1.7mn t to 76.3mn t.

cif ARA vs Europe-delivered coal prices *$/t*



Exports to Europe and Turkey fell by around 500,000t to 39.3mn t, but producers lost most ground in northeast Asia, where shipments slid by 2.1mn t to 17.7mn t.

Total shipments were boosted by gains in most other regions, however, including nominal increases to China and Latin America, a 2mn t increase to southeast Asia and a 1.1mn t rise to India.

A weak outlook for coal burn in Europe — which accounts for around half of Russian shipments — presents a downside risk to exports later this year, although annual supply to the seaborne market is forecast to increase by 4mn t compared with a year earlier, according to the *Argus* Seaborne Thermal Coal Outlook.

Despite losing ground in the first half of the year, Russian shipments to northeast Asia were firm at the end of the first half and there could be an opportunity to recover further ground later in the year, with Japanese and South Korean coal burn likely to rise heading into winter.

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