

Coking coal: Impact assessment for supply security



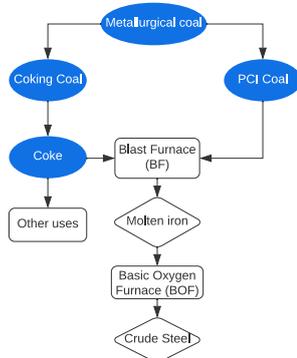
HIGHLIGHTS

- Coking coal is one of the essential raw materials for primary steel production.
- The trade of coking coal is highly concentrated on the export side, with Australia being the dominant global supplier and Russia the world's third largest producer and exporter.
- EU's dependency on coking coal imports rose from 2015 to 2019 due to declining domestic production. The reliance on Russian imports decreased since 2018. Russia accounted for 11% of EU imports of coking coal in 2021.
- Replacing Russian supply in the EU is feasible. The alternatives to Russian imports are limited to geographically distant sources, i.e. Australia, the United States of America, Canada and Mozambique, which are current EU trade partners.
- Trade options that could ensure substitution of Russian imports in the EU: a) additional exports from Australia, the USA, Canada and Mozambique in 2022-2024 are directed only to the EU and other countries that are phasing out Russian imports; b) non-Russian supply in the rest of the world is re-orientated to the EU and other countries that are phasing out Russian imports and replaced elsewhere by deflected Russian trade flows.
- The risk of supply disruption due to the Russo-Ukrainian war is rising due to the current tight market balance globally, which is projected to last at least until 2024. Competition for non-Russian supply is expected to intensify.

QUICK GUIDE - This briefing is one of a series of overviews about potential supply disruption of non-food, non-energy raw materials due to Russia's war against Ukraine.

Coking coal, the most widely used type of metallurgical coal¹, is high-grade bituminous coal with a quality that allows the production of a coke suitable for use in blast furnaces in the steel industry. The EC 2020 list of Critical Raw Materials includes coking coal.

Figure 1 - Metallurgical coal's value chain



Metallurgical coal comprises coking coal of various qualities (hard, semi-hard and semi-soft) and coal for Pulverised Coal Injection (PCI). Coke is the solid product obtained by high-temperature heating of coking coal in the absence of oxygen (coking process) in coke ovens. Coke is used mainly in the iron & steel industry acting as energy source, and chemical agent (carbon source) in blast furnaces (BF). Coke makers usually use multiple coking coal qualities in a coke oven's blend in order to ensure that coke meets specifications (e.g. sulphur and phosphorus content, coke strength), and optimizes BF performance and costs. Coke can be substituted by pulverised coal injection (PCI) to a certain extent. PCI coal is a high-quality steam coal injected into a blast furnace to reduce coking coal (coke) consumption. Most Blast Furnaces operate at a ratio of 60-70% coke and 30-40% PCI coal (MCA, 2021).

IMPACT ASSESSMENT

Short-term impacts and medium-term outlook globally

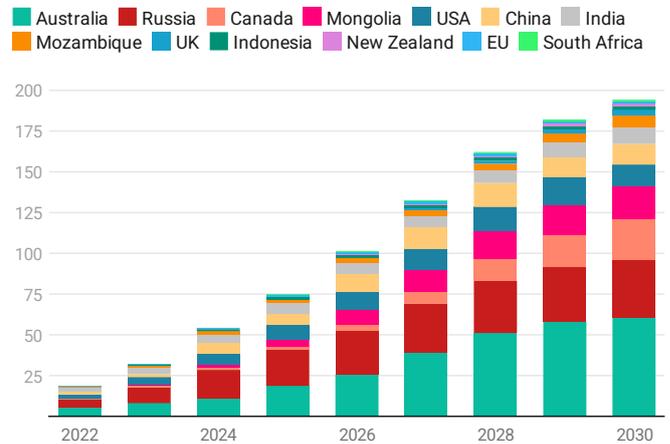
Sanctions on Russia will create additional demand for imports from Australia, USA, Canada and Mozambique, as western consumers seek to substitute the metallurgical coal supply from Russia. Securing fast non-Russian alternative supply is challenging as mining companies typically utilise long-term contracts², making surplus volumes scarce. In addition, the global supply/demand balance of coking coal has been extremely tight since mid-2021.

Import demand is foreseen to rise in the near- to medium term (2022-2024), mainly shaped by the rising demand in China and India for steel production. On the supply side, forecasts show

that new mining projects, located in both major consuming and export-oriented producing countries of metallurgical coal (Figure 2), could only marginally balance the additional demand in 2022-2024³. Therefore, the current tight market balance is likely to continue at least until 2024. Figure 3 shows the expected changes in metallurgical coal trade by country/region.

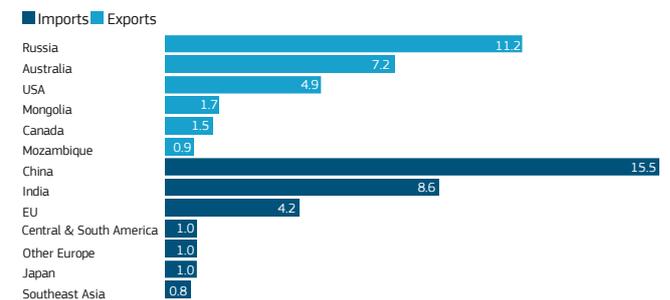
Figure 2 – Forecast of metallurgical coal's additional supply⁴, 2022-2030, in million tonnes (Mt)

Global supply of coking coal in 2020: 1,032 Mt



Source: JRC modelling based on background data from S&P Global (2022); GCMT (2022); IEA (2021)

Figure 3 – Forecast of metallurgical coal's export/import increase⁵ in 2024 compared to 2021, in million tonnes (Mt)



Source: JRC based on the modelling of expected production (Figure 1) and the forecast of consumption reported by IEA (2021).

Russia's former trade partners — the EU, the UK and other European countries, Japan and South Korea that have already moved to ban Russian imports or intend to phase them out — imported 17 Mt of metallurgical coal from Russia in 2021. The additional seaborne exports from non-Russian sources (Australia, USA, Canada, and Mozambique) that are projected in 2022-2024 will not be enough to replace Russian imports and meet extra import demand, even in the best-case scenario⁶ (Figure 4).

¹ The products included in the scope of this overview are metallurgical coal consisting of coking coal and PCI coal, and coke.

² <https://www.reuters.com/business/australia-south-africa-miners-eye-options-europe-makes-desperate-calls-2022-03-09/>

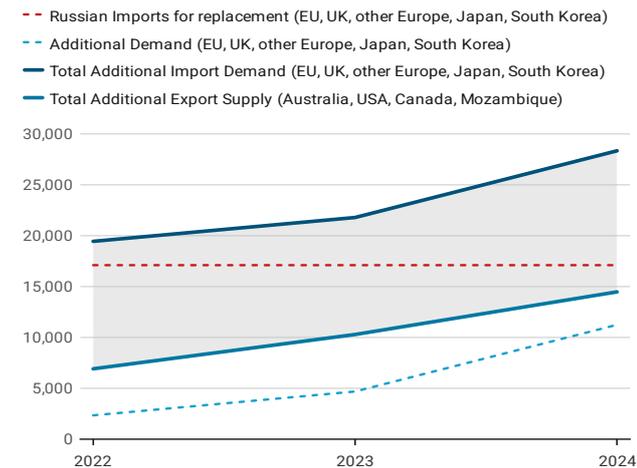
³ In 2024, 58 Mt of additional demand is expected according to (IEA, 2021), and 54 Mt of new supply according to JRC modelling.

⁴ The additional supply is derived from new mines development, expansion of operating mines and closure of operating mines (depletion).

⁵ Based on JRC's forecast of additional supply (Figure 2), and the anticipated projection of changes in consumption per country/region provided by (IEA, 2021) on the basis of anticipated steel production.

⁶ The best-case scenario assumes that all new supply (exports) from Australia, USA, Canada, and Mozambique is directed exclusively into EU, UK, other European countries, Japan and South Korea.

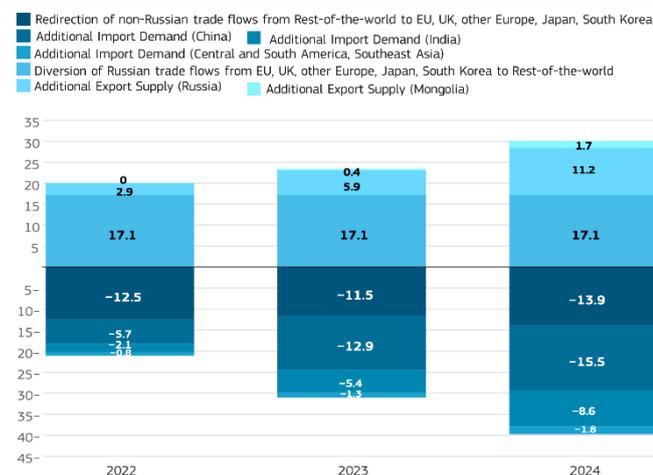
Figure 4 – Forecast of metallurgical coal's additional import demand⁷ and export supply for countries aiming to end purchases from Russia, 2022-2024, in thousand tonnes (kt)



Source: JRC analysis

The shortfall in metallurgical coal's export supply for countries that intend to cut their reliance on Russia, ranges from 11.5 to 14 Mt in 2022-2024. The deficit may be covered by substituting non-Russian supply elsewhere in the world (e.g. China and India) with deflected Russian export flows, and the subsequent redirection of these non-Russian seaborne export flows into the European and other markets (Japan, South Korea). In this trade switch scenario, an annual shortfall⁸ ranging from 1 Mt in 2022 to 10 Mt in 2024 is projected in the rest of the world (Figure 5). The limited spare capacity in active mines globally and a faster ramp-up rate in new mines might offset this gap, but with no prompt availability ensured.

Figure 5 – Forecast of metallurgical coal's additional import demand and export supply in rest-of-the-world⁹, 2022-2024, in Mt



Source: JRC analysis

It is underlined that pivoting Russian shipments from Europe to Asia depends on the availability of railways and ports eastwards in Russia¹⁰. Hence, infrastructural and logistical

⁷ The 2021 level of Russian exports is assumed over 2022-2024

⁸ The assessment does not cover specific qualities and grades but the overall export supply gap.

⁹ The trade switch scenario assumes that the re-routed non-Russian export flows from the rest-of-the-world (such as China and India), to the EU, the UK, other Europe, Japan and South Korea are replaced in the rest-of-the-

bottlenecks may restrict such a trade redirection and lead to the loss of some of Russia's exports in the global market. It is also noted that a preferential flow of supply from Australia — the world's top exporter and the principal non-Russian origin of extra supply in 2022-2024 (Figure 3) — to Japan and South Korea is highly probable as a new free trade agreement¹¹ in East Asia and Pacific came into force on 1 January 2022. At the same time, more Australian supply may become available for exports, as China is restricting Australian imports (Box 1).

Box 1: Sanctions and recent developments

On 8 April 2022, the EU approved an import ban on all forms of Russian coal, worth EUR 8.2 billion in 2021, as part of the fifth wave of sanctions against Russia in response to Ukraine's invasion. The ban includes imports of coking coal and coke, worth EUR 550 million in 2021 or about 7% of the total value of banned coal imports from Russia. The measure will be fully effective from the second week of August 2022. Contracts concluded before 9 April 2022 may still be executed until 10 August 2022.

Along with the EU, the USA and Japan have also banned imports of Russian coal. The UK has announced a plan to phase out Russian coal imports by the end of the year, while South Korea began diversifying coal import sources away from Russia. Among other recent developments in the global market is the elimination of import tariffs by China, the world's leading importer, from 1 May 2022 to 31 March 2023. Furthermore, China has imposed an unofficial embargo on Australian coal imports in October 2020 amid deteriorating political relations. Australia used to be the dominant supplier to China accounting for about half of Chinese imports (Figure 15).



Short-term impacts and medium-term outlook in the EU

More geographically distant sources can fill the gap in Russian supply of metallurgical coal at higher freight costs, i.e. Australia, the USA, Canada, and Mozambique, all of which are current EU trade partners (Figure 19). For securing non-Russian supply, EU importers will have to compete with countries (mainly Japan and South Korea) which strive to substitute Russian imports too. New supply from a Polish mine that commenced production in March 2022 can offset at full ramp-up about half of 2021 EU imports of coking coal from Russia. About coke, phasing out imports from Russia is assessed to have minor repercussions in EU's supply security, as the EU is a net exporter of coke. Finally, for the specific grade of low-

world by the banned Russian exports in the EU, the UK, other Europe, Japan and South Korea.

¹⁰ <https://www.ft.com/content/83ed0382-6740-47a7-86e5-efea37756452>

¹¹ [The Regional Comprehensive Economic Partnership \(RCEP\)](#)

sulphur PCI coal, it is reported that replacement of Russian imports with Australian supply — the only other major supplier — is unlike in the short-term (IEEFA, 2022),(Wood Mackenzie, 2022).

DEMAND

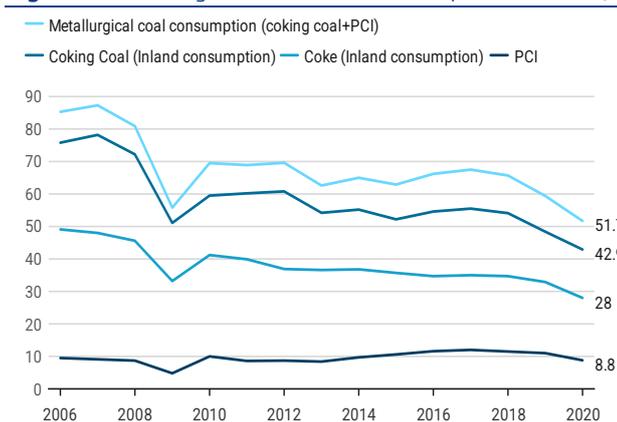
Coking coal is an essential feedstock in the integrated (BF-BOF) steelmaking route (Figure 1). 71% of global¹² and 57% of EU¹³ steel production relies on metallurgical coal. The transformation in coke ovens of coking coal into coke for use in blast furnaces accounted for 89% of the EU's total coking coal consumption in 2020 (Figure 6). 95% of EU's consumption of coking coal is associated with the iron & steel industry. By-products of the coking process are used in several applications, e.g. the coke tar is employed in the production of chemical compounds and carbon fibres. Coke and by-products of coke production (coke oven gas) are also used in the generation of heat and electricity for industrial and non-industrial purposes.

Figure 6 – Coking coal's applications in EU industrial sectors¹⁴, 2020

Applications	Industry	Uses
Iron & Steel (coke in Blast Furnace)	C2410 - Manufacture of basic iron and steel and of ferro-alloys	89%
Iron & Steel (other uses)	C2410 - Manufacture of basic iron and steel and of ferro-alloys	6%
Industrial (other than Iron & Steel) energy use	C2445 - Other non-ferrous metal production; C2399 - Manufacture of other non-metallic mineral products n.e.c.; C10 - Manufacture of food products; C11 - Manufacture of beverages; C12 - Manufacture of tobacco products; C28 - Manufacture of machinery and equipment n.e.c	3%
Chemicals	C2014 - Manufacture of other organic basic chemicals	1%
Non-industrial energy use (commercial and public services, households, etc)	-	1%

Source: JRC based on data from Eurostat (2022), Eurostat (2008)

Figure 7 – Metallurgical coal and coke consumption in the EU¹⁵, Mt



Source: JRC elaboration based on data from Eurostat (2022)

In the EU, coking coal consumption fell from 55.5 Mt in 2017 to 48.5 Mt in 2019 and, further, to 43 Mt in 2020 (Figure 7). Regarding all types of metallurgical coal (i.e., coking coal+PCI coal), consumption in the EU is estimated at 55 Mt in 2021 (IEA,

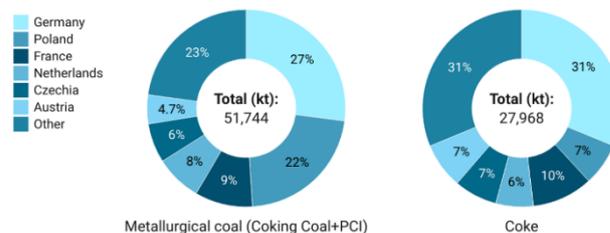
¹² <https://www.worldcoal.org/coal-facts/coal-steel/>

¹³ <https://www.eurofer.eu/publications/brochures-booklets-and-factsheets/european-steel-in-figures-2021/>

¹⁴ Other uses in the iron & steel industry may include foundry coke used in ferroalloy and castings production, breeze coke in iron ore sintering, and

2021). Germany is the largest metallurgical coal and coke user in the EU (Figure 8).

Figure 8 – Metallurgical coal and coke consumption by EU country, 2020



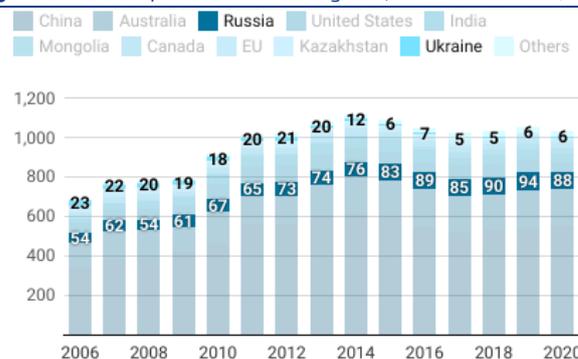
Source: JRC elaboration based on data from Eurostat (2022)

SUPPLY

Global production

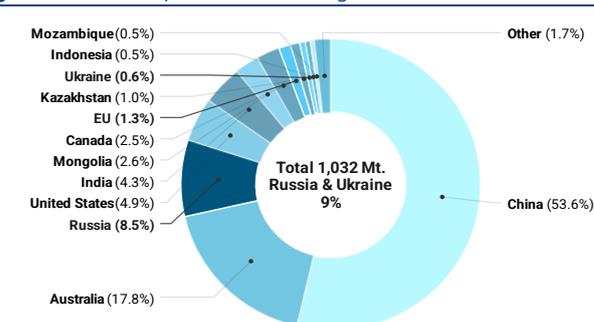
The annual world supply of coking coal ranged between 1,000 Mt and 1,150 Mt in the last decade (Figure 9). China mines more than half of world's output. Other significant producers are Australia (18%), Russia (8%) and the USA (5%) (Figure 10).

Figure 9 – Global production of coking coal, in million tonnes (Mt)



Source: WMD (2022)

Figure 10 – Global producers of coking coal in 2020



Source: WMD (2022)

Global trade

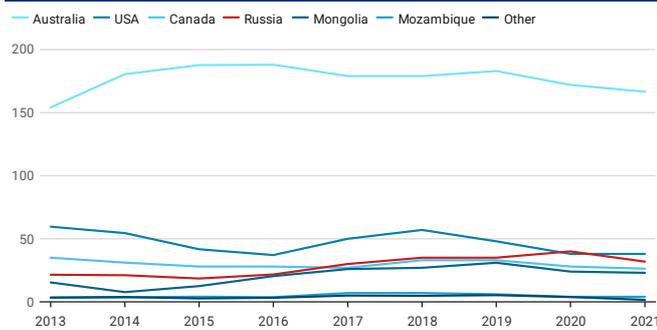
The metallurgical coal market has only one-quarter of the volume of the overall coal market and one-third of the trade volumes of the thermal coal market (IEA, 2021). Nevertheless, international trade plays a more important role in metallurgical

fuel for heating and operation of coke ovens and blast furnaces. Consumption in the chemical industry includes energy uses.

¹⁵ "Inland consumption" is defined by Eurostat (2022) as: indigenous production + production from other sources + imports - exports - international marine bunkers + stock changes.

coal's¹ supply than thermal coal. Roughly 30% of the world's annual metallurgical coal consumption is imported, of which 85-90% by seaborne trade. In 2021, global metallurgical coal exports were estimated at 290 million tonnes, 50 Mt or approximately 15% lower than in 2019. The value of coking coal's global trade in 2019 was about USD 50 billion¹⁶. The small number of supplying countries also characterises the metallurgical coal market (Figure 11) compared to thermal coal.

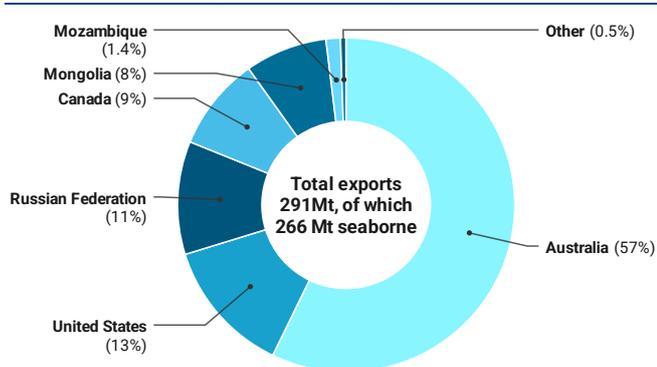
Figure 11 – Evolution of global exports¹⁷ of metallurgical coal by origin, 2013-2021, in million tonnes (Mt)



Source: JRC compilation based on data from (IEA, 2021)(IEA, 2018)(Euracoal, 2022)(VDKI, 2022)(Euracoal, 2021) (Eurostat Comext, 2022).

Global exports are dominated by Australia, which held 57% of the market in 2021. The product mix in Australian exports is balanced over all qualities/types of metallurgical coal, i.e. from the highest quality of hard coking coal to PCI coal (MCA, 2021). Other large exporting countries are the United States, Canada, Russia, and Mongolia (Figure 12). In 2021, these five countries supplied 98% of the world's metallurgical coal exports.

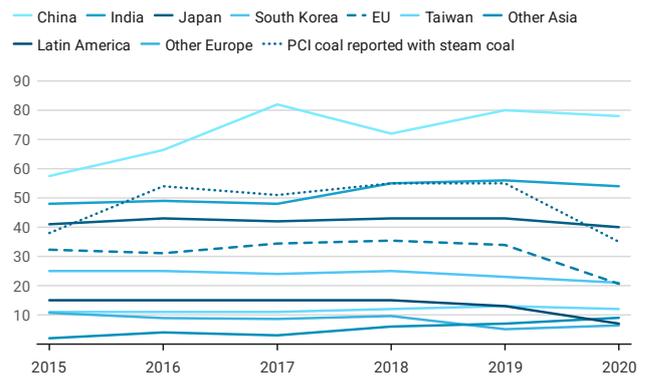
Figure 12 – Global exporters of metallurgical coal, 2021, in Mt



Source: JRC elaboration based on Euracoal (2022); Eurostat Comext (2022); IEA (2021)

China is the world's biggest coking coal importer (Figure 13), primarily from Australia and Mongolia. Despite China's dominant position in global production, the giant Chinese steel industry relies on overseas suppliers. However, China does export coke, being the most significant exporter in the world¹⁸.

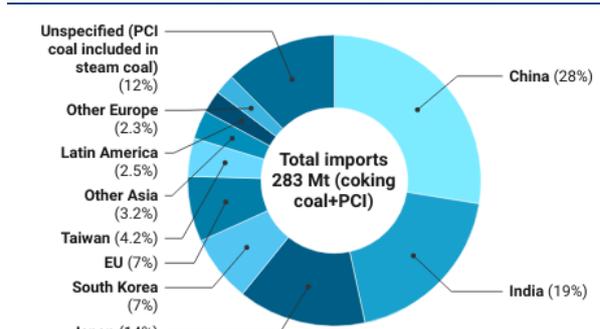
Figure 13 – Evolution of global imports of coking coal¹⁹ by destination, 2015-2020, in million tonnes (Mt)



Source: JRC elaboration based on data from VDKI (2022); Eurostat Comext (2022); UN Comtrade (2022)

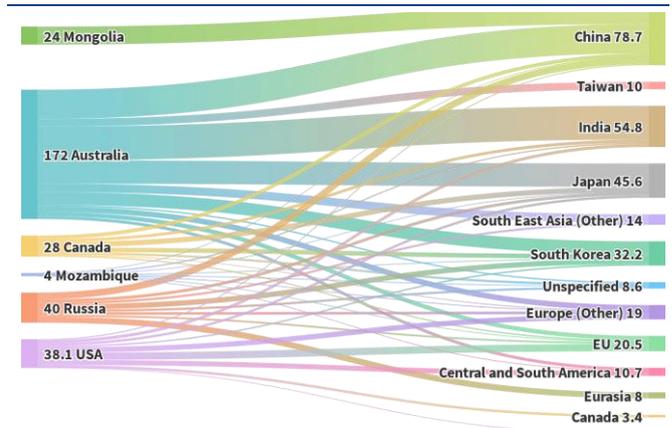
Countries in Asia are the major destinations of coking coal trade. In 2020, Asian countries accounted for 86% of global coking coal imports (or 80% of global imports of metallurgical coal) (Figure 14). Australia is a major supplier to Asian countries, covering almost two-thirds of their metallurgical coal imports (63% in 2020) (Figure 15).

Figure 14 – Global importers of coking coal, 2020, in Mt



Source: JRC based on data VDKI (2022); Eurostat Comext (2022); UN Comtrade (2022).

Figure 15 – Main trade flows in the metallurgical coal market, 2020, in Mt



Source: JRC based on background data from IEA (2021); Eurostat Comext (2022); EIA (2022)

¹⁶ <https://rmis.jrc.ec.europa.eu/apps/rmp2/#/Coking%20coal>

¹⁷ EU-intra trade is excluded.

¹⁸ Data for HS 270400 (UN Comtrade, 2022)

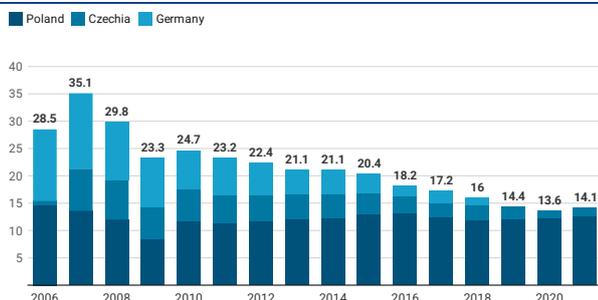
¹⁹ Imports of PCI coal are presented separately as they are not attributed to destination countries by the data source.

EU IMPORT DEPENDENCY

EU production

The EU production of coking coal has decreased over the last years due to the closure of mines²⁰ in Germany and Czechia (Figure 16). Coking coal is currently produced in Poland (90% in 2020), mainly in the Śląskie region, and Czechia (10% in 2020) in the Moravskoslezsko region. The Polish company Jastrzębska Spółka Węglowa SA (JSW SA) is the largest producer of coking coal in the EU and a significant producer of coke. Few investments in new mining capacity have been made over recent years (Kapetaki et al., 2021). A new mine in Poland (Jastrzębie-Bzie mine), which in March 2022 commenced extraction²¹ of high-quality hard coking coal²², will strengthen EU's domestic supply in the coming years. The annual production of coking coal is projected to reach over 1.5 Mt at full ramp-up (about 3% of EU demand in 2021).

Figure 16 – Evolution of EU production for coking coal by country, Mt



Source: WMD (2022) for 2006-2020; Euracoal (2022) for 2021

Figure 17 shows the operating coking coal mines and steel plants consuming coking coal (coke) in the integrated (BF-BOF) steelmaking route (whether or not integrated with coking plants) across the EU.

Figure 17 – Distribution of coking coal active mines and steel plants with blast furnaces (BF) in the EU



Source: JRC based on data from GSPT (2022); S&P Global (2022)

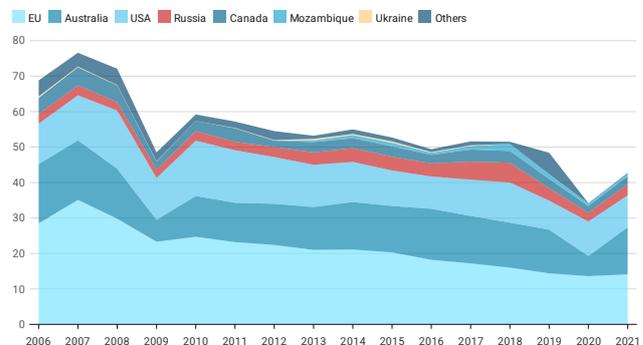
²⁰ In Germany, the two remaining active mines ceased production in 2018 (Prosper-Haniel mine, and Ibbenbüren mine in Münster region). In Czechia, one mine terminated its production in 2017 (Paskov mine).

²¹ <https://www.jsw.pl/en/about-us/jsw-mines-and-plants>

EU imports

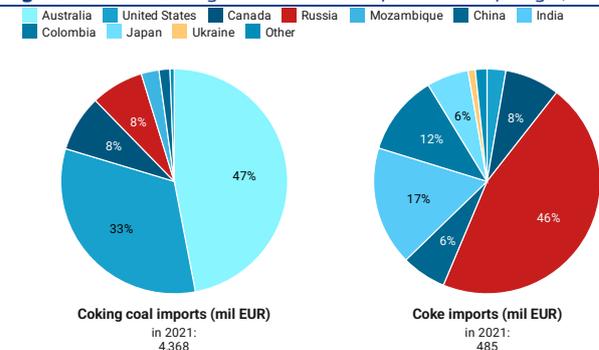
EU imports of coking coal reached 28.7 million tonnes in 2021, worth EUR 4.4 billion. Imports represented about two-thirds of the total EU sourcing (production+imports) (Figure 18). Australia and the USA covered 31% and 21% of the total EU sourcing (production+imports) in 2021.

Figure 18 – Structure of EU coking coal supply by source, in Mt



Source: JRC based on Eurostat Comext (2022) for EU-extra Trade; WMD (2022) for 2006-2020 production; Euracoal (2022) for 2021 production.

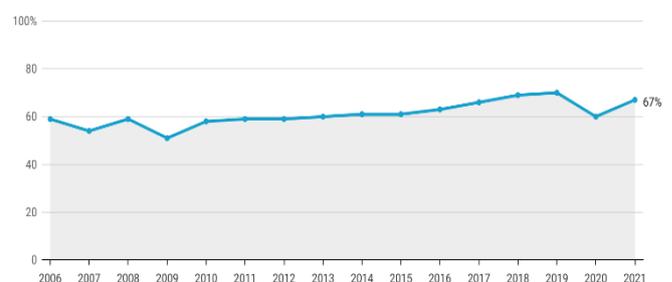
Figure 19 – EU coking coal and coke import value by origin, 2021



Source: Data from Eurostat Comext (2022)

The majority of coking coal imported into the EU comes from Australia (47% in 2021 by value) and the USA (33% in 2021 by value) (Figure 19). Coke imports amounted to 1.6 million tonnes in 2021, worth EUR 485 million. Coke imports made up a much smaller share (10%) of the total import value for coking coal+coke (EUR 4.9 billion in 2021).

Figure 20 – Reliance on net imports of coking coal in the EU (%)



Source: JRC elaboration based on Eurostat (2022); Eurostat Comext (2022)

Due to the decline of domestic production, the EU's reliance²³ on coking coal imports rose from 61% in 2015 to 70% in 2019

²² <https://www.jsw.pl/en/press-office/news/article/jsws-new-mine-launch>

²³ 'Import Reliance' Indicator = (Imports – Exports) / Apparent consumption; Apparent consumption = Domestic production + Imports – Exports

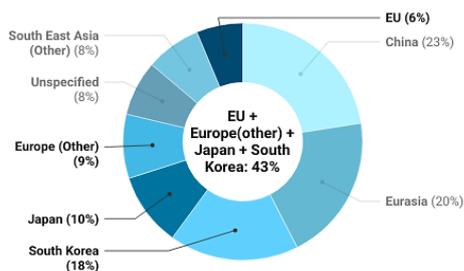
before falling in 2020, owing to lower imports in the wake of the pandemic's impact on steel production (Figure 20). Regarding coke, the EU has been a net exporter since 2009. Net exports ranged from 1.4 Mt to 2.4 Mt in 2016-2021.

TRADE FLOWS FROM RUSSIA AND UKRAINE

Global

Russia ranks third in metallurgical coal exports worldwide (Figure 12). China is Russia's top buyer of metallurgical coal (Figure 21). In 2020, countries that have recently imposed sanctions against Russian imports (or foresee to do so) took 43% of Russian exports worldwide.

Figure 21 – Destinations of Russian metallurgical coal exports, 2020



Source: Background data from IEA (2021)

Box 2: Russia's and Ukrainian coking coal industry

In 2020, Russia was the world's third-largest producer and second-largest exporter of coking coal worldwide. The Russian output increased by 45% in the last decade (from 67 Mt in 2010 to 88 Mt in 2020), and Russia accounted for about 9% of global coking coal supply in 2020. Its share in total metallurgical coal supply is expected to be higher; it is reported that it owns about 30% of global pulverized coal injection (PCI) operations. Russia's share in global trade of metallurgical coal rose to 13% in 2020 (IEA, 2021), from 7% in 2013 (IEA, 2017). According to (IEA, 2021), Russia is currently expanding production capacity and export infrastructure such as its railway network and port terminals in order to facilitate exports to China and other areas in Asia in the coming years.



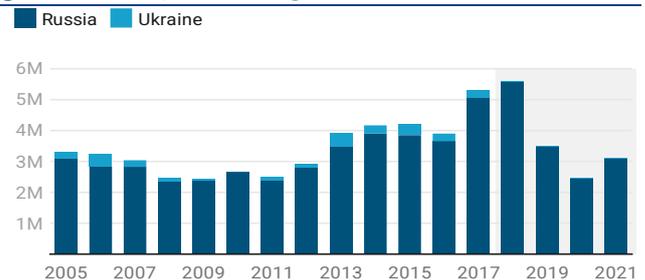
Ukraine's production has had a significant setback since 2012, with a decline of about 70% (from 21 Mt in 2012 to 6.5 Mt in 2020). In 2020, it represented less than 1% of the global coking coal output. Ukraine is a net importer of coking coal and its production is mainly destined for domestic consumption. Mining sites are located in eastern Ukraine, where an armed conflict with Russia-backed separatists erupted in 2014. Ukrainian mines are currently (June 2022) very close or within the active [conflict zone](#) of the Russo-Ukrainian war.

EU

Russia ranked as the fourth largest exporter of coking coal and the top coke exporter to the EU in 2021 (Figure 19). EU countries imported 3.1 Mt of coking coal from Russia in 2021, up from 2.5 Mt in the previous year, which accounted for about 11% of extra-EU coking coal imports in 2021. Over the last years, the import volume from Russia peaked at 5.6 Mt in 2018 (or 16% of extra-EU coking coal imports), but coking coal imports from Russia declined substantially in 2019 (Figure 22). Ukrainian exports to the EU ceased after 2017.

Lastly, it is reported that 30% of European consumption of PCI coal originates from Russia, and, most importantly, that Russia supplies Europe with almost all of its low-sulphur PCI coal (Wood Mackenzie, 2022). Specific trade data for PCI coal in international statistics are not available²⁴.

Figure 22 – EU imports of coking coal from Russia and Ukraine, Mt



Source: Eurostat Comext (2022)

The EU relied on Russia for 8% of its coking coal consumption in 2018-2020. EU countries depend on Russian coking coal to varying degrees (Figure 24). Germany was the largest importer of Russian coking coal in the EU in 2018-2020, while the higher dependency is observed for Slovakia.

Figure 23 – Coking coal imports from Russia by Member State²⁵, annual average 2018-2020

EU country	Coking coal Imports from Russia (kt) ▼	Coking coal demand for steel production (blast furnace, BF) (Mt)	Imports from Russia (% of EU-extra imports)	Imports from Russia (% of coking coal consumption)	Imports from Russia (% of demand for steel production)
EU	3,846	54.7	13%	8%	7%
Germany	1,070	17.6	26%	9%	6%
France	802	2.4	44%	35%	33%
Spain	444	3.0	16%	4%	15%
Netherlands	418	4.1	5%	10%	10%
Italy	389	3.8	32%	22%	10%
Poland	289	3.0	11%	14%	10%
Hungary	202	0.8	21%	16%	25%
Finland	156	1.7	13%	13%	9%
Belgium	33	6.6	1%	1%	1%
Austria	19	2.6	2%	2%	1%
Czechia	9	2.6	2%	0%	0%
Denmark	1	2.1	1%	0%	0%
Greece	0	3.0	0%	0%	0%
Portugal	0	1.4	0%	0%	0%
Other	15	-	1%	-	-

Source: JRC elaboration based on data from Eurostat Comext (2022); Eurostat (2022); WorldSteel (2020)

²⁴ PCI coal can be sold either as metallurgical or as thermal (steam) coal; in international trade statistics it is classified together with thermal coal

²⁵ The demand for steel production is estimated from pig iron production data provided by WorldSteel (2020), and the generic assumptions that the

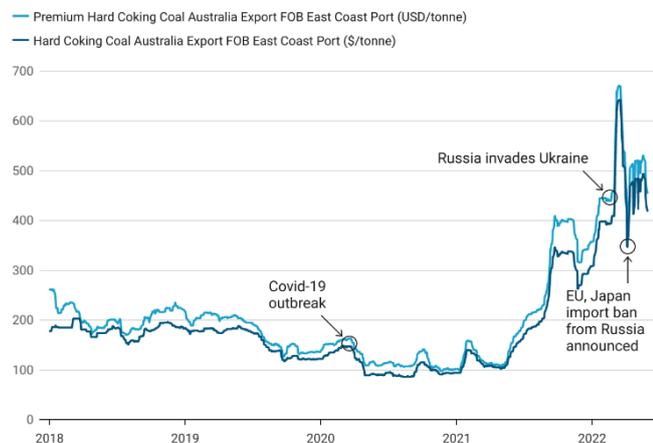
production of 1 tonne of pig iron requires 450 kg pf coke, and that 1 tonne of coking coal produces 643 kg of coke.

Overall, EU imports of coking coal and coke from Russia accounted for 11% by value of total coking coal and coke imports in 2021 (EUR 4.9 billion in 2021).

PRICES

Coking coal prices plummeted in 2020 due to weak global steel demand caused by Covid-19 (IEA, 2021). The recovery of demand from Asian steelmakers (especially in India) and constrained output in Australia, mainly due to weather conditions, exhausted stocks. The tight supply on the global market and the low freight availability drove prices to record high levels between mid-2021 and February 2022. While prices of coking coal were already soaring, and therefore the costs for blast furnace-based steel production, Russia's invasion of Ukraine on February 24th, 2022 prompted concerns about supply disruption. Since then, coking coal prices have been highly volatile. Premium hard coking coal loaded in Australia, a benchmark for global seaborne supply, spiked to all-time highs of USD 670 per tonne in mid-March 2022, from USD 460 per tonne at the end of February 2022. Following a short-lived drop, prices rose again temporarily as the EU and Japan announced an import coal ban from Russia. At the end of May 2022, Australia's premium hard coking coal declined to USD 455 per tonne, similar to the level before Russia's invasion of Ukraine. Still, this represents a more than three-fold jump from the lowest price level in 2020, and a 28% increase compared to the end of 2021.

Figure 24 - Coking coal daily prices, January 2018 – May 2022



Source: JRC based on *The Steel Index-S&P Global* (2022)

CONCLUDING REMARK

Trade re-orientation is taking place as a consequence of the sanctions against Russian imports imposed globally, including by the EU. However, predicting how new patterns of trade will

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eventually settle down in the coking coal market is a complicated puzzle. EU's reliance on coking coal imports from Russia is not significant, but the substitution of Russian supply is foreseen to be challenging as it is dependent on how global trade channels will redistribute Russian and non-Russian supply. At the same time, JRC's analyses shows that global export supply is likely to remain very tight over 2022–2024, which is expected to intensify competition for the procurement of non-Russian supply.

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