



EURACOAL Market Report 2023 no.2

October 2023

WORLD COAL MARKET DEVELOPMENTS

After a record 8.3 billion tonnes (Gt) in 2022 – higher than previously reported because China made upward revisions to its statistics – coal demand has remained buoyant in 2023 as multiple geopolitical crises play out and concerns grow over the stability of global oil and gas supplies. The IEA's *Coal Market Update* of July 2023 estimates +1.5% coal demand growth in the first six months. With wars in Ukraine and the Middle East, it is difficult to predict the future direction of energy markets. Country reports below are in alphabetic order, so although Ukraine appears at the end of this report, readers should begin there as it offers a sobering description of the issues faced by the country's coal sector over the last fifteen months. The outlook for a better future would see new investment to exploit Ukraine's gas storage infrastructure and its massive renewable energy potential.

In both China and India – who together accounted for over two thirds of total global coal use in 2022 – demand grew by an estimated 5.5% in the first half of 2023. Data from the National Bureau of Statistics show Chinese coal production surpassed 400 million tonnes (Mt) in December 2022 – a new monthly record which was broken again in March 2023 when output reached 417 Mt. Overall, Chinese coal production grew 5.3% in H1 2023 to 2 309 Mt compared with the same period of 2022.

In India, the government aims to produce over one billion tonnes this year and monthly production surpassed 100 Mt for the first time in March 2023. The third largest coal producer, Indonesia, saw coal production rise 16% to 353 Mt in the first half of 2023, meeting the demand for export coal as well as the needs of its industrialising economy without resorting to any temporary export bans as it did in January 2022. After increasing by 3.0% to 540 Mt in 2022, because of demand from power plants and strong export sales, the United States saw production dip to 264 Mt in H1 2023, a fall of 1.3% and so a return to the long-term, downward trend driven by the availability of cheaper fossil gas for power generation in that country. In Australia, the world's fifth largest producer (and second largest coal exporter after Indonesia, but top exporter by value), coal production grew by a modest 1.8% or 201 Mt, helped by improved trade relations with China who ended its unofficial ban on Australian coal imports. In June 2023, China overtook Japan to become the largest importer of Australian steam coal, but its coking coal needs are now largely met by Mongolian and Russian exports with little need for Australian coking coal.

In Europe, the closure of the last nuclear power plants in Germany in April 2023 and uncertainty about the speed and cost of a transition to renewable energy sources should have underpinned coal demand. However, data for the first six months of 2023 show a sharp drop in coal and lignite demand, verging on a shock. In the first six months, coal supply shrank in the EU by 40.0 Mt or 17.1% compared with the first half of 2022 to just 193.6 Mt (including lignite). The reasons for this are many and varied, but largely self-inflicted: the cost of EU ETS emission allowances is driving energy-intensive industrial production away from EU member states and high energy prices mean economic growth has been subdued. Table 4 shows that EU steel production fell 10.9% in the six months to June 2023. In Germany, which is the most industrialised economy in Europe, energy demand collapsed by 7.1% in the first half year even though its economy emerged from a brief recession.

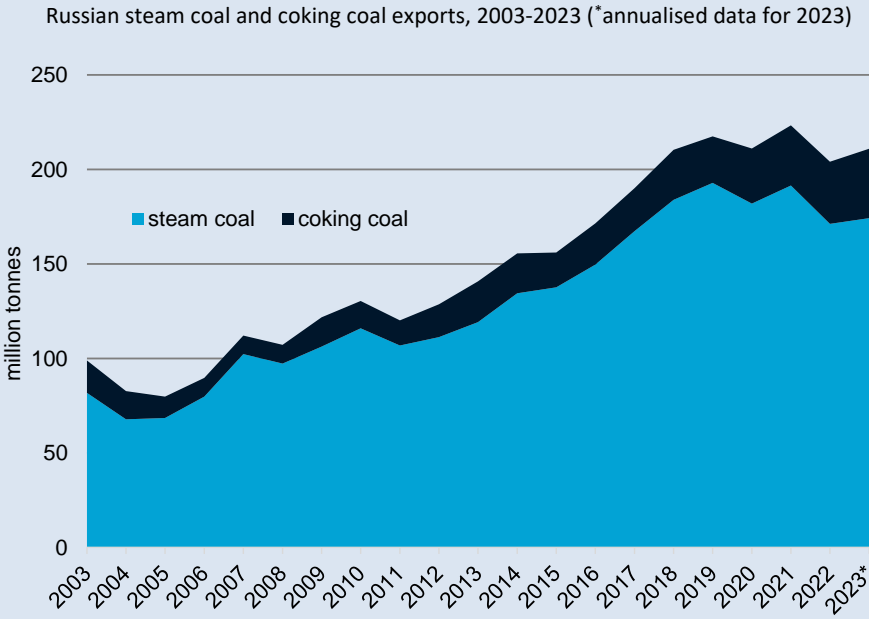
After much turbulence, the international coal market stabilised in H1 2023. Tables 2 and 3 show our estimates of international coal trade. The Atlantic steam coal market shrank by 4.8 Mt or 10.5% to 40.9 Mt, and actually slipped much further because Russia switched from the Atlantic to Pacific, but its export data are missing (see box) so are estimated under “other”. The Pacific market grew 8.8% and, overall, the global traded steam coal market is estimated to have grown by 5.7% to 458 Mt. The coking coal market was stable, growing 0.7% to 136 Mt and still dominated by Australia with a 56% share of global trade.

Coal prices in Europe have declined from the stratospheric levels seen in 2022 as high stocks at ports, a warm winter and lower fossil gas prices all worked against the steam coal market. Although still the world’s fifth largest importer after China, India, Japan and South Korea, the EU’s demand for imported coal cooled in H1 2023: 54.9 Mt of steam and coking coal were imported, 7.5% lower than over the same period of 2022. Other big importers in 2023 were Taiwan, Türkiye and the fast-developing nations of Southeast Asia.

Impact of EU sanctions on Russian coal exports

Russia stopped publishing customs data for its coal exports in February 2022, the month it invaded Ukraine. However, a picture of Russian coal exports emerges by aggregating customs data from all those countries that import (and declare) Russian coal. The chart below is a compilation of such data for the twenty-year period 2003 to 2022 with annualised data for 2023 based on a simple extrapolation of data for the first six months. The chart gives an indication of trends but underestimates Russian exports as some coal is known to be exported from Russia via third countries and the original source may not be correctly declared in all cases. The impact of EU sanctions, introduced in August 2022, are seen to be minimal: Russian coal exports have barely changed, only the direction of coal flows which no longer arrive in EU member states. For example, Finland was once entirely dependent on Russian coal, but in H1 2023 imported no Russian coal and by June 2023 was using almost no coal for power generation.

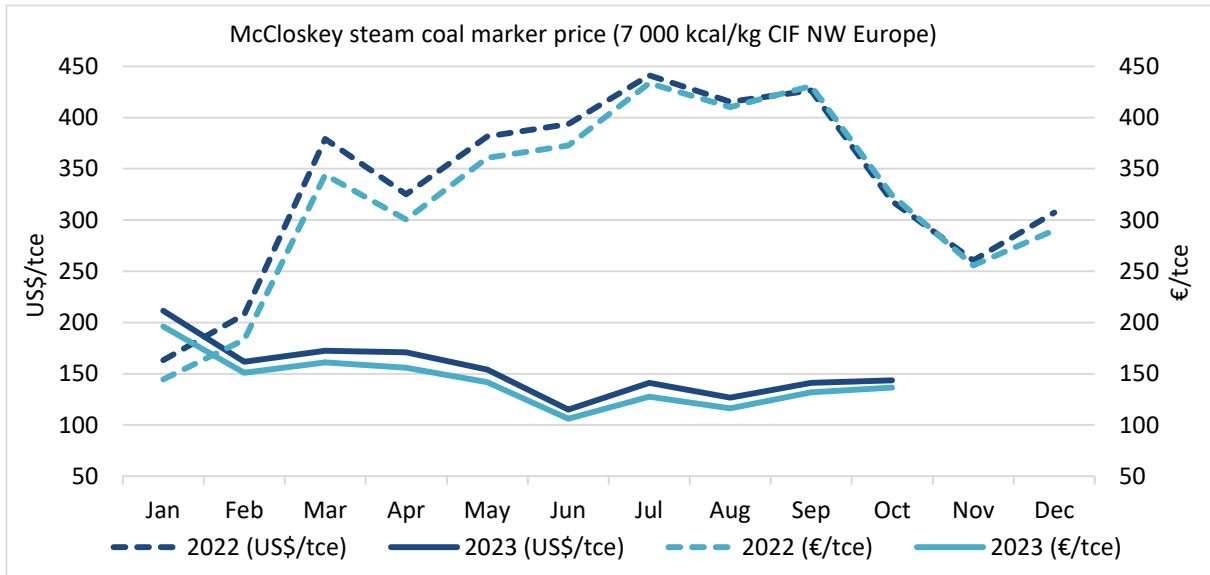
Coal trade with Russia was disrupted even for those countries that chose not to impose sanctions as Russia was excluded from the SWIFT international payment system which made payments more difficult. In terms of revenues, the heavy discounts for Russian coal exports seen in 2022 appear to have largely disappeared and export earnings remain stable.



Source: McCloskey by OPIS, a Dow Jones Company

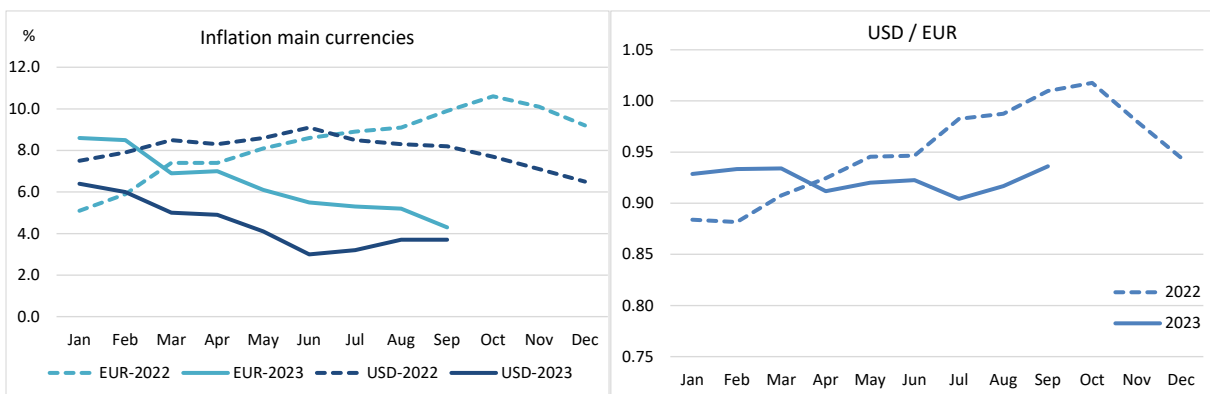
Coal Prices

After a turbulent 2022, coal prices stabilised in H1 2023. The steam coal price at ports in northwest Europe (ARA) averaged 136 US\$/t CIF, falling from 188 US\$/t at the start of the year to 121 US\$/t at the end of June 2023. Compare this to the average price of 292 US\$/t CIF for steam coal imported into Europe in 2022 when traders had at times been faced with prices north of 400 US\$/t.

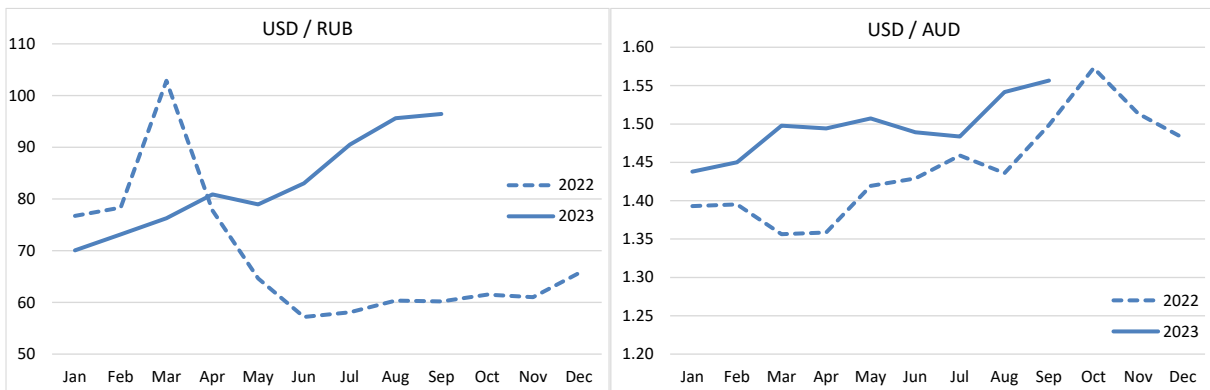


Source: McCloskey by OPIS, a Dow Jones Company (first week quotation of month, 6 000 kcal/kg converted to 7 000 kcal/kg)

With the EU sanctions on Russian coal that came into force on 10 August 2022, no EU member state imported coal from Russia in 2023. More Russian coal is now exported to China which has benefitted from lower prices thanks to a weakening rouble; after peaking briefly above 100 USD / RUB in 2022,



Sources for inflation: ECB; US Bureau of Labor Statistics



Sources for exchange rates: ECB, BoE and OECD

the exchange rate has gradually risen back to this level during 2023 as the Russian economy weakened. Steam coal import prices at ports in South China were below ARA prices for much of 2022, although this spread corrected at the start of 2023 as import prices in Europe and China converged.

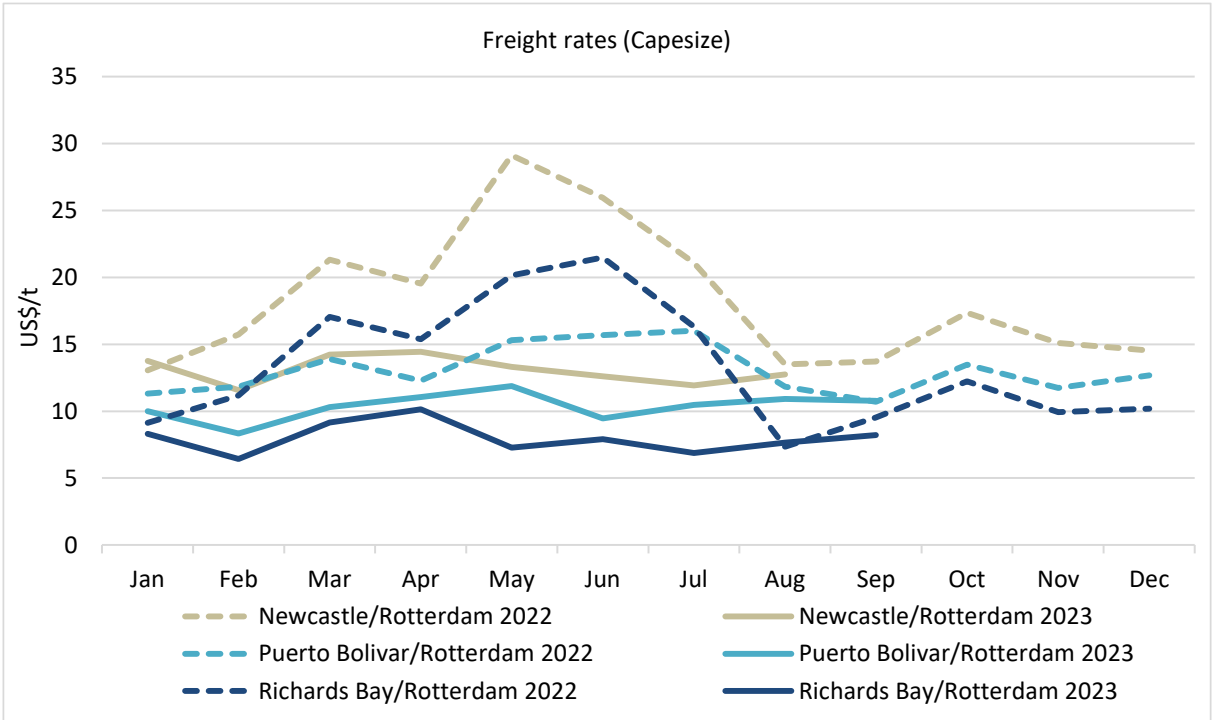
The coking coal trade between Australia and Japan sets price benchmarks. Coking coal hit record prices in March 2022, reaching 654 US\$/t for Australian low-vol premium hard coal coking coal (FOB, weekly basis). In 2023, coking coal prices remain well above their pre-2019 level and have held up in recent months despite a softening global economic outlook. The Australian government expects prices for the country’s premium hard coking coal to average US\$ 265/t in 2023, easing to around US\$ 200/t by 2025 as supply conditions improve.

Any price forecast depends partly on inflation rates: the US consumer prices index (CPI) again eased in H1 2023 to 3.0%, as did the annual inflation rate in the EU which fell to 5.5% in June after peaking at 10.6% in October 2022 (Table 1 and chart above). Prior to November 2021, eurozone inflation had never been above 4.1%.

Freight Rates

Like coal prices, freight rates stabilised at lower levels this year compared with the volatility seen in 2022. In H1 2023, shipping rates averaged 10 US\$/t and 8 US\$/t respectively on the Bolivar-Rotterdam and Richards Bay-Rotterdam routes of interest to European steam coal buyers. Importers of coking coal from Australia paid higher shipping costs, averaging 13 US\$/t in H1 2023.

Around 15% of seaborne coal trade finds its way to European or Mediterranean countries where Germany, with 16.7 Mt, remained the region’s biggest importer in the first half of 2023. In second place, Türkiye imported 15.7 Mt, an increase of 8.6% compared with H1 2022.



Source: Clarksons

EU COAL MARKET¹

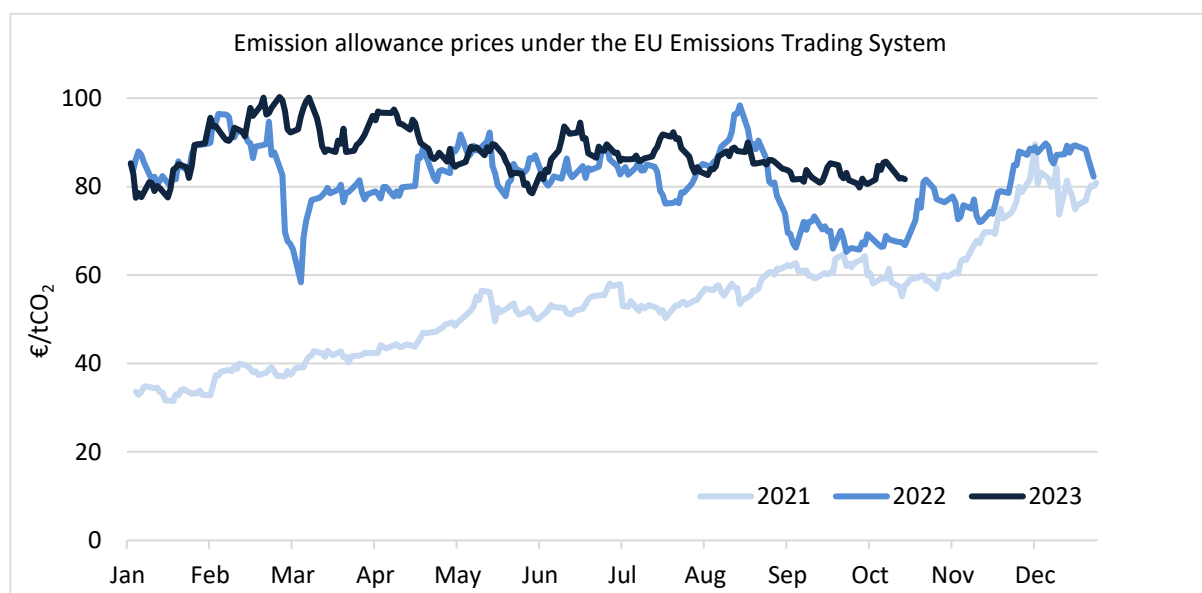
	2023 (1-6) Mt	2022 (1-6) Mt
Hard coal imports	54.9	59.4
Hard coal production	24.0	28.8
Lignite production	114.7	145.5

Hard coal imports into the EU, at 54.9 Mt in in the first half of 2023, were down 7.5% compared with H1 2022. Poland saw the biggest swing with an *increase* in imports of 5.5 Mt or +80.0% to 11.6 Mt as the government insisted on sufficient coal stocks being available to ensure electricity and heat supply security during a difficult period. Notably, Finland reduced its coal use of power generation in H1 2022 to almost zero in June as it had stopped using Russian coal and was able to fire plants with alternative fuels. In 2022, large coal stocks were accumulated in some of the biggest coal-using EU member states, but the winter turned out warm and demand sluggish, so some European traders decided to resell coal to Morocco and on the Asia-Pacific market.

Turning to coal production, EU hard coal output fell by 16.6% in H1 2022 to 24.0 Mt compared with H1 2022. Lignite production fell even more, by 21.2% to 114.7 Mt in the first six months of 2022 as lignite demand for power generation slumped across the whole of the EU. Bulgaria experienced the biggest relative fall, of almost 40%, followed by Slovenia, Poland, Slovakia and Germany. In absolute terms, the biggest decline was in Germany where lignite mines produced 11.4 Mt less than in H1 2022, a 17.8% drop.

Carbon Prices

In the first half of 2023, EU ETS allowance (EUA) prices averaged 89.31 €/tCO₂e, ranging from a low of 77.50 €/tCO₂e to a high of 100.29 €/tCO₂e. Compared with recent years, there was less volatility, albeit around a higher price level. On 21 February 2023, EUA prices rose above 100 €/tCO₂e for the first time ever and broke through this psychological barrier twice more: in the last week of February and first week of March. Increased coal use during the energy crisis spurred allowance buying in 2022, but February's rise was partly driven by utilities wishing to hedge their position as lower temperatures were forecast in northern Europe. In contrast, demand from energy-intensive industry was lower as high energy and allowance prices drove down production by basic industries in the EU.



Source: Intercontinental Exchange

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

Hard Coal

Producer	2023 (1-6) Mt	2022 (1-6) Mt
Czechia	0.7	0.7
Poland	23.2	27.9
EU total	24.0	28.8

Czech Republic

Czech coal production statistics for H1 2023 show that hard coal output was 0.67 Mt (-5.6% compared with H1 2022) of which 0.27 Mt or around half were coking coal. Hard coal imports fell 4.3% to 2.2 Mt with Poland the largest supplier followed by the US, while exports collapsed 36% to 0.33 Mt (of which 0.15 Mt coking coal) supplied mainly to Poland and Hungary. Some 0.83 Mt (+11%) of steam coal were used for heat and power generation at utility plants in the first half of 2023. To shore up public finances, royalties for hard coal mining will more than quadruple from CZK 9.90/t (0.40 €/t) to CZK 44.88/t (1.83 €/t).

Poland

Hard coal production in Poland totalled 23.2 Mt in H1 2023, a 16.7% fall compared with H1 2022. While coking coal production fell by only 0.5 Mt (-7.9%) to 5.8 Mt, steam coal output fell by 19.4% to 17.4 Mt, 4.2 Mt lower than in H1 2022. Coal output remained at a low level in July and August as stocks built to around 3.5 Mt – about one month’s production. Despite falling output, employment in the Polish hard coal sector grew over the last year to 75 936 people at the end of H1 2023.

Coal imports into Poland totalled 20.2 Mt in 2022 (17.2 Mt of steam coal plus 3.0 Mt of coking coal), with Węglokoks Group handling a 22.7% share while PGE was another big importer among others. Imports in 2022 were considerably greater than the 12.6 Mt imported in 2021 as the Polish government demanded enough coal be on stock to ensure energy security over the winter period. This trend continued in H1 2023 with imports of 11.6 Mt (+80%) coming from Colombia, Kazakhstan, Australia and South Africa. Russian coal imports were zero. Indonesia, the US, Mozambique and Czechia accounted for smaller shares of the 10.3 Mt of steam coal and 1.3 Mt of coking coal imported in H1 2023. Meanwhile, Polish coal exports fell by 1.1 Mt (-19%) to 4.7 Mt in 2022 and continued to fall in H1 2023 by 26% to 2.0 Mt compared with H1 2022.

Lignite

Producer	2023 (1-6) Mt	2022 (1-6) Mt
Bulgaria	11.1	18.2
Czechia	14.2	16.4
Germany	52.7	64.1
Greece	5.8	6.7
Hungary	2.1	2.4
Poland	19.8	27.2
Romania	7.6	8.6
Slovakia	0.4	0.5
Slovenia	1.0	1.5
Total	114.7	145.5

Bulgaria

Mini Maritsa Iztok EAD (MMI) operates a total installed power generation capacity of 3 422 MW in Bulgaria, fired with lignite from mines having an annual output capacity of 35 Mtpa of typically 1 650 kcal/kg lignite with 4-5% sulphur. In 2022, 35.5 Mt of lignite were produced, a 25.5% increase compared with 2021. However, in H1 2023, just 11.1 Mt were produced, a decrease of 39.3% compared with H1 2022. Electricity generation at MMI plants fell from 9.3 TWh in H1 2022 to 5.6 TWh in H1 2023 (-40%). More positively, exports of lignite continued in H1 2023 with 1.1 Mt exported to Serbia.

In H1 2023, total Bulgarian electricity generation fell 16.8% to 20.0 TWh compared with H1 2022 while electricity consumption fell by 7.4%. Coal's share in generation fell dramatically, from 40.7% to 27.4%, as the shares of nuclear (40.7% in H1 2023), hydro (10.4%), solar PV (7.8%), wind (4.1%) and bioenergy (4.2%) all grew, although only solar PV grew in terms of actual output – doubling. Net power exports collapsed from 6.6 TWh to 1.9 TWh as exports fell by 45% in H1 2023 and imports grew by over 200%.

Territorial Just Transition Plans for three Bulgarian coal-mining regions, which are an eligibility requirement to receive support from the EU Just Transition Fund, were presented to the European Commission on 29 September 2023 and negotiations are pending. It is proposed that large companies and SMEs are eligible for investment support. However, in protest over the plans to ramp down lignite production, trade unionists have threatened strike action.

In 2023, Bulgaria's National Energy and Climate Plan will be updated as a draft version to be finalised in 2024 after public consultation. Local authorities seek to participate in the process. The Ministry of Energy reports that the update is currently in progress in line with the current energy situation in Europe, the best outcomes for energy sector development and energy security.

Czech Republic

Brown coal output in the Czech Republic was 14.2 Mt in the first half of 2023 (-13.5% compared with H1 2022) of which 9.1 Mt (-22%) was used to generate 13.3 TWh (-22%) of electricity. Hard coal and lignite accounted for 38% of total generation in the first six months of 2023 compared with 43% for the same period of 2022. Brown coal's leading position was overtaken by nuclear with 15.3 TWh (a 40.3% share).

To improve public finances, the government will increase fees on mining: concession fees will increase by 50% from CZK 1 000/ha to CZK 1 500/ha; royalties for brown coal mining will almost double from CZK 1.18/GJ (4.8 €/GJ) to CZK 2.05/GJ (8.5 €/GJ). An update of the National Energy and Climate Plan (NECP) for 2021-2030 with an outlook to 2050 includes:

- a phase out of coal for heat and power by 2033, with a significant decline 2025-2030,
- expansion of RES to reach 30% of final energy consumption by 2030 (*c.f.* 17.7% in 2021), and
- a new unit at Dukovany nuclear power plant by 2036.

This plan will be sent to the European Commission by the end of October 2023 with submission of a final version scheduled for June 2024. The plan will directly influence Czech energy policy due to be finalised in 2024, so is heavily debated.

Germany

Lignite consumption in Germany fell by 18.1% in H1 2023 on account of a general decline in energy demand of 7.1% and a rise in electricity imports, much of it nuclear power from France after the closure in April of Germany's last nuclear plant. All primary energy supplies declined except RES which grew only +0.6% compared with H1 2022, with conventional sources down by 19.1% in H1 2023 compared with the same period of 2022.

Year-ahead and spot electricity prices stabilised after a turbulent year in 2022, but at relatively high levels compared with previous years. These high prices are of concern to German industry and other energy consumers who also face higher rates for gas, oil and district heating.

Lignite production in the first half year was 52.7 Mt, down 17.8% compared with the same period of 2022 and below the 2018-22 five-year average, with quite wide variations across the different lignite mining regions (–10% in Lusatia, –27.5 in Central Germany and –20% in Rhineland for the January to August period). Of this, 46.9 Mt (–18.3%) was delivered to power plants in H1 2023 while the remainder was used for industrial products and households. A recently agreed extension to the strategic reserve means that five lignite units totalling 1.8 GW will be kept available to run for six additional months over the coming winter. No further extensions are expected such that the decommissioning plan would continue as planned with the closure of all plants by 2038.

By law, the German government should have conducted its first “check-point” review of the Coal Exit Law (KVBG – *Kohleverstromungsbeendigungsgesetz*) by 15 August 2022, but failed to do so. A power plant strategy is also awaited by industry with details on how the national 80% CO₂ reduction target by 2030 can be achieved. Fifty new gas-fired peaking units (24 GW) are envisaged across Germany, all “H₂-ready”. While coal and lignite will be needed during the phase-out period, the large mining and power companies are announcing future investment projects, *e.g.* LEAG plans 7 GW of RES by 2030 and 14 GW by 2040. For lignite mine closures in the Rhenish area, perhaps as early as 2030, RWE is planning a large pipeline from the river Rhine to flood new lakes at the Hambach mine from 2030 and the Garzweiler mine from 2036 – a project that will take four decades to complete. At the same time, RWE is investing in renewables in the Rhenish area, aiming to build at least 700 MW by 2030, including floating solar PV on lakes at former mines. As the second part of RWE’s transformation plan agreed with the government, the company plans to build 3 GW of hydrogen-ready, gas-fired power plants.

Greece

Lignite mining by the Public Power Corporation (PPC) in Greece takes place at two mines in Western Macedonia (Mavropigi and South Field mines which supply the Agios Dimitrios power plant in the West Macedonia Lignite Center where the new Ptolemais V power plant is also being commissioned) and at one mine in the Peloponnese region (Megalopolis Lignite Center which will close in one or two years with areas away from active mines already being developed into solar PV parks and some pumped-storage hydro). Production from January to June 2023 was 5.8 Mt, well below plan, so it is estimated that 12.0 Mt will be produced by year end, a fall of 10.3% from the 13.4 Mt mined in 2022 and far below production a decade ago which was above 50 Mtpa.

Estimates of the power generation mix in 2023 show lignite with 4.7 TWh (a 9.1% share of a 50.9 TWh total supply) and gas also falling to 14.5 TWh (28.4%) as RES grow to 21.3 TWh (41.9%) and imports grow to 6.8 TWh (13.3%) with hydro accounting for the balancing 7.2%. With this mix, indigenous energy sources would account for 58% of Greek electricity supply.

With inflation under control at 2.7% (CPI) in August, compared with August 2022, and unemployment on a downward trend at 10.9% in August, concerns remain about a just transition because of the correlation between lignite production and employment in manufacturing in the mining regions – both are trending downwards. Plans are in progress to return PPC lignite mining areas to the public as forest, agricultural land, recreational parks, industrial areas (to create jobs) and lakes. As in Germany, the latter will take time to fill and water quality must be managed, as must slope stability.

Poland

Polish lignite production in 2022 was 54.6 Mt, 4.3% greater than in 2021 and 18% greater than the low of 2020. However, that trend reversed sharply in H1 2023 when Polish lignite production fell to 19.8 Mt, some 27.1% below production in the same period of 2022. Production at the PAK Adamów mine ended in 2023 and production at PAK Konin fell 43%.

Looking ahead to 2030 and 2040, a draft update to the *Energy Policy of Poland to 2040* shows growing electricity demand will be met initially by offshore/onshore wind power, solar PV and gas-fired power, and then also by small- and large-scale nuclear power plants. An overall investment of around PLN 750 billion in new generation capacity is foreseen. By 2040, power generation should reach 243.6 TWh with just 20.3 TWh or 8.3% from coal and lignite units.

NON-EU COAL MARKET

Ukraine

Despite bombings, destruction of energy facilities, occupation of territories, deaths among company employees, the Ukrainian energy sector, including DTEK, has continued to supply electricity. The conflict has led to a significant shortage of thermal power generation, while the Russian army continues to occupy the Zaporizka NPP and uses it as a military base, endangering employees. Control over Luhanska, Zaporizka and Kurakhivska TPPs has been lost. The destruction of the Nova Kakhovska hydropower plant on 6 June 2023 led to a disaster on an enormous scale: 600 km² and seventy-seven settlements flooded, two million tonnes of crops lost, and more than one million Ukrainians without drinking water.

Compared with 2021, the Ukrainian economy has seen a 30% fall in GDP, a 27% inflation rate, a 30% devaluation of the Hryvnia, a 30% rise in unemployment, and a 70% drop in steel production. 8 million refugees have left the country, 6 million people internally displaced. Almost one third of generation capacity lies in now occupied territories and is thus unavailable, 50% of NEC Ukrenergo's HV substations and tens of thousands of kilometres of transmission lines have been damaged. Electricity consumption has reduced by 35%, gas consumption by 30%, over ten million Ukrainians were left without power supply in November and December 2022. 25% of generation capacity has been destroyed and 40% damaged by cruise missile and kamikaze drones strikes. At DTEK mines, the workforce now includes 250 women working underground, replacing miners who have joined the Ukrainian armed forces, some of whom have been killed or wounded.

Total coal production in the first six months of 2023 was 6.2 Mt, a slight increase of 0.9% compared with the same period of 2022. DTEK has an 84% market share of Ukrainian steam coal production, 17% of thermal power generation, 11% of renewables generation, 48% of private gas production, 38% of electricity distribution and 26% of electricity supply. Coal imports in H1 2023 are a reported 0.2 Mt of only coking coal, far below the 4.3 Mt imported in H1 2022 which included 1.7 Mt of steam coal. Despite the war, DTEK has played a significant role in the stable running of heat plants and is prepared for the 2023-24 heating season when the Ukrainian energy system will have much lower margins due to damaged equipment.

Looking ahead, Ukraine can provide 30 GW of RES generation by 2030. In May 2023, DTEK launched the first stage of the Tiligul'ska wind power plant, the world's first wind power plant to be built during a war. While Ukraine reduced its emissions during the war, for security reasons it has become necessary to revise the closure plans for coal-fired power plants.

Ukraine's energy strategy to 2050 foresees the closure of all coal-fired power plants by 2040, subject to the risks of not having enough renewable energy capacity and the unpredictable military situation. Ukraine can play a crucial role in EU energy security, boasting Europe's second largest proven gas reserves at 1 100 bcm, Europe's largest underground gas storage facilities at 30 bcm, significant renewable resources and a willingness to introduce new types of nuclear generation. Ukraine can be a "testing ground" for new technologies such as energy storage systems, small modular nuclear reactors, smart grids and hydrogen, with the potential to become a supplier of expertise and human capital for the development of new clean technologies.

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	2022	163.33	207.74	379.31	325.20	381.49	393.75	441.15	415.40	426.62	318.48	260.75	307.29
(US\$/tce CIF NW Europe)	2023	211.33	161.57	172.29	170.99	153.90	114.87	141.00	126.81	141.02	143.45		
steam coal	2022	144.37	183.16	344.26	300.64	360.66	372.72	433.43	410.21	430.75	324.12	255.61	290.20
(€/tce CIF NW Europe)	2023	196.24	150.79	160.94	155.89	141.60	105.97	127.51	116.24	131.99	136.38		

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

Freight rates (US\$/t)

Richards Bay/Rotterdam	2022	9.13	11.18	17.06	15.38	20.15	21.50	16.31	7.34	9.53	12.23	9.94	10.18
(Capesize)	2023	8.31	6.43	9.15	10.15	7.29	7.92	6.88	7.65	8.22			
Queensland/Rotterdam	2022	13.05	15.73	21.33	19.53	29.13	25.96	21.09	13.50	13.72	17.36	15.10	14.53
(Capesize)	2023	13.75	11.58	14.22	14.44	13.31	12.60	11.93	12.75				
Puerto Bolivar/Rotterdam	2022	11.31	11.84	13.90	12.27	15.31	15.69	16.02	11.83	10.70	13.49	11.75	12.68
(Capesize)	2023	10.01	8.33	10.31	11.05	11.89	9.46	10.48	10.91	10.78			

Source: Clarksons (monthly averages from weekly data)

Currency rates

USD / EUR	2022	0.884	0.882	0.908	0.925	0.945	0.947	0.983	0.988	1.010	1.018	0.980	0.944
	2023	0.929	0.933	0.934	0.912	0.920	0.923	0.904	0.917	0.936			
USD / RUB	2022	76.7	78.3	102.9	77.8	64.6	57.2	58.1	60.3	60.2	61.5	61.0	65.6
	2023	70.1	73.1	76.3	80.9	79.0	83.0	90.5	95.6	96.4			
USD / AUD	2022	1.39	1.40	1.36	1.36	1.42	1.43	1.46	1.44	1.50	1.57	1.51	1.48
	2023	1.44	1.45	1.50	1.49	1.51	1.49	1.48	1.54	1.56			

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	2022	85.24	93.95	113.48	105.64	113.87	117.72	108.55	101.90	95.32	93.62	89.73	79.68
	2023	81.62	81.88	78.45	84.13	75.82	75.19	81.06	87.33	94.60	91.34		

Source: OPEC Reference Basket (ORB) price

International coal trade

TABLE 2

Steam coal				
exporting country	2023 (1-6) Mt	YoY change c.f. 2022		2022 (1-6) Mt
		Mt	%	
PACIFIC				
Australia	94.6	5.5	6.2%	89.1
Canada	3.5	-0.7	-16.6%	4.2
China	1.9	0.2	9.4%	1.7
Colombia	6.0	4.3	254.4%	1.7
Indonesia	179.8	10.7	6.4%	169.0
Russia	n.a.	:	:	n.a.
South Africa	29.7	3.8	14.8%	25.8
USA	11.0	2.5	29.2%	8.5
sub-total	326.4	26.3	8.8%	300.0
ATLANTIC				
Australia	1.0	-2.0	-66.8%	3.0
Canada	0.5	0.3	91.5%	0.3
Colombia	20.8	-3.5	-14.6%	24.3
Indonesia	1.8	0.1	7.4%	1.7
Russia	n.a.	:	:	n.a.
South Africa	7.3	-2.3	-23.9%	9.5
USA	10.5	0.7	6.8%	9.8
sub-total	40.9	-4.8	-10.5%	45.7
others	91.1			88.0
total	458.3	24.6	5.7%	433.7

revised 2022 figures shown in **bold**

steam coal data includes anthracite

TABLE 3

Coking coal				
exporting country	2023 (1-6) Mt	YoY change c.f. 2022		2022 (1-6) Mt
		Mt	%	
Australia	76.3	-4.3	-5.4%	80.6
Canada	15.6	0.8	5.1%	14.9
China	0.1	-0.1	-45.7%	0.3
Russia	n.a.	:	:	n.a.
USA	22.7	1.3	6.0%	21.4
others	21.1			17.8
total	135.9	0.9	0.7%	134.9

revised 2022 figures shown in **bold**

European crude steel production

COUNTRY	2023 (1-6) Mt	YoY change c.f. 2022	2022 (1-6) Mt
Austria	3.8	-5.9%	4.0
Belgium	3.3	-8.1%	3.6
Bulgaria	0.3	34.0%	0.2
Croatia	0.1	13.8%	0.1
Czechia	1.9	-25.8%	2.6
Finland	2.0	8.2%	1.9
France	4.9	-24.9%	6.5
Germany	18.5	-5.2%	19.6
Greece	0.6	-23.1%	0.8
Hungary	0.3	-42.4%	0.5
Italy	11.4	4.7%	10.9
Luxembourg	1.0	-12.5%	1.1
Netherlands	2.4	-31.5%	3.5
Poland	3.3	-24.4%	4.4
Portugal	n.a.	:	0.8
Romania	0.9	-49.4%	1.7
Slovakia	2.3	16.1%	2.0
Slovenia	0.3	-8.2%	0.3
Spain	5.8	-2.5%	5.9
Sweden	2.3	0.7%	2.3
unspecified	1.1	:	1.7
EU-27	66.3	-10.9%	74.4
Belarus		:	
Bosnia & Herzegovina		:	
Moldova		:	
North Macedonia		:	
Norway		:	
Serbia		:	
Switzerland		:	
Türkiye	15.9	-16.3%	19.0
Ukraine		:	
UK	n.a.	:	3.5

Sources: World Steel Association, Eurofer and own estimates

 revised 2022 figures shown in **bold**

Hard coal and lignite production and consumption

COUNTRY	Hard coal production			Hard coal deliveries for power generation	
	2023 (1-6) Mt	YoY change c.f. 2022	2022 (1-6) Mt	2023 (1-6) Mt	2022 (1-6) Mt
Czechia	0.7	-5.6%	0.7	0.8	0.7
Germany	0.0	:	0.0	8.1	11.7
Poland	23.2	-16.7%	27.9	16.8	18.2
other EU	0.1	-43.4%	0.2	8.4 e	10.9
EU-27	24.0	-16.6%	28.8	34.2	41.6
Norway	0.1	-15.1%	0.1	0.0	0.0
Türkiye	0.5	-31.2%	0.7	10.7	9.1
Ukraine	6.2	0.9%	6.1	n.a.	6.4
UK	0.2	-45.0%	0.4	0.6	1.2

COUNTRY	Lignite production			Lignite deliveries for power generation	
	2023 (1-6) Mt	YoY change c.f. 2022	2022 (1-6) Mt	2023 (1-6) Mt	2022 (1-6) Mt
Bulgaria	11.1	-39.3%	18.2	9.9	18.2
Czechia	14.2	-13.5%	16.4	9.1	11.6
Germany	52.7	-17.8%	64.1	46.9	57.4
Greece	5.8	-12.5%	6.7	4.8	5.5
Hungary	2.1	-9.4%	2.4	2.1	2.3
Poland	19.8	-27.1%	27.2	20.6	27.2
Romania	7.6	-11.8%	8.6	7.7	8.6
Slovakia	0.4	-18.7%	0.5	0.7	0.6
Slovenia	1.0	-34.2%	1.5	0.9	1.6
EU-27	114.7	-21.2%	145.5	102.6	133.0
Bosnia and Herzegovina	6.0	-10.0%	6.7	5.0	5.8
Georgia	0.1	13.9%	0.1	0.0	0.0
Kosovo	3.5 e	-14.9%	4.1	3.6	4.3
Montenegro	0.7 e	-2.4%	0.7	0.6	0.6
North Macedonia	2.1	-20.9%	2.6	2.8	3.0
Serbia	14.4	-13.2%	16.6	16.0	16.3
Türkiye*	25.7	-35.8%	40.0	21.8	33.6

* Asphaltite is included within lignite.

revised 2022 figures shown in **bold**

Hard coal imports

COUNTRY	Coking coal imports		Steam coal imports		Total hard coal imports		
	2023 (1-6) Mt	2022 (1-6) Mt	2023 (1-6) Mt	2022 (1-6) Mt	2023 (1-6) Mt	YoY change c.f. 2022	2022 (1-6) Mt
Austria	0.8	1.1	0.5	0.2	1.3	3.6%	1.3
Belgium	1.1	1.2	0.6	0.8	1.7	-17.4%	2.1
Bulgaria	0.0	0.0	0.3	0.5	0.3	-53.0%	0.5
Croatia	-	-	0.2	0.3	0.2	-33.9%	0.3
Czechia	1.2	1.3	1.1	1.1	2.2	-4.3%	2.3
Denmark	-	-	0.9	1.0	0.9	-8.5%	1.0
Finland	0.0	0.4	0.8	0.9	0.8	-40.8%	1.4
France	1.7	1.8	1.9	2.9	3.5	-23.9%	4.7
Germany	5.8	5.7	10.9	15.4	16.7	-20.9%	21.1
Greece	0.0	0.0	0.0	0.1	0.0	-53.6%	0.1
Hungary	0.1	0.4	0.1	0.0	0.2	-57.8%	0.5
Ireland	0.0	0.0	0.4	1.1	0.4	-63.4%	1.1
Italy	1.1	1.4	3.5	4.5	4.6	-21.9%	5.9
Netherlands	0.6 e	0.7	3.1	3.4	3.7	-9.6%	4.1
Poland	1.3	1.6	10.3	4.8	11.6	80.0%	6.4
Portugal	-	-	0.0	0.0	0.0	-17.1%	0.0
Romania	-	-	0.2	0.5	0.2	-50.0%	0.5
Slovakia	1.2	1.4	0.2	0.1	1.4	-9.9%	1.6
Slovenia	-	-	0.0	0.0	0.0	-34.7%	0.0
Spain	0.9	0.9	3.3	3.0	4.2	7.7%	3.9
Sweden	0.6	0.2	0.2	0.4	0.8	17.7%	0.6
EU-27	16.5	18.2	38.4	41.1	54.9	-7.5%	59.4
Bosnia and Herzegovina	0.6	0.6	-	-	0.6	-12.1%	0.6
Serbia	-	-	0.0	0.0	0.0	75.3%	0.0
Türkiye	2.2	2.3	13.6	12.2	15.7	8.6%	14.5
Ukraine	0.2	2.6	0.0	1.7	0.2	-94.6%	4.3
UK	0.4	1.1	1.5	1.8	2.0	-32.3%	2.9

 revised 2022 figures shown in **bold**

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