



## EURACOAL Market Report 2022 no.1

April 2022

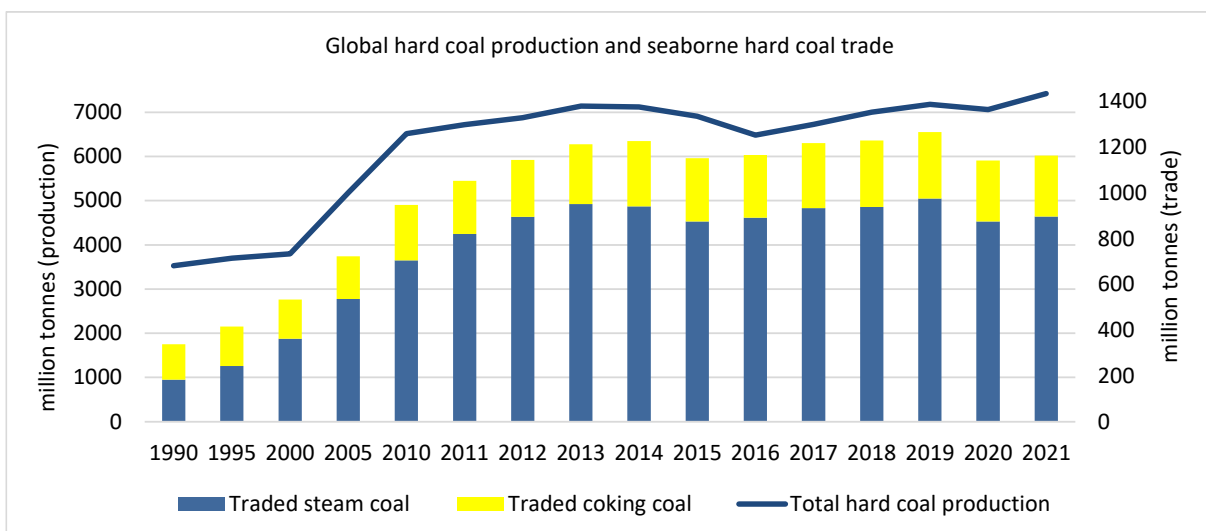
### WORLD COAL MARKET DEVELOPMENTS

#### Global Coal Trade

Coal industry developments in 2021 were dwarfed by the impact of Russia’s invasion of Ukraine on 24 February 2022. This ongoing war has upended energy markets, especially in the EU where a ban on Russian coal imports and fast-changing energy policies have affected the market for all energy commodities. Coal prices quickly rose to all-time historic highs, and it will be some months before the coal market settles down with new patterns of trade, very different from recent years. The dominance of Russian coal and fossil gas on the EU market will fade, with importers and consumers doing whatever is necessary to secure alternative supplies and reduce demand.

Interviewed by the BBC a week after the Russian invasion, the European Commission Executive Vice President and Commissioner for Climate Action, Frans Timmermans, said *“history has taken a very sharp turn a week ago, and we need to come to terms with that historic change”*. On the coal-to-gas switch foreseen in many EU member states, he stated that *“it could still be within the parameters we set for our climate policy [if coal plants were run longer] before switching to renewables”*. The REPowerEU initiative on energy independence from Russia, published a few days later, proposed measures related to gas supply and renewables. There were no measures for coal.

Over the two decades since EURACOAL was established in 2002, we have consistently highlighted the value of indigenous energy production. Now, more than ever, the EU must re-assess all energy options for a secure and sustainable future. In the meantime, our thoughts are with our Ukrainian members who find themselves on the front line of a war in Europe that the EU founders strived to avoid when they established the European Coal and Steel Community back in 1952.



Sources: IEA; VDKi; McCloskey by OPIS

Global hard coal production increased by around 5.1% to an estimated 7.4 Gt in 2021 as economies everywhere recovered from the COVID-19 pandemic. In the EU, coal supply grew by a massive 12.4% with lignite production increasing by 12.5%, hard coal production by 1.2% and coal imports by 19.4%. This followed a 22.1% collapse in 2020, so EU coal supply in 2021 remained below 2019 levels. As in recent years, Asian coal production and consumption were strong in 2021. Coal production in China grew by 214 Mt or 5.6% – roughly equivalent to half of the EU’s total coal consumption – to 4 026 Mt despite many lockdowns in response to the pandemic.

India, the second-largest coal producer, reported output of 773 Mt in 2021 (+7.5%) as local producers competed well with imports. Indonesia production rose to 525 Mt (+5.4%) although exports rose by only 1.1% to 345.5 Mt as coal continued to be reserved for domestic use. US production grew by a healthy 7.8% to 524 Mt, helping to meet demand for power generation, but also a 25.0% growth in exports to 73.1 Mt (excluding to Canada). Despite an unofficial import ban imposed by China on Australian coal and other commodities, Australian coal production of 410 Mt in 2021 was just 10 Mt or 2.4% down from 2020. Russia benefitted from the changing pattern of coal trade in 2021, with production growing 35 Mt (+8.7%) to 437 Mt. However, South Africa suffered from rail constraints and other problems such that coal exports fell by 11.5% to 66.2 Mt while production fell 8.0% to 229 Mt.

The impact on the international coal market of China’s ban on Australian coal was less dramatic than originally feared. Coal trade reorganised with longer shipping distances, but Australia was able to find new customers for almost all its coal. Tables 2 and 3 show that international seaborne coal trade – steam and coking coal – grew to 1 164 Mt in 2021, a 1.9% increase compared with 2020. Steam coal accounted for 77% of trade. At 730.4 Mt, there was no change to total steam coal on the Pacific market, although shipments of South African coal declined, replaced by additional tonnages from the US, Indonesia and Russia. The Atlantic steam coal market grew by 12.4% to 153.2 Mt, with the additional 16.9 Mt of steam coal coming from Colombia (+5.7 Mt), Russia (+5.7 Mt), the US (+4.7 Mt), South Africa (+1.0 Mt) and even Australia (+2.5 Mt) – five times more than in 2020. At 266.3 Mt, coking coal trade was barely changed in 2021 compared with 2020. Australian exports of coking coal fell by 5.1 Mt (–5.1%) to 166.6 Mt, with the US and Russia enjoying growths of 9% or more as they picked up demand previously met by Australian exporters.

Coal imports into the EU, mostly via the ports of Amsterdam, Rotterdam and Antwerp (ARA), were strong in 2021, rising 17.2 Mt on 2020 to 106.0 Mt, but still below pre-pandemic level of 126.9 Mt in 2019.

## Coal Prices

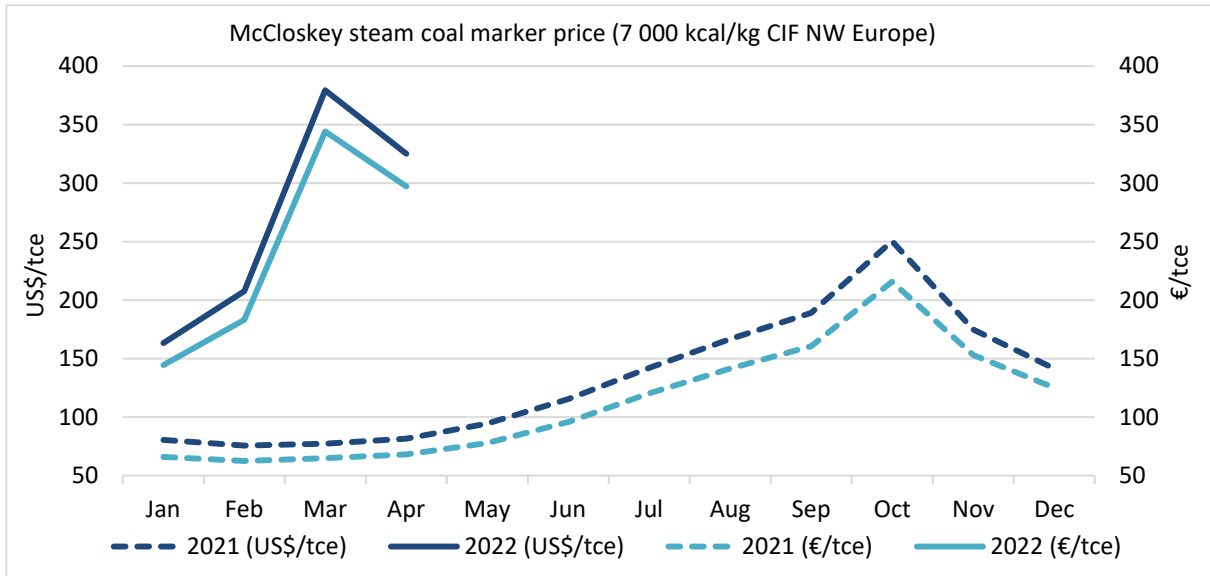
In 2021, the average price of steam coal imported into NW European ports was USD 118.38/t, a 135% increase on 2020 when the average price was relatively low at USD 50.28/t due to the COVID-19 pandemic. On 5 October 2021, coal prices peaked at USD 298.60/t CIF at ARA ports as Europe prepared for a winter with unusually low fossil gas stocks and very high gas prices. Coal prices then dropped as the Chinese government took steps to moderate prices, but with little change to actual global coal supply. However, coal prices in China were consistently higher in 2021 than elsewhere: steam coal for export at Qinhuangdao port averaged USD 163.60/t and the Chinese domestic market was similarly priced. The outbreak of hostilities in Ukraine on 24 February 2022 saw already high steam coal prices skyrocket, to reach an all-time historic high of USD 417.57/t on 9 March. Although prices have since retreated, they remain around USD 300/t – a level that means steam coal should be considered, like coking coal, a critical raw material in the EU.

The collapse of the Russian rouble in March 2022 – losing more than one quarter of its value against the US dollar – would have made Russian coal exports more competitive on the international market. However, by April the rouble had almost fully recovered its lost value.

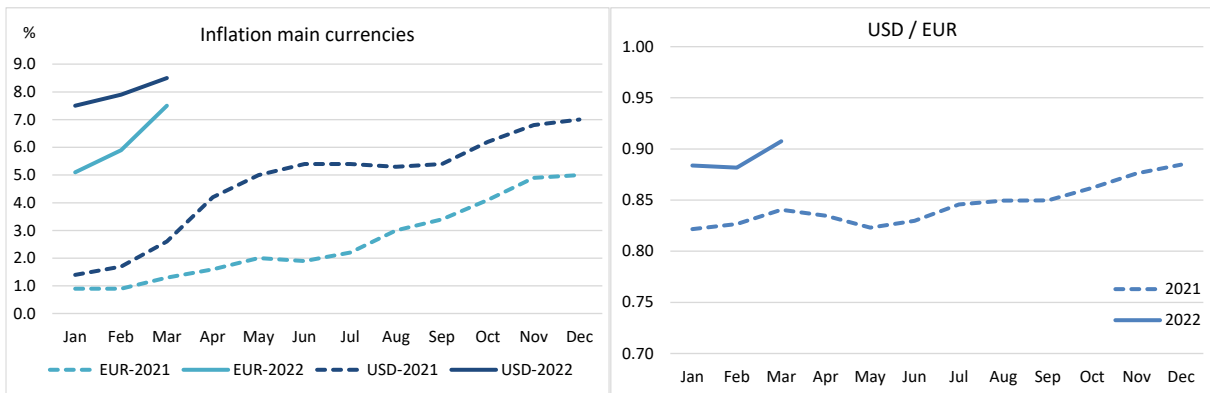
On the coking coal market, prices rose in 2021, partly because China prioritised steam coal shipments. High-quality Australian low-vol coking coal began the year at USD 103.00/t FOB and

closed the year at USD 346.00/t, a 236% increase. This trend has continued in 2022, with the price rising to USD 654.20/t in March.

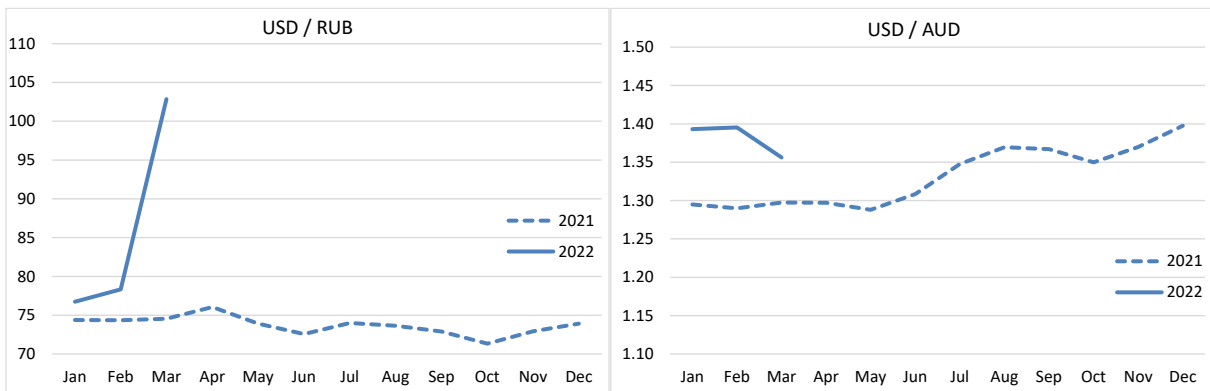
Coal markets and the energy market in general have become unstable and the outlook is uncertain, especially with the growing signs of inflation. The annual US consumer price index (CPI) to the end of March 2022 rose to 8.5%, the highest for forty years, while in the EU annual inflation has crept up from below zero at the beginning of 2021 to 7.5% at the end of March 2022.



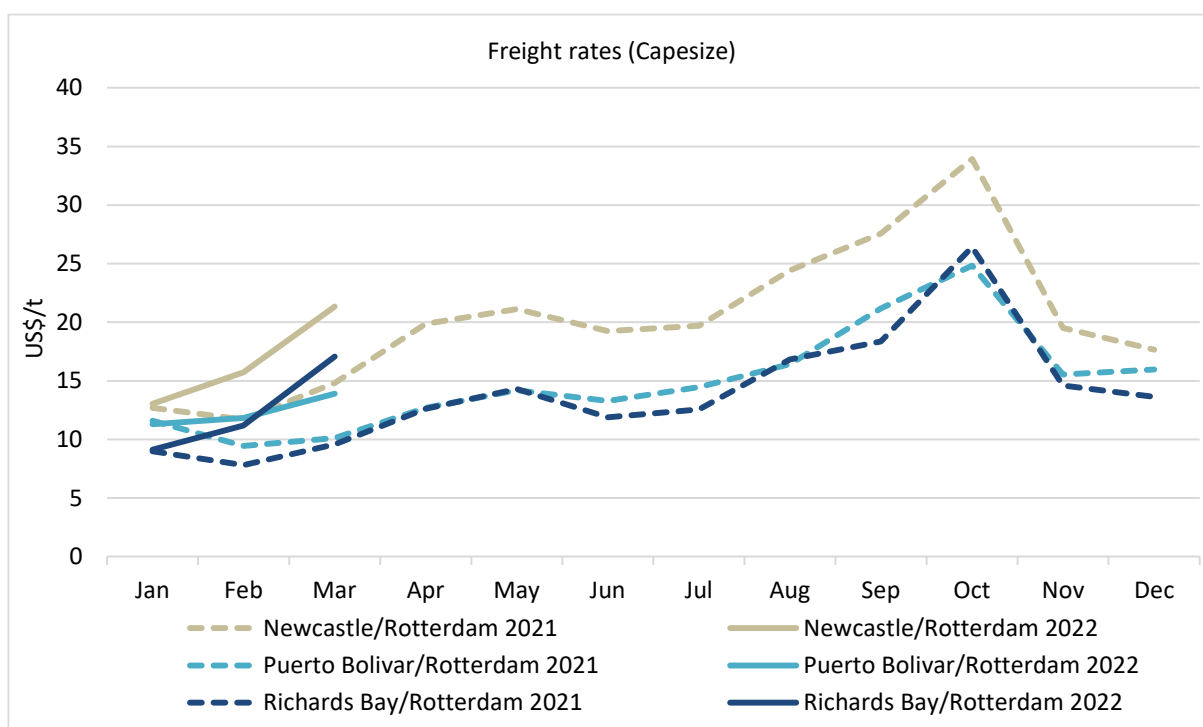
Source: IHS Markit (McCloskey first week quotation of the month, basis 6 000 kcal/kg converted to 7 000 kcal/kg)



Sources for inflation: ECB; US Bureau of Labor Statistics



Sources for exchange rates: ECB, BoE and OECD



Source: Clarksons

## Freight Rates

Seaborne coal trade flows are dominated by Asian demand: Indonesia was almost entirely focussed on supplying China and other countries in the region in 2021, while Australia looked further afield to find a market for coal of all types previously supplied to China. Less than 15% of seaborne coal trade finds its way to European or Mediterranean countries where Germany was the biggest importer in 2021, followed by Turkey. Longer shipping distances mean freight rates for coal have risen: in 2020, the average rate for Capesize vessels on the Richards Bay – Rotterdam route was USD 6.40/t; in 2021, this increased by 120% to USD 14.00/t; and at the end of March 2022 it stood at USD 16.75/t. Similar rates have been seen on the Puerto Bolivar, Colombia – Rotterdam route, whereas rates from Australian ports to Rotterdam have been USD 5/t to USD 10/t higher.

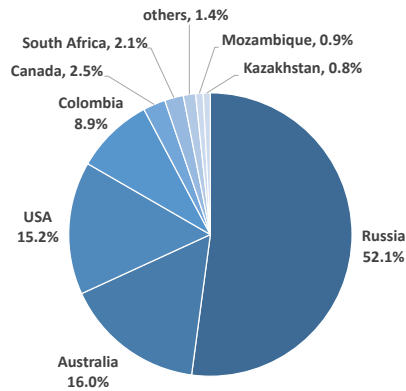
## EU COAL MARKET<sup>1</sup>

	2021 (1-12) Mt	2020 (1-12) Mt
Hard coal imports	106.0	88.7
Hard coal production	57.2	56.5
Lignite production	274.7	244.3

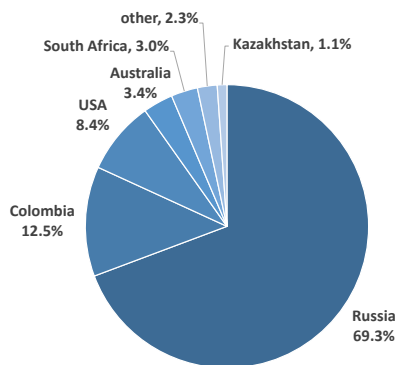
Hard coal imports into the EU, at 106.0 Mt in 2021, were up 19.4% on 2020, but still well short of the 126.9 Mt imported by the EU in 2019 (a figure which excludes the UK following the country's exit from the EU). The charts below show the extra-EU sources of imported coal into the EU to gauge the region's dependency on Russia. Overall, Russian coal imports accounted for an estimated 52.1% or 50.7 Mt of hard coal imports in 2021: a greater share in the case of steam coal (69.3% or 47.6 Mt), and a much smaller share in the case of coking coal (10.8% or 3.1 Mt).

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

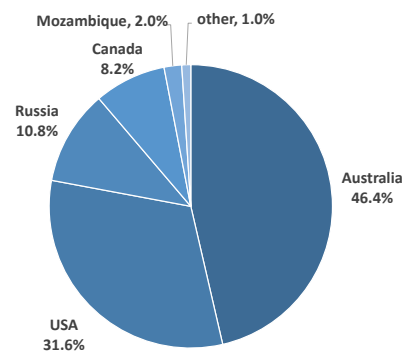
### Hard coal imports into the EU by country of origin (extra-EU), 2021



### EU steam coal imports by origin, 2021



### EU coking coal imports by origin, 2021

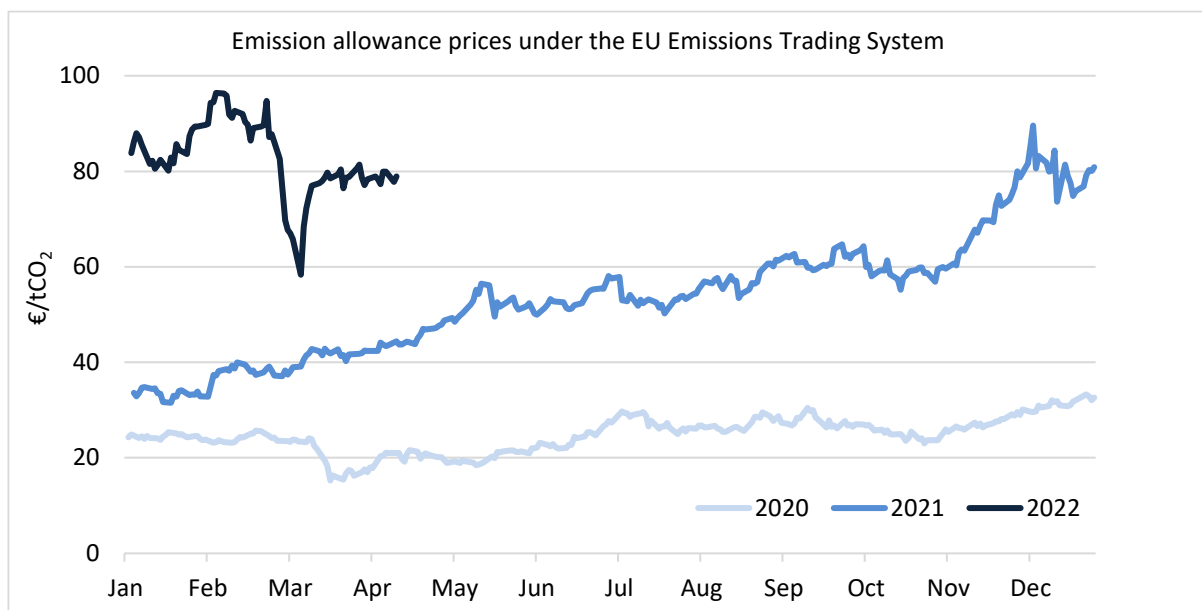


Source: Eurostat database on EU trade since 1988 by HS2,4,6 and CN8 [DS-645593]

EU hard coal production grew 1.2% in 2021 to 57.2 Mt compared with 2020, falling well short of the 65.1 Mt produced in 2019. Lignite production in the EU rose 12.5% to 274.7 Mt in 2021 compared with 2020. However, this was not a return to pre-pandemic levels as output in 2021 was 10.7% below the 2019 production of 307.5 Mt.

## Carbon Prices

The price of EU emission trading system allowances averaged 53.62 €/tCO<sub>2</sub> in 2021 – a 117% increase on the average carbon price in 2020 – rising from a low in mid-January 2021 of 31.54 €/tCO<sub>2</sub> to a high of 89.60 €/tCO<sub>2</sub> during the first week of December 2021 in reaction to market and political developments. This was the highest price seen for allowances since the trading scheme or system began in January 2005. The main driver for this rise has been high fossil gas prices which has created a greater demand for coal-fired power generation and hence a greater demand for carbon allowances. In 2022, allowance prices continued to increase, peaking at 96.43 €/tCO<sub>2</sub> on 4 February. While the war in Ukraine drove up energy commodity prices, EU carbon allowance prices collapsed to 58.36 €/tCO<sub>2</sub> on 7 March, perhaps because they offered liquidity to those who needed cash to pay for fuel purchases or margin calls on their positions in the energy market.



Source: Intercontinental Exchange

## Hard Coal

Producer	2021 (1-12) Mt	2020 (1-12) Mt
Czechia	2.2	2.1
Poland	55.0	54.4
<b>Total</b>	<b>57.2</b>	<b>56.5</b>

### Czech Republic

Czech hard coal production increased by 3.0% in 2021 compared with 2020 to reach 2.2 Mt of which 1.5 Mt coking coal. Hard coal imports rose by 39% to 4.5 Mt, including 2.1 Mt of coking coal from Poland, the US, and Canada. Steam coal imports in 2020 came mostly from Poland (75%) and Russia (23%). Hard coal exports to neighbouring countries increased by 82% to 1.4 Mt, including 1.0 Mt of coking coal. Consumption of hard coal for electricity generation increased 45% to 1.2 Mt.

The Czech Republic's dependence on energy imports reached 39% in 2020, well below the EU average of 60%. The country's overall dependency on energy imports from Russia was 23.7%, rising to 100% in the case of fossil gas.

### Germany

Hard coal imports into Germany increased by 30.3% in 2021 to 38.7 Mt, comprising 26.8 Mt of steam coal and 11.9 Mt of coking coal. There were additional imports of coke totalling 2.3 Mt. Despite this impressive growth, imports fell short of the 40.3 Mt of 2019.

Since 2016, the share of Russian coal in German hard coal and coke imports has risen from 30% to 50% in 2021. In the German steam coal market, dependency on Russian imports in 2021 was even higher at 18.9 Mt (70%) out of 26.8 Mt, with minor quantities from elsewhere. In the case of coking coal, the German market was dominated by imports from Australia (45%) and the US (31%) in 2021, while Poland had a 56% share of coke imports.

Electricity production from hard coal increased in every single month of 2021 to give an overall increase of 28.2% compared with 2020. This was the result of high fossil gas prices and low wind output. In the steel sector, German pig iron production increased 15.3% to 25.9 Mt in 2021 while crude steel production grew to over 40 Mt with strong growth in BOF steel output. Overall hard coal

consumption increased by 16.4% to 35.6 Mtce in 2021 compared with 2020 (+23.9% for power generation and +12.3% for steel).

## The Netherlands

Coal imports for domestic use in the Netherlands grew by 43.8% in 2021 to reach 8.7 Mt in total: 4.7 Mt of steam coal plus 4.0 Mt of coking coal. Coal imports declined significantly between 2015 and 2020, from 12.4 Mt to 6.0 Mt, but bounced back in 2021 with greater demand for electricity generation.

Although most thermal power plants are gas-fired in the Netherlands, four coal-fired power plants remain in operation, three cofiring biomass (up to 80% biomass). At 18.5 TWh, power generation from coal in 2021 was 72% greater than in 2020, but well below the 38.0 TWh (+22%) from RES.

Generation from coal-fired power plants is to be restricted from 2022. State compensation payments for plant closures are planned, although the closure of the 731 MW Riverstone power plant at Rotterdam has been cancelled. In coal's place, the Dutch government plans to double offshore wind capacity, increase indigenous gas production at Groningen and has proposed new nuclear power plants, alongside CCS and electrolyzers for hydrogen production.

There is steady demand at coke ovens and blast furnaces in the Netherlands for coking coal and coke, but not PCI coal.

## Poland

In 2021, Polish hard coal production increased by 1.1% to 55.0 Mt compared with 2020: 42.4 Mt (+0.7%) of steam coal and 12.6 Mt (+2.4%) of coking coal. Total coal exports grew sharply in 2021 to reach 5.8 Mt (+32%): 2.1 Mt of steam coal and 3.7 Mt of coking coal. At the same time, imports of hard coal fell only slightly to 12.6 Mt: 9.4 Mt of steam coal and 3.2 Mt of coking coal, so Poland remained a net coal importer. 8.3 Mt or 65% of these imports came from Russia, but Prime Minister Morawiecki announced on 30 March 2022 a phase out of Russian coal imports by the end of May 2022 at the latest (and oil and gas imports by year end).

In Poland, twenty-one coal mines remain in operation, with PGG and JSW being the biggest producers of steam coal and the only producers of coking coal, together accounting for two-thirds of Polish coal production. The government plans to create a National Energy Security Agency (NABE) which will see all coal mines transferred to a single operating company.

Given the current situation, the Polish government discusses with the European Commission the possibility of increasing hard coal production. Despite their advanced age, there are still over forty modernised 200 MW coal-fired power units in operation in Poland while coal use in the heating sector will continue if the rate of conversion to gas slows.

## Lignite

Producer	2021 (1-12) Mt	2020 (1-12) Mt
Bulgaria	28.3	22.3
Czechia	29.3	29.5
Germany	126.3	107.4
Greece	12.1	13.9
Hungary	5.0	6.1
Poland	52.4	46.0
Romania	17.7	15.0
Slovakia	1.1	1.0
Slovenia	2.6	3.2
<b>Total</b>	<b>274.7</b>	<b>244.3</b>

### Bulgaria

Lignite production in Bulgaria jumped by 27.0% in 2021, compared with 2020, to 28.3 Mt and so exceeded the pre-pandemic output of 28.0 Mt in 2019. Poland was the only other lignite-producing member state to make such a dramatic recovery. Mini Maritsa Iztok EAD (MMI), 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 the state-owned TPP Maritsa East 2. These and other coal power plants generate around 45% of Bulgaria's electricity.

### Czech Republic

Czech brown coal production was stable in 2021, falling only slightly to 29.3 Mt (-1% compared with 2020) with a small quantity exported (0.4 Mt). Consumption for electricity generation rose 8% to 24.9 Mt in 2021.

Total electricity generation increased by 4% to an estimated 84.9 TWh with hard coal at 2.8 TWh (3.3% of total generation) and lignite at 31.4 TWh (37.0%) – a similar output to nuclear power.

According to the new government's manifesto, the construction of new nuclear plants from 2029 and the development of RES are essential for the Czech Republic's energy security. A tender for a new 1 200 MW unit at Dukovany was published at the beginning of March 2022 with bids expected in November from EdF, Westinghouse and Korea Hydro and Nuclear Power (KHNP) and commissioning in 2036.

### Germany

Primary energy consumption in Germany increased by 3.1% in 2021 with economic recovery following the COVID-19 pandemic and cooler weather, but somewhat damped by higher energy and carbon prices. After the hiatus during April-July 2020 (8.5% below 2016-2020 average), electricity demand in 2021 was close to the pre-pandemic five-year average. AG Energiebilanzen forecasts a 4% increase in energy-related CO<sub>2</sub> for the year 2021.

Lignite consumption was up by 17.7% in 2021, helped by low wind power output (total RES output fell by 1.2%). Even so, when compared with 2019, lignite consumption was still around 4% lower. In 2021, coal accounted for 32.5% of domestic energy production (*i.e.* lignite), 17.7% of total primary energy consumption, and 28.1% of power generation (18.8% lignite, 9.3% hard coal).

Lignite production matched demand, increasing by 17.6% to 126.3 Mt in 2021, with most of this being delivered to power plants (111.5 Mt) and the remainder converted into 5.5 Mt of industrial products. Production grew quite differently in each mining district: in the Rhineland (+21.8%) and in



Central Germany (+32.0%) the increases were particularly high, while the increase in Lusatia was smaller, but still significant (+8.3%). At the end of 2021, 17 948 employees worked in the German lignite industry, including at power plants.

The lignite phase-out plan is on schedule for 2038 under the Coal Exit Law, although the German traffic-light government's coalition agreement (SDP, FDP and The Greens) suggests earlier, "ideally by 2030" assuming RES grow quickly to an 80% share and 20-40 GW of gas-fired capacity is built. Given the current situation, extending coal use and delaying the exit of plants from the 2.7 GW security standby reserve were under discussion by policymakers. Niederaußem E & F, Jänschwalde E & F and Neurath C remain in the reserve and can be called on to run with eleven-days' notice, while the decommissioning of four RWE units in 2022 could be delayed, at least in the short term.

## Greece

The Public Power Corporation (PPC) produced 11.8 Mt of lignite in 2021, with 11.6 Mt initially planned for 2022. Small producers accounted for the rest of the country's 12.1 Mt total lignite production. Electricity generation from lignite was 5.3 TWh in 2021 – a 10.4% share of the 51.2 TWh total – and is forecast to fall to 4.5 TWh in 2022, although this may change. Fossil gas and RES shares increased to 40.8% and 29.9% respectively in 2021, while electricity imports declined to 3.7 TWh. RES output is forecast to grow 9% in 2022 to 15.3 TWh, excluding hydro. The share of indigenous power production fell to 47% in 2020, continuing a long-term trend that reversed in 2021 as the share bounced back to 52% and is forecast to grow again in 2022.

Wholesale electricity prices on the Hellenic Energy Exchange rose due to a jump in fossil gas prices and EU ETS allowance prices: day-ahead power prices peaked at 244.5 €/MWh in December 2021 and electricity bills skyrocketed. Lignite-fired generation became more competitive. To meet fuel demand and given the current geopolitical situation, an increase of lignite production has been scheduled for the coming months, at least until spring 2023.

PPC and its subsidiaries operate seven lignite-fired units (2 225 MW), most at low capacity or idled. All should be decommissioned by 2023. The 660 MW Ptolemais V will be commissioned on lignite in November 2022, with a fuel switch mid-decade – probably to fossil gas.

## Poland

Polish lignite production increased by 13.6% in 2021 to 52.4 Mt: 38.4 Mt from Bełchatów mine and the remainder mostly from the Konin and Turów mines. Recovery from the COVID-19 pandemic and a collapse in electricity imports resulted in strong demand for power generated from all sources, with hard coal- and lignite-fired generation increasing by 18.7%. Total generation was 179.4 TWh in 2021, up 13.8% compared with 2020 with hard coal taking a 45.3% share, lignite 25.6%, fossil gas 4.7% and 16.9% RES. Coal and gas were also used at industrial thermal power plants that accounted for a 7.0% share of total generation. Interestingly, hard coal-fired power generation grew by 6.0% from 2015 to 2021, while lignite power generation fell by 13.1%.

A National Raw Materials Policy was adopted by the Polish government in March 2022. From the point of view of economic security, the policy assumes lignite, sulphur and copper are among the most important raw material deposits. A concept of "strategic deposits" is introduced for both undeveloped deposits and those newly documented. Such resources will be marked in local spatial development plans, thus making it impossible for other developments to sterilise these resources. Proposed amendments to the Geological and Mining Law will follow.

## Romania

Romanian lignite production rose by 18.2% in 2021 to 17.7 Mt as electricity demand bounced back following the economic impact of the COVID-19 pandemic. On 26 January 2022, the European Commission approved, under EU State aid rules, Romania's plans to grant Complexul Energetic Oltenia restructuring aid of up to €2.66 billion. The measure will enable the lignite mining and power

generation company to finance its restructuring plan and restore its long-term viability. This is important as Oltenia's 3 240 MW of lignite-fired power plants meet around 20% of Romanian electricity demand. The restructuring plan aims to replace lignite-based electricity production with electricity produced from fossil gas and renewables (solar PV and hydro). This is expected to help the company improve its environmental footprint and, at the same time, reduce its operating costs. In addition, the restructuring plan will reduce the costs and improve the efficiency of the company through organisational, managerial and financial measures (e.g. optimisation of bank loans, divestment or sales of assets).

## Slovakia

In 2021, 1.1 Mt of brown coal were produced at the three active underground coal mines in Slovakia, even though one of them was closed in November 2021. The HBP coal mining company employed 2 500 workers at the beginning of 2022, with 1 200 workers at underground mines. State aid granted to domestic energy sources will end in December 2023, meaning the closure of the remaining coal mines and adjacent power plants – two 110 MW blocks are operating. The lost production would be replaced with two new 471 MW blocks at the Mochovce nuclear power plant: the first block was complete and would start operating in 2022, while the second was 80% complete with commissioning due in 2024. HBP plans include new renewables such as a heating project fired with fossil gas and biomass and another project using heat recovery from mine water.

## Slovenia

Slovenia enjoys balanced shares of hydro, nuclear and fossil fuels for power generation. Lignite coal usually covers around one third of electricity production, but up to one half when annual precipitation and hence hydro output are low. In 2021, electricity production from the lignite-fired Termoelektrarna Šoštanj (TEŠ) decreased by 10% and only 2.6 Mt of lignite were mined, 17.7% less than in 2020. Previously stable electricity prices inflated in 2021 as input costs rose, including EU ETS allowance prices – there are no EU or national support schemes or measures in Slovenia to offset EU ETS allowance prices.

Although a Deloitte-led study and subsequent stakeholder consultation pointed towards a 2038 coal phase-out date, the government opted for 2033 in a decision of 13 January 2022. By 2030, TEŠ block 5 would be closed, Ljubljana district heating system (TE TEOL) converted from coal to biomass and fossil gas, and coal production is expected to be 30% lower. Despite the 2033 coal phase-out date, several open questions remain on the future of the new TEŠ unit 6 and the replacement of the country's only nuclear power plant at Krško.

## NON-EU COAL MARKET

### Ukraine

The Russian invasion of Ukraine on 24 February 2022 has created an horrendous situation in Ukraine: energy companies have had to operate in an often-dangerous environment to maintain supplies. It is a testament to those working at companies such as DTEK that electricity has continued to flow to consumers across Ukraine. On 16 March 2022, the Ukrainian and Moldovan electricity grids were synchronised with the continental European grid – an emergency measure ahead of schedule that brings additional stability to the Ukrainian grid as well as the opportunity for electricity trade between Ukraine and the EU. Electricity demand fell by around 34% in March 2022 and operational power plants were able to meet the 12 GW average daily demand – roughly half from nuclear plants and the remainder from thermal plants (coal and gas), hydro and solar PV, but not wind which has remained off-grid due to the hostilities. Around 2 GW of this daily average has come from coal-fired power plants.

Ukrainian coal production was 23.0 Mt in 2021, a 3.4% increase of saleable coal output compared with 2020. DTEK and other private mining companies accounted for more than 80% of this production. Production at state-owned coal mines was less than 20% of total production, but was costly and heavily subsidised – UAH 6.4 billion in 2021. The closure of coal mines will see total production fall over the coming years: sixteen mines are scheduled to close in 2023 and 2024. Ukraine was a net importer of coal in 2021 with no exports: 19.6 Mt were imported (of which 11.5 Mt coking coal), 14.2% lower than in 2020.

In the autumn of 2021, coal stocks were down to 0.5 Mt, compared with 2.5 Mt in October 2020. In November 2021, Russia banned the export of coal to Ukraine. In response, DTEK booked additional international cargoes to ensure power supply in December-March.

In November 2021, Ukraine and DTEK joined the Powering Past Coal Alliance, with the company committing to carbon neutrality by 2040. The country aims to reduce CO<sub>2</sub> emission by 65% by 2030 (c.f. 1990) under the UNFCCC Paris Agreement (NDC-2). Given the current situation, energy policy is under continuous review. There are many national-level activities to manage the transition, including the Coordination Center for the Transformation of Coal Regions headed by PM Shmyhal, although a Coal Industry Reform Concept and Programme remains outstanding. Ukraine also joined the Global Methane Pledge, with a joint commitment to reduce methane emissions by 30% by 2030.

### United Kingdom

The UK consumed 7.3 Mt of coal in 2021, of which 2.6 Mt was for steelmaking and 2.7 Mt for power generation where coal took a 2.1% share of total generation. UK coal production was 1.1 Mt and imports 4.6 Mt, half from Russia. Despite the hostilities in Ukraine and impact on energy markets, there has been no discussion on a return to coal in the UK, the use of which continues to decline although perhaps with some delays to coal plant closures and demolitions, such as EdF West Burton (2 000 MW) and RWE Aberthaw (1 560 MW).

A planning decision on a prospective new coking coal mine, proposed by West Cumbria Mining, is under review by the national government, after being granted permission by the local authority in 2019/2020 and examined by the UK Planning Inspectorate. A final decision is expected by 7 July 2022 for this 2.5 Mtpa project – a drift mine at Whitehaven reaching out under the Irish Sea.

**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
<b>steam coal</b>	<b>2021</b>	80.47	75.69	77.42	81.61	94.43	115.47	142.16	166.76	189.12	250.29	174.74	141.54
<b>(US\$/tce CIF NW Europe)</b>	<b>2022</b>	163.33	207.74	379.31	325.20								
<b>steam coal</b>	<b>2021</b>	66.12	62.57	65.07	68.12	77.72	95.81	120.22	141.67	160.67	215.75	153.11	125.22
<b>(€/tce CIF NW Europe)</b>	<b>2022</b>	144.37	183.16	344.26	297.10								

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)**

<b>Richards Bay/Rotterdam</b>	<b>2021</b>	9.00	7.81	9.58	12.60	14.31	11.90	12.55	16.84	18.35	26.40	14.61	13.64
<b>(Capesize)</b>	<b>2022</b>	9.13	11.18	17.06									
<b>Queensland/Rotterdam</b>	<b>2021</b>	12.70	11.69	14.81	19.85	21.13	19.25	19.70	24.41	27.56	33.92	19.51	17.65
<b>(Capesize)</b>	<b>2022</b>	13.05	15.73	21.33									
<b>Puerto Bolivar/Rotterdam</b>	<b>2021</b>	11.60	9.44	10.13	12.70	14.19	13.28	14.46	16.44	21.18	24.82	15.55	15.97
<b>(Capesize)</b>	<b>2022</b>	11.31	11.84	13.90									

Source: Clarksons (monthly averages from weekly data)

**Currency rates**

<b>USD / EUR</b>	<b>2021</b>	0.822	0.827	0.841	0.835	0.823	0.830	0.846	0.850	0.850	0.862	0.876	0.885
	<b>2022</b>	0.884	0.882	0.908									
<b>USD / RUB</b>	<b>2021</b>	74.4	74.4	74.5	76.0	73.9	72.6	74.0	73.6	72.9	71.3	72.9	73.9
	<b>2022</b>	76.7	78.3	102.9									
<b>USD / AUD</b>	<b>2021</b>	1.30	1.29	1.30	1.30	1.29	1.31	1.35	1.37	1.37	1.35	1.37	1.40
	<b>2022</b>	1.39	1.40	1.36									

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

**Crude oil (US\$/barrel)**

<b>crude oil</b>	<b>2021</b>	54.38	61.05	64.56	63.24	66.91	71.89	73.53	70.33	73.88	82.11	80.37	74.38
	<b>2022</b>	85.24	93.95	113.48									

Source: OPEC Reference Basket (ORB) price

**International coal trade**
**TABLE 2**

Steam coal				
exporting country	2021 (1-12) Mt	YoY change c.f. 2020		2020 (1-12) Mt
		Mt	%	
PACIFIC				
Australia	195.3	-3.4	-1.7%	198.7
Canada	5.4	0.9	20.0%	4.5
China	2.5	0.2	9.2%	2.3
Colombia	8.0	-1.9	-19.1%	9.9
Indonesia (exc. lignite)	344.5	4.1	1.2%	340.4
Russia	93.5	2.9	3.2%	90.7
South Africa	60.2	-9.7	-13.8%	69.9
USA (exc. to Canada)	20.9	6.8	48.2%	14.1
sub-total	730.4	-0.1	0.0%	730.5
ATLANTIC				
Australia	3.1	2.5	387.8%	<b>0.6</b>
Canada	0.1	0.0	-5.7%	0.1
Colombia	47.9	5.7	13.6%	42.2
Indonesia	1.0	-0.2	-14.9%	1.1
Russia	84.1	5.7	7.2%	78.4
South Africa	6.0	1.0	21.0%	4.9
USA (exc. to Canada)	14.2	4.7	48.9%	9.5
sub-total	153.2	16.9	12.4%	136.3
others	13.7			<b>8.9</b>
<b>total</b>	<b>897.4</b>	<b>21.7</b>	<b>2.5%</b>	<b>875.7</b>

steam coal data includes anthracite

**TABLE 3**

Coking coal				
exporting country	2021 (1-12) Mt	YoY change c.f. 2020		2020 (1-12) Mt
		Mt	%	
Australia	166.6	-5.1	-2.9%	171.7
Canada	26.3	-0.7	-2.5%	<b>27.0</b>
China	0.1	-0.8	-89.5%	0.9
Russia	31.9	2.8	9.7%	29.1
USA (exc. to Canada)	38.0	3.2	9.1%	34.8
others	3.4	0.7	28.2%	2.6
<b>total</b>	<b>266.3</b>	<b>0.2</b>	<b>0.1%</b>	<b>266.1</b>

 revised 2020 figures shown in **bold**

**European crude steel production**

COUNTRY	2021 (1-12) Mt	YoY change c.f. 2020	2020 (1-12) Mt
Austria	7.9	16.5%	<b>6.8</b>
Belgium	6.9	12.9%	6.1
Bulgaria	0.5	13.2%	0.5
Croatia	0.2	309.0%	<0.1
Czechia	4.8	7.9%	4.5
Finland	4.3	24.1%	3.5
France	13.9	20.3%	11.6
Germany	40.1	12.3%	35.7
Greece	1.5	6.4%	1.4
Hungary	1.1	-28.0%	1.5
Italy	24.4	19.9%	<b>20.4</b>
Luxembourg	2.1	9.9%	1.9
Netherlands	6.6	9.4%	6.1
Poland	8.5	7.6%	7.9
Portugal	2.0	-11.3%	<b>2.2</b>
Romania	3.4	21.0%	2.8
Slovakia	4.9	41.2%	<b>3.4</b>
Slovenia	0.7	13.1%	0.6
Spain	14.2	29.0%	<b>11.0</b>
Sweden	4.7	6.1%	4.4
unspecified		:	
<b>EU-27</b>	<b>152.6</b>	<b>15.5%</b>	<b>132.1</b>
Belarus	2.4	-3.7%	2.5
Bosnia & Herzegovina	0.9	20.5%	0.8
Moldova	0.6	22.6%	0.5
North Macedonia	0.3	75.4%	0.2
Norway	0.6	-0.2%	0.6
Serbia	1.7	14.5%	1.5
Switzerland	1.2	2.1%	1.2
Turkey	40.4	12.7%	35.8
Ukraine	21.4	3.6%	20.6
UK	7.2	1.9%	<b>7.1</b>

Sources: World Steel Association, Eurostat production in industry database sts\_inpr\_m and own estimates

revised 2020 figures shown in **bold**

**Hard coal and lignite production and consumption**

COUNTRY	Hard coal production			Hard coal deliveries for power generation	
	2021 (1-12) Mt	YoY change c.f. 2020	2020 (1-12) Mt	2021 (1-12) Mt	2020 (1-12) Mt
Czechia	2.2	3.0%	2.1	1.6	1.3
Germany	0.0	:	0.0	18.3	12.9
Poland	55.0	1.1%	54.4	34.9	32.8
Spain	0.0	:	0.0	1.1	1.7
<b>EU-27</b>	<b>57.2</b>	<b>1.2%</b>	<b>56.5</b>	<b>56.0</b>	<b>48.7</b>
Turkey	1.2	14.8%	1.1	19.7	21.9
Ukraine	23.0	3.4%	22.3	n.a.	n.a.
UK	1.1	-37.0%	1.7	2.7	2.3

COUNTRY	Lignite production			Lignite deliveries for power generation	
	2021 (1-12) Mt	YoY change c.f. 2020	2020 (1-12) Mt	2021 (1-12) Mt	2020 (1-12) Mt
Bulgaria	28.3	27.0%	22.3	28.2	22.1
Czechia	29.3	-0.7%	29.5	21.5	24.2
Germany	126.3	17.6%	107.4	111.5	93.1
Greece	12.1	-12.7%	13.9	n.a.	n.a.
Hungary	5.0	-18.6%	6.1	4.9	6.0
Poland	52.4	13.9%	46.0	52.2	44.9
Romania	17.7	18.2%	15.0	17.5	15.4
Slovakia	1.1	9.4%	1.0	1.3	1.4
Slovenia	2.6	-17.7%	3.2	2.9	3.1
<b>EU-27</b>	<b>274.7</b>	<b>12.5%</b>	<b>244.3</b>	<b>240.0</b>	<b>210.2</b>
Bosnia & Herzegovina	12.8	-5.8%	13.6	10.9	12.1
Serbia	36.4	-8.2%	39.7	35.4	38.5
Turkey*	72.8	4.2%	69.9	60.2	51.3

\* Asphaltite is included within lignite.

revised 2020 figures shown in **bold**

Sources: EURACOAL members and Eurostat

**Hard coal imports**

	Coking coal imports		Steam coal imports		Total hard coal imports		
<b>COUNTRY</b>	<b>2021 (1-12)</b> <b>Mt</b>	<b>2020 (1-12)</b> <b>Mt</b>	<b>2021 (1-12)</b> <b>Mt</b>	<b>2020 (1-12)</b> <b>Mt</b>	<b>2021 (1-12)</b> <b>Mt</b>	<b>YoY change</b> <b>c.f. 2020</b>	<b>2020 (1-12)</b> <b>Mt</b>
Austria	0.9	1.0	1.8	1.6	2.8	6.0%	2.6
Belgium	1.7	1.9	1.8	1.0	3.5	17.1%	3.0
Bulgaria	0.0	0.0	0.7	0.5	0.8	40.5%	0.5
Croatia	-	-	0.7	0.6	0.7	13.4%	0.6
Czechia	2.2	1.8	2.4	1.5	4.5	39.2%	3.3
Denmark	-	-	0.8	1.1	0.8	-30.8%	1.1
Finland	1.0	1.0	1.2	1.4	2.2	-8.7%	2.4
France	2.3	2.3	6.4	5.6	8.7	9.6%	7.9
Germany	11.9	10.1	26.8	19.7	38.7	30.3%	29.7
Greece	-	-	0.3	0.3	0.3	-13.3%	0.3
Hungary	1.0	1.2	0.1	0.1	1.1	-6.4%	1.2
Ireland	-	-	1.6	0.3	1.6	384.9%	0.3
Italy	1.4	1.9	6.6	5.3	7.9	10.2%	7.2
Netherlands	4.0	3.7	4.7	2.3	8.7	43.8%	6.0
Poland	3.2	1.8	9.4	11.0	12.6	-1.7%	12.8
Portugal	-	-	0.0	0.2	0.0	-98.6%	0.2
Romania	-	-	0.8	0.7	0.8	11.5%	0.7
Slovakia	2.9	2.1	0.3	0.3	3.2	35.0%	2.4
Slovenia	-	-	0.2	0.3	0.2	-46.2%	0.3
Spain	1.4	0.4	3.9	3.6	5.3	32.7%	4.0
Sweden	0.3	0.5	1.4	1.6	1.7	-19.9%	2.1
<b>EU-27</b>	<b>34.2</b>	<b>29.5</b>	<b>71.8</b>	<b>59.3</b>	<b>106.0</b>	<b>19.4%</b>	<b>88.7</b>
Bosnia & Herzegovina	1.4	1.2	-	-	1.4	25.1%	1.2
Serbia	-	-	0.6	0.4	0.6	46.0%	0.4
Turkey	5.3	5.5	30.9	33.3	36.2	-6.5%	38.7
Ukraine	11.5	17.0	8.1	5.9	19.6	-14.2%	22.8
UK	2.0	2.1	2.6	2.5	4.6	1.8%	4.5

 revised 2020 figures shown in **bold**

Sources: EURACOAL members, McCloskey by OPIS, national government statistics, Eurostat, IEA