



EURACOAL Market Report 2020 no.2

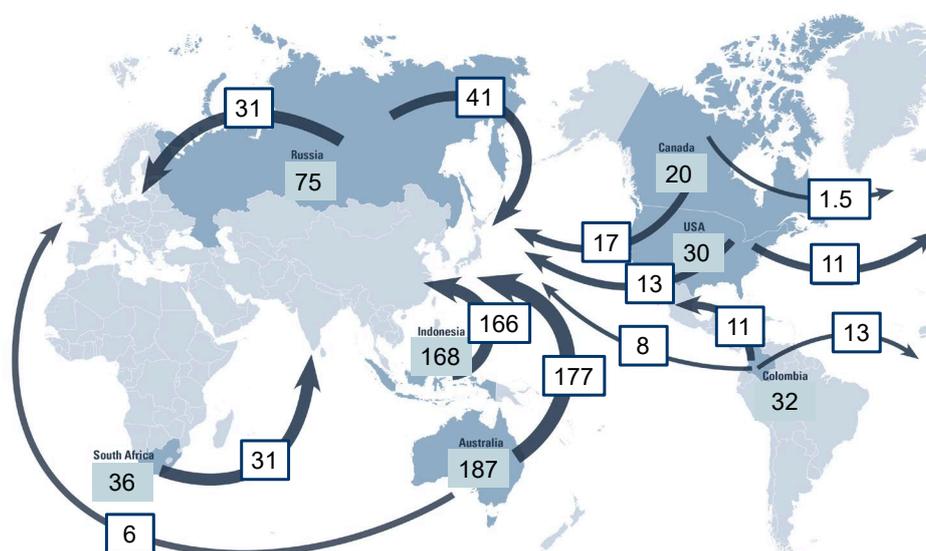
November 2020

WORLD COAL MARKET DEVELOPMENTS

Global Coal Trade

In H1 2020, global hard coal production fell 3.5% compared with H1 2019 to 3.45 Gt, falling less than coal demand which might fall 7% in 2020 according to an IEA forecast. Coal production declined everywhere except China where production grew +49 Mt or +3% to 1.8 Gt, with higher production in March and April than in the same months of 2019. Colombia (-11 Mt, -27%), the US (-86 Mt, -26%) and Canada (-7 Mt, -25%) all experienced relatively dramatic production falls due to the Covid-19 pandemic, but significant production was lost also in Indonesia (-27 Mt, -9%) and Russia (-18 Mt, -8%) compared with H1 2019. Australia (-9 Mt, -4%), South Africa (-4 Mt, -3%) and India (-8 Mt, -2%) each reported relatively smaller production losses.

Main seaborne hard coal trade flows in H1 2020



Source: VDKi preliminary data

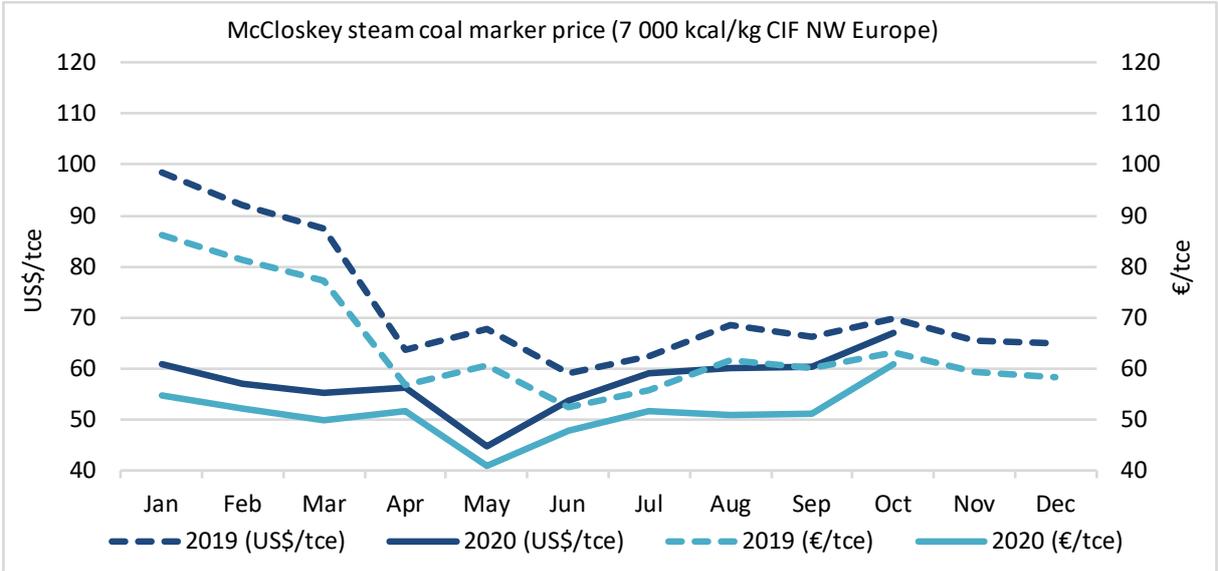
There was an 8.7% drop in seaborne hard coal trade to 556 Mt in H1 2020, compared with H1 2019, with flows as shown in the map above, centred on the now dominant Pacific market, and in Tables 2 and 3. Russian coal exports to Asia were, for the first time, higher than exports to Europe – a major change since 2019 and reflecting poor demand in Europe. The US exported 13.6 Mt less in H1 2020 compared with the same period in 2019, a massive 31% reduction. Russia (-11.7 Mt, -13%), Colombia (-3.8 Mt, -11%), South Africa (-4.0 Mt, -10%) and Indonesia (-14.2 Mt, -8%) all saw steep falls in

exports, while Australia (-7.0 Mt, -4%) fared relatively better. Only Canada (+3.0 Mt, +18%) enjoyed export growth, despite its lower production. With almost equal shares, Australia and Indonesia together accounted for 64% of global seaborne hard coal trade – although Australian exports are threatened by unofficial Chinese trade sanctions. The US share fell from 8% in 2019 to 5% in H1 2020. Despite the declining market, Russia has positioned itself to compete against Colombia in, for example, the Mediterranean market via its Black Sea and Azov Sea ports.

Coal Prices

Coal prices continued a downward trend in H1 2020, with metallurgical prices being hit by depressed steel demand and falling to around 100 US\$/tonne for prime coking coal. Moreover, there were no real signs of price recovery which would be needed to stimulate investment in new capacity, such as the recently permitted 15 Mtpa Olive Downs coking coal project in Queensland, Australia. Thermal coal prices showed diverging trends, with a bottoming out at 40-50 US\$/tonne for exporters tied to the Atlantic market and presumably indicating a threshold below which coal supply is uneconomic, while those on the Pacific market enjoyed higher prices of 50-60 US\$/tonne. A short-lived price surge in Q1 2020 for South African coal from Richards Bay, was fuelled by Indian sponge iron producers demanding a particular coal quality. Another outlier was the Chinese domestic market where prices fell only briefly from around 90 US\$/tonne due to the country’s quick recovery from the pandemic which began in Wuhan – in stark contrast to the situation elsewhere.

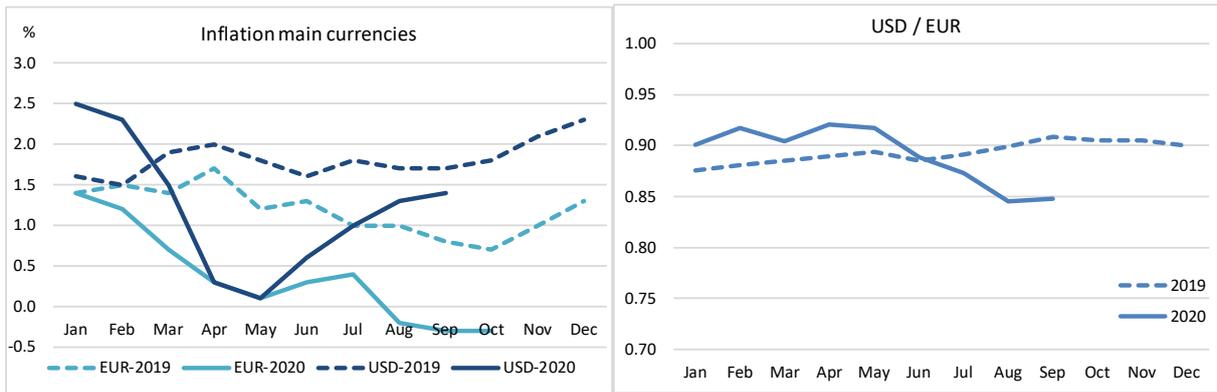
More generally, the expectation is for a demand recovery, coupled with supply shortages which should drive coal prices higher, although Fitch Ratings forecast only 58 US\$/tonne for 2020 (FOB Newcastle 6 000 kcal/kg), rising to 68 US\$/tonne in 2021. IHS forward curves with lows in April, in contango at least until calendar year 2024, and generally confirming Fitch at levels that make coal a competitive fuel, but leave producers struggling.



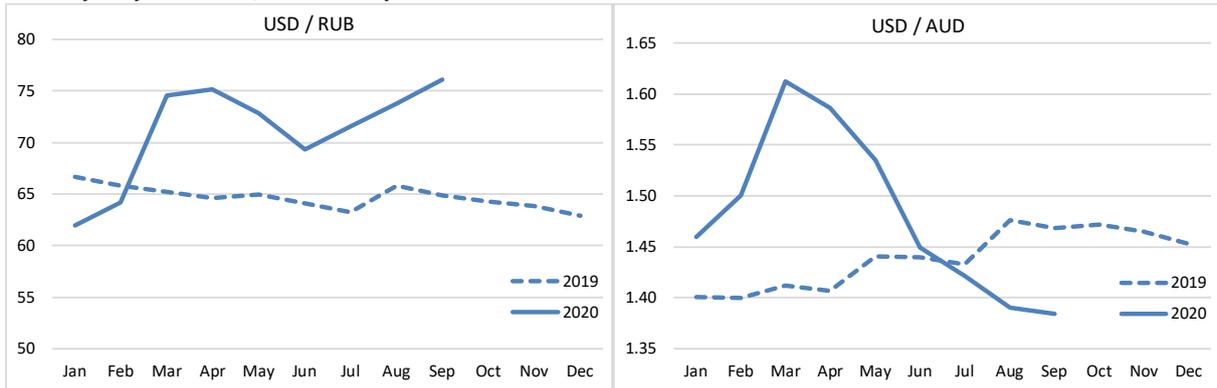
Source: IHS Markit (McCloskey first week quotation of the month, basis 6 000 kcal/kg converted to 7 000 kcal/kg)

Global crude steel output decreased in H1 2020 by 6.0% to 873.1 Mt compared with H1 2019 according to the World Steel Association. Steel output fell in the EU by 19% to 68.3 Mt, this being just 7.8% of the global total (Table 4).

The OPEC Reference Basket (ORB) oil price was around 70 US\$/bbl at the start of 2020 and collapsed more dramatically than other commodities as the Covid-19 crisis dramatically hit transport fuel demand. This reference oil price hit an all-time low of 12 US\$/bbl towards the end of April (Table 1). Remarkable, at the same time, the price for future deliveries of West Texas Intermediate crude went briefly negative at -38 US\$/bbl. ORB subsequently recovered to above 40 US\$/bbl in Q3 2020.



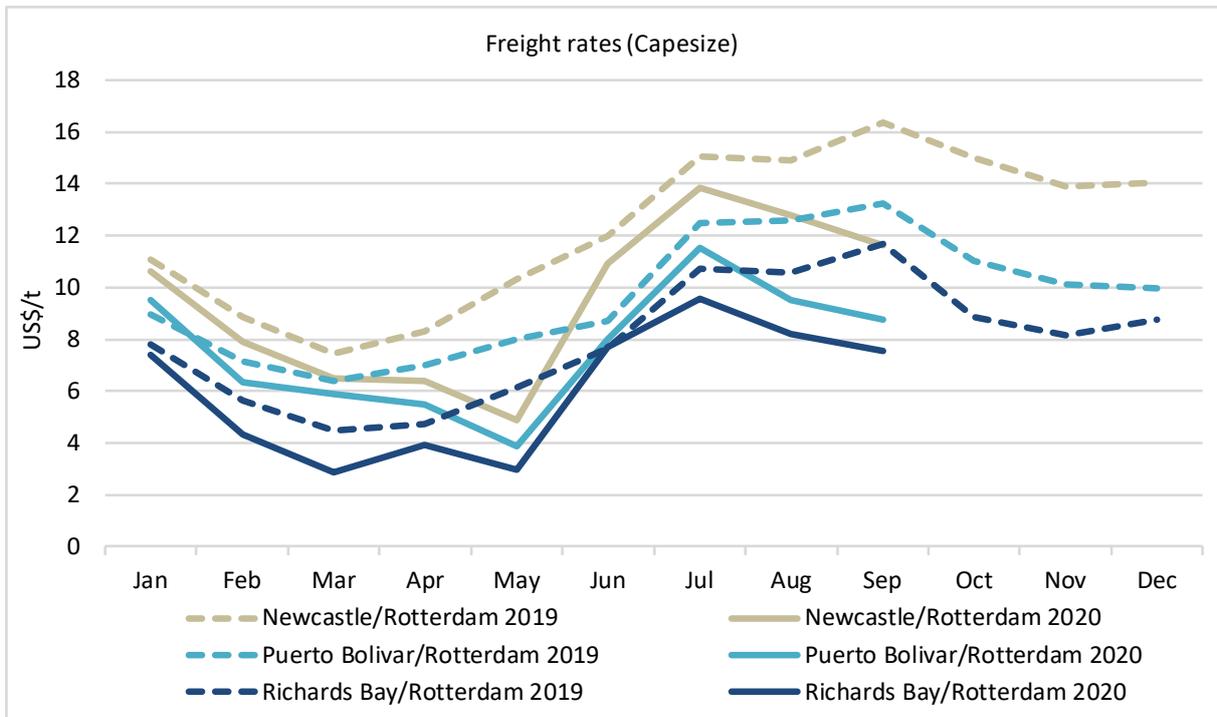
Sources for inflation: ECB; US Bureau of Labor Statistics



Sources for exchange rates: ECB, BoE and OECD

Freight Rates

Freight rates, which often reflect the macro-economic situation, collapsed in Q1 2020 to below US\$ 3 for the formerly important Richards Bay to Rotterdam route as the pandemic struck. Rates rebounded sharply in expectation of greater economic activity – as predicted in the previous EURACOAL Market Report and similar in fact to commodities and stock markets in general.



Source: Clarksons

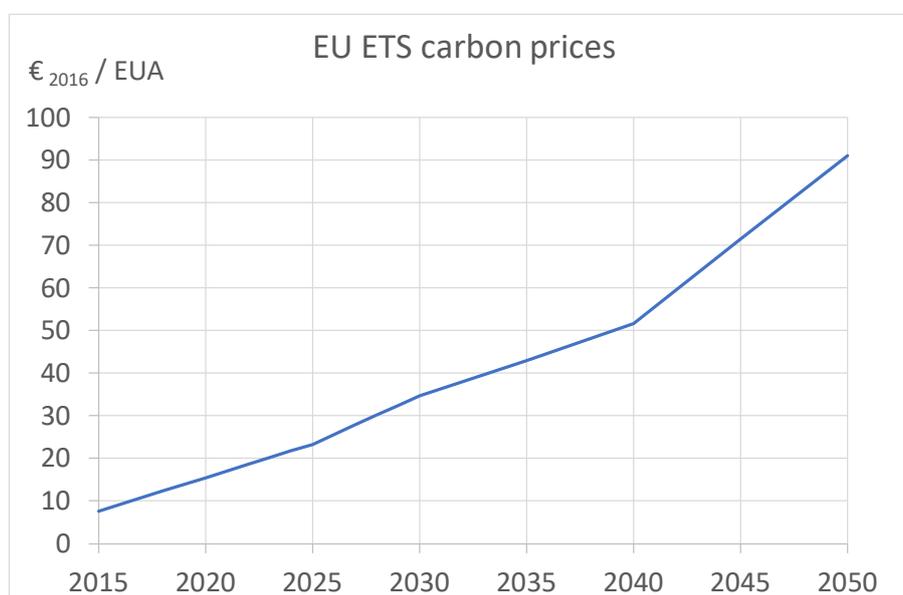
EU COAL MARKET¹

	2020 (1-6) Mt	2019 (1-6) Mt
Hard coal imports	44.2	72.8
Hard coal production	28.3	33.5
Lignite production	112.7	159.2

Hard coal production in the European Union fell to 28.3 Mt in H1 2020 (-5.2 Mt or -15.6% compared with H1 2019), this being a much larger relative production fall than seen at the global level – see Table 5. Coal imports were heavily depressed at 44.2 Mt, a massive 39.3% lower than in H1 2019 – see Table 6. Steam coal demand suffered as less coal was used for power generation – a direct result of the ongoing Covid-19 crisis, low fossil gas prices and high EU ETS allowance prices. For the same reasons, lignite production fell by 29.2% to 112.7 Mt in H1 2020 compared with H1 2019.

Carbon Prices

Allowance prices under the EU emissions trading system (ETS) held steady at around 24 €/EUA over the first two months of 2020, during the early stages of the global pandemic. Mid-March saw prices collapse to 15 €/EUA, reflecting lower demand from the power and industrial sectors as industrial output was hit by government-imposed lockdowns across the European Economic Area. Some called for further interventions in this supposedly market-based system to boost prices. However, like commodities, allowance prices recovered above pre-pandemic levels, reaching almost 30 €/EUA at the beginning of July and briefly hit this perceived limit again in September, but fell back to below 25 €/EUA by mid-October.



2015	2018	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2035	2040	2045	2050
7.68	12.42	15.50	17.06	18.62	20.18	21.74	23.30	25.58	27.86	30.14	32.42	34.7	42.9	51.7	71.5	91.0

¹ All European coal production and trade data come from EURACOAL members or government sources.

A driver for these unexpected price developments can be found in the EU reference scenario published by the European Commission in *Energy, transport and GHG emissions trends to 2050* (July 2016). The EU-ETS carbon price projection [EUR/EUA] under this scenario was used by many member states when preparing their National Energy and Climate Plans, as indeed recommended by the Commission according to the Regulation on the Governance of the Energy Union and Climate Action ((EU) 2018/1999). In September 2020, the European Commission proposed a 55% GHG reduction target for 2030, further reinforcing the political driver for high allowance prices.

Clean dark spreads in the UK, where carbon prices are regulated at a higher price than in the EU, have remained negative throughout 2020, with clean spark spreads generally positive so favouring gas-fired power generation. In Germany, the differential between clean spark and dark spreads is narrower, because EU carbon prices are lower, and dark spreads became briefly positive in September, although not enough to threaten gas.

Carbon prices: allowance prices under the EU Emissions Trading System (ETS), 2005-2020



Source: European Energy Exchange

Hard Coal

Producer	2020 (1-6) Mt	2019 (1-6) Mt
Czechia	1.0	1.5
Germany	0.0	0.0
Poland	26.5	30.8
Spain	0.0	0.1
United Kingdom	0.8	1.1
Total	28.3	33.5

Czech Republic

The Covid-19 crisis has had severe consequences in Czechia, with hard coal production of 1.0 Mt in H1 2020, more than one third lower than H1 2019 and, for the first time, even lower than imports which stood at 1.5 Mt of mainly coking coal from Poland. Exports nearly halved.

Established in August 2019, the Czech coal commission is expected to report by the end of 2020 after considering three different coal phase-out dates: 2033, 2038 and 2043, using a baseline reference scenario from the National Energy and Climate Plan. The government has already decided to phase out coal mining by OKD which operates five mines as the country’s only hard coal producer: two mines will close in January 2021 with 2 000 job losses, two more mines will close in March 2021, while a decision on the last mine is still to be made.

Germany

The trend of declining electricity production from hard coal in Germany quickly accelerated in 2019 and 2020: annual generation fell from around 100 TWh in 2016 and 2017, but will collapse to perhaps just 30 TWh in 2020. Hard coal-fired power plants generated just 20.1 TWh from January to July 2020, this being 41.9% less than the same seven-month period of 2019, which should be compared with the exceptional fall in total generation of 9.6% due to the pandemic. In the month of July, hard coal-fired generation was down 44.8% compared with July 2019.

The poor performance of coal power generation was reflected in German import statistics, with steam coal (10.0 Mt, -45%) and coking coal (5.8 Mt, -12%) both down in the first seven months. Two thirds of steam coal imports came from Russia. Australia and the US accounted for three quarters of coking coal imports, with roughly equal tonnages, while imports from Canada grew to take a 13% share.

The auctioning process for closing down hard coal-fired power plants has started, prior to European Commission approval and, unlike for lignite power plants, with no planned exit timeline. Vattenfall, operator of two of the most modern coal-fired power plants in Germany (Moorburg, Hamburg and Reuter West, Berlin), has announced its participation in the auction process.

Italy

In H1 2020, Italy imported 3.8 Mt (-30% compared with H1 2019) of hard coal, comprising 2.8 Mt of steam coal (-27%) and 1.0 Mt of coking coal (-38%). According to the National Energy and Climate Plan (PNIEC), coal will be phased out of the Italian energy mix by 2025.

Eight coal power plants are fully or partially operated by ENEL, A2A and EPH. However, ENEL has received permission from the Ministry of Economic Development to close the first of four 660 MW units early at Federico II near Brindisi, in January 2021. This entire coal plant will be closed by 2025. To ensure the security of the national electricity grid, the government has not allowed ENEL to close other units. Meanwhile, A2A has decided to convert its two coal plants to combined cycle gas turbine (CCGT) and awaits authorisation to begin work at Monfalcone.

On Sardinia, two coal power plants run by ENEL and EP may be converted to gas, but perhaps later than 2025 as the island has no gas infrastructure and no gas pipeline to the mainland.

Coal-fired power plants in Italy

Name	Region	Owner	Units
Fiume Santo	Sardinia	EP Produzione SpA	2×320 MW
Monfalcone	Friuli Venezia Giulia	A2A SpA	165 MW & 171 MW
Torrevaldaliga Nord	Rome	Enel SpA	3×660 MW
Brescia	Lombardy	A2A SpA	70 MW
Brindisi Sud "Federico II"	Brindisi	Enel SpA	4×660 MW
Sulcis	Sardinia	Enel SpA	340 MW & 240 MW
Fusina	Veneto	Enel SpA	2×320 MW & 2×160 MW
La Spezia "Eugenio Montale"	Liguria	Enel SpA	600 MW

Italian crude steel production fell by 20% to 10.1 Mt in H1 2020, compared with H1 2019, and the national steel association, Federacciai, forecasts an overall annual decline of 17% for 2020. The Ilva steelworks question is central to future coking coal demand, with negotiations still underway between the government and ArcelorMittal, aggravated now by the Covid-19 pandemic, stoppages and tensions with trade unions. Renationalisation has been posited by some.

The Netherlands

Hard coal supply decreased in the Netherlands by 48% to 3.0 Mt in H1 2020 compared with H1 2019. Steam coal imports especially collapsed by a massive 72% to just 1.0 Mt, while coking coal imports fell 7% to 2.0 Mt. Dutch electricity production remained stable and exports to Germany increased, but cheaper gas favoured gas-fired power plants. Renewables also grew their share of power production. From September, a GHG tax on industry puts further pressure on coal use. Looking to the future, the state subsidised conversion of the Netherlands' latest coal-fired power plants to biomass was one of several options being considered, alongside more solar PV and wind.

Poland

Polish hard coal production declined 2.8% in 2019 to 61.6 Mt, and then 14.0% in H1 2020 to 26.5 Mt as steam coal dropped 4.3 Mt compared with H1 2019, mainly due to EU regulations and the pandemic. Stocks at power plants and elsewhere grew. Coking coal output held steady at 5.9 Mt in H1 2020.

Hard coal exports in H1 2020 were the same as H1 2019 at 1.9 Mt as contracts agreed in 2019 were fulfilled and industrial consumers such as CHP plants, paper mills, cement plants and sugar factories continued to take Polish coal.

Steam and coking coal imports declined 35% to 5.4 Mt in H1 2020; the closure of ArcelorMittal's Kraków steelworks plant was a major factor. Russia supplied two thirds of all coal imports.

Previously a net electricity exporter, Poland became a net importer in 2014, because of lower German wholesale prices in particular, which has damaged the Polish steam coal market. Swedish hydropower is also imported at times, whereas Polish hydropower production was minimal, but wind and other renewable power are growing.

The Polish coal sector restructuring plan for 2021 to 2049, as presented by the government in September 2020, will see the gradual closure of PGG mines, and presumably other companies' mines where the government has a controlling share. Further details are expected, but this plan will determine the shape of the coal production curve after 2020, falling to the announced zero in 2049.

Spain

Spanish coal production largely ceased in 2018. Insignificant production comes from the small San Nicolás underground coal mine near Mieres in Asturias. Coal imports fell to just 2.1 Mt in H1 2020, a fall of 65% compared with the same period of 2019.

United Kingdom

The UK left the EU on 31 January 2020. All coal mining in England and Scotland has ceased, pending some outstanding planning decisions, while some small anthracite mines remain in Wales. UK production fell by 28% to 0.8 Mt in H1 2020 compared with H1 2019.

Several potentially viable coal mine projects have been hampered by political resistance, despite local support. Highthorn surface mine in Northumberland has local planning authorisation, but was blocked by national government, despite a positive public inquiry and judicial review. Similarly, the Woodhouse coking coal drift mine in Cumbria has local approval, but central government hesitates.

UK power station demand dropped to very low levels in 2020 as coal's share in electricity production fell to 2%. Other markets created a demand for around 5 Mt. High coal stocks *vis à vis* demand posed a problem at power stations: Drax sold coal stocks to India. In H1 2020, imports fell by 50.2% to 1.9 Mt compared with H1 2019. About 29% of coal used came from UK sources, with Russian imports taking a 25% share.

An English ban on the use of house coal went through parliament on 29 September, banning the sale of bagged coal from 2021 and loose deliveries from 2023.

Lignite

Producer	2020 (1-6) Mt	2019 (1-6) Mt
Bulgaria	11.1	13.8
Czechia	15.3	19.1
Germany	44.7	68.0
Greece	7.8	15.2
Hungary	2.7	3.3
Poland	22.4	26.1
Romania	6.7	11.0
Slovakia	0.5	0.8
Slovenia	1.5	1.7
Total	112.7	159.2

Bulgaria

Lignite production in Bulgaria fell 19.6% in H1 2020, compared with H1 2019, to 11.1 Mt. Mini Maritsa Iztok EAD, a subsidiary of the state-owned Bulgarian Energy Holdings EAD, is by far the country's largest lignite producer. The company's coal mines in south-eastern Bulgaria sell their output mainly to three nearby thermal power plants: one owned by ContourGlobal, one by AES and one state-owned. These and other coal power plants generate around 45% of Bulgaria's electricity.

Czech Republic

Lignite production fell by 20.1% in H1 2020 to 15.3 Mt compared with H1 2019. Total power generation fell 9% compared with H1 2019 to 40.0 TWh, with hard coal-fired generation (-13%) and lignite-fired generation (-20%) both down, but together still accounting for 39% of total power generation. Nuclear remained the other dominant source, with a 36% share in H1 2020.

Sokolovská uhelná closed its lignite gasifier in September after 51 years of operation at Vřesová, because high EU ETS allowance prices rendered it uneconomic. Employees at the gasification plant and adjacent mine will be laid off, while the CCGT plant will continue to run on fossil gas.

Germany

AGEB statistics show an 8.8% decline in German primary energy consumption in H1 2020: lignite (-35.5%) and hard coal (-24.6%) were hit hard and only renewables increased (+3.0%). Total electricity generation was 9.5% lower in the first half of 2020, *c.f.* H1 2019. Spot fossil gas prices hit a low in May of <4 €/MWh, although annual futures held at 12-13 €/MWh, putting further pressure on generation at coal- (-12.8%) and lignite-fired (-21.2%) power plants – their combined market share slumped from 29% in H1 2019 to 20% in H1 2020.

German lignite extraction decreased by 34.3% in H1 2020 compared with H1 2019 to 44.7 Mt, although August and September showed some improvement. H2 2020 lignite production is forecast to be similar to H2 2019.

The German coal phase out conditions were enshrined in a law which the Bundestag passed in July. For the lignite industry, the law's public-private contract should ensure compensation payments are legally secure. Approval is now awaited from Brussels.

Greece

Greek GDP decreased by 15.2% in Q2 2020, a sharper decline than in any quarter of the previous economic crisis of 2011. In 2020, PPC lignite production, so excluding small private mines, is forecast to reach an historic low of 13 Mt, a 49% drop on 2019. Electricity production forecasts show a 2.9%

decrease in 2020, with just 5.7 TWh from lignite plants (-45% to an 11% share) while gas-fired generation (+17%), RES (+17%) and imports (+5%) all increase.

The pandemic, higher prices for EU ETS emission allowances, environmental restrictions on old lignite units, the competitiveness of gas, the rise of renewables, low electricity import prices and increased lignite production costs have all contributed to lignite's decline which, as recently as 2018, had a 29% share in power generation. The country's dependence on imported sources for electricity has risen from 26% in 2004 to 56% in 2020.

In September 2020, PPC closed two lignite-fired units with an installed capacity of 600 MW and an integrated lignite mine, leaving ten lignite units in operation with an installed capacity of 3 157 MW operating mostly at a low capacity or idled. A further two units and mine will close in April 2021, and all PPC lignite units are planned to be decommissioned by 2023, except the new 660 MW Ptolemais plant which is scheduled to start in 2022 and close or fuel switch in 2028. The Greek government had applied to the European Commission for state aid approval for the three-year phase-out plan. PPC is carrying out an intensive restructuring, with a decisive shift towards wind, solar PV and gas, which will leave the small, independent lignite-mining companies who supply PPC in difficulties.

Hungary

In H1 2020, lignite production again declined, to 2.7 Mt (-18.4%). There are no hard coal mines and so, in 2019, Hungary imported 3 000 tonnes of anthracite from Poland and 1.2 Mt of coking coal from the US, Czechia and Russia, as well as small volumes of bituminous coal from Poland and Russia, some lignite mainly from Czechia, and 9 000 tonnes of brown coal briquettes from Germany.

Power production from lignite fell by 14.7% from 2018 to 2019. At Mátra power plant, a low-carbon transformation plan is in progress, based on replacing the old lignite-fired units with gas-fired and waste-fired units, as well as solar PV. Although meeting only 8% of national electricity demand, Mátra is important from a security perspective. MVM Zrt. and the Hungarian government are investigating additional options for financing this transformation: EU ETS 10c and 10d mechanisms, LIFE programme, Just Transition Fund, Cohesion Fund and others.

Poland

Four Polish lignite mining areas are in operation: Konin (c.5.8 Mtpa) and Adamów (<1.0 Mtpa ending in 2020), Bełchatów (c.38 Mtpa) and Turów (c.5 Mtpa). Sieniawa mine, in the Western part of Poland, produces an insignificant c.100 ktpa. For about twenty years, annual Polish lignite production was around 60-65 Mt, but has declined since 2017, to 50.0 Mt in 2019 and with a further drop of 14.2% in H1 2020 to 22.4 Mt compared with H1 2019.

Total power production dropped by 7% between H1 2019 and H2 2020. Over the five-year period 2014-19, lignite power production declined by a significant 24% and output from hard coal plants decreased 3.3%, while gas and renewables increased to take a 23.0% combined share of total generation in 2019.

With many lignite-mining concessions expiring, new concessions will be needed. The concession (and related environmental permits) for the Bełchatów field will end in 2026 and the one for the Szczerców field in 2038. Konin (Drzewce and Józwin fields), Adamów and Turów concessions extend to 2026, while the concession for the Tomisławice field runs until 2030.

The Polish Energy Policy to 2040 leaves investors to decide, with no state intervention, on whether or not to exploit strategic lignite deposits, *i.e.* those in the official programme for the Polish lignite sector and including Złoczew (611 Mt) and Ościstowo (50 Mt). Hence, ZE PAK has abandoned its Ościstowo open pit project; the company will now only exploit lignite remaining at the Tomisławice, Józwin and Adamów fields and operation of the Pątnów I and Pątnów II power plants will be foreshortened to 2030. On the other hand, PGE GiEK had applied for a concession at Złoczew.

Romania

In H1 2020, lignite production in Romania declined by a massive 39.2% to 6.7 Mt compared with H1 2019, mostly to supply Complexul Energetic Oltenia (CEO) which is the main electricity producer in Romania with 3 240 MW installed capacity and a market share of 24% in 2019. CEO is an early casualty of high EU ETS allowance prices, compounded by the pandemic and low power prices. EU-approved rescue aid is in place and a restructuring plan is being prepared for Commission approval. The restructuring plan focuses on operational efficiency and cost reduction, alongside €5 billion capex to decarbonise the company. From 2026, CEO's generation mix could include 51% gas with more RES at the expense of coal. Half this investment could be borne by CEO, but the remainder would require state support, if approved.

Slovakia

Slovak coal production decreased by 34.1% to 0.5 Mt in H1 2020 compared with H1 2019, because of low demand. Three mines operate (Baňa Handlová and Baňa Nováky in Upper Nitra and the small Baňa Čáry in the Záhorie region of western Slovakia). Nováky power plant is scheduled to close by 2023/24, with talk of an earlier date. €480 million has been dedicated for transition, including a retraining programme for miners – a sum that might be enough for Western Slovakia, but not the whole country. There are plans for a heat plant at the former Cígel mine that would combine mine-water heat with biomass combustion and solar thermal pre-heating. This plant will be capable of supplying district heat and hot water to the town of Prievidza. Another similar project at Nováky mine could heat the town of Nováky.

Vojany power plant in Eastern Slovakia has been shut since February 2020 due to high-priced Russian coal; alternative fuels are being explored.

Slovenia

The only operating lignite mine remaining in Slovenia is owned by Premogovnik Velenje d.o.o. – a subsidiary of the state-owned utility, Holding Slovenske elektrarne d.o.o. (HSE). In H1 2020, lignite production fell by 15.8% to 1.5 Mt compared with H1 2019.

On 27 February 2020, the Slovenian government adopted a National Energy and Climate Plan (NECP). For coal, the plan shows 30% lower production by 2030, with the closure of TEŠ unit 5 and the end of coal use by TE-TEOL for district heating in Ljubljana. Coal mine closure is left open, so operation to 2050 is possible, recognising that any closure date would be set within the scope of a national strategy for a just transition. Legislation related to the NECP will be adopted in 2021.

NON-EU COAL MARKET

Ukraine

Run-of-mine or raw coal production from Ukrainian mines was 13.2 Mt in H1 2020 according to the Ministry of Energy. Table 5 shows saleable coal output. DTEK is the largest coal producer. Electricity demand fell by 5.5% due to the Covid-19 pandemic, resulting in the temporary suspension of nearly all coal mining, a situation exacerbated by cheap power imports from Russia, Belarus and the EU. Inefficient and loss-making, state-owned mines continue to absorb heavy subsidies and remain problematic. Looking ahead, the total run-of-mine production forecast for 2020 is 29 Mt, falling to 21 Mt in 2030.

Steam coal imports dropped back to 3.1 Mt in H1 2020, 29.5% less than H1 2019, while coking coal imports fell by 10.5% to 5.5 Mt. Total coal imports were therefore 8.6 Mt in the first half of 2020, this being 18.4% lower than the same period of 2019.

The government is revising its energy strategy to 2035, having already agreed a target for carbon neutrality by 2070. A “National Programme for the Transition to Low-Carbon Energy” is in preparation as part of the wider Western Balkans and Ukraine Coal Regions in Transition Platform supported by the European Commission, World Bank, EBRD, Energy Community and Collège of Europe Natolin. The German Co-ordination Committee on Structural Change in the Coal Regions (*Bund-Länder-Koordinierungsgremium*) has also agreed to support transition in Ukraine.

Turkey

Turkey became Europe’s largest hard coal importer in H1 2020 as imports rose 5.1% compared with H1 2019 to 17.1 Mt, with Russia being the most important supplier.

Compared with H1 2019, Turkish lignite production fell by 21.1% in H1 2020 to 28.9 Mt of which 23.8 Mt or 82% was delivered to power plants for power generation. The small quantity of hard coal production from the Zonguldak basin on the Black Sea coast similarly fell by 24.8% in H1 2020 to 447 kt as the pandemic struck all economic activity.

The government’s policy of favouring indigenous energy sources, such as lignite, hydro and wind, has clearly come to a temporary halt, despite the steady devaluation of the Turkish Lira since the 2008 financial crisis and a growing trade deficit. Steam coal imports rose remarkably, by a countercyclical 14.9%, to reach 14.2 Mt, while coking coal imports fell by 25.7% to 2.9 Mt. In April, the European Commission launched an anti-subsidy investigation on Turkish hot-rolled and flat steel products covered by a coal and steel free-trade agreement (FTA). The results of this inquiry could impact steel production and hence coking coal demand in 2021.

New coal-fired power plants will see steam coal imports continue to grow, despite the opening of the TurkStream gas pipeline in January 2020. For example, the 1 320 MW Hunutlu coal power plant in Adana province, which EMBA Elektrik Üretim A.Ş. owns in a joint venture with Shanghai Electric Power, is expected to come online by the end of 2022, consuming around 3.5-4.0 Mt annually.

Evolution of world market prices for coal, freight and crude oil
McCloskey steam coal marker price (7 000 kcal/kg)

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
steam coal	2019	98.40	92.17	87.38	63.71	67.78	59.05	62.43	68.50	66.22	69.81	65.52	64.86
(US\$/tce CIF NW Europe)	2020	60.76	56.91	55.14	56.14	44.64	53.63	59.16	60.06	60.40	66.90		
steam coal	2019	86.19	81.20	77.32	56.69	60.61	52.28	55.65	61.56	60.18	63.17	59.29	58.36
(€/tce CIF NW Europe)	2020	54.74	52.19	49.85	51.69	40.95	47.65	51.62	50.78	51.22	60.88		

Source: IHS Markit (McCloskey first week quotation of the month, basis 6 000 kcal/kg converted to 7 000 kcal/kg)

Freight rates (US\$/t)

Richards Bay/Rotterdam	2019	7.81	5.63	4.46	4.71	6.16	7.63	10.73	10.55	11.69	8.85	8.15	8.76
(Capesize)	2020	7.42	4.34	2.88	3.94	2.98	7.69	9.54	8.20	7.53			
Queensland/Rotterdam	2019	11.06	8.88	7.45	8.28	10.30	12.00	15.05	14.88	16.38	15.00	13.90	14.06
(Capesize)	2020	10.62	7.88	6.50	6.38	4.90	10.90	13.85	12.78	11.63			
Puerto Bolivar/Rotterdam	2019	8.94	7.13	6.41	6.99	8.02	8.68	12.50	12.56	13.24	11.03	10.13	9.98
(Capesize)	2020	9.50	6.33	5.88	5.50	3.85	8.00	11.50	9.53	8.75			

Source: Clarksons (monthly averages from weekly data)

Currency rates

USD / EUR	2019	0.876	0.881	0.885	0.890	0.894	0.886	0.891	0.899	0.909	0.905	0.905	0.900
	2020	0.901	0.917	0.904	0.921	0.917	0.889	0.873	0.846	0.848			
USD / RUB	2019	66.7	65.8	65.2	64.7	64.9	64.1	63.2	65.8	64.9	64.3	63.9	62.9
	2020	62.0	64.2	74.6	75.1	72.8	69.4	71.5	73.8	76.1			
USD / AUD	2019	1.40	1.40	1.41	1.41	1.44	1.44	1.43	1.48	1.47	1.47	1.47	1.45
	2020	1.46	1.50	1.61	1.59	1.54	1.45	1.42	1.39	1.38			

Sources: ECB Euro foreign exchange reference rates; Bank of England database; OECD.Stat Monthly Monetary and Financial Statistics (MEI) dataset

Crude oil (US\$/barrel)

crude oil	2019	58.74	63.83	66.37	70.78	69.97	62.92	64.71	59.62	62.36	59.91	62.94	66.48
	2020	65.10	55.53	33.92	17.66	25.17	37.05	43.42	45.19	41.54			

Source: OPEC Reference Basket (ORB) price

International coal trade
TABLE 2

Steam coal				
exporting country	2020 (1-6) Mt	YoY change c.f. H1 2019		2019 (1-6) Mt
		Mt	%	
PACIFIC				
Australia	101.5	0.3	0.3%	101.2
Canada	1.7	1.3	398.1%	0.3
China	1.3	-0.8	-38.9%	2.1
Colombia	13.6	3.2	30.4%	10.4
Indonesia (inc. lignite)	206.5	-20.3	-8.9%	226.8
Russia	47.8	4.5	10.3%	43.3
South Africa	34.2	-1.9	-5.4%	36.2
USA (exc. to Canada)	8.3	-1.1	-11.5%	9.3
sub-total	414.8	-14.8	-3.5%	429.7
ATLANTIC				
Canada	0.0	0.0	-90.6%	0.0
Colombia	18.4	-6.7	-26.7%	25.1
Indonesia	0.6	-1.2	-64.5%	1.8
Russia	34.1	-14.4	-29.6%	48.5
South Africa	1.4	-2.1	-59.5%	3.5
USA (exc. to Canada)	4.3	-5.4	-56.1%	9.7
sub-total	58.8	-29.7	-33.6%	88.6
others	4.6			8.2
total	478.3	-48.2	-9.2%	526.5

 revised 2019 figure shown in **bold**

steam coal data includes anthracite

TABLE 3

Coking coal				
exporting country	2020 (1-6) Mt	YoY change c.f. H1 2019		2019 (1-6) Mt
		Mt	%	
Australia	85.0	-7.2	-7.8%	92.3
Canada	18.0	1.5	9.0%	16.5
China	0.4	-0.4	-50.0%	0.9
Russia	11.4	-1.8	-13.4%	13.1
USA (exc. to Canada)	17.9	-7.1	-28.5%	25.0
others	1.2	-0.2	-12.5%	1.4
total	133.9	-15.2	-10.2%	149.1

 revised 2019 figure shown in **bold**

European crude steel production

COUNTRY	2020 (1-6) Mt	YoY change c.f. 2019	2019 (1-6) Mt
Austria	3.3	-16.2%	4.0
Belgium	3.2	-19.1%	4.0
Bulgaria	0.2	-18.7%	0.3
Croatia	:	:	0.1
Czechia	2.2	-8.6%	2.4
Finland	1.7	-10.2%	1.9
France	5.6	-26.6%	7.7
Germany	17.5	-15.7%	20.7
Greece	0.7	-11.0%	0.8
Hungary	0.8	-10.9%	0.9
Italy	10.1	-19.8%	12.6
Luxembourg	0.9	-23.2%	1.2
Netherlands	3.1	-11.1%	3.4
Poland	4.0	-15.6%	4.8
Portugal (est.)	:	:	1.1
Romania (est.)	:	:	1.8
Slovakia	:	:	2.6
Slovenia	0.3	-12.6%	0.3
Spain	5.5	-26.4%	7.5
Sweden	2.4	-7.8%	2.6
UK	3.5	-7.8%	3.8
unspecified	3.2	:	:
EU-28	68.3	-19.0%	84.4
Belarus	1.3	-2.4%	1.3
Bosnia & Herzegovina	0.3	-37.1%	0.4
Moldova	0.1	-21.1%	0.2
North Macedonia	0.1	-44.8%	0.1
Norway	0.3	2.7%	0.3
Serbia	0.7	-28.1%	1.0
Switzerland (est.)	:	:	0.8
Turkey	16.3	-4.1%	17.0
Ukraine	10.1	-7.6%	10.9

Source: World Steel Association and own estimates

Hard coal and lignite production and consumption

	Hard coal production			Hard coal deliveries for power generation	
COUNTRY	2020 (1-6) Mt	YoY change <i>c.f.</i> H1 2019	2019 (1-6) Mt	2020 (1-6) Mt	2019 (1-6) Mt
Czechia	1.0	-34.6%	1.5	0.4	0.9
Germany	0.0	:	0.0	6.0	9.8
Poland	26.5	-14.0%	30.8	11.5	17.0
Spain	0.0	-100.0%	0.1	1.1	3.8
UK	0.8	-27.9%	1.1	1.5	1.5
EU-28	28.3	-15.6%	33.5	20.5	33.0
Turkey	0.4	-24.8%	0.6	9.5	9.0
Ukraine	10.3	-22.5%	13.3	n.a.	n.a.

	Lignite production			Lignite deliveries for power generation	
COUNTRY	2020 (1-6) Mt	YoY change <i>c.f.</i> H1 2019	2019 (1-6) Mt	2020 (1-6) Mt	2019 (1-6) Mt
Bulgaria	11.1	-19.6%	13.8	11.1	13.8
Czechia	15.3	-20.1%	19.1	11.5	14.4
Germany	44.7	-34.3%	68.0	37.8	60.0
Greece	7.8	-48.8%	15.2	7.9	14.7
Hungary	2.7	-18.4%	3.3	2.7	3.2
Poland	22.4	-14.2%	26.1	22.6	26.0
Romania	6.7	-39.2%	11.0	6.6	10.9
Slovakia	0.5	-34.1%	0.8	0.8	1.0
Slovenia	1.5	-15.8%	1.7	1.2	1.4
EU-28	112.7	-29.2%	159.2	102.1	145.4
Bosnia & Herzegovina	6.6	11.3%	6.0	6.2	5.6
Serbia	18.9	0.8%	18.8	18.3	18.1
Turkey*	28.9	-21.1%	36.6	23.8	32.0

* Asphaltite is included within lignite.

revised 2019 figures are shown in **bold**

Sources: EURACOAL members and Eurostat

Hard coal imports

COUNTRY	Coking coal imports		Steam coal imports		Total hard coal imports		
	2020 (1-6) Mt	2019 (1-6) Mt	2020 (1-6) Mt	2019 (1-6) Mt	2020 (1-6) Mt	YoY change c.f. H1 2019	2019 (1-6) Mt
Austria	0.5	0.8	0.8	1.1	1.3	-32.2%	2.0
Belgium	1.2	1.1	0.8	1.0	2.0	-4.0%	2.1
Bulgaria	0.0	0.0	0.2	0.3	0.2	-25.3%	0.3
Croatia	-	-	0.2	0.4	0.2	-45.3%	0.4
Czechia	0.8	1.2	0.7	0.8	1.5	-23.4%	1.9
Denmark	-	-	0.4	1.4	0.4	-72.1%	1.4
Finland	0.4	0.3	0.6	0.8	1.1	-8.3%	1.2
France	1.3	1.7	2.0	3.5	3.3	-34.7%	5.1
Germany	5.0	5.7	9.3	16.9	14.3	-36.7%	22.6
Greece	-	-	0.1	0.2	0.1	-48.2%	0.2
Hungary	0.6	0.6	0.1	0.1	0.6	-10.7%	0.7
Ireland	-	-	0.1	0.1	0.1	8.0%	0.1
Italy	1.0	1.6	2.8	3.8	3.8	-29.8%	5.4
Netherlands	2.0	2.2	1.0	3.5	3.0	-47.6%	5.7
Poland	1.1	2.0	4.3	6.3	5.4	-34.7%	8.3
Portugal	-	-	0.1	1.8	0.1	-92.5%	1.8
Romania	-	-	0.4	0.6	0.4	-40.3%	0.6
Slovakia	0.9	1.5	0.2	0.4	1.1	-41.0%	1.9
Slovenia	-	-	0.0	0.0	0.0	42.9%	0.0
Spain	0.2	0.4	2.0	5.7	2.1	-65.1%	6.1
Sweden	0.2	0.2	0.8	0.8	1.1	6.3%	1.0
UK	1.1	1.3	0.8	2.7	1.9	-50.2%	3.9
EU-28	16.4	20.5	27.8	52.3	44.2	-39.3%	72.8
Bosnia & Herzegovina	0.5	0.7	-	-	0.5	-23.8%	0.7
Serbia	-	-	0.0	0.0	0.0	-30.8%	0.0
Turkey	2.9	3.9	14.2	12.4	17.1	5.1%	16.3
Ukraine	5.5	6.2	3.1	4.4	8.6	-18.4%	10.6

 revised 2019 figures are shown in **bold**