

EURACOAL



European Association for Coal and Lignite AISBL

Annual Report

2022



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MESSAGE FROM THE PRESIDENT

Vladimír Budinský



This report covers the activities of EURACOAL during calendar year 2022, a year which will be remembered for the start of an armed conflict on European soil. Even before Russia launched its full-scale invasion of Ukraine on 24 February, the energy sector was under attack: gas supplies to Europe were interrupted in autumn 2021 leading to volatile and high prices for all energy commodities. The anticipated post-Covid recovery stalled as supply chains became stretched and, by mid-2022, Europe faced an energy crisis on a scale not seen since the 1970s. To alleviate hardship and protect industry, EU and UK governments put together support packages worth around one trillion euros or 6% of GDP – including the REPowerEU package.

At the EURACOAL Executive Committee meeting in July 2021 and following a site visit to the Chernobyl nuclear power station, members discussed coal, electricity and other aspects of Ukrainian energy supply. I spoke at the IV International Coal Conference, alongside Prime Minister Shmyhal at the DTEK Academy on the outskirts of Kyiv – an ultra-modern facility established by the company to train and educate the next generation of managers and technicians. It is located near Babyn Yar, the site of a mass slaughter of Jews eighty years ago. Following Russia's invasion, we saw a repeat of such atrocities on the outskirts of Kyiv in a war that should never have started.

Since then, DTEK has had to deal with the horrors and challenges of war. From the regular reports we receive, DTEK has worked under the most difficult and dangerous of conditions to secure the country's electricity supply. During 2022, Ukraine became an integrated part of the European Union by connecting and synchronising its grid and even exporting some electricity. Coal has been essential. Russia must end its aggression and allow a return to peace in Europe. Ukraine can then choose its own future and fulfil its potential. In the meantime, high fuel and power prices have shaken European politicians which means policy priorities under the European Green Deal must be balanced and affordable.

When I was elected EURACOAL President in January 2021, EU energy policy debate centred on emission reductions, and on how fast new, tougher targets could be reached. Coal was only mentioned in the context of phase-outs and a just transition. By September 2021, policymakers and elected representatives were becoming concerned about security of energy supply and the affordability of energy as fossil gas prices and then coal prices soared: steam coal in Rotterdam was selling at over 200 US\$/tonne.

Everything has now changed: energy security and energy prices matter to citizens and hence politicians. The Czech Ambassador-at-Large for Energy Security, Václav Bartuška, has said, "We will need [coal] until we find alternative sources. Until then, even the greenest government will not phase out coal." At the EU level, the European Commission Executive Vice President, Frans Timmermans, said that member states should be allowed to use coal for power generation for longer, providing they invest in renewable energy sources. This is a great opportunity for our sector, because coal, not fossil gas, can be the bridging fuel to balance renewables, at least until we have sufficient, large-scale energy storage in place.

Large investments, especially in LNG terminals, have helped secure alternative energy supplies. Russian pipeline gas supply to the EU is a tiny fraction of what it was in 2021, and we see new patterns in global energy flows. The EU was quick to ban Russian coal from 10 August 2022, and

crude oil was banned from early December, followed by petroleum products from February 2023. EU coal buyers scoured the globe for supplies to meet demand. Poland was able to find replacements for the 8-9 million tonnes of good-quality coal it previously imported from Russia, despite steam coal prices rising briefly to around 400 US\$/tonne. So far, and despite these seismic disturbances to what had been a well-functioning energy market, the EU has not suffered any serious shortages. Analysts point to several factors which have helped, notably:

- demand destruction by energy-intensive industry,
- warm weather,
- outbidding other regions for LNG, and
- modest energy savings by citizens.

To this list, I add Chinese coal production which increased by a massive 8% in 2022. This freed up the international coal market, but China’s import demand could swing sharply upwards: the country remains the biggest single driver of coal prices everywhere. We should not assume coal prices will revert to more normal levels.

The International Energy Agency (IEA) estimates global coal demand was 8 billion tonnes in 2022 – the highest ever. With half of global production and still growing demand, China dominates, but growth rates in India and the EU were also significant in 2022. The IEA expects coal power generation in the EU to remain at current levels for some time. This will depend on the rollout of renewables which policymakers believe can replace coal, gas and older nuclear plants.

In the EU, hard coal imports stood at 126.8 million tonnes in 2022, up 18.3% on 2021 even though Russian imports fell close to zero from mid-August. EU hard coal production, mainly from underground coal mines in Poland, declined by 4.5% in 2022 to 54.6 million tonnes compared with 2021. Lignite production rose 7.1% to 294.3 million tonnes, with Germany accounting for almost half of this total. However, production did not return to pre-pandemic levels as output in 2022 was 4.3% below the 307.5 million tonnes of lignite mined by the EU in 2019.

Nord Stream fossil gas pipeline



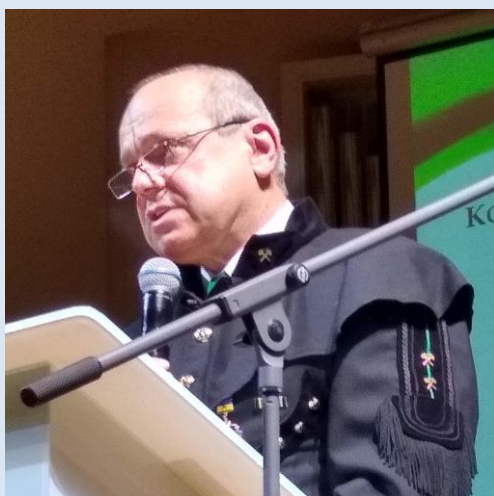
In every annual report since 2017, EURACOAL has highlighted the energy security implications for the EU of building a second pair of Nord Stream gas pipelines from Russia. The additional fossil gas to have been imported could have displaced all the coal- and lignite-fired power generation in Germany which was of concern to all EURACOAL members. The explosive damage to three of the four Nord Stream pipelines on 26 September 2022 released an estimated 200-400 ktCH₄, but it was the geopolitical consequences rather than climate impact that made headlines around the world.

The European coal industry has assumed a new and urgent responsibility: to guarantee European energy sovereignty. The European Commission’s REPowerEU plan could see a change to its previous Fit-for-55 proposals and give coal a more important role while still achieving the climate target of a 55% reduction in greenhouse gas emissions by 2030.

The Fit-for-55 package was published on 14 July 2021 and EURACOAL held workshops to formulate our positions in response to the Commission’s ambitious proposals. On 17 December 2022, the most important files in the package were agreed during trilogue negotiations between Council, Parliament and the Commission. The outcome is not what the coal industry had wanted: a tightening of the EU Emissions Trading System (ETS) and a carbon border tax that may or may not help certain industries. We take some comfort from the fact that Parliament did not make the Commission’s proposal worse.

Although not obvious from the text of the REPowerEU plan of 18 May 2022, which is mainly concerned with fossil gas security and the faster rollout of renewables, projections in the annexes show a greater use of coal than previously envisaged. While Fit-for-55 foresaw a decrease of coal demand in the EU – by 50% by 2030 – REPowerEU expects demand for coal to decrease less steeply. In a staff working document, the Commission writes that consumption of fossil gas will be 48% lower by 2030 while consumption of coal is 41% higher to generate an additional 105 TWh of electricity compared with Fit-for-55. However, the EU ETS does not allow for this, so the outcome will depend on political decisions at the EU and national levels.

EURACOAL President in Silesia



On 7 March 2022, the Polish Mining Chamber of Industry and Commerce (GIPH – a member of EURACOAL) celebrated its 30th anniversary at the Silesian Philharmonic in Katowice with an awards ceremony and concert. The Vice Minister of State Assets and government plenipotentiary for energy and mining transformation, Piotr Pyzik, joined MEPs, members of the Sejm, officials and representatives from science and industry, as well as the President of EURACOAL, Vladimír Budinský, who gave a speech in Polish. The concert was overshadowed by events in Ukraine where Russian aggressors had created a humanitarian crisis that Poland especially has responded to with great compassion.

The EU ETS has added enormous costs for coal users – carbon prices in the EU trebled in 2021 and reached almost 100 €/tCO₂ in 2022. A revision of the ETS Directive makes things even tougher. At the same time, our sector is more important than ever for energy security, and this is now being better recognised by the European Commission and other stakeholders. EURACOAL will therefore continue its work to ensure no additional burdens are placed on the coal industry.

For Europe, lignite is an indigenous energy resource that has a high strategic value. Hard coal is essential for many member states who need alternatives to Russian gas – domestically mined coal or coal from the well-diversified international market. This was seen in April 2022 when the EU found it a lot easier to ban Russian coal, but not oil or gas, under its 5th package of sanctions. Thankfully, the 50 million tonnes of coal once imported from Russia have been substituted with coal from the US, Colombia, South Africa, Indonesian and Australia. If the EU wants to be more energy independent, then coal should logically be a part of that strategy.

During this energy transition, we should not ignore clean coal technologies to reduce emissions. There is an ongoing need for cutting-edge research in the coal sector, including for the repurposing of coal assets. The final meeting of a project on repurposing coal power plants during the energy transition took place in June 2022, hosted by VGBE Energy and involving eight EURACOAL members. This important project is funded by the Research Fund for Coal and Steel (RFCS). Fortunately, and thanks to the Commission with the support of EURACOAL members, we now have a modernised legal basis for the RFCS. This was a major achievement – finalised in 2021 with three new texts published in the Official Journal of the EU. For the 20th anniversary of the RFCS, a summit was hosted by the European Commission in Brussels on 21/22 March 2022 (see Prof. Alicja Krzemień's report below on the activities of the EURACOAL Technical Research Committee). At the summit and given the disruption caused by the war in

Ukraine, our then Vice President, Dr. Tomasz Rogala, was already looking at how an additional 10 million tonnes of coal could be found to avoid dependency on Russian fossil fuels. Back in 2018, he had warned on every possible occasion of the very risks that have now become a reality.

In December 2021, the European Commission presented its proposal for a new Methane Regulation. This would place enormous burdens on the coal and lignite industry. If approved by the European Parliament without amendment, it would force underground coal mines to close prematurely. EURACOAL engaged actively in the consultations during the drafting of the regulation and was disappointed with the outcome: coal mine safety is subordinated to climate protection. I met the Commissioner for Energy, Kadri Simson, and was able to explain to her why environmental regulations need to be flexible enough to allow

the coal industry to operate for as long as each member state still needs coal.

Unfortunately, the bigger political picture influenced the Methane Regulation. US President Joe Biden, European Commission President Ursula von der Leyen and several other international leaders agreed to a Global Methane Pledge at the UNFCCC COP26 summit in Glasgow. This non-binding declaration aims to collectively reduce global methane emissions by at least 30% from 2020 levels by 2030. In its quest to reduce methane emissions, the European Commission placed a heavy burden on the energy sector with an unreasonable proposal that threatens the remaining underground hard coal mines in Poland and an underground lignite mine in Slovenia. As the file progressed through the European Parliament, EURACOAL engaged with MEPs and other stakeholders to avoid this outcome. On

EURACOAL breakfast event in the European Parliament: Coal in the REPowerEU Plan

On 30 June 2022, three days after the Executive Committee met in Prague, EURACOAL members had an exchange of views with MEPs on the future role of coal in the EU. Russia’s aggression against Ukraine had seen the EU re-evaluate its energy policy priorities and this event, hosted by MEP Dennis Radtke, was an opportunity to take stock. MEP Radan Kanev, rapporteur for the Industrial Emissions Directive (IED) revision, joined MEP Anna Zalewska, MEP Rainer Wieland and MEP Christian Ehler while EURACOAL was represented by President Vladimír Budinský, Vice President, Dr. Lars Kulik and committee chair Dr. Thorsten Diercks. From JSW, Artur Badylak spoke knowledgeably on coal mine methane, supported by colleagues from PGE and RWE.

Recalling the two mining disasters in Poland in April 2022, Mr. Budinský said the health and safety aspects of methane control were missing from the Commission proposal for a Methane Regulation. He described the use of coal across Europe as an abundant indigenous resource that provides secure electricity and heat production. With the Czech government’s six-month



MEP Dennis Radtke addresses EURACOAL members in the European Parliament, Brussels, 30 June 2022

presidency of the European Council about to begin, Mr. Budinský praised the energy security priority. He urged MEPs to “allow us to survive until the end” and not burden the coal industry with more regulation. Dr. Kulik explained Germany’s long-term plan to phase out coal, yet in the short term would need to bring back 10 GW of mainly coal plants to replace gas-fired power generation. He spoke of the need to maintain a motivated workforce in the face of a 15-year closure plan, before commenting on the proposed revision of the IED. In his summing up of a wide-ranging discussion, Mr. Radtke promised MEPs would do their best in challenging times.

30 June 2022 thanks to an initiative of our Vice President, Dr. Lars Kulik, EURACOAL hosted a meeting with five MEPs in the European Parliament on not only the Methane Regulation but also the Commission's proposal for a revision of the Industrial Emissions Directive (IED). The IED is a crucial file for the EURACOAL Energy and Environment Policy Committee as explained below in the report of Dr. Thorsten Diercks, the committee chair. In the European Parliament, the report on IED reform is a splendid balancing act by MEP Radan Kanev, partly thanks to efforts by EURACOAL and other industry associations who highlighted their concerns in detailed assessments.



EURACOAL President Budinský at *Braunkohlentag* 2022 organised by Deutscher Braunkohlen-Industrie-Verein (DEBRIV) in Radebeul, Germany on 19 May 2022

The safety of mineworkers is as important as climate protection and EURACOAL members are working together to deliver on these imperatives as well as ensuring energy security in the EU. It was an honour for me to serve as EURACOAL President over my two-year term – never before has the association seen so much change at the European level in such a short space of time. With the Covid-19 pandemic thankfully now behind us, I hope to see a quick resolution to the conflict in Ukraine. Finally, I sincerely thank our Vice Presidents and committee chairs for all their support during my term and wish President Rogala every success during his second term.

COMMITTEE ACTIVITIES: Energy and Environment Policy Committee

Dr. Thorsten Diercks, Chairman

The EURACOAL Energy and Environment Policy Committee deals mainly with energy, climate and environmental matters of concern to the coal sector, with a focus on EU policy initiatives. Given the importance of member state policies, an exchange of views on these is another essential element of the committee's work. Issues are analysed, discussed and conclusions agreed on appropriate actions. The Committee's position papers are used to inform opinion leaders and decision-makers in Brussels and beyond.

The Committee held two formal meetings in 2022, a hybrid one on 5 April and an online one on 11 October. Both meetings were focussed on the coal industry's responses to legislative proposals by the European Commission. Members also discussed the impacts of Russia's war of aggression against Ukraine on the energy sector, particularly the coal sector. EU sanctions against coal imports from Russia were announced on 5 April as Committee members met in Brussels. On 20 September, an *ad hoc* meeting was held to discuss the Commission's emergency interventions to address high energy prices.

Most of the Committee's work in 2022 centred around a proposed Methane Regulation and a revision of the Industrial Emissions Directive (IED). While the former poses a direct and existential threat to underground coal mines and adds significant burdens at closed mines and operating opencast mines, the latter is of broader concern to many industrial sectors. The discussions and respective strategies on each file were thus very different. EURACOAL alone needed to raise awareness of the vital threat posed by the Methane Regulation as drafted, but could co-ordinate its activities with other industry associations on the IED revision.

Members also discussed the responses of the European Commission and member states to the evolving energy crisis. On 3 March 2022, the European Commission Executive Vice President,

Frans Timmermans, stated in an interview with the BBC that “there are no taboos in this situation” and suggested greater coal use to reduce gas demand as renewables are rolled out with more urgency. In the subsequent REPowerEU package of 18 May, the Commission indeed foresaw a small increase in EU coal-fired electricity generation capacity (compared with previous forecasts under the Fit-for-55 package) to displace 105 TWh of gas-fired generation in 2030. On the other hand, the market interventions announced by the Commission on 30 September imposed windfall profit taxes on the coal and other energy sectors.

Methane Regulation

On 15 December 2021, the European Commission published its *Proposal for a Regulation on Methane Emissions Reduction in the Energy Sector*. If adopted without amendment, this regulation would:

- prohibit, from 1 January 2025, the venting and flaring of drainage methane, and ban the venting of methane in coal mine ventilation air from 1 January 2027 above a level of 0.5 tonnes of methane per thousand tonnes of coal mined, except in the case of coking coal mines;
- impose extensive monitoring and reporting requirements at underground and surface coal mines, independently verified by accredited bodies and overseen by a national competent authority; and
- ban the venting of methane from abandoned and closed mines from 2030.

On 10 February 2022, EURACOAL sent a letter to all 705 Members of the European Parliament, warning against certain provisions which placed environmental concerns above the health and safety imperative. The proposed regulation threatened EU energy security and risked unravelling the compromises made for a just transition of the coal regions. EURACOAL members also engaged individually with MEPs, stressing the national and regional dimensions of this threat to the coal industry. A breakfast event was held in the European Parliament on 30 June to discuss both the Methane Regulation and IED

revision. It remained however difficult to inform a wider audience of political decision-makers about the gravity of these rather technical proposals.



Executive Vice President Timmermans speaking at an event on fugitive methane emissions from the energy sector hosted by Euractiv at their offices in Brussels on 29 November 2022.

In the European Parliament, the Conference of Committee Chairs decided to follow an unusual “joint committee procedure” and thus assigned the possibly controversial methane file to both ENVI and ITRE committees. The draft report of the joint rapporteurs, published on 15 September 2022, included some minor improvements on closed mines and verifiers, and raised the limit on venting methane from ventilation shafts to 3 tonnes of methane per thousand tonnes of coal mined (3 tCH₄/kt). At this level, most Polish underground coal mines and Slovenia’s only underground lignite mine were still threatened with premature closure. Several MEPs, notably from Poland, submitted useful amendments that would further raise the limit on venting, introduce a mineworkers’ health and safety clause, and offer derogations for coking coal mines and mines scheduled for closure.

Meanwhile, the general approach of the Council of Ministers would see the proposed limit on venting methane from ventilation air shafts raised to 5 tCH₄/kt until 2031 when it would be reduced to 3 tCH₄/kt. The interinstitutional or trilogue negotiations in 2023 after the first reading of the Methane Regulation in the European Parliament will be crucial for the future of deep coal mines in the EU.

Industrial Emissions Directive

To prepare for a planned revision of the Industrial Emissions Directive of 2010 (IED), the European Commission held a public consultation, a targeted stakeholder survey and a final workshop in 2021, all with the active participation of EURACOAL and its members. On 23 February 2022, EURACOAL submitted a letter to the European Commission outlining our arguments for excluding coal mining from the revised directive.

The European Commission proposal, published on 5 April 2022, would see the IED extended to cover the mining of “non-energy minerals”. It links the exclusion of coal mining to the finality of coal use under the European Green Deal and related just transition strategy. However, the Commission would remain empowered to include additional sectors via delegated acts. On other aspects of the proposal, EURACOAL’s main concerns are:

- to protect confidential business information given the proposal to publish permit details on the internet;
- to stop the proposed reversal of burden of proof in law in cases where citizens claim compensation for any damages;
- to alleviate any unnecessary additional burdens on plant operators created by new mandatory measures such as environmental management systems and transformation plans;
- to reject the proposal to fix emission limit values at the strictest ends of BAT-AEL ranges, especially where operators can demonstrate that applying BAT only allows less strict emission limits to be met; and
- to introduce a derogation for plants within a closure plan.

These concerns were raised by EURACOAL at several meetings with the appointed rapporteur in the European Parliament, Radan Kanev, and other interested MEPs. The parliament’s draft report, published on 14 November 2022, foresees improvements on several of the points raised by EURACOAL, but concerns remain on those that would make plant operations legally uncertain.

US Green New Deal



US President Joe Biden at the European Council, Brussels, 24 March 2022

On Sunday, 7 August 2022, the US Senate passed the Inflation Reduction Act (IRA), a key component of President Biden’s political agenda. Senator Joe Manchin from coal-rich West Virginia was able to defend his constituency’s interests with budgetary caution and some coal-friendly amendments. The final version of the act foresees \$370 billion spending on energy and climate change. Viewed by some as protectionist, the IRA has forced the EU and others to re-examine their own policies on state aid for industry.

On a positive note, the draft report would introduce a derogation for plants within a closure plan. Work on the IED will continue in 2023 as compromise amendments are debated in the European Parliament and negotiations continue with the Council of Ministers.

Emergency Market Interventions

The European coal sector stands in full solidarity with Ukraine in the face of an unwarranted war. EURACOAL member DTEK has shown remarkable resilience in response to repeated attacks by Russia on the company’s assets. Repairing damaged energy infrastructure has been crucial to Ukraine’s defence. On 5 April, the European Commission announced a full ban of Russian coal from 11 August 2022. At the same time, due to rising fossil gas prices and physical scarcity of gas supplies, many EU member states turned to their remaining coal and lignite assets to secure electricity supplies. Although very challenging,

EURACOAL members quickly found other, non-Russian sources of coal to import and increased output from their generation assets.



European Commissioner for Energy, Kadri Simson, and Jozef Síkela, Deputy Prime Minister and Minister of Industry and Trade of the Czech Republic, after an extraordinary Transport, Telecommunications and Energy Council (Energy) meeting at which ministers approved interventions in the EU energy market, Brussels, 30 September 2022

In September, the Committee held an *ad hoc* meeting on the emergency market interventions proposed by the Council of Ministers. Apart from significant demand-reduction measures, the REPowerEU package of measures included a cap on the market revenues of operators of “inframarginal” electricity generation which includes lignite generation, but not hard coal. In addition, Council approved a “solidarity contribution” or 33% tax on excess profits in the oil, gas, coal and refinery sectors not covered by the inframarginal revenue cap. Members were particularly concerned about the potential double taxation of lignite mine and power plant operators. The Committee will closely watch

energy market developments in 2023 as a long-term reform of market design is discussed. The European Commission wishes to address the security and cost challenges of 2022, as well as create a better framework to integrate a growing share of renewable energy sources.

Revenue cap for low-cost power generation

According to the European Commission, ‘inframarginal’ electricity producers were making exceptional profits as high gas prices drove up the wholesale electricity price in 2022, while their generation costs remained low. The Commission therefore proposed a **temporary EU revenue cap** of 180 €/MWh of electricity produced from these technologies: nuclear, lignite and renewable sources, among others. Any revenues above this cap will be collected by member states and **redirected to energy consumers** to alleviate the impact of high energy prices.

EXAMPLES OF HOW MEMBER STATES CAN USE THESE REVENUES:



Compensation to electricity customers for **reducing their consumption**



Direct transfers to **customers**



Compensation to suppliers who deliver electricity to customers below costs



Lowering electricity costs of customers for limited volumes



Promoting **investments** by customers into **renewables** and **energy efficiency**

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COMMITTEE ACTIVITIES:

Market Committee

Report prepared by the EURACOAL secretariat

The aim of the Market Committee is to deliver accurate, consistent and timely data on the production, imports and consumption of hard coal and lignite in Europe, and to publish such data in regular market reports. These reports have a wide circulation beyond the EURACOAL membership and include, each year, the first aggregated annual data for the European Union. In 2022, EURACOAL issued two coal market reports: one in May which scoped the size of the challenge to replace Russian coal imports, and another in November.

In 2022, the committee held two meetings: an in-person one in Brussels in April and an online one in October hosted from Katowice in Poland, both chaired by Anetta Piszczek of Węglokoks S.A. The first meeting included an agenda item on the coal supply situation in Europe with a focus on securing non-Russian coal imports. In late 2021 and early 2022, curtailment of some pipeline gas flows from Russia, a tight global LNG market and unseasonably low levels at gas storage sites in the EU all contributed to an energy price shock that saw coal prices rise to over 400 US\$/tonne. During the committee meeting on 5 April 2022, the European Commission announced its fifth sanctions package which included a ban on Russian coal imports after 10 August 2022.

The destruction of the Nord Stream gas pipelines linking Russia with Germany on 26 September 2022 was a pivotal moment for the EU energy sector, eliminating any thoughts of a return to the past. At the October meeting, members discussed the Commission's proposal of 30 September on an EU emergency intervention to address high energy prices. This proposal included revenue caps on inframarginal electricity producers (*i.e.* lignite, nuclear and renewables) and a windfall tax on fossil fuel businesses. Many EURACOAL members were concerned about overlaps that could have resulted in the double taxation of their activities. Other measures proposed by the Commission

sought to implement the REPowerEU plan of May 2022 which aimed to quickly reduce the EU's dependency on Russian fossil gas.

World Coal Market Developments in 2022

Global hard coal production increased by over 5% to a record 7.9 billion tonnes in 2022 as economies continued to recover from the Covid-19 pandemic and pent-up demand was met. Coal power generation also reached a new record high of around 10 300 TWh, led by strong growth in India and the EU. The International Energy Agency (IEA) now expects a decade-long plateau, rather than any decline in coal demand.

In the EU, coal supply grew by 8.3% to 476 million tonnes with lignite production increasing by 7.1% and coal imports by a massive 18.4%. The IEA predicts this growth in imports is temporary. Despite the high demand, EU hard coal production fell by 4.5%. EU coal supply has rebounded strongly over the last two years, after collapsing 22.1% in 2020, but was still 6.0% below 2019 levels in 2022.

As in recent years, especially since 2001 when China joined the World Trade Organization, Asian coal production and consumption were again strong in 2022. Coal output in China grew by 463 million tonnes or 11.5% – roughly equivalent to the EU's *total coal consumption* – to 4 489 million tonnes as the government eased its strict lockdown policies following the Covid-19 pandemic. Accounting for half of global coal production, China's demand for coal will remain buoyant: 94 GW of new coal power plants are under construction. To meet the growing demand from the power sector, the National Development and Reform Commission wants more steam coal production, with a target of 2.9 billion tonnes in 2023.

India, the world's second-largest coal producer, reported an output increase of 11.0% to 850 million tonnes in 2022 as the government encouraged local production. The Indian government wants Coal India Limited to lift its annual production to 1 000 million tonnes to largely eliminate the need for imports. Even so,

with limited domestic resources of coking coal and fast-rising demand for steam coal, India is still expected to become the world’s biggest coal importer by 2030.

Indonesian hard coal production rose 2.7% to 539 million tonnes. Adding brown coal production, Indonesian output hit a record 669 million tonnes in 2022 and the government expects a 5% production growth in 2023. Indonesia is the world’s largest exporter, followed by Australia: together they have a share of more than 60% of global coal trade.

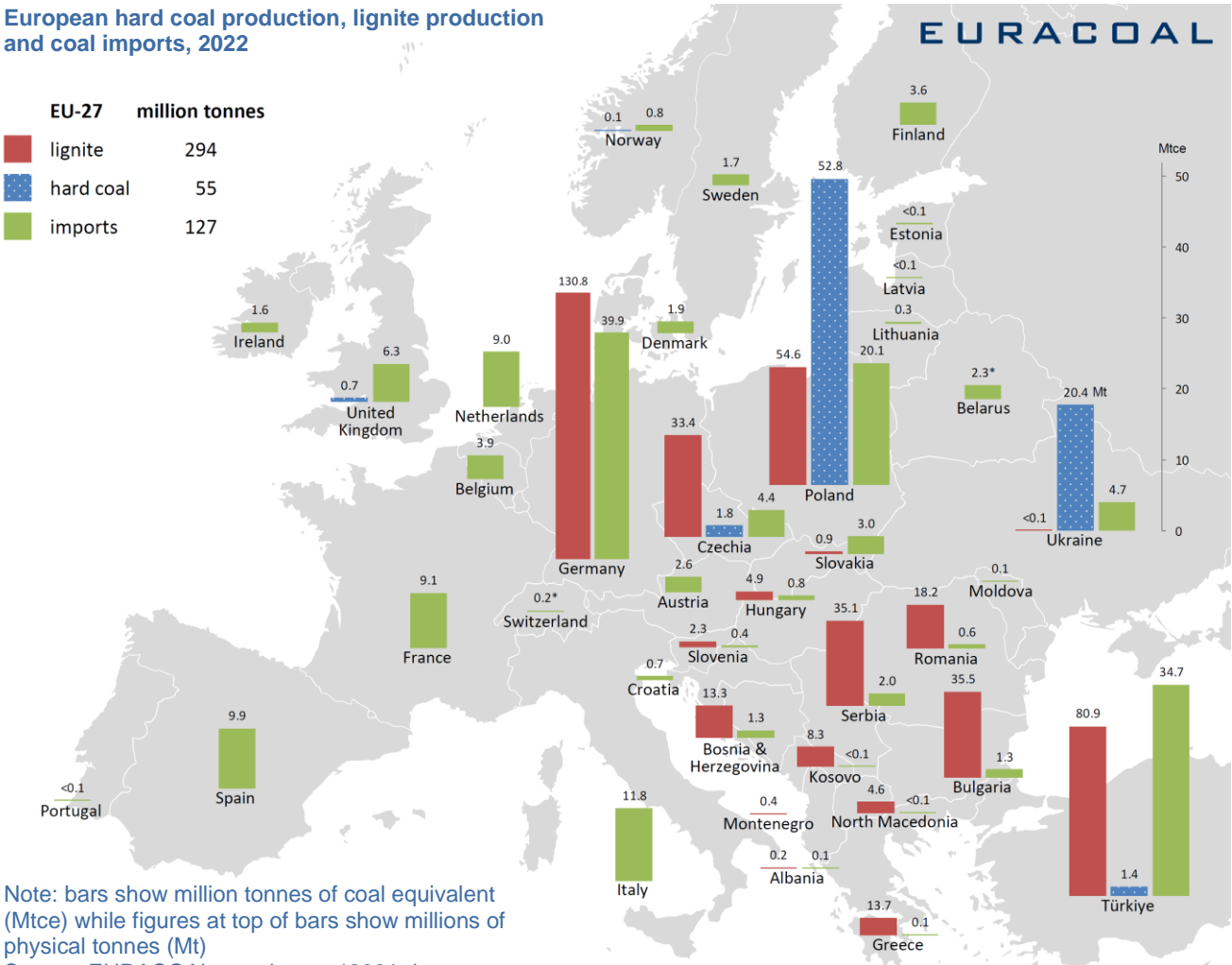
After growing strongly in 2021, US production added one million tonnes in 2022 to reach 482 million tonnes, meeting demand mainly for power generation and exports which were steady at 73.0 million tonnes (excluding to Canada) with strong demand from European buyers.

South Africa, benefitting from significantly higher sales to Europe, increased production by 3 million tonnes (+1.3%) to 232 million tonnes while exports rose by 5.3 million tonnes or 8.0% to 71.5 million tonnes. Infrastructure bottlenecks and vandalism mean export capacity at ports remains underutilised.

In Colombia, the government appears open to new coal developments, despite the tough anti-coal line taken by President Gustavo Petro during his 2022 election campaign. At an operational level, heavy rain blocked important rail lines, while protests by traditional landowners limited coal output to 65 million tonnes in 2021, but still 10% above 2021.

Türkiye was Europe’s second largest coal importer in 2022; imports declined 4.1% compared with 2021 to 34.7 million tonnes – well below the 38.7 million tonnes of 2020 when Türkiye briefly

European hard coal production, lignite production and coal imports, 2022



overtook Germany to become Europe's largest importer. Turkish lignite production rose to 80.9 million tonnes, an increase of 11.3% compared with 2021. The government's *Eleventh Development Plan 2019-2023* puts a strategic priority on expanding lignite production and power generation. Hard coal output was 1.4 million tonnes, a 13.8% increase on 2021, entirely from the Zonguldak coal basin on the Black Sea coast. The disaster at Amasra on 14 October 2022 highlighted the risks of mining and EURACOAL offers its sympathies to all those affected by this tragedy.

The Russian invasion of **Ukraine** on 24 February 2022 left Ukrainian energy companies operating in often dangerous conditions to maintain supplies. Hard coal production declined by an estimated 11.2% to 20.4 million tonnes of mostly steam coal. The war has taken a heavy toll at EURACOAL member DTEK: 116 employees were killed in 2022 and 298 wounded. All the company's mines in Luhansk and some in Donetsk have been forced to shut down and the risk is that other coal mines will cease production due to the threat of missile attacks. Coal imports contracted dramatically in 2022, down 76.2% to an estimated 4.7 million tonnes, including 2.8 million tonnes of coking coal.

Lignite and brown coal remain important sources of energy in the Western Balkans. **Bosnia and Herzegovina** increased its coal production to 13.3 million tonnes in 2022, 3.9% higher than in 2021. Looking to the future, a decision is awaited on a new unit 7 at the Tuzla power plant which has attracted the interest of several Chinese companies.

European Union Coal Market in 2022

Hard coal imports into the EU, at 126.8 million tonnes in 2022 and mostly via the ports of Amsterdam, Rotterdam and Antwerp (ARA), were up 18.3% on 2021 but still just below the 127.5 million tonnes imported by the EU in 2019. Italy, Poland and Spain saw the biggest absolute increases in 2022, but Germany was the biggest coal importer in Europe, at 39.9 million tonnes. Russian coal imports, which had accounted for an estimated 52.1% or 50.7 million tonnes of hard coal imports into the EU in 2021, fell to near zero

in September 2022. EU coal buyers increased purchases from the US, Australia, Colombia, South Africa and Indonesia. EU hard coal output fell by 4.5% in 2022 to 54.6 million tonnes compared with 2021. Lignite production rose 7.1% to 294.3 million tonnes, 4.3% below the pre-pandemic 2019 production level of 307.5 million tonnes.

Lignite production in **Bulgaria** jumped by 25.5% in 2022, compared with 2021, to a record output of 35.5 million tonnes. Mini Maritsa Iztok EAD, a subsidiary of the state-owned Bulgarian Energy Holdings EAD, is the country's largest lignite producer and in addition to supplying nearby thermal power plants the company began exporting lignite to two power plants in Serbia in 2022.

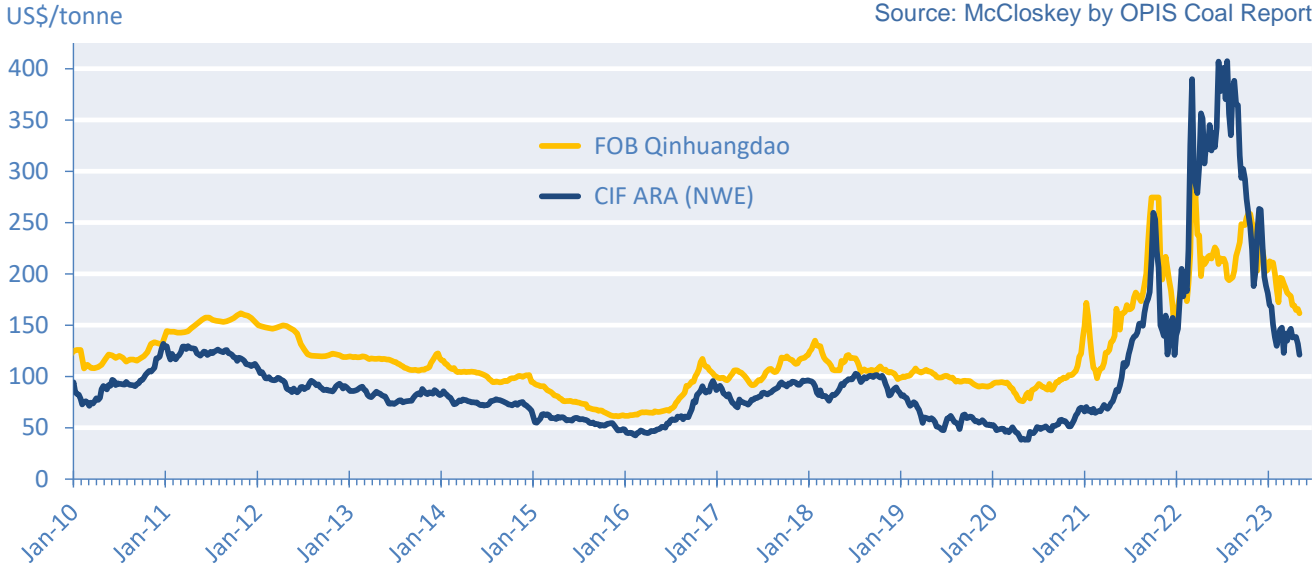
Hard coal production in the **Czech Republic** fell by 18.0% in 2022 compared with 2021 to 1.8 million tonnes while imports fell by 3.5% to 4.4 million tonnes. In contrast, Czech brown coal production increased by 14.0% to reach 33.4 million tonnes, mostly delivered for lignite-fired electricity generation which, with an estimated 34.4% share, was again the most important source of electricity generation in the Czech Republic.

In 2022, **Germany** imported 39.9 million tonnes of hard coal, a 3.1% increase on 2021 and comprising 28.4 million tonnes of steam coal and 11.5 million tonnes of coking coal. The main challenge for importers in 2022 was to source more coal than planned while diversifying away from Russian coal which had accounted for the majority of imports in recent years.

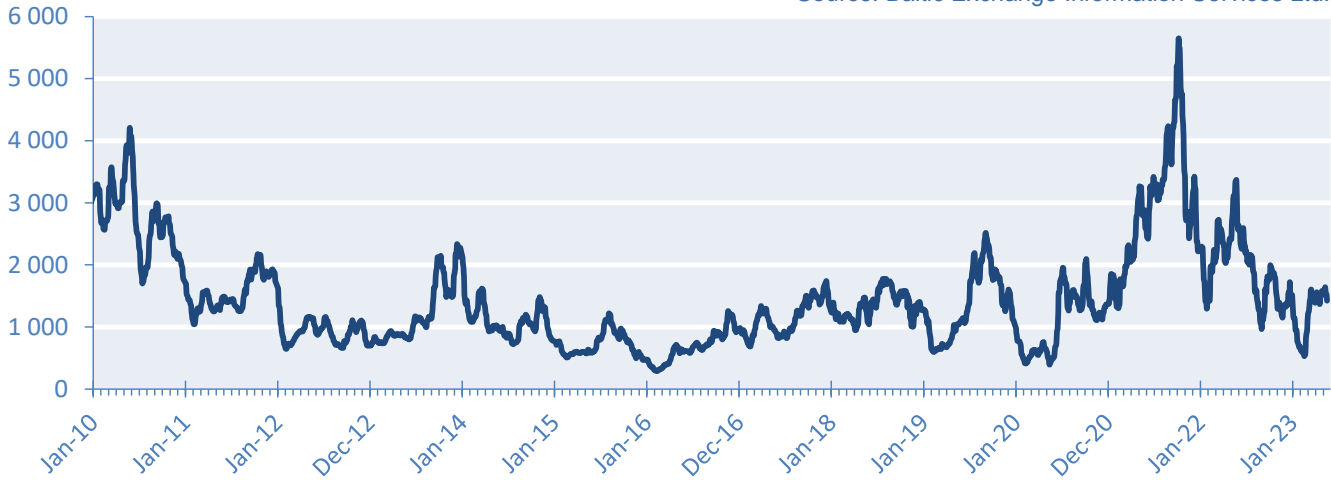
At 130.8 million tonnes, German lignite production in 2022 was 3.6% above 2021. However, compared with the average of the previous five years, the trend was still downward. Despite power plant closures, the war in Ukraine meant generation from lignite-fired power plants rose 6% to 116 TWh thanks to higher load factors. Generation from hard coal increased by 18% to 64.7 TWh in 2022. Germany's total electricity generation fell by around 1.7%, thus lignite and hard coal with a combined share of 31.9% compensated for the reduced output from other sources.



Steam coal import prices at ARA ports in northwest Europe (NWE) & Qinhuangdao port in China, 2010-2023
Source: McCloskey by OPIS Coal Report



Baltic Dry Index (BDI) 2010-2023
Source: Baltic Exchange Information Services Ltd.



Carbon prices: allowance prices under the EU Emissions Trading System (ETS), 2010-2023
Sources: European Energy Exchange and Intercontinental Exchange, Inc.



In **Greece**, the plan to phase out lignite mining remains in place, although delayed until 2028 due to the energy crisis. With a 13.3% increase to 13.7 million tonnes in 2021, the twenty-year trend of declining lignite production reversed in 2022. PPC, the majority state-owned utility company, expects almost the same production in 2023.

Hard coal production in **Poland** decreased to 52.8 million tonnes in 2022, a 4.0% drop compared with 2021. Attempts to increase production – against a backdrop of mines closures and the social agreement of 2020 to end coal mining by 2049 – were hampered. In total, 20.1 million tonnes of hard coal were imported in 2022: 17.1 million tonnes of steam coal and 3.0 million tonnes of coking coal – an overall increase of 50.2% compared with 2021 and above the previous record peak of 19.7 million tonnes in 2018. Lignite production in Poland reached a total of 54.6 million tonnes in 2022, this being 4.3% greater than in 2021.

Following an announcement in July 2022 that the Polish State Treasury would acquire the coal and lignite assets of PGE, ENEA, Energa, Tauron Polska Energia and their service companies, PGE GiEK will have a special role as the new National Energy Security Agency (NABE). After an internal reorganisation of the energy companies, the State Treasury will own all lignite- and hard coal-fired power plants and related lignite mines (except two small private mines), but not hard coal mines or heating assets.

In 2022, lignite production increased by 2.4% to 18.2 million tonnes in **Romania**, almost all of which was delivered to power plants at the Oltenia Energy Complex (CEO) for electricity generation. Romania's *National Recovery and Resilience Plan* foresees the phasing out of coal and lignite-fired power by 2032, with some flexibility in the short term to increase production as required. In 2022, the European Commission approved state aid of up to €2.66 billion to CEO for a restructuring plan to diversify its energy mix with eight solar PV parks of 725 MW total capacity and two gas-fired power plants.

Production of brown coal by the only private coal mining company in **Slovakia**, Hornonitrianske

Bane Prievidza (HBP), decreased by 19.1% to 869 thousand tonnes in 2022 – all delivered to the Nováky power plant. The Čárý coal mine closed in September 2022 as poor geological conditions forced HBP to abandon the mine. Closure work at the company's two remaining mines – Handlová and Nováky – is well advanced. Only the underground Nováky mine is producing but will close in December 2023 when state aid ends.

Lignite in **Slovenia** usually covers around one third of electricity production, but up to one half when annual precipitation and hydro output are low. In 2022, Slovenia's only lignite mine at Velenje produced 2.3 million tonnes, a decrease of 12.6% compared with 2021, mainly due to geotechnical problems in the mine. This decrease was partly compensated by imports from Indonesia which are set to continue through 2023.



As a member of the European Energy Forum, EURACOAL was pleased to join Ditte Juul-Jørgensen, European Commission Director-General for Energy, for a dinner debate with MEPs on the REPowerEU Plan in the European Parliament, Strasbourg on 3 May 2022

Coal Prices

In 2022, the average price of steam coal imported into NW European ports was 291.94 US\$/tonne, a 140% increase on 2021 and almost six times the average price in 2020 of 50.41 US\$/tonne. 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. Although international coal prices then dropped as the Chinese government took steps to moderate prices, they remained volatile and ARA prices rose above 400 US\$/tonne in March 2022. The wide delta between ARA and Qinhuangdao port export prices

reflected how China benefitted from lower-priced coal imports from Russia (see EURACOAL Market Report 2023 No.1). As EU buyers clamoured for coal to build up stocks, prices remained high and hit an all-time peak of 425.75 US\$/tonne on 23 June. By the end of the year, with enough stocks for a cold winter, prices retreated to below 200 US\$/tonne. In the event, a warm winter left power plants and ports overstocked in spring 2023.

Coking coal also hit record prices, reaching 654.20 US\$/tonne on 18 March 2022 for premium quality Australian coal. Prices for coking coal have at times been lower than thermal coal prices which may reflect a preference by Japanese utilities to pay more for in-specification steam coal rather than risk any technical problems at their high-efficiency power plants with out-of-spec coking coal.

Freight Rates

Around 15% of seaborne coal trade finds its way to European or Mediterranean countries where Germany was once again the biggest importer in 2022 at 39.9 million tonnes followed by Türkiye which saw imports fall to 34.7 million tonnes. Freight rates, although volatile, have not seen the same high growth as coal prices: shipping rates averaged 13 US\$/tonne in 2022 for both the Bolivar-Rotterdam and Richards Bay-Rotterdam routes of interest to European buyers.

The Baltic Dry Index (BDI) averaged 1 931 in 2022 – 34% lower than in 2021 and ranging from 3 369 in May to 965 at the end of August. The index is a weighted composite of Capesize (40%), Panamax (30%) and Supramax (30%) average time-charter rates and is reported as a proxy indicator for the dry bulk shipping market.

Carbon Prices

The price of EU emission trading system allowances (EUAs) averaged 81.28 €/tCO₂ in 2022 – a 52% increase on the average price in 2021. Carbon prices began the year above 80 €/tCO₂ before falling briefly to a low of 58.36 €/tCO₂ in March 2022, perhaps because allowances offered liquidity to those who needed cash to pay for fuel purchases or margin calls on their positions in the

energy market which became very volatile when Russia invaded Ukraine. EUA prices hit a peak of 98.43 €/tCO₂ in mid-August as the EU’s response to the war became clearer.

Carbon prices have risen fivefold in the past three years, worrying EU steel and paper producers as well as other energy-intensive industries. The tightened rules under the Fit-for-55 package, agreed during trilogue in December 2022, may be a driver for even higher EUA prices. On 21 February 2023, the price of allowances rose slightly above 100 €/tCO₂e for the first time ever, although this value continues to act as a ceiling. Increased coal use during the energy crisis spurred 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.

A just transition in the coal regions



European Commissioner for Cohesion and Reforms, Elisa Ferreira, at an underground coal mine in Petrila, Romania, 6 October 2022 (© Avantul Liber)

The 6th Just Transition Platform conference, including a dedicated workstream on the Coal Regions in Transition Initiative, was joined by over 1 100, mostly online participants including several EURACOAL members and the secretariat. With all Territorial Just Transition Plans submitted and some approved by the European Commission, the conference focused on project implementation in the coal regions with support allocated from the €25.4 billion Just Transition Fund and other sources over the 2021-2027 EU budget period.

COMMITTEE ACTIVITIES: Technical Research Committee

Prof. Alicja Krzemień, Chairwoman

The Technical Research Committee was established in 1956 and has met regularly for over sixty years, as a EURACOAL committee since 2002. The committee provides networking opportunities for EURACOAL members and others interested in submitting proposals to the research programmes supported by the European Union. In addition, it advocates for favourable policies towards those areas of research that benefit the European coal industry and a just transition of the coal regions.

The Technical Research Committee met twice in 2022, on 20 June and on 15 December with both meetings attracting a large number of online participants. Other highlights of the year were the EURACOAL workshop on RFCS proposals on 9/10 March in Katowice and the RFCS Summit 2022 held in Brussels on 22 March (see box).

The RFCS Summit reflected a high-level desire within the European Commission to promote the newly modernised RFCS research programme, worth €780 million over seven years. EURACOAL worked closely with the Directorate-General for Research and Innovation (DG RTD) on this event in Q3 2021 and early 2022. Thus, the association was well represented at the professionally hosted, hybrid meeting in the Albert Borschette Conference Centre, Brussels. Success stories were presented, and political issues covered during what was an informative and thought-provoking summit. From the Commission, Director Rosalinde van der Vlies of DG RTD and Director Nicola de Michelis of the Directorate-General for Regional and Urban Policy (DG REGIO) gave keynotes alongside EURACOAL. The war in Ukraine put energy security firmly back on the agenda, with some calling for the political objectives under the European Green Deal to be strengthened: “Coal is part of our past, not our future,” said de Michelis whose directorate manages the EU’s €100 billion cohesion funds, including the Just Transition Fund to help carbon-intensive regions.

After a very small RFCS budget in 2021 – when the new legal basis was not yet in place – researchers saw a significantly larger budget in 2022: an annual call worth €19 million for coal-related research projects and the first “big-ticket” call launched on 16 February 2022 worth €38 million for coal (two years combined). On the practical management of the RFCS programme, discussions with the Commission on the selection of independent experts to monitor projects led to a workable outcome where the knowledge and experience of managing industrial R&D projects remains valued.

For the annual call, the RFCS Information Package 2022 no longer included priorities, but instead focuses on three objectives: just transition of the coal sector and regions, improving health and safety at mines undergoing a closure process, and minimising the environmental impacts of coal mines in transition. The Commission decided to allocate defined amounts for research/pilot projects and to one accompanying measure project. The latter should help guide and promote the RFCS research programme.

In the event, only around half of the available budget was awarded in 2022 as many of the proposals submitted fell short of the funding threshold after evaluations overseen by the European Research Executive Agency. Six coal projects were selected for funding under the annual call, including **CoalHeritage** an accompanying measure that aims to protect and promote coal mining heritage. The selected research, pilot and demonstration projects address issues of closer concern to the coal industry:

- **ProVAM** aims to reduce methane emissions by creating favourable conditions underground for the efficient implementation of technologies to use ventilation air methane (VAM).
- **HydroMine** is an innovative approach to hydrogen production from municipal solid waste via repurposed coal industry infrastructure.
- **HESS** offers hybrid energy storage systems using post-mining infrastructure.

- **H2GEO** uses separated mineral fractions and fly ashes for geopolymer composites using CO₂ as a process carrier in their production.
- **REECOL** concerns new solutions for the post-mining ecological rehabilitation of coal and lignite mines.

For the first “big-ticket” call, a similar story emerged with many good projects submitted, but only two selected:

- **GreenDEALInertia** will repurpose the decommissioned 765 MW Westfalen coal power plant to provide system services, *e.g.* grid stability, inertia, black-start capability, short-circuit level, and sector coupling via hydrogen or synthetic fuel production. Second-life batteries from electric buses will be used to demonstrate Europe’s largest and most advanced grid-forming converter.
- **REM** (Reduction of Emissions of Methane) is a pilot demonstration of the intelligent management of abandoned mine methane in post-mining goafs of the “Pniówek” underground coking coal mine to allow its collection and use in special gas engines to produce electricity and heat.

The selection of two projects on coal mine methane shows the importance the coal industry and the European Commission attach to methane management at coal mines.

During 2022, EURACOAL sought clarification from the European Commission on Article 4(d) of the RFCS legal basis (Council Decision (EU) 2021/1094): “the repurposing of former coal and lignite mines as well as coal related infrastructure, including power supply services, in line with a climate neutral and environmentally friendly transition”. Specifically, it was important to understand if this included coal power plants. In reply, the DG RTD legal unit confirmed that, “Activities related to the repurposing of coal power plants are considered within the scope of the RFCS programme. In addition, the wording of the RFCS legal text is broad enough in order for coal power plants not to require any links to coal mines, coal mining infrastructure or coal regions.” Given this clarification, the scope for “big-ticket” repurposing projects is usefully widened which should see more proposals in line with EU policy to transition away from fossil fuels.

EU Research Fund for Coal and Steel Summit 2022

On 22 March 2022, EURACOAL members joined European Commission officials and other stakeholders at a summit meeting in Brussels to launch the first “big-ticket” call under the recently modernised EU Research Fund for Coal and Steel (RFCS). The RFCS was established in 2002 after the fifty-year treaty establishing the European Coal and Steel Community (ECSC) expired.



Rosalinde van der Vlies, Director for Clean Planet, Directorate-General for Research and Innovation at the European Commission, welcomes participants to the RFCS Summit 2022

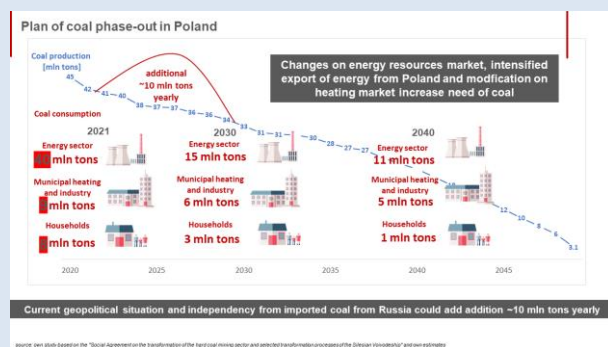
At the coal day, there was a broad discussion on technologies and their role in a just transition, but also on energy security. During the preceding steel day, emphasis had been placed on the green transition, with discussions on how to curb emissions in the steel sector, the need for digitalisation and the rollout of hydrogen in steel production. This 20th anniversary celebration was web streamed.



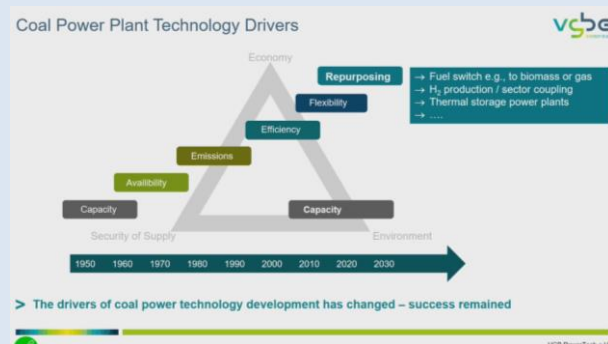
Dr. Tomasz Rogala, EURACOAL Senior Vice President and Chairman of the Board, Polska Grupa Górnicza S.A.

EURACOAL President Vladimír Budinský was represented by the association’s Secretary General, but it was Dr. Tomasz Rogala, Senior Vice

President of EURACOAL and Chairman of the Board of the Polish Mining Group (PGG), who shared news on the Polish coal sector. He reflected on the background to EU climate targets and the Fit-for-55 package, including the UNFCCC COP 24 conference in Katowice, and on the need to reduce the EU’s dependency on Russian fossil fuels. On a just transition, Dr. Rogala explained the agreement reached in 2020 by the government, trade unions and local authorities to end coal production in Poland by 2049, allowing not only time this decade for investments in environmentally friendly IGCC with CCS, but also time for workers to adapt and time to build a secure, new energy system comprising RES and nuclear with some fossil gas.



Other EURACOAL members gave presentations on seven important RFCS coal research projects on, for example, the safe flooding of mines and sustainable use of spoil dumps. Meanwhile Dr. Oliver Then, Managing Director of VGBE Energy, took participants on a voyage from the 1950s to the 2030s, a period over which the priorities for coal power research evolved from increasing capacity and availability to meet demand, through reducing emissions and improving efficiency for sustainability, to today’s requirement of maximising flexibility to balance RES and repurposing of former power plant sites.



EURACOAL ACTIVITIES: serving the interests of the European coal industry

The European Association for Coal and Lignite – EURACOAL – is the umbrella organisation of the European coal industry. EURACOAL evolved in 2002 from the European Solid Fuels’ Association – CECSO – after the expiry of the Treaty establishing the European Coal and Steel Community.

EURACOAL has twenty-three members including national coal associations, research institutes and individual companies. Members come from thirteen countries: Bosnia-Herzegovina, Bulgaria, the Czech Republic, Germany, Greece, Hungary, Poland, Romania, Serbia, Slovakia, Slovenia, Spain and Ukraine.

EURACOAL’s mission is to highlight the importance of coal to security of energy supply in the EU, to energy price stability, to economic added value and to environmental protection. EURACOAL seeks to be an active communicator, with the aim of creating an appropriate framework within which the European coal industry and coal consumers can operate.

EURACOAL has three committees:

- Energy and Environment Policy Committee
- Market Committee
- Technical Research Committee

EURACOAL is officially represented in the European Commission RFCS Coal Advisory Group (DG Research & Innovation).

EURACOAL participates in the European Commission Social Dialogue (DG Employment, Social Affairs & Inclusion).

EURACOAL supports the European Commission *Initiative for Coal Regions in Transition* (DG Energy and DG Regional & Urban Policy).

EURACOAL co-operates with Members of the European Parliament in the cross-party European Round Table on Coal and European Energy Forum.

EURACOAL organises meetings and workshops, and participates in projects, e.g. CoalTech2051.

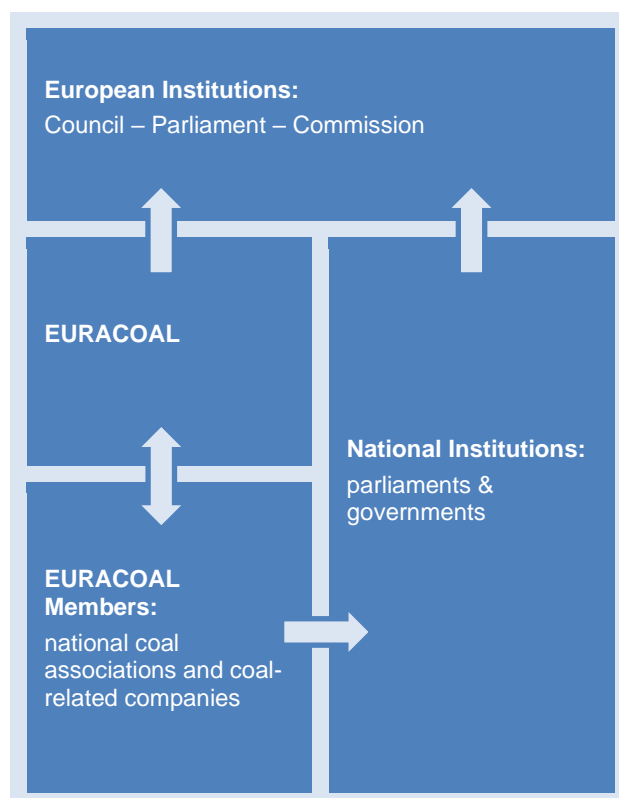
EURACOAL informs and works with many stakeholders, notably:

- European Commission (DG Competition, DG Energy, DG Employment, Social Affairs & Inclusion, DG Regional & Urban Policy, and DG Research & Innovation)
- European Parliament (ITRE, ENVI and REGI)
- European Economic & Social Committee (CCMI – Consultative Commission on Industrial Change)
- International Energy Agency
- World Coal Association

FINANCIAL REPORT FOR 2022

Total income (a):	346 985 €
membership fees:	346 425 €
Other income:	560 €
Total operating costs & write-downs (b):	367 654 €
Net loss (a – b):	-20 669 €

Accounts for 2022, prepared on the basis of Belgian accounting standards, were audited by RSM InterAudit. The income statement shows a net loss of €22 669 for the year and total assets amounted to €440 612 at year end.



General Assembly

coal producers, importers, traders, coal-based power utilities, R&D institutes

Executive Committee

discussions, opinion forming, work programme, lobbying positions

President

Dr. Tomasz Rogala – PGG

Vice President

Dr. Lars Kulik – DEBRIV

Senior Vice President

Ing. Vladimír Budinský – ZSDNP

National Delegations

23 members from 13 countries

Committees & Chairs**Energy and Environment Policy Committee**

Dr. Thorsten Diercks – DEBRIV

Market Committee

Mr. Tomasz Mańka – Polské uhlí, a.s. (Węglokoks Group)

Technical Research Committee

Prof. Alicja Krzemień – GIG

Brussels Secretariat

Secretary-General: Mr. Brian Ricketts

Senior Policy Manager: Mr. David Bonson-Hesener

EXECUTIVE COMMITTEE

Member	Country	Affiliation	as at 1 June 2023
Dr. Tomasz ROGALA	Poland	President of EURACOAL and Chairman of the Board, PGG – Polska Grupa Górnicza S.A.	
Ing. Vladimír BUDINSKÝ	Czech Republic	Senior Vice President of EURACOAL and President of ZSDNP – Zaměstnavatelský svaz důlního a naftového průmyslu (Employers' Association of Czech Mining and Oil Industries)	
Dr. Lars KULIK	Germany	Vice President of EURACOAL and Chief Technology Officer – Lignite, RWE Power AG	
Mr. Yurii CHEREDNICHENKO	Ukraine	General Director, DTEK Dobropolyeugol	
Mr. Dimitar CHOLAKOV	Bulgaria	Deputy Executive Director, MMI – Mini Maritsa Iztok EAD	
Dr. Armin EICHHOLZ	Germany	Chairman of the Board, MIBRAG mbH	
Dr. Renata EISENVORTOVÁ	Czech Republic	European Affairs Manager, Sev.en Group	
Ms. Boglárka BÁNNÉ dr. GÁL	Hungary	President of Borsod-Abaúj-Zemplén County Government	
Mr. Milan JAKOVLJEVIĆ	Serbia	Head of Mining Efficiency Improvement and Environmental Protection, EPS – Elektroprivreda Srbije (Electric Power Industry of Serbia)	
Ing. Rastislav JANUŠČÁK	Slovak Republic	Director of Strategy and External Affairs Department, HBP – Hornonitrianske bane Prievidza, a.s.	

Dr. Nikolaos KOUKOZAS	Greece	Director of Research, CERTH/CPERI – Chemical Process & Energy Resources Institute
mag. Marko MAVEC	Slovenia	General Director, Premogovnik Velenje, d.o.o. (Coal Mine Velenje)
Dr. Roger MIESEN	Germany	Chief Executive Officer & Chief Operating Officer, RWE Generation SE
Dr. -Ing. Philipp NELLESSEN	Germany	President, DEBRIV – Deutscher Braunkohlen-Industrie-Verein e.V. (German Association of Lignite Producers) and Member of the Board – Director of Mining, LEAG – Lausitz Energie Bergbau AG & Lausitz Energie Kraftwerke AG
Mr. Janusz OLSZOWSKI	Poland	President, GIPH – Górnictwa Izba Przemysłowo-Handlowa (Mining Chamber of Industry and Commerce)
Mr. Rafał PATYK	Poland	Director of Investor Relations, PGG – Polska Grupa Górnictwa S.A. (Polish Mining Group)
Prof. Stanisław PRUSEK	Poland	Director, GIG – Główny Instytut Górnictwa (Central Mining Institute)
Dr. Christos ROUMPOS	Greece	Head of Mining Engineering Unit, PPC – Public Power Corporation S.A.
Mr. Ildar SALIEIEV	Ukraine	Chief Executive Officer, DTEK Energy
Mr. Elvir SALIHOVIĆ	Bosnia-Herzegovina	Chief Executive, RMU “Banovići” d.d. Banovići
Ms. Ariadni SOKRATIDOU	Greece	Director - Environment Department, PPC – Public Power Corporation S.A.
Ing. Radim TABÁŠEK	Czech Republic	Executive Director, OKD, a.s.
Eng. Ilza TCHINKOVA	Bulgaria	Executive Director, MMI – Mini Maritsa Iztok EAD
Prof. Dr. rer. oec. Kai VAN DE LOO	Germany	Scientific Director Reactivation and Transition, Technische Hochschule Georg Agricola (Technical University Georg Agricola)
Mr. Konstantin VYALY	Ukraine	Chief Executive, Officer, Donetsksteel
Mr. Michael WEBERINK	Germany	Managing Director, bsn – Branchenverband Steinkohle und Nachbergbau e. V. (Association for Hard Coal and Post-Mining)
Mr. Sławomir WOCHNA	Poland	President, PPWB – Porozumienie Producentów Węgla Brunatnego (Confederation of Polish Lignite Producers) and Director – Kopalnia Węgla Brunatnego Turów, PGE GiEK S.A.
Mr. Kasjan WYLIGAŁA	Poland	President of the Board, Lubelski Węgiel „Bogdanka” S.A.
Ms. Agata ZIELIŃSKA	Poland	Director of Administration and International Cooperation, GIPH – Górnictwa Izba Przemysłowo-Handlowa (Mining Chamber of Industry and Commerce)

EURACOAL MEMBERS & OBSERVER: an international partnership

Country	Member Association / Company	as at 1 June 2023
Bosnia-Herzegovina	RMU "Banovići" d.d. Banovići	
Bulgaria	MMI – Mini Maritsa Iztok EAD	
Czech Republic	ZSDNP – Zaměstnavatelský svaz důlního a naftového průmyslu (Employers' Association of Czech Mining and Oil Industries)	
Germany	DEBRIV – Deutscher Braunkohlen-Industrie-Verein e.V. (German Association of Lignite Producers) DMT GmbH & Co KG bsn – Branchenverband Steinkohle und Nachbergbau e.V. (Association for Hard Coal and Post-Mining)	
Greece	PPC – Public Power Corporation S.A. CERTH/CPERI – Chemical Process and Energy Resources Institute	
Hungary	Borsod-Abaúj-Zemplén County Government	
Poland	GIPH – Górnictwa Izba Przemysłowo-Handlowa (Mining Chamber of Industry and Commerce) PPWB – Porozumienie Producentów Węgla Brunatnego (Confederation of Polish Lignite Producers) PGG – Polska Grupa Górnictwa S.A. (Polish Mining Group) Lubelski Węgiel „Bogdanka” S.A. GIG – Główny Instytut Górnictwa (Central Mining Institute) IMG-PAN – Strata Mechanics Research Institute, Polish Academy of Sciences	
Romania	PATROMIN – Asociația Patronală Minieră din Romania (Mining Employers Association of Romania)	
Serbia	EPS – Elektroprivreda Srbije (Electric Power Industry of Serbia)	
Slovak Republic	HBP – Hornonitrianske bane Prievidza a.s.	
Slovenia	Premogovnik Velenje d.o.o.	
Spain	Geocontrol S.A. SUBTERRA Ingeniería S.L.	
Turkey	TKİ – Turkish Coal Enterprises	
Ukraine	DTEK Donetsksteel	

