



# **METALLURGICAL COAL FINANCING:**

**Time to call it off**

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## Time to call it off

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# TABLE OF CONTENTS

<b>Executive Summary</b>	<b>4</b>
<b>Methodology</b>	<b>6</b>
Company analysis	6
Financial analysis	7
Policy analysis	7
Geographic scope: China, an isolated metallurgical coal ecosystem	8
<b>Introduction</b>	<b>10</b>
<b>1. Keeping metallurgical coal in the ground</b>	<b>12</b>
a. What is metallurgical coal?	14
b. Too many metallurgical coal projects are in the pipeline	15
c. The disastrous climate impact of metallurgical coal	18
Metallurgical coal makes the steel sector extremely carbon intensive	18
Coal mine methane: an alarming climate threat	18
d. Alternatives to metallurgical coal	20
<b>2. The billions flowing to metallurgical coal expansion</b>	<b>22</b>
a. Companies developing new metallurgical coal projects	24
b. Top banks supporting metallurgical coal expansion	32
c. Top investors supporting metallurgical coal expansion	38
d. Case studies	46
Glencore	46
BHP Group/BHP Mitsubishi Alliance	47
Whitehaven Coal	48
Teck Resources	49
<b>3. Urgently needed: policies to restrict metallurgical coal financing</b>	<b>50</b>
a. Policy analysis	51
b. Recommendations	64

## EXECUTIVE SUMMARY

**F**inancial institutions have taken significant steps to phase out coal in the past decade. Many have adopted sectoral policies to restrict financing to the most carbon-intensive fossil fuel.<sup>1</sup> Although a lot remains to be done to improve these existing policies,<sup>2</sup> they contain a glaring loophole which appears to be systematic: even though it accounts for about 14% of global coal production, metallurgical coal is left out.<sup>3</sup>

The steel sector is responsible for 7% of global greenhouse gas (GHG) emissions and 11% of global carbon dioxide (CO<sub>2</sub>) emissions.<sup>4</sup> This is largely due to the use of coal – specifically metallurgical coal – to produce steel. In spite of its disastrous climate impact, however, the policies of financial institutions fail to cover metallurgical coal due to the long-held belief that no technical alternatives exist for steelmaking. Yet, research now shows that recent technological advances, like green hydrogen, make phasing out metallurgical coal possible by the early 2040s.<sup>5</sup>

Even though solutions exist to decarbonize steel production, the absence of sectoral policies to restrict financing for metallurgical coal means that substantial resources are still flowing to companies that develop new projects of this kind. Since 2016, banks have supported companies involved in the development of metallurgical coal projects by over US\$557 billion.<sup>6</sup> Almost all the banks involved do not have a metallurgical coal policy. Out of the 100 financial institutions analyzed for this report, only five include metallurgical coal in their policies, and only then at the project level – coal expansion financing is therefore able to continue through general corporate funding.

In its Net Zero by 2050 report, the International Energy Agency (IEA) projects that even though demand for coking coal (metallurgical coal) should fall at a slightly slower rate than for thermal coal, “existing sources of production are sufficient to cover demand through to 2050”.<sup>7</sup> Even so, new projects with a total planned production capacity of 406 Mtpa (million tonnes per annum) of coal, and consisting partly or entirely of metallurgical coal, are being planned by 118 companies worldwide.

**“The problem is not simply fossil fuel emissions. It’s fossil fuels – period. The solution is clear: The world must phase out fossil fuels in a just and equitable way – moving to leave oil, coal and gas in the ground where they belong – and massively boosting renewable investment in a just transition.”**

*Antonio Guterres,  
Secretary-General’s press  
conference on Climate,  
June 2023*

Coal phase-out will not be complete until it includes metallurgical coal. Just as financial institutions play a key role in enabling the phase-out of thermal coal, their contribution to the phase-out of metallurgical coal will be critical. Financial institutions must commit their support to the transition to fossil-free steel, and help the world to limit global warming to 1.5°C. Their first priority must be to stop metallurgical coal expansion, starting with:

- Immediately ending dedicated financial services, including advisory services, insurance coverage, and dedicated financing to new metallurgical coal projects. This includes the development of new metallurgical coal

mines, the expansion of existing ones, and all related infrastructure.

- Committing to no longer provide services, including the provision of financial services, holding companies in portfolio, and providing insurance coverage, for companies that have plans to develop, or are developing, metallurgical coal projects. This includes no longer providing services to companies that do not have a detailed asset-by-asset and mine-by-mine closure (not selling) timetable aligned with a 1.5°C scenario, and a just and sustainable transition plan for workers, local communities, and the environment.

# METHODOLOGY

## a. Company analysis

This report analyzes the financial support going to the 50 companies with the largest planned metallurgical coal production capacity – hereafter referred to as “metallurgical coal developers”.

To select these companies, the May 2023 version of the [Global Coal Mine Tracker](#) developed by Global Energy Monitor has been used.

*“The Global Coal Mine Tracker (GCMT) is a worldwide dataset of coal mines and proposed projects. The tracker provides asset-level details on ownership structure, development stage and status, coal type, production, workforce size, reserves and resources, methane emissions, geolocation, and over 30 other categories.”*

### Parent company unpivoting and processing

For each asset, regardless of its status, the Global Coal Mine Tracker details holding parent companies and production capacity. The independent research organization Profundo, which also handled the financial research for this report, was mandated to process Global Energy Monitor in order to:

1. split the coal production capacity of each mine in the database – either planned or existing – between the different parent companies, assuming each parent company receives a share of the production capacity equal to its ownership in the asset;

2. research each Asset-Parent Company-Ultimate Parent Company ownership chain to identify the highest parent company of corporate type. This guarantees that the companies included in this report do not overlap with one another or belong to the same organization.

It is noted that, depending on available information, Global Monitor Energy provides either the coal production capacity or the latest coal production figure. In the report, this metric is referred to as “production capacity”. This approximation has no impact on proposed assets, for which only production capacity information is available. It may however impact figures of operating assets in a conservative way, as an asset’s production figure is by construction inferior or equal to the asset’s production capacity.

### Identification of metallurgical coal companies with the largest development plans

The Global Coal Mine Tracker offers the possibility to differentiate between mines producing thermal coal, mines producing metallurgical coal, and mines producing both, although proportions are not provided for the latest mines. It can also differentiate assets based on their status: Proposed, Shelved, Operating, Mothballed, Canceled, Closed.

In order to identify metallurgical coal companies with the largest development plans:

1. Metallurgical coal companies were identified: mines extracting solely thermal coal and mines missing coal type information were removed from the database. The assumption that no metallurgical coal will be sourced from mines lacking information tends to render this assessment more conservative. Therefore, remaining in scope for this report were mines producing either metallurgical coal or a mix of metallurgical and thermal coal. For the latter, in the absence of further information, all production capacity was assumed to relate to metallurgical coal.

2. Largest metallurgical coal developers were identified: companies were ranked according to their total planned coal production capacity, based on their “Proposed” assets.

As a result of this specific focus on the 50 largest developers of metallurgical coal mines, 80% of the global planned metallurgical coal production capacity is covered in this report. Note that production and production capacity figures indicated in Global Energy Monitor’s database rely on companies’ information, whose definition of metallurgical coal can vary from solely coking coal to also include coal for pulverized coal injections (PCI) and non-coking coal. Hereafter, production capacity associated with assets at the “Proposed” stage are referred to as “planned production capacity”.

## b. Financial analysis

Financial research for this report was conducted by the independent research organization Profundo B.V<sup>8</sup> using financial databases, including Bloomberg, Refinitiv and IJGlobal. Corporate loans, credit and underwriting facilities provided to the 50 selected companies were researched for

the period 2016-2023 (June). Investments in bonds and shares of the selected companies were identified through Refinitiv, Thomson EMAXX and Bloomberg at the most recently available filing date (July 2023). Pure green instruments<sup>9</sup> are not taken into account in the analysis.

Transactions were considered in full and not weighted based on the proportion of the borrower or issuer’s operations devoted to metallurgical coal. Adjusters were not used to fully measure financial flows allocated to the companies responsible for the largest metallurgical coal development plans, as even in cases where not all transactions are in direct support of metallurgical coal related activities (especially in the case of highly diversified holdings), companies can still allocate financial resources from non-earmarked transactions.

For more detailed explanations on the financial research used in this report, please consult [Profundo’s methodology document](#). The financial institutions explicitly mentioned in the report have been contacted by Reclaim Finance and were given the possibility of accessing and reviewing the financial data concerning them before publication of this report. The consultation period took place over September and October 2023.

## c. Policy analysis

This report evaluated the metallurgical coal policies of the top 50 banks and top 50 investors most exposed to metallurgical coal mining developers. The focus is on metallurgical coal expansion: how policies consider metallurgical coal projects and companies involved in metallurgical coal mining expansion. Only financing restriction policies were considered. Engagement policies and enhanced due diligence were not

included in the report. The research relating to steel decarbonization targets relies on research carried out by Reclaim Finance in April 2023.

Financial institutions explicitly mentioned in the report have been contacted by Reclaim Finance with questions about existing policies and to ensure no commitments were missed. The consultation period took place over September and October 2023.

**d. Geographic scope: China, an isolated metallurgical coal ecosystem**

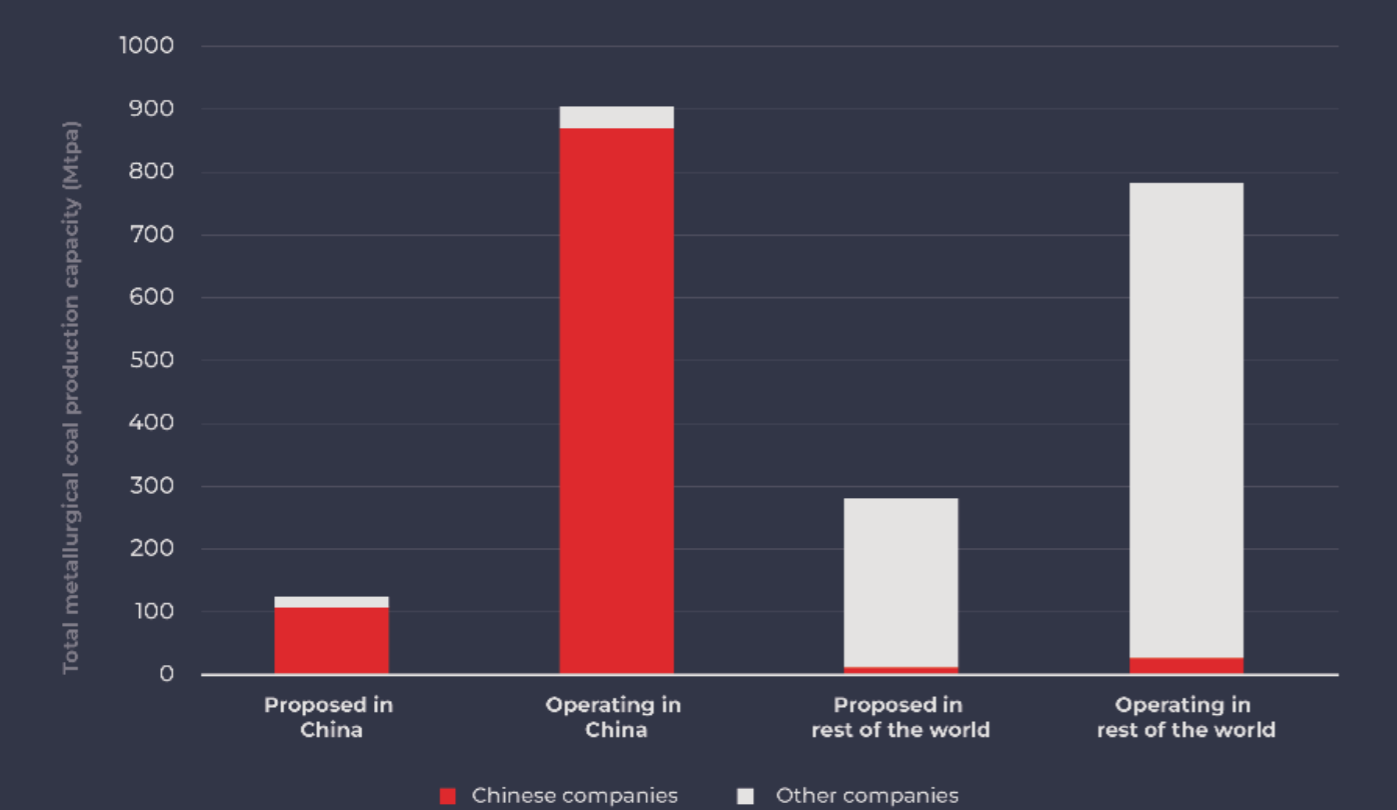
China holds a particular place in the metallurgical coal sector. 54% of global production capacity and 30% of global planned production capacity is owned almost exclusively by China-headquartered companies. Conversely, Chinese mining companies own assets almost exclusively within China, as shown in the graphic below.

Foreign financial institutions have little to no exposure to the 15 Chinese companies included in the scope of metallurgical coal developers in this report, meaning their capacity to have an impact on coal mining development in China is limited. The following graphics indicate that the banks and investors supporting Chinese metallurgical coal developers are mainly Chinese.

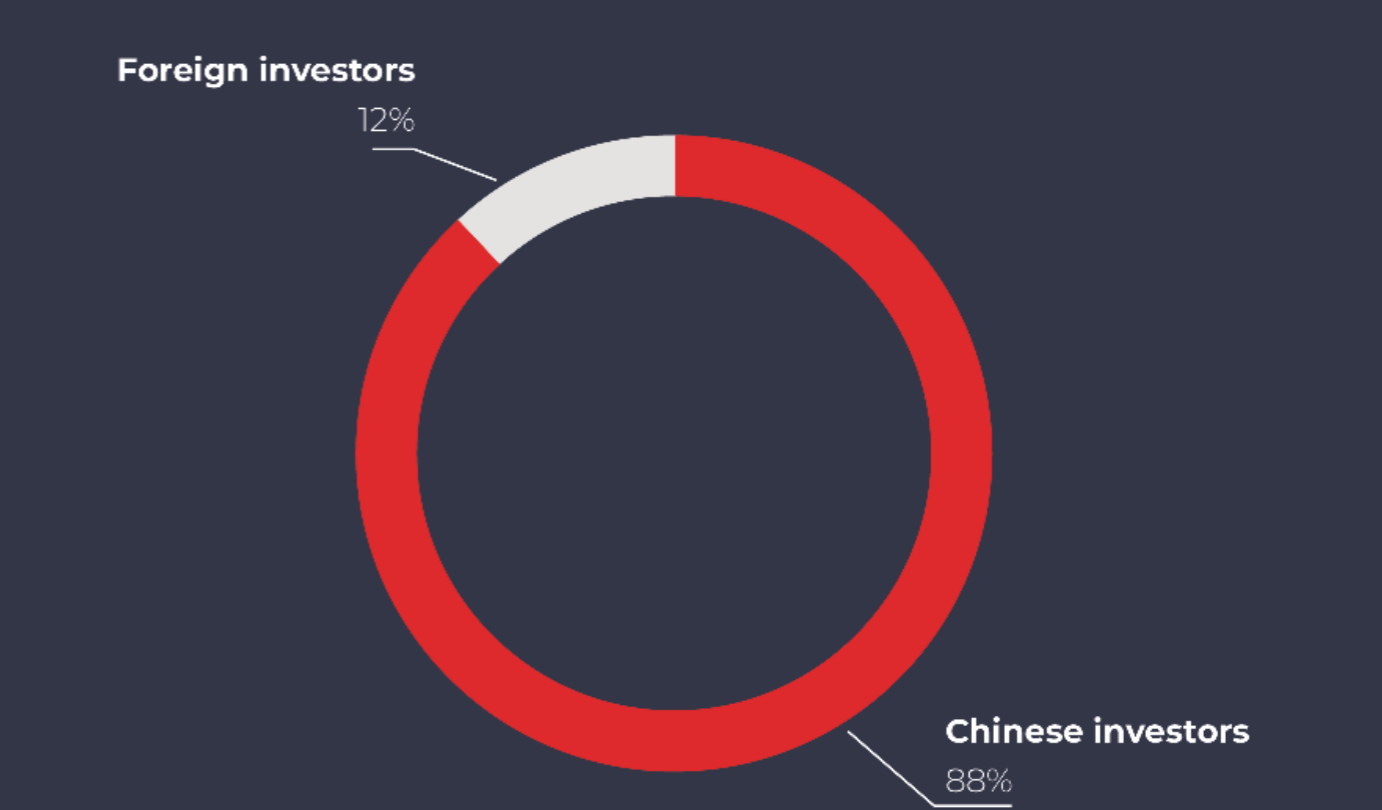
Given the specific place Chinese companies hold in the metallurgical coal industry – highly independent, disconnected from foreign financial stakeholders, and evolving in a unique political context – this report focuses on financial institutions supporting developments beyond China. Furthermore, Chinese steel demand is entering long-term decline, meaning Chinese metallurgical coal demand is following the same trajectory.<sup>10</sup>

As such, details of the China situation and the financial support behind it are excluded from this report and may be the object of a separate publication.

**Figure 1 - Proposed and operating production capacity in China and the rest of the world, split by location of owning company headquarters**



**Figure 2 - Nationality of investors with shareholdings and bond holdings in Chinese metallurgical coal developers**



**Figure 3 - Nationality of banks providing loans and underwriting services to Chinese metallurgical coal developers**



# INTRODUCTION

**K**eeping the 1.5°C climate target within reach requires decarbonizing the economy as a whole. This implies leveraging the financial sector, which must shift its support to technologies that are compatible with climate objectives. So far, the principal efforts made by financial institutions to support the move away from fossil fuel dependency have been directed at the supply side and, to some extent, power generation. On the other hand, sectors on the demand side have been neglected. Steel, which depends on coal for its production, is one such sector.

For years, the absence of technological alternatives to coal for steelmaking has led banks and other financial institutions to overlook the issue of metallurgical coal in the policies they have adopted since COP21. However, thanks to recent developments, technologies now exist to produce fossil-free steel and are ready for rollout. These developments make deep decarbonization of the steel sector possible. The first step, however, is to relinquish the false belief that metallurgical coal is a critical material.<sup>11</sup>

Immediate action to stop metallurgical coal expansion is absolutely necessary for adherence to a 1.5°C trajectory. The case for its phase-out is made even more pressing given that any new projects would not only considerably increase carbon emissions but would release huge quantities of methane into the atmosphere.

This report exposes the financial institutions behind metallurgical coal expansion and analyzes the metallurgical coal coverage in their policies. Recommendations for the concrete first steps that can be taken by financial institutions are given at the end of the report.



# 1.

## KEEPING METALLURGICAL COAL IN THE GROUND

*The use of metallurgical coal to produce steel makes the sector extremely harmful for the climate. In spite of this, too many metallurgical coal projects are still being planned, even though currently existing mines are enough to meet future demand and coal-free steelmaking technologies are now available.*

## a. What is metallurgical coal?

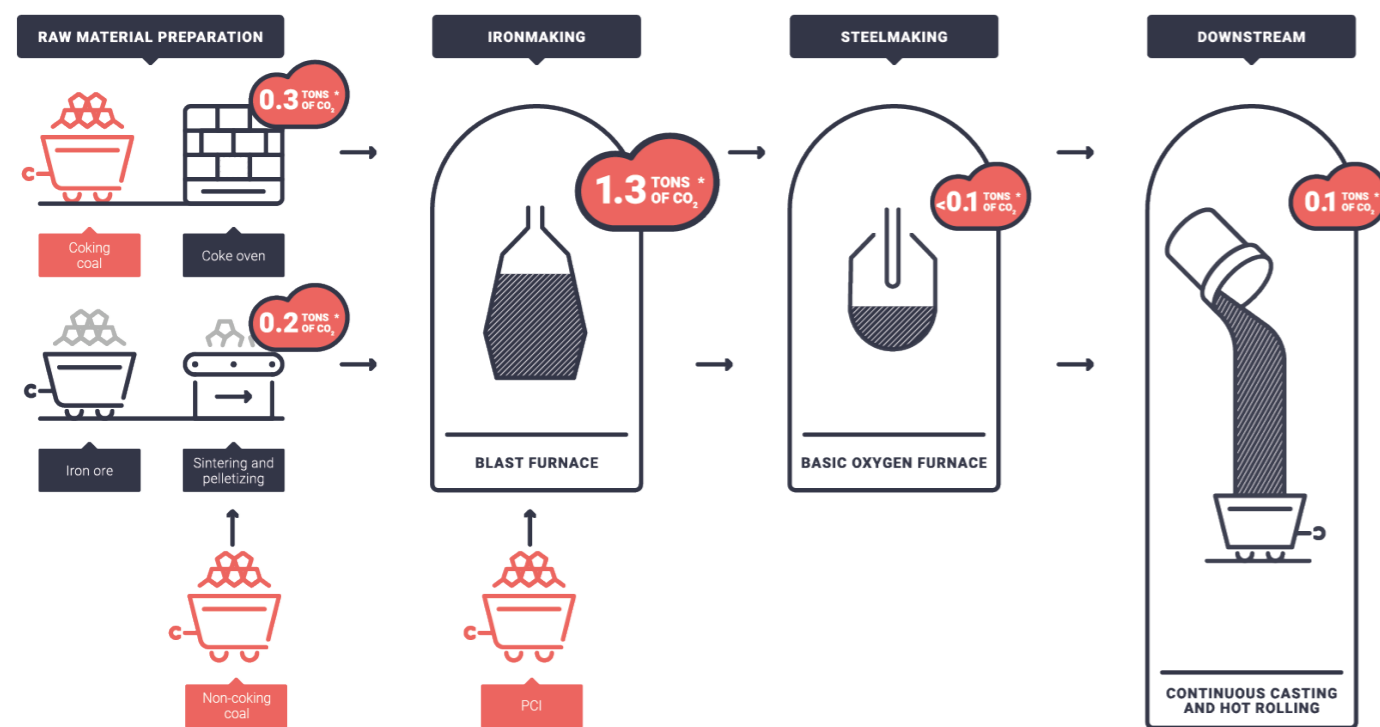
Metallurgical coal, also called 'met coal', refers to coal used for steelmaking, as opposed to thermal coal which is used for power generation. Metallurgical coal includes coking coal that is heated to produce coke that is then fed into blast furnaces, coal for pulverized coal injections (PCI coal),<sup>12</sup> and non-coking coals.<sup>13</sup> It represents approximately 14%<sup>14</sup> of total coal production and 23% of global coal trade.<sup>15</sup>

Metallurgical coal is used in what is called primary steelmaking, which accounts for 68% of global steel production capacity.<sup>16</sup> It is the most emissions intensive way of producing steel, with on average seven times more emissions than secondary steelmaking.<sup>17</sup> Primary steelmaking almost exclusively

entails the blast furnace to basic oxygen furnace route (BF-BOF) using metallurgical coal.

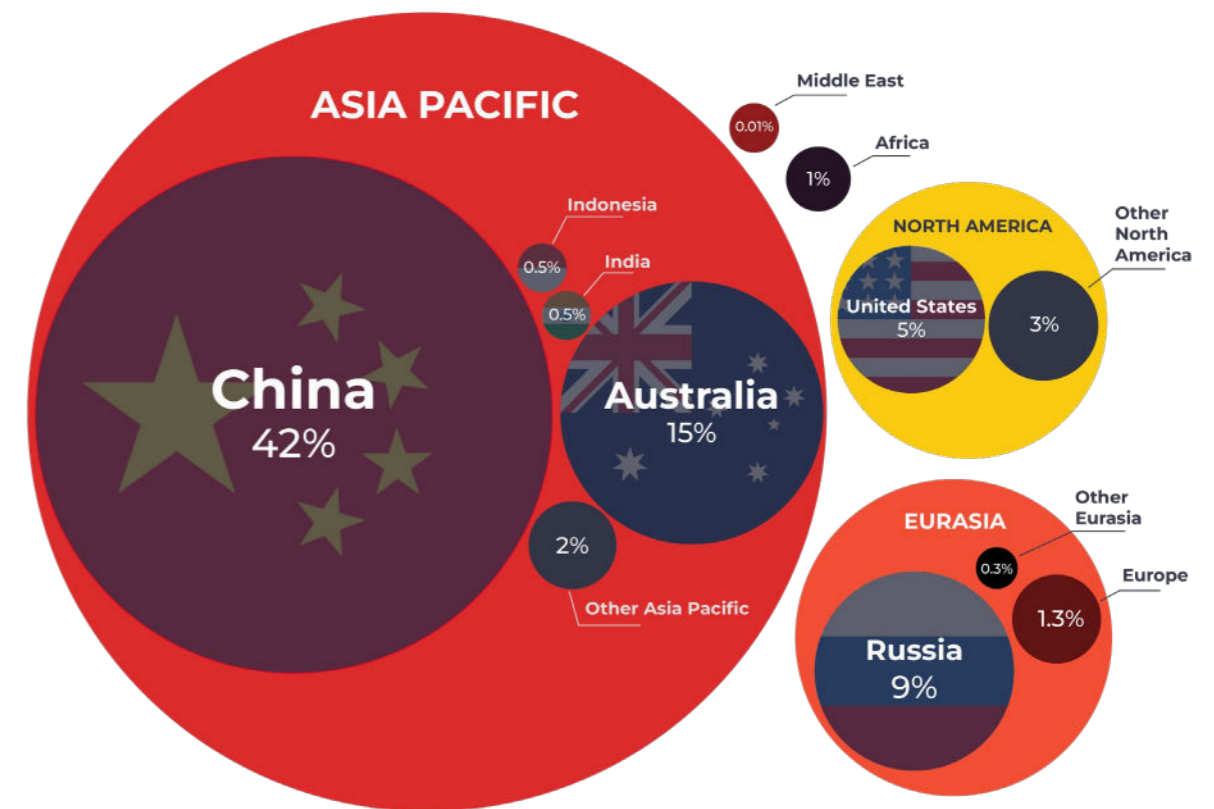
80% of the world's metallurgical coal is currently produced in the Asia-Pacific region.<sup>18</sup> Australia is the world's largest exporter of metallurgical coal<sup>19</sup> and holds 52% of the world's share of exports, with almost all of the country's metallurgical coal production being exported.<sup>20</sup> The second largest producing region is North America, with the United States accounting for 64% of its production. Remaining production from this region comes from mines in Canada, Colombia and Venezuela, with the most coming from Canada, which holds three times more metallurgical coal production capacity than Columbia and Venezuela taken together.

**Figure 4 - Coking coal use in steelmaking and main coal use in steelmaking**



\*per ton of steel - Sources: IEA; Material Economics, Industrial Transformation 2050 - Graphic design: guenole.fr ©2023

**Figure 5 - Share of metallurgical coal production across the world in 2021**



Source: International Energy Agency, Coal 2022: Analysis and forecast to 2025, p.113, accessed October 5, 2023.  
Other minor shares of global production: other Asia Pacific: 2%; India: 1%; Indonesia: <1%; other North America: 3%; other Eurasia: <1%; Europe: 1%; Africa: 1%; Central and South America: <1%.

## b. Too many metallurgical coal projects are in the pipeline

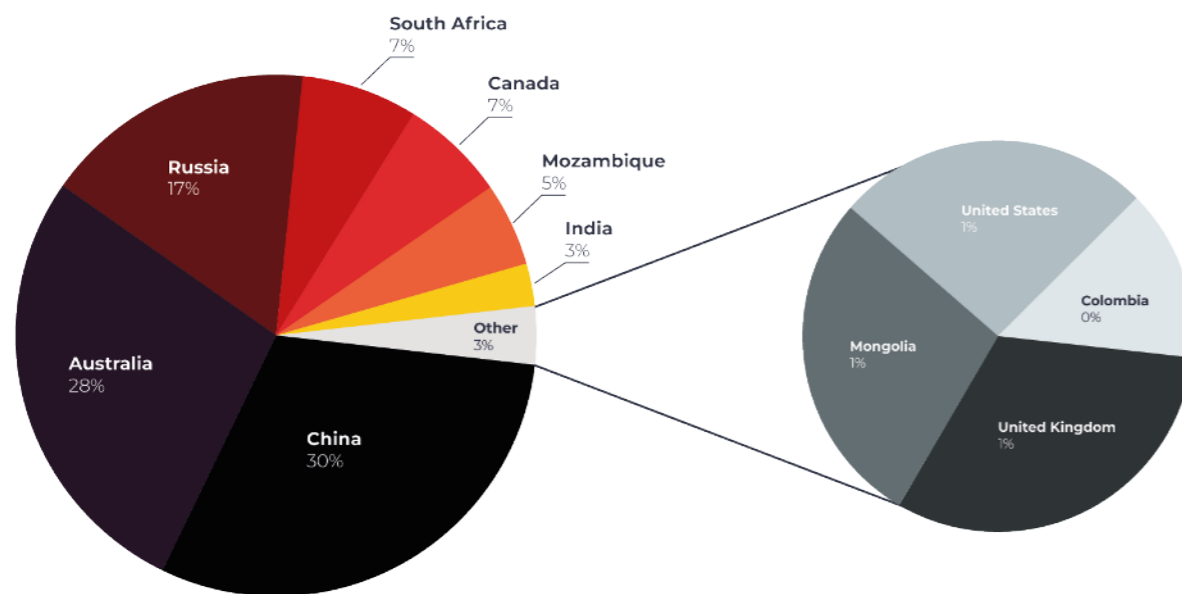
In the latest version of its Net Zero by 2050 roadmap, the IEA shows that no new coal mines or coal mine expansions are needed,<sup>21</sup> as currently operating metallurgical coal mines will be able to meet demand until 2050.<sup>22</sup> Yet, according to Global Energy Monitor's Global Coal Mine Tracker, there are 138 proposed projects consisting partly or entirely of metallurgical coal, of which at least 85 are brand new projects and 48 are mine expansions.<sup>23</sup> A third of these projects, making up almost half of the global planned production capacity, aim to start production

by 2030. Taken together, these projects represent 406 Mtpa of planned production capacity, while already operating mines have the capacity to produce 1,687 Mtpa, meaning a proposed 24.1% increase.

The planned projects are held by 118 companies worldwide, with most in the Asia-Pacific region: 31% of the new production capacity is in China, followed by Australia and Russia, with 28% and 17% of the global planned production capacity respectively.

Since current production capacity must not be expanded, these projects not only face the risk of becoming stranded assets, but also pose a significant threat to maintain the 1.5°C trajectory. Increasing global metallurgical coal

**Figure 6 - Geographic distribution of global planned production capacity**



production capacity by nearly 406 Mtpa would enable production of 438-521 Mt of coal-based steel annually,<sup>24</sup> which would lead to an additional 1 Gt of annual CO<sub>2</sub> emissions.<sup>25</sup> For comparison, CO<sub>2</sub> emissions from coal-based steel production were 3.1 Gt in 2019.<sup>26</sup>

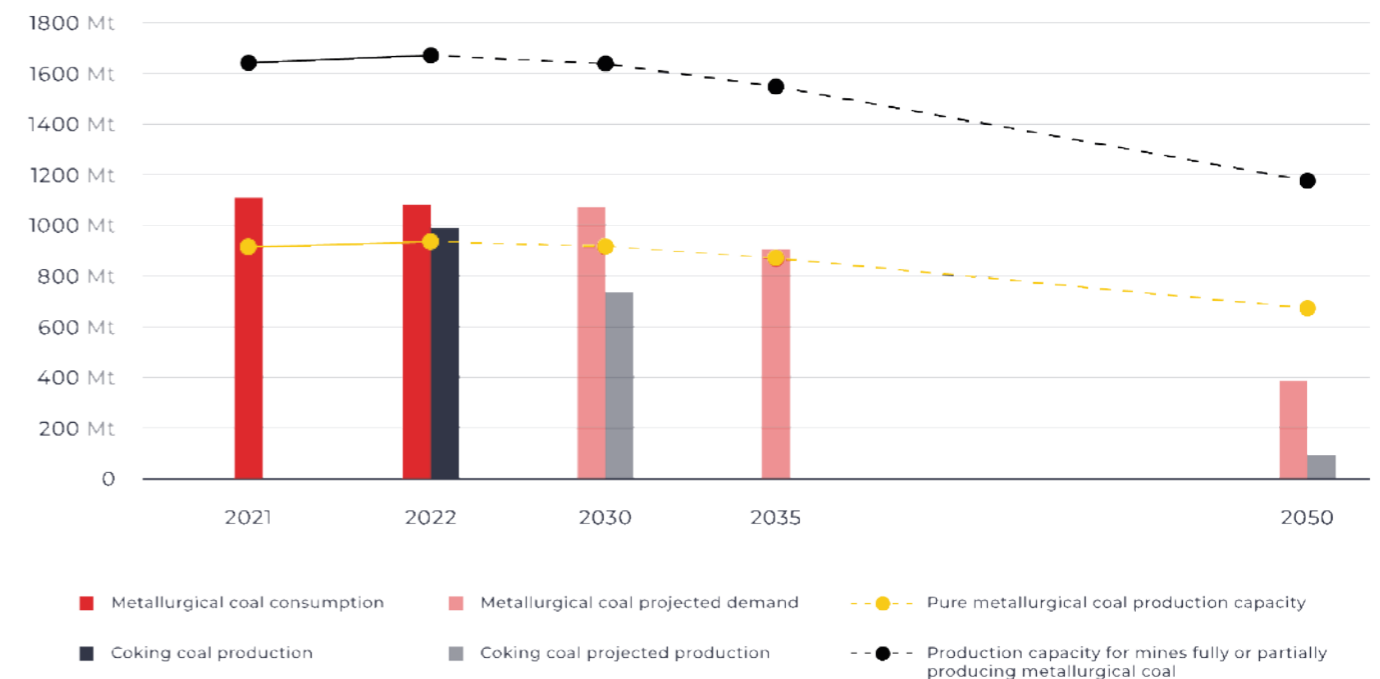
Coal mines are also a source of methane emissions. Methane is adsorbed in coal seams, released when coal is mined and, most of the time, leaked into the atmosphere. Increasing metallurgical coal production capacity could therefore increase its methane emissions by 7% to 20% by 2030, if the projects start in the proposed time.

Moreover, there is no need to develop new metallurgical coal mines to meet future demand for steel. As recycling of steel takes off and new methods for primary steel produc-

tion scale up, dependency on metallurgical coal for steelmaking is decreasing significantly. In the IEA's Net Zero Emissions by 2050 Scenario (NZE), metallurgical coal demand for steel is cut to a third by 2050 and coking coal production in particular reduces by 90%.

Currently operating mines are therefore more than enough to meet future metallurgical coal demand. The lines in Figure 7 represent the decrease of mining capacity due to depleting reserves – because mining companies use various definitions of metallurgical coal, from the full scope of metallurgical coals to solely coking coal, the future mining capacity is compared to both future metallurgical coal demand and coking coal production from the NZE scenario. The figure shows that the depletion of reserves and the resulting reduction in production capacity is slower

**Figure 7 - Evolution of total annual production capacity from coal mines producing metallurgical coal versus historic and projected metallurgical coal demand and coking coal production**



Full lines reflect historical coal production capacity. Dashed lines represent the future coal production capacity based on currently operating metallurgical coal mines, assuming: a) no new mines or extensions of existing ones, and b) closure of mines when reserves are depleted, hence the decrease in capacity.

Metallurgical coal demand is from Reclaim Finance calculations based on the IEA's NZE plans for steel production<sup>28</sup> and conversion factors from the World Steel Association,<sup>29</sup> while coking coal production is based directly on the NZE figures.<sup>30</sup>

Note that production capacity represents the highest achievable production, but for operational reasons does not necessarily coincide with actual production.

than the decrease of demand for metallurgical coal in the NZE scenario – reduction in demand is two times more important than the reduction in production capacity by 2050. The implication is that currently operating mines would have to close even before the end of their potential lifetime.

In short, developing new metallurgical coal mines or extending existing ones is pointless. As stated by the IEA in its NZE scenario, no new coal mines or coal mine expansions are needed.<sup>27</sup>

## c. The disastrous climate impact of metallurgical coal

Not only are new metallurgical coal mines unnecessary, they would have a catastrophic climate impact. The extraction of metallurgical coal enables the most carbon-intensive steelmaking technology to perpetuate while releasing an alarming amount of methane from the mining alone.

### 1. Metallurgical coal makes the steel sector extremely carbon intensive

Due to its reliance on metallurgical coal, steel production is the highest CO<sub>2</sub> emitter among heavy industries. The steel sector accounts for around 7% of global greenhouse gas emissions and 11% of global CO<sub>2</sub> emissions.<sup>31</sup> In comparison, the aviation sector accounts for 2.1% of global CO<sub>2</sub> emissions.<sup>32</sup>

The main source of steel emissions comes from the BF-BOF route, which is both the most CO<sub>2</sub>- and coal-intensive way to make steel. Producing a tonne of crude steel via this route using coal injection (which represents 90% of BF-BOF steel production) directly emits around 1.2 tonnes of CO<sub>2</sub>. In addition, it results in an average of 1 tonne of CO<sub>2</sub> per tonne of crude steel in indirect emissions from electricity and imported heat generation. Even though it represents 71.5% of current steel production,<sup>33</sup> it is estimated that, in fact, 86% of steel sector emissions originate from this route.<sup>34</sup>

According to calculations by SteelWatch, business as usual coal-based steel production could use up 23% of the world's remaining carbon budget for 2023 to 2050.<sup>35</sup> Aligning with science-based climate scenarios means drastically reducing steel sector emissions, which in turn means bringing a stop to the burning of coal in steelmaking.

Furthermore, global steel sector estimates fail to take into account methane emissions from metallurgical coal mining. A study by the climate think tank Ember has found that metallurgical coal mine methane would warm

the planet more than the CO<sub>2</sub> emissions of Germany or Canada over the next 20 years, and would increase the steel industry's climate impact by 27% in the same time frame.<sup>36</sup>

### 2. Coal mine methane: an alarming climate threat

- *Do not underestimate methane's climate risk*

Methane is a short-lived but potent greenhouse gas, 82.5 times more potent than CO<sub>2</sub> across a 20-year time frame.<sup>37</sup> It is the second biggest driver of climate change and is estimated to account for 30% of human-induced warming since the pre-industrial era.<sup>38</sup>

Given its short-term impact, methane's effect by 2050 far exceeds that by the century's end. Mitigating warming in 2100 is a key goal, but interim temperatures matter: crossing tipping points may trigger irreversible climate changes like permafrost melting, Amazon forest decline, or the Atlantic Meridional Overturning Circulation collapse. Such tipping points are already possible and may become likely in the Paris Agreement's range of 1.5 to 2°C of warming, making methane mitigation a priority in order to avoid short-term climate disruption.

- *Coal mine methane accounts for 11.6% of human-caused methane emissions, and may increase*

Coal seams naturally contain methane, and when these are disturbed methane gas seeps out. In surface mines, this leads to fugitive emissions that are hard to collect. In underground mines, ventilation systems are used to maintain a low concentration of coal mine methane (CMM) as a safety measure, but this results in ventilation air methane (VAM), which is usually vented.

Mines produce a significant 11.6% of human-caused methane emissions – a quarter of which arise from metallurgical coal mines. Metallurgical coal-related emissions could increase by 7% by 2030 if all proposed projects that announced a 2030 start date are developed, and up to 20% if proposed projects

**“The transition to clean energy is also accelerating in other sectors, including those where emissions are most challenging to reduce, such as steel. The project pipeline for producing steel with hydrogen rather than coal is expanding rapidly.”**

**Fatih Birol,  
Clean energy is moving faster  
than you think, Financial Times  
April 2023**

without starting dates are also developed. It is therefore a priority for the mitigation of methane emissions to stop the development of new metallurgical coal mines or extending existing ones.

- **Coal mining at the forefront of methane mitigation**

If no new mines or extensions are developed, and if emissions from operating mines are mitigated, it is possible to significantly decrease methane emissions in the

metallurgical coal sector. Taking action on currently operating mines is not only possible, it is also cost-effective and necessary. According to the OECD, mitigating methane emissions now could avoid 0.3°C of global warming by 2050. The energy sector presents the biggest opportunity to help reduce methane emissions in this time frame, and the metallurgical coal sector specifically could reduce emissions from existing mines by 60% through the implementation of low net cost, or even profitable, measures.

**Figure 8 - Metallurgical coal mine methane emissions potential evolution by 2030**



One of the main solutions available is methane gathering via drainage systems, such as degasification wells and boreholes, and utilization. Drainage systems can be installed prior to or after exploitation and come with environmental benefits, but only if the collected methane is not vented. During operation, it is also possible to significantly reduce methane emissions from underground mines by eliminating VAM instead of venting it. In surface mines, reductions can be achieved by monitoring and sealing emission

sources – such as outcrops, unsealed entries or boreholes – and routing methane to VAM abatement systems.

The coal industry is therefore at a crossroads in relation to methane emissions: while metallurgical coal mining carries the potential to significantly contribute to the much needed methane emissions reductions, actors continue to plan new or extended mines that will only increase emissions, sending the industry the opposite way.

In addition to its climate impact, metallurgical coal mining also poses major threats to nature, biodiversity, air quality, human rights, and workers' lives.<sup>39</sup> For instance, in August 2023, a fire in a coal mine in Kazakhstan owned by steelmaker ArcelorMittal killed five workers,<sup>40</sup> and later in October a methane explosion killed 46 workers in the same mine.<sup>41</sup> For this and the many other pressing reasons, phasing out metallurgical coal must become a priority for financial institutions, especially now that alternatives exist.

## d. Alternatives to metallurgical coal

Though the steel sector has for many years been dubbed as 'hard-to-abate' by policymakers, multiple analyses now show that it can be almost fully decarbonized by 2050 thanks to recent technological advances.<sup>42</sup> A report published in June 2023 by Agora Industry even shows that the steel sector can become coal free in the early 2040s<sup>43</sup> by combining decarbonization technologies with other levers, including increasing material efficiency and steel recycling.


New technologies to produce fossil-free steel include using green hydrogen (hydrogen made from sustainable sources of energy) to produce sponge iron via a process called direct reduction of iron (DRI), after which the iron is fed into an electric arc furnace (EAF).<sup>44</sup> To make the process completely coal-free, the EAF must be powered by sustainable sources of energy. EAFs used to recycle steel scraps should also be powered from similar sustainable sources. Since the future demand for green hydrogen might outstrip production capacities,<sup>45</sup> an implication for the allocation of its use is that it should be saved primarily for steelmaking,<sup>46</sup> as there are far fewer alternatives available compared to other sectors in consideration, such as heat and power.<sup>47</sup>

Technologies that are as yet unproven and expensive should be avoided.<sup>48</sup> This goes for carbon capture and storage (CCS) technologies, in particular when applied to coal-based steel production, as they would only extend the world's reliance on fossil fuels. Agora

Industry has revealed that CCS will not play a major role in the global steel transformation, as hydrogen-based DRI is gaining traction fast.<sup>49</sup> Furthermore, the Institute for Energy Economics and Financial Analysis (IEEFA) highlights that CCS technologies have a track record of under-performance and failure,<sup>50</sup> likely making further investments in metallurgical coal a dead end.<sup>51</sup> As United Nations Secretary General António Guterres declared, "We are hurtling towards disaster, eyes wide open, with far too many willing to bet it all on wishful thinking, unproven technologies and silver bullet solutions."<sup>52</sup>

Continuing to invest in metallurgical coal creates the serious risk of stranded assets for coal mines and steel facilities. Although no estimates have been developed for the risk of metallurgical coal stranded assets, Global Energy Monitor calculations show that the global stranded asset risk for coal-based steel facilities could be as high as US\$554 billion.<sup>53</sup>

Now that alternatives exist and are available, it is time for financial institutions to play an active part in the transformation of the steel sector. This means stopping investments in new metallurgical coal mines, while at the same time increasing funding to sustainable energy sources and green hydrogen for the use of direct reduction of iron processes in steelmaking.



# THE BILLIONS FLOWING TO METALLURGICAL COAL EXPANSION

*Ending metallurgical coal expansion while developing alternatives requires the active involvement of financial institutions. This report seeks to identify where financial institutions stand when it comes to metallurgical coal policies and metallurgical coal expansion financing in the past years. As a first expectation, action must be taken by those which have supported the sector, since they are the most likely to directly or indirectly finance new mines. These financial institutions also have the power to send the strongest message to the industry by adopting robust metallurgical coal policies.*

## a. Companies developing new metallurgical coal projects

This report presents an analysis of the financial support going to the 50 metallurgical coal mining companies with the largest development plans. Taken together, these 50 developers represent 80% of the global pipeline for new metallurgical coal. This corresponds to 326 Mtpa out of a total planned production capacity of 406 Mtpa.

Between 2016 and June 2023, banks provided over US\$557 billion to the 50 companies in this report, or US\$224 billion excluding financing received by Chinese companies. Outside of China, the five most heavily backed companies include Glencore (US\$123 billion), Mitsubishi Corporation (US\$51 billion), Teck Resources (US\$22 billion), BHP Group (US\$8 billion) and Whitehaven Coal (US\$2 billion). Representing 14.4% of planned metallurgical coal production capacity, these five companies together received more than 98% of the total banking support provided during the period of research.

Furthermore, as of June 2023, US\$163 billion of investments were made in these 50 companies (including shareholding and bond holding). Again, aside from Chinese companies, the most supported companies include BHP Group (US\$64 billion), Glencore (US\$36 billion) and Mitsubishi Corporation (US\$28 billion).

Excluding Chinese companies, the financial research secured data on companies responsible for 34% of the total planned production capacity. As shown in the table, however, data was not available on transactions for 18 companies that together account for 25% of the total planned production capacity, or 102 Mtpa.<sup>54</sup> This shows that the financing behind many new metallurgical coal projects lacks transparency. This is the case for West Cumbria Mining, Pembroke Resources and Jellinbah Group, which are owned by private equity firms. Further research will be carried out by Reclaim Finance on these companies.

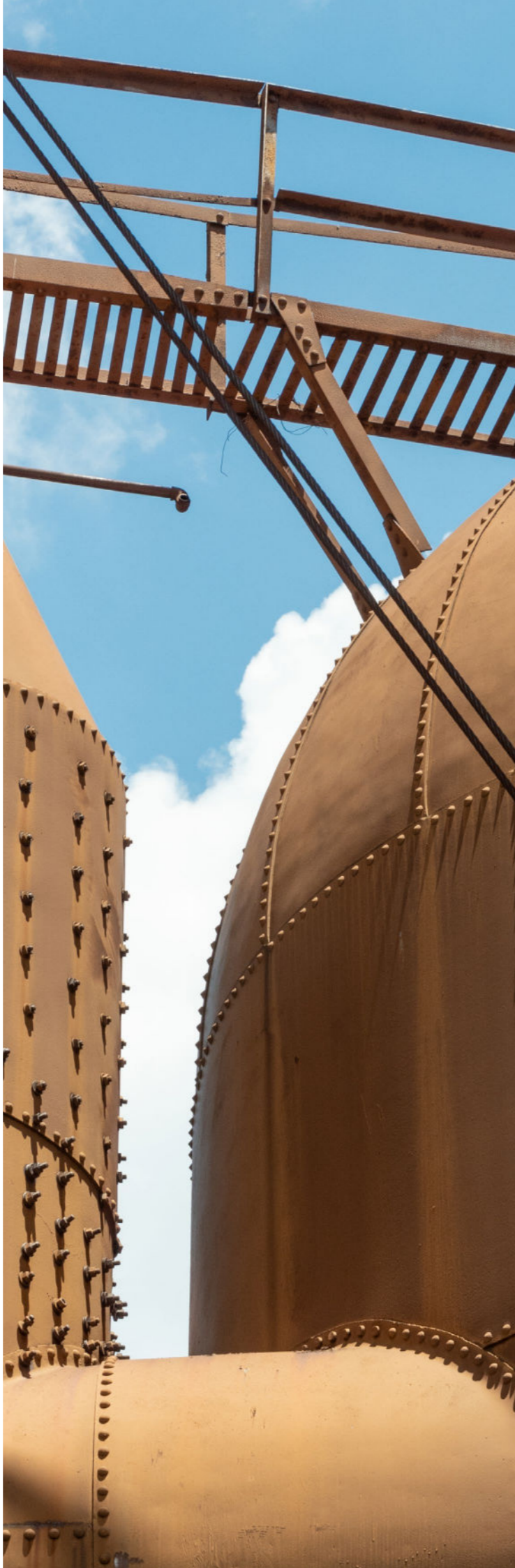


Figure 9 - Top 50 metallurgical coal developers ranked by planned production capacity

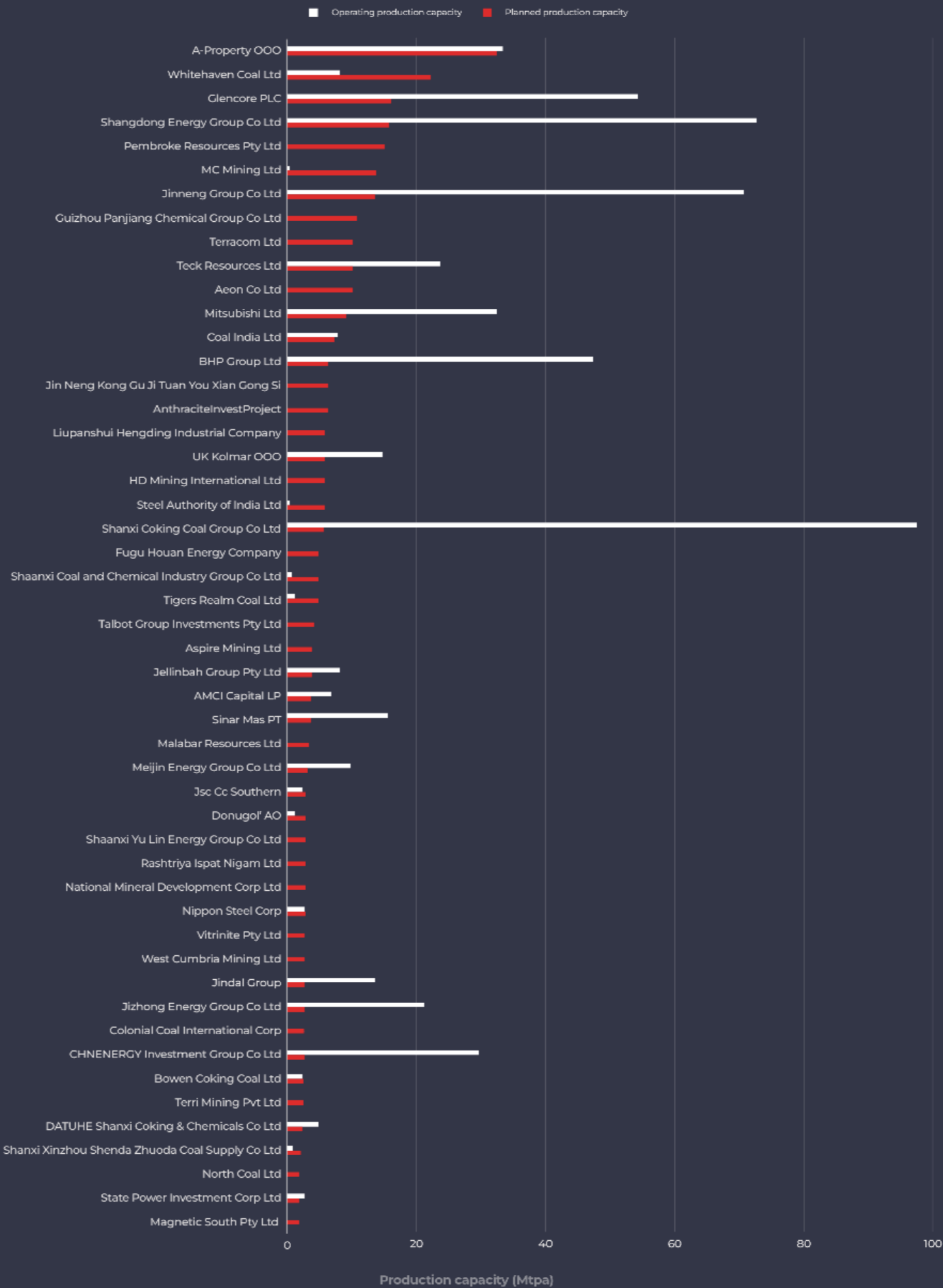
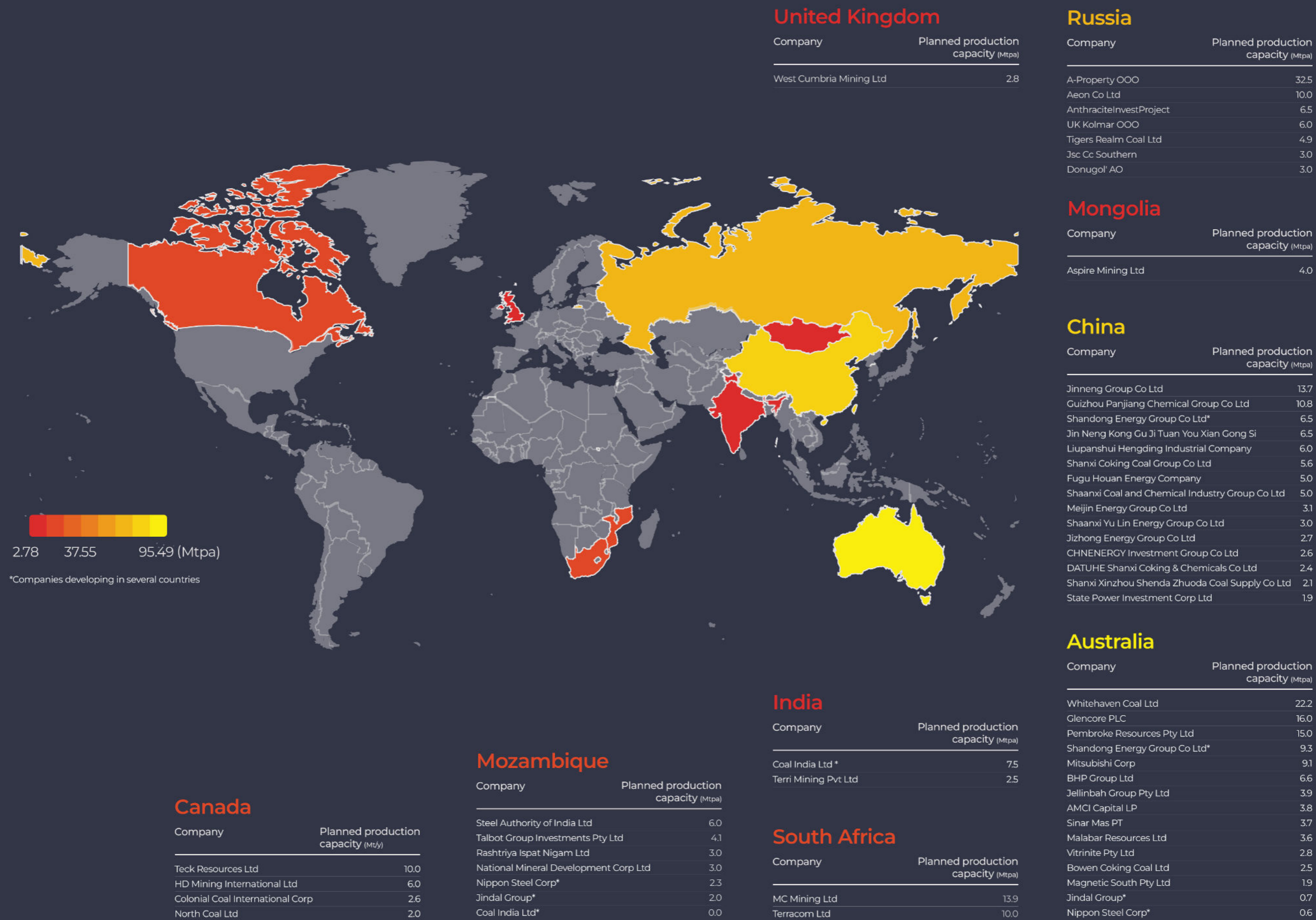


Figure 10 - Metallurgical coal developers by country of development



**Table 1 - Metallurgical coal developers matched with financial support**

Company	Developer ranking*	Metallurgical coal production capacity in development (Mtpa)	Headquarters country	Creditor support (US\$ million)	Top three banks	Investor support (US\$ million)	Top three investors
A-Property	1	32.5	Russia	-	-	-	-
Whitehaven Coal	2	22.2	Australia	2,043	UBS, Bank of China, National Australia Bank	1,503	Dimensional Fund Advisors, Mitsubishi UFJ Financial, Vanguard
Glencore**	3	16.0	Switzerland	122,923	Bank of America (BofA), Deutsche Bank, ING Group	35,639	Qatar Investment Authority, BlackRock, Vanguard
Pembroke Resources	5	15.0	Australia	61	SMBC Group	-	-
MC Mining	6	13.9	South Africa	20	Adelaide Equity Partners, Morgans, Peel Hunt	2	Barclays, M&G, Teilinger Capital
Aeon	9	10.0	Russia	-	-	-	-
Terracom	9	10.0	Australia	180	JPMorgan Chase, Petra Capital, Gleneagle	135	Regal Partners, Thorney Investment Group, African Minerals Exploration & Development Fund
Teck Resources**	9	10.0	Canada	21,715	CIBC, BMO Financial Group, Toronto-Dominion Bank	15,936	China Investment Corporation, Dodge & Cox, Royal Bank of Canada
Mitsubishi Corporation	12	9.05	Japan	50,666	Mitsubishi UFJ Financial, Mizuho Financial, SMBC Group	28,016	Berkshire Hathaway, Government Pension Investment Fund (GPIF), Nomura
Coal India	13	7.5	India	1,440	Kotak Mahindra Bank, Axis Bank, State Bank of India	4,028	Life Insurance Corporation of India, Nippon Life Insurance, HDFC Bank
BHP Group	14	6.55	Australia	8,250	Barclays, BNP Paribas, Mitsubishi UFJ Financial	64,279	Vanguard, BlackRock, State Street
Anthracite Invest Project	15	6.5	Russia	-	-	-	-
HD Mining International	17	6.0	Canada	-	-	-	-
UK Kolmar	17	6.0	Russia	-	-	-	-
Steel Authority of India	20	6.0	India	898	State Bank of India, ICICI Bank, IDFC	565	Life Insurance Corporation of India, Nippon Life Insurance, Vanguard
Tigers Realm Coal	24	4.9	Australia	-	-	-	-

Talbot Group Investments	25	4.1	Australia	-	-	-	-
Aspire Mining	26	4.0	Australia	14	Patersons Securities Ltd	-	-
Jellinbah Group	27	3.9	Australia	-	-	-	-
AMCI Capital	28	3.8	United States	-	-	-	-
Sinar Mas	29	3.7	Indonesia	1,742	Bank Mandiri, Credit Suisse, CITIC	267	Regal Partners, Odey Asset Management, Argo Investments
Malabar Resources	30	3.6	Australia	-	-	-	-
Jsc Cc Southern	32	3.0	Russia	-	-	-	-
Donugol	32	3.0	Russia	-	-	-	-
Rashtriya Ispat Nigam	35	3.0	India	-	-	-	-
National Mineral Development (NMDC)	35	3.0	India	263	ICICI Bank, State Bank of India, Citigroup	-	-
Nippon Steel Corporation	37	2.9	Japan	9,988	Mizuho Financial Goldman Sachs Daiwa Securities	9,849	GPIF, BlackRock, Sumitomo Mitsui Trust
Vitrinite	38	2.8	Australia	-	-	-	-
West Cumbria Mining	39	2.8	United Kingdom	-	-	-	-
Jindal Group	40	2.7	India	-	-	1,317	Kotak Mahindra Bank, HDFC Bank, Capital Group
Colonial Coal International	42	2.6	Canada	-	-	32	Rosseau Asset Management
Bowen Coking Coal	44	2.5	Australia	149	Petra Capital, EFG International, Morgans	76	Regal Partners, Crocodile Capital Partners, Vanguard
Terri Mining	44	2.5	India	-	-	-	-
North Coal	48	2.0	Canada	-	-	-	-
Magnetic South	50	1.9	Australia	-	-	-	-

\* The ranking does not include Chinese companies.

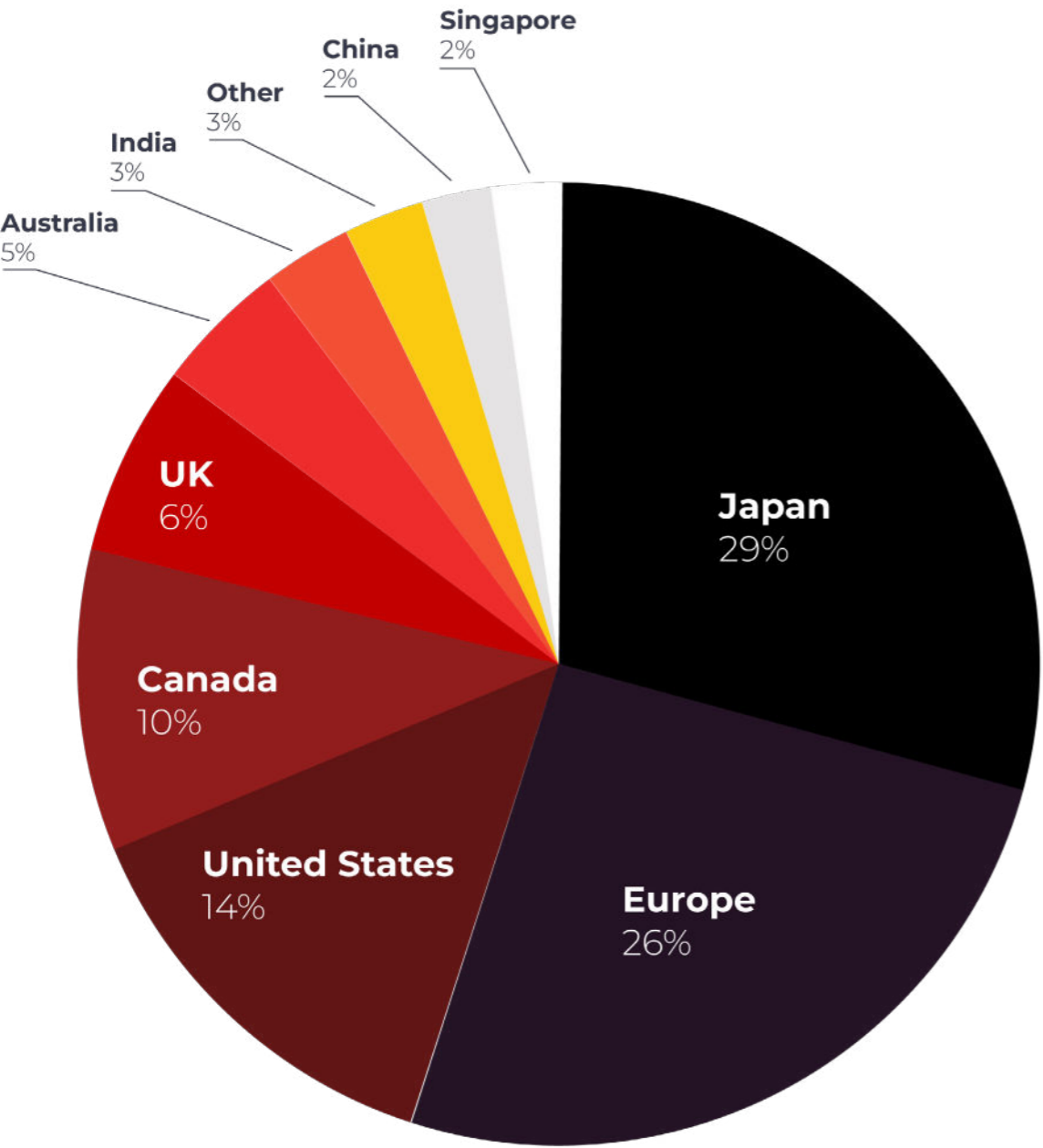
\*\* It was confirmed in November 2023 that Glencore is acquiring a 77% stake in Teck's coal unit.<sup>55</sup> This is not reflected in this ranking which is based on data prior to the sale.

**b. Top banks supporting metallurgical coal expansion**

Since 2016, banks have continually provided financing to companies engaged in the development of metallurgical coal mines. During this time frame, 81% of this bank

support has taken the form of loans, while 19% has been provided through underwriting. Based on the financial research, only 1.4% of this financing is classified as pure project financing in which the entirety of the funds is designated for a specific metallurgical coal project.

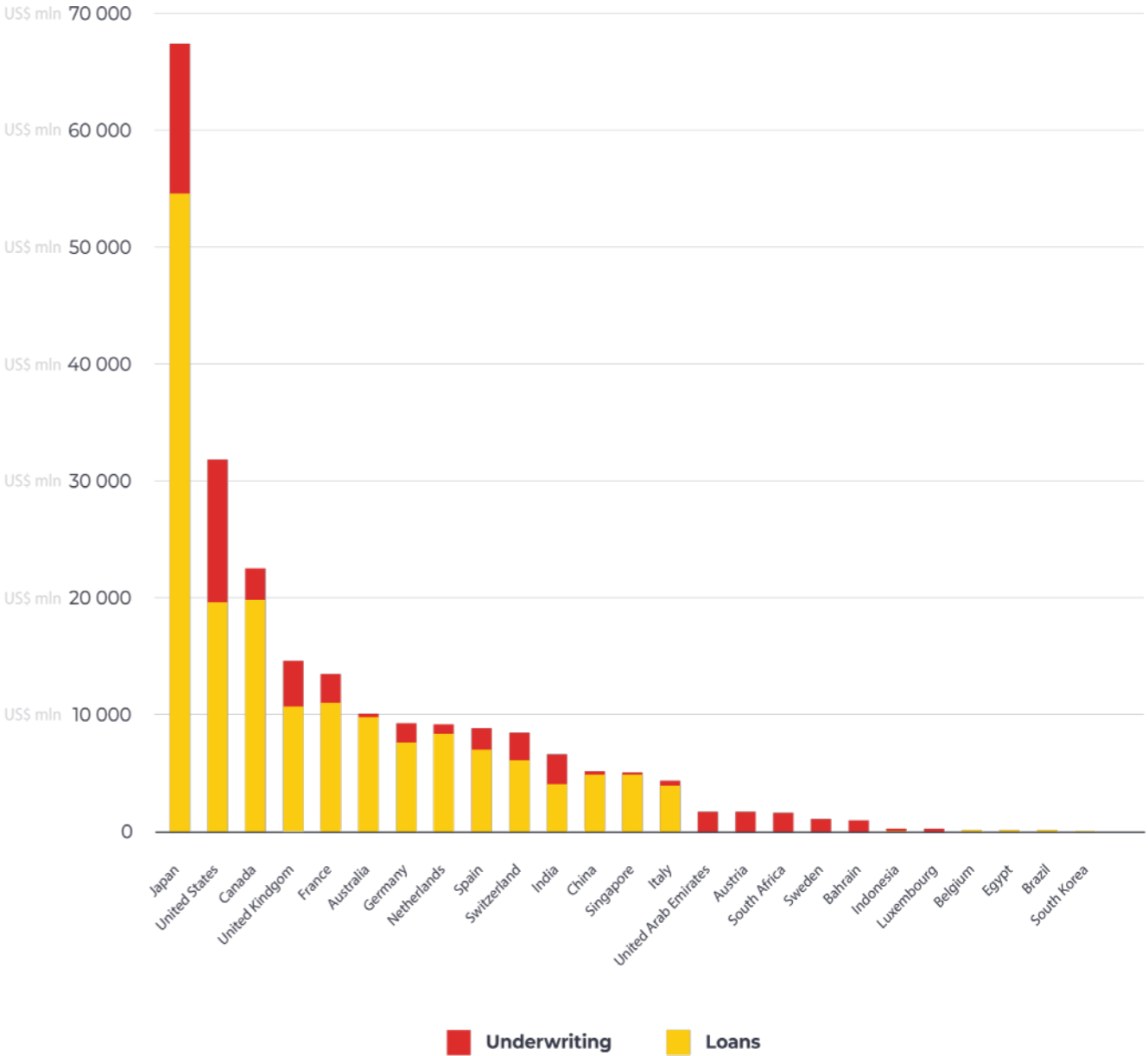
**Figure 11 - Total banking services (in %) by financial institution headquarters country, 2016 to June 2023**



In total, just 15 banks represent 51% of the financing found in the research. The top five private banks supporting the companies planning new metallurgical coal projects outside of China – Mitsubishi UFJ Financial, Mizuho Financial, SMBC Group, Citigroup and Sumitomo Mitsui Trust – represent more than 28% of the total banking support to the sector

between 2016 and June 2023. 29% of financing came from banks in Japan, 26% from Europe (with France, Germany and the Netherlands as the top three headquarters countries), 14% from banks in the US, 10% from Canada, and 6% from the UK.

**Figure 12 - Total banking services (in US\$ million) by financial institution headquarters country, 2016 to June 2023**



**Table 2 - Banking support to metallurgical coal developers, 2016 to June 2023**

Rank	Bank	Headquarters country	Metallurgical coal policy	Total financing provided (US\$ million)	Top companies financed
1	Mitsubishi UFJ Financial	Japan	No	21,236	Mitsubishi Corporation, Glencore, Nippon Steel
2	Mizuho Financial	Japan	No	13,707	Mitsubishi Corporation, Glencore, Nippon Steel
3	SMBC Group	Japan	No	12,052	Mitsubishi Corporation, Glencore, Nippon Steel
4	Citigroup	United States	No	9,815	Mitsubishi Corporation, Glencore, Teck Resources
5	Sumitomo Mitsui Trust	Japan	No	6,916	Mitsubishi Corporation, Glencore
6	Bank of America	United States	No	6,713	Glencore, Nippon Steel, Teck Resources
7	JPMorgan Chase	United States	No	5,965	Glencore, Teck Resources, Mitsubishi Corporation
8	Norinchukin Bank	Japan	No	5,860	Mitsubishi Corporation
9	Barclays	United Kingdom	No	5,201	Glencore, BHP Group, Teck Resources
10	Scotiabank	Canada	No	4,692	Glencore, Teck Resources, BHP Group
11	BNP Paribas	France	No	4,491	Glencore, Teck Resources, BHP Group
12	BMO Financial Group	Canada	No	4,474	Glencore, Teck Resources
13	Toronto-Dominion Bank	Canada	No	4,291	Glencore, Teck Resources
14	Deutsche Bank	Germany	No	4,133	Glencore, BHP Group, Teck Resources
15	ING Group	Netherlands	No	4,115	Glencore, Teck Resources
16	Royal Bank of Canada	Canada	No	3,869	Glencore, Teck Resources
17	Goldman Sachs	United States	No	3,838	Nippon Steel, Teck Resources, Glencore
18	UBS	Switzerland	No	3,816	Glencore, Whitehaven Coal, BHP Group
19	Santander	Spain	No	3,757	Glencore, BHP Group
20	Crédit Agricole	France	No	3,740	Glencore, BHP Group, Teck Resources
21	Morgan Stanley	United States	No	3,496	Glencore, Mitsubishi Corporation, Teck Resources
22	Société Générale	France	Yes	3,494	Glencore
23	CIBC	Canada	No	3,482	Teck Resources, Glencore, BHP Group

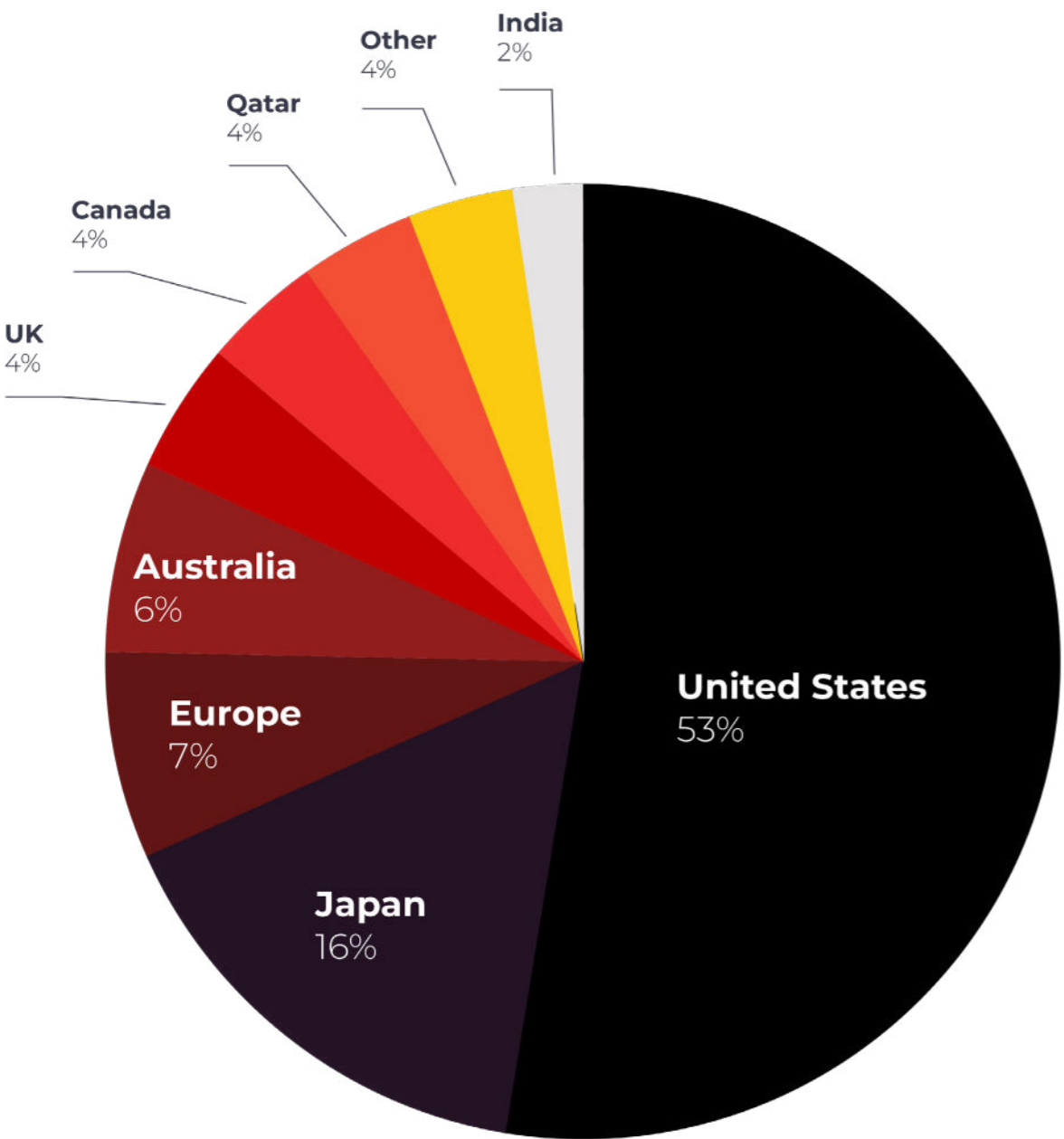
24	State Bank of India	India	No	3,397	Jindal Group, Steel Authority of India, Coal India
25	ABN Amro	Netherlands	No	3,330	Glencore, Teck Resources
26	Credit Suisse	Switzerland	No	3,283	Glencore, Sinar Mas, Whitehaven Coal
27	HSBC	United Kingdom	Yes	3,202	Glencore
28	DBS	Singapore	No	3,185	Glencore, BHP Group
29	UniCredit	Italy	No	3,039	Glencore
30	Standard Chartered	United Kingdom	No	3,024	Glencore, Teck Resources
31	ANZ	Australia	No	2,987	Glencore, BHP Group, Whitehaven Coal
32	NatWest	United Kingdom	No	2,866	Glencore
33	National Australia Bank	Australia	No	2,822	Glencore, BHP Group, Whitehaven Coal
34	Commerzbank	Germany	No	2,742	Glencore
35	Banco Bilbao Vizcaya Argentaria (BBVA)	Spain	No	2,620	Glencore
36	Industrial and Commercial Bank of China	China	No	2,397	Glencore, Teck Resources, Whitehaven Coal
37	Commonwealth Bank of Australia	Australia	No	2,240	Glencore
38	United Overseas Bank	Singapore	No	1,996	Glencore, Teck Resources
39	Bank of China	China	No	1,821	Glencore, BHP Group, Whitehaven Coal
40	Daiwa Securities	Japan	No	1,784	Nippon Steel, Mitsubishi Corporation
41	Rabobank	Netherlands	No	1,712	Glencore
42	Groupe BPCE	France	No	1,580	Glencore
43	Westpac	Australia	Yes	1,577	Glencore, BHP Group, Whitehaven Coal
44	La Caixa Group	Spain	Yes	1,547	Glencore
45	JBIC	Japan	No	1,455	Mitsubishi Corporation
46	Intesa Sanpaolo	Italy	No	1,361	Glencore
47	Skandinaviska Enskilda Banken	Sweden	No	1,335	Glencore
48	DZ Bank	Germany	No	1,295	Glencore
49	ICICI Bank	India	No	1,243	Teck Resources, Coal India, Steel Authority of India
50	First Abu Dhabi Bank	United Arab Emirates	No	1,206	Glencore

c. Top investors supporting metallurgical coal expansion

As of June 2023, investors owned US\$163 billion in metallurgical coal developers. Out of this figure, 96% is shareholding, while 4% is bond holding, a distribution which can be partly attributed to data accessibility.

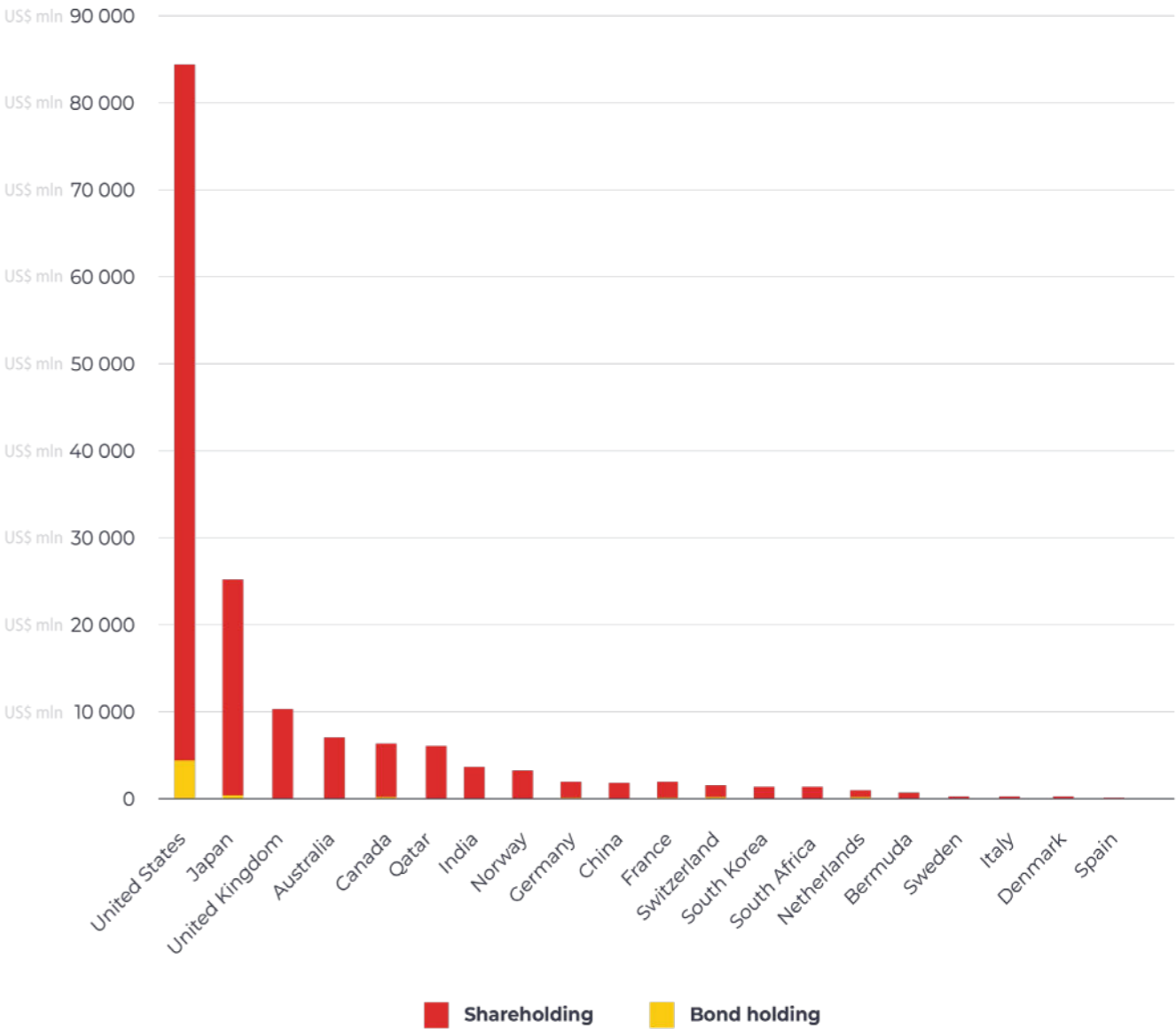
In total, 10 investors represent 45% of the financing found in this research. Among the top investors, BlackRock (11% of total investor support), Vanguard (10% of total investor support), and Japan’s Government Pension Investment Fund (5% of total investor support) offer the most support to metallurgical coal developers.

Figure 13 - Total investments (in %) by financial institution headquarters country, as of June 2023



53% of financing is from investors in the US, 16% in Japan, 6% in Australia, 4% in the UK, and 7% in Europe (with Norway, Germany and France as the top three headquarters countries).

Figure 14 - Total investments (in %) by financial institution headquarters country, as of June 2023



**Table 3 - Investor support to metallurgical coal developers, as of June 2023**

Rank	Investor	Country of headquarter	Metallurgical coal policy	Total investments (US\$ million)	Top companies exposed to
1	BlackRock	United States	No	18,098	BHP Group, Glencore, Mitsubishi Corporation
2	Vanguard	United States	No	15,792	BHP Group, Glencore, Mitsubishi Corporation
3	Government Pension Investment Fund (GPIF)	Japan	No	8,458	BHP Group, Mitsubishi Corporation, Nippon Steel
4	State Street	United States	No	7,644	BHP Group, Glencore, Teck Resources
5	Qatar Investment Authority	Qatar	No	6,231	Glencore
6	Berkshire Hathaway	United States	No	5,390	Mitsubishi Corporation, Glencore, Teck Resources
7	AustralianSuper	Australia	No	4,129	BHP Group, Glencore, Teck Resources
8	Government Pension Fund Global (GFPG)	Norway	No	3,333	BHP Group, Mitsubishi Corporation, Teck Resources
9	Mitsubishi UFJ Financial	Japan	No	2,824	BHP Group, Mitsubishi Corporation, Nippon Steel
10	Nomura	Japan	No	2,633	BHP Group, Mitsubishi Corporation, Nippon Steel
11	Fidelity Investments	United States	No	2,466	BHP Group, Glencore, Teck Resources
12	JPMorgan Chase	United States	No	2,255	BHP Group, Glencore, Mitsubishi Corporation
13	Sumitomo Mitsui Trust	Japan	No	2,246	Mitsubishi Corporation, Nippon Steel, Teck Resources
14	Capital Group	United States	No	2,164	BHP Group, Glencore, Jindal Group
15	Dimensional Fund Advisors	United States	No	2,125	BHP Group, Glencore, Whitehaven Coal
16	Life Insurance Corporation of India	India	No	2,052	Coal India, Steel Authority of India
17	China Investment Corporation	China	No	1,909	Teck Resources
18	Geode Capital Holdings	United States	No	1,902	BHP Group, Mitsubishi Corporation, Glencore
19	Meiji Yasuda Life Insurance	Japan	No	1,803	Mitsubishi Corporation, BHP Group, Nippon Steel
20	Dodge & Cox	United States	No	1,549	Teck Resources, Glencore
21	Wellington Management	United States	No	1,367	Glencore, BHP Group, Teck Resources
22	TIAA	United States	No	1,326	Glencore, BHP Group, Mitsubishi Corporation
23	Tokio Marine	Japan	No	1,308	Mitsubishi Corporation, Glencore, Nippon Steel
24	Future Fund	Australia	No	1,299	BHP Group

25	GQG Partners	United States	No	1,287	Glencore, Coal India, Whitehaven Coal
26	Deutsche Bank	Germany	No	1,264	BHP Group, Glencore, Mitsubishi Corporation
27	Daiwa Securities	Japan	No	1,263	Mitsubishi Corporation, BHP Group, Nippon Steel
28	Fisher Investments	United States	No	1,225	BHP Group, Glencore, Steel Authority of India
29	KKR Group	United States	No	1,165	BHP Group
30	Pension Fund Association for Local Government Officials	Japan	No	1,146	Mitsubishi Corporation, BHP Group, Nippon Steel
31	T. Rowe Price	United States	No	1,118	BHP Group, Mitsubishi Corporation, Nippon Steel
32	Royal Bank of Canada	Canada	No	1,052	Teck Resources, BHP Group, Mitsubishi Corporation
33	Mizuho Financial	Japan	No	1,039	Nippon Steel, Mitsubishi Corporation, BHP Group
34	Sun Life Financial	Canada	No	1,003	Glencore, BHP Group, Teck Resources
35	Nippon Life Insurance	Japan	No	1,000	Coal India, Nippon Steel, Jindal Group
36	Charles Schwab	United States	No	947	BHP Group, Glencore, Mitsubishi Corporation
37	Schroders	United Kingdom	No	926	BHP Group, Glencore, Mitsubishi Corporation
38	Commonwealth Superannuation Corporation	Australia	No	915	BHP Group
39	Aviva	United Kingdom	No	864	BHP Group, Glencore, Mitsubishi Corporation
40	Abrdn	United Kingdom	No	835	Glencore, BHP Group, Teck Resources
41	Affiliated Managers Group	United States	No	788	BHP Group, Glencore, Teck Resources
42	Northern Trust	United States	No	785	BHP Group, Glencore, Mitsubishi Corporation
43	Groupe BPCE	France	No	782	Glencore, BHP Group, Teck Resources
44	National Pension Service	South Korea	No	736	BHP Group, Glencore, Mitsubishi Corporation
45	HSBC	United Kingdom	No	724	BHP Group, Glencore, Teck Resources
46	UBS	Switzerland	No	713	BHP Group, Glencore, Mitsubishi Corporation
47	Power Corporation of Canada	Canada	No	708	Glencore, Teck Resources, BHP Group
48	HostPlus	Australia	No	689	BHP Group, Whitehaven Coal
49	California Public Employees' Retirement System (CalPERS)	United States	No	673	BHP Group, Glencore, Mitsubishi Corporation
50	Invesco	United States	No	665	Glencore, Teck Resources, BHP Group

## A lesser-known financial backer of metallurgical coal - private equity firms: the case of the West Cumbria coal mine

In addition to banks and investors, a more discrete type of financial institution supports metallurgical coal: private equity (PE) firms. These firms invest in companies that are not publicly traded, and are therefore less transparent and less regulated than other types of investors. As a result, PE firms can more easily escape public scrutiny, leading to hidden negative climate, environmental and social impacts.

In 2022, the West Cumbria coal mine became the first new coal mine to be approved in the UK in 30 years. PE firm EMR Capital is the majority owner of this controversial project expected to start production in 2025.

The West Cumbria coal mine (or Woodhouse Colliery Mine) is intended to produce metallurgical coal for steelmaking. While giving up on the use of coal should be a priority to decarbonize the steel sector,<sup>56</sup> estimates show that the mine will emit 8.8 Mt of CO<sub>2</sub> per annum<sup>57</sup> from its operations alone, and could emit around 200 million additional tonnes from burning the extracted coal.<sup>58</sup> By also emitting fifteen times more methane than announced by the developer, the mine considerably jeopardizes the UK's chances of reaching its climate commitments. Not only will the mine have a disastrous climate impact, it is also highly criticized for its negative impacts on human rights, communities, and biodiversity.<sup>59</sup> Furthermore, all blast furnaces in the UK are now scheduled for retirement, meaning that no metallurgical coal will be used in the UK in the future.<sup>60</sup>

As EMR Capital is currently seeking to raise more capital to secure the construction of the mine, it will be looking to banks and investors. Financial institutions must refrain from providing any financial support to the mine or EMR Capital.

More information on this topic can be found  
on [Reclaim Finance's website](#).



## d. Case studies

Within the scope of this report, four metallurgical coal developers are among the most supported by financial institutions: Glencore, BHP Mitsubishi Alliance (BMA), Whitehaven Coal and Teck Resources. According to Global Energy Monitor, these developers are involved in nine proposed new metallurgical coal mines, all located in Australia except for one in Canada.

According to Move Beyond Coal, the Australian federal government is currently considering 29 coal mine expansions that together could

produce over 250 Mt of coal per year and contribute to as much as 17 billion tonnes of CO<sub>2</sub> emissions.<sup>61</sup> The Australia Institute<sup>62</sup> has revealed that should these mines receive approval, their cumulative lifetime emissions would have a comparable environmental impact to sustaining the operation of every coal-fired power station in Australia for an extra 92 years. However, according to scientists, 95% of Australia's remaining coal reserves must remain untouched to have a 50% probability of restricting global warming to 1.5°C.<sup>63</sup> A vast proportion of these proposed mines are for metallurgical coal and are associated with the following companies.

### GLENCORE

Glencore is one of the world's largest producers and exporters of seaborne traded thermal and coking coal.<sup>64</sup> The company currently operates 11 mines that consist partially or entirely of metallurgical coal, with a combined coal production capacity of 54.3 Mtpa.

The company is planning to expand the Hunter Valley operations in New South Wales,<sup>65</sup> which would extend the life of the mine up to 2050. The mine has already had disastrous consequences for the region's groundwater and surface water, however. The expansion would additionally lead to the destruction of significant portions of critically endangered ecological communities.<sup>66</sup>

Investors should also be extremely concerned about the company's aggressive, and now successful, strategy to acquire the metallurgical coal business of Canadian company Teck Resources.<sup>67</sup> It made an offer in early 2023 to buy in cash, up to US\$8.2 billion,<sup>68</sup> and merge it with its own thermal coal business. One of Glencore's shareholders, Bluebell Capital, criticized the deal, stating that "Glencore has demonstrated no intention to accelerate the transformation into a world-class pure player in green economy transition metals, but rather the intention is to become the indisputable leader in coal (thermal and steel)".<sup>69</sup> It was confirmed in November 2023 that Glencore was buying a majority stake in Teck's coal unit.<sup>70</sup> This transaction makes Glencore one of the biggest metallurgical coal players.

While the damage caused by Glencore's activities has been documented for years, the company continues to receive substantial financial support. Since 2016, banks have provided US\$122,923 million to the company. This includes a US\$8,070 million loan in 2021 in which UBS, Crédit Agricole and Société Générale were among the 32 banks to act as lenders. As of June 2023, investors held US\$35,639 million in bonds and shares in the company.

The BHP Mitsubishi Alliance (BMA) stands as the largest metallurgical coal company in Australia and is the world's leading exporter of metallurgical coal.<sup>71</sup> BHP currently operates eight mines<sup>72</sup> that consist partially or entirely of metallurgical coal, with a combined coal production capacity of 47.35 Mtpa (all but one are owned by BMA, the other is owned by BHP alone).<sup>73</sup> BMA also owns and operates the Hay Point Coal Terminal on the Great Barrier Reef World Heritage Area, handling more than 55 million tonnes of metallurgical coal for export every year.<sup>74</sup>

BMA is planning three coal mine expansions in Queensland. The Saraji East and Caval Ridge coal expansion projects could mine an additional 12.3 Mt of coal per year and create 829 Mt of CO<sub>2</sub> emissions in their lifetimes.<sup>75</sup> BHP and Mitsubishi are also seeking government approval to extend the life of the Peak Downs Coal Mine for almost a century,<sup>76</sup> which would emit 3,212 Mt of emissions over its lifetime according to estimates by the Australia Institute.<sup>77</sup> Additionally, BMA is still proposing the Red Hill Mine, a greenfield coking coal mine in Queensland that would mine 14 million tonnes of coal per year.<sup>78</sup>

The BHP Group's decarbonization strategy must ring the alarm for financial institutions. In a report published in October 2023, IEEFA revealed that BHP has not set measurable targets for its scope 3 emissions, which dwarf the impact of its scope 1 and 2 emissions.<sup>79</sup> IEEFA has warned that the company can expect to face growing investor pressure. Financiers should also worry about the company's approach to the overall steel transition – in its latest annual report it states that "We believe a wholesale shift away from blast furnace steelmaking, which uses metallurgical coal, is still decades in the future and as a result metallurgical coal will remain an essential input...over the coming decades."<sup>80</sup>

Since 2016, banks have provided US\$8,250 million to BHP and US\$50,666 million to Mitsubishi. This notably includes a US\$1 billion bond issued by BHP in 2023 in which Barclays, BNP Paribas, Santander and Bank of America were among the bookrunners. As of June 2023, investors held US\$64,279 million in bonds and shares in BHP and US\$28,016 million in Mitsubishi. The company's financiers have a key role to play to ensure that these expansion plans do not come to life.

Australian company Whitehaven Coal operates two mines that consist partially of metallurgical coal, with a combined coal production capacity of 8.14 Mtpa.

The company is currently involved in four coal expansion projects in Australia: the expansion of the Narrabri and Maules Creek<sup>81</sup> coal mines, the development of the new Vickery mine in New South Wales, and the new Winchester South mine in Queensland. These projects amount to a total production capacity of 23.8 Mtpa.

In October 2023, Whitehaven acquired the Daunia and Blackwater metallurgical coal mines in Queensland put up for sale by the BHP Mitsubishi Alliance.<sup>82</sup> This occurred in spite of strong opposition from some of its largest shareholders, including London hedge fund Bell Rock Capital Management, which called the mines “very high-risk investments”.<sup>83</sup> In the sale, Whitehaven also acquired the tenements for BMA’s large proposed new Blackwater South coking coal mine that proposes to destroy almost 7,000 hectares of endangered Koala habitat in order to mine 8 million tonnes of coal per annum until the year 2116.<sup>84</sup> In an article published in October 2023, IEEFA pointed out that this acquisition shows that mining operators remain overly optimistic about long-term demand for Australian metallurgical coal, even though shareholders increasingly expect an end to coal asset expansion. In a report published the same month, IEEFA explained that due to the technology transition, the long-term outlook for metallurgical coal demand is starting to change, thus undermining Whitehaven’s plans to invest in these new projects.<sup>85</sup>

The company is also reported to have committed over 100 environmental crimes, including damaging Aboriginal artefacts, clearing bush without approval, polluting creeks, stealing water, failing to manage noise and air pollution, and dumping dangerous waste materials.<sup>86</sup> The offenses are so many that a representative from the grassroots organization Lock the Gate even declared, “It looks like there’s not a single environmental harm Whitehaven hasn’t committed”.<sup>87</sup>

In spite of this disastrous track record, financial institutions continue to provide substantial resources to Whitehaven Coal. Since 2016, banks have provided US\$2,043 million to the company. As of June 2023, investors held US\$1,503 million in bonds and shares in the company. While no recent transactions were found in this research, news from October 2023 revealed that Jefferies and Bank of America provided a US\$900 million bridge loan for Whitehaven’s successful \$3.2 billion acquisition of BHP’s Blackwater and Daunia coal mines.<sup>88</sup> Whitehaven is now looking for a longer-term financing arrangement as the bridge facility will expire on 30 June 2024.<sup>89</sup>

Canadian company Teck Resources currently operates four mines that consist partially or entirely of metallurgical coal, with a combined coal production capacity of 23.75 Mtpa. All are located in British Columbia.

The company is currently involved in the Fording River coal mine expansion project in Canada, which would add 10 Mtpa of production capacity, resulting in the extraction of an additional 360 Mt of coal over the mine’s lifetime.<sup>90</sup> As highlighted in a briefing published by BankTrack, Teck Resources’ metallurgical coal operations have historically disregarded human rights, Indigenous sovereignty, and the health of ecosystems.<sup>91</sup>

Since 2016, banks have provided US\$21,715 million to the company. This includes a 2021 US\$4,000 million loan in which 22 banks participated, including JPMorgan Chase, BNP Paribas, Crédit Agricole and Barclays. As of June 2023, investors held US\$15,936 million in bonds and shares in Teck Resources.

The company stated in December 2022 that it was looking to move away from metallurgical coal to focus on copper.<sup>92</sup> However, it is selling rather than closing its existing assets. As previously indicated, Teck sold a majority of its coal units to Glencore,<sup>93</sup> and a minority to Nippon Steel.<sup>94</sup>

# 3.

## URGENTLY NEEDED: POLICIES TO RESTRICT METALLURGICAL COAL FINANCING

*Even though there is both no need for additional metallurgical coal production capacity and fossil-free steelmaking alternatives already exist, billions keep flowing to companies developing new metallurgical coal projects. Over the past years, financial institutions have adopted policies to restrict financing to thermal coal, meaning thermal coal companies are increasingly facing difficulties in financing new mines, but funds can keep pouring into metallurgical coal expansion since it remains absent from the majority of existing policies. It is therefore urgent that financial institutions include metallurgical coal in their policies.*

## a. Policy analysis

An increasing number of financial institutions have adopted a coal exclusion policy. As assessed in Reclaim Finance's Coal Policy Tool, over 240 financial institutions now have policies to address thermal coal.<sup>95</sup> Even though these policies are of varying quality, they all converge in likeness around metallurgical coal, which they almost all fail to include. As such, new commitments are necessary to limit financial support to the development of new metallurgical coal mines.

A robust metallurgical coal policy must prevent direct funding to these types of projects, but must also frame the corporate-level financial support to companies with development plans. Indeed, as previously mentioned, only 1.4% of financing in this research comes in the form of direct project funding. Addressing corporate support is essential to put an end to metallurgical coal expansion.

Unfortunately, the very few existing metallurgical coal policies are weak. Of the 50 banks analyzed in this report, only five have adopted commitments related to metallurgical coal – HSBC,<sup>96</sup> Société Générale,<sup>97</sup>

Westpac,<sup>98</sup> BNP Paribas and CaixaBank.<sup>99</sup> The four have adopted similar exclusions: they will not finance any new metallurgical coal mines or the expansion of existing metallurgical coal mines, except for Westpac which only excludes new metallurgical coal mines. Only Société Générale excludes some companies deriving revenues from metallurgical coal. These commitments are a welcome first step towards ending financial support for metallurgical coal. However, they do not prevent continuing financing support to companies with development plans and, indirectly, new metallurgical coal projects. While no transactions to metallurgical coal developers were identified after the adoption of their policies by Société Générale in November 2021 and CaixaBank in March 2022, HSBC acted as joint bookrunner in a US\$1 billion bond underwriting for Glencore in May 2023. This bond, emitted in two tranches with maturity dates in 2028 and 2033, is for general corporate purposes and could therefore be used to finance the company's metallurgical coal expansion plans.

In addition, none of the 50 investors analyzed in this report have adopted commitments relating to metallurgical coal. Around

80% have not adopted an exclusion policy regarding thermal coal either, even though they contribute largely to the support of companies with coal expansion plans.<sup>100</sup> These investors must urgently adopt robust exclusion policies that include both thermal and metallurgical coal.

Insurers also play a critical role in the development of new metallurgical coal mines by offering the insurance coverage needed for mines to open and operate. While there is no available data that indicates the amount of insurer support to the sector, it is worth pointing out that metallurgical coal is also completely overlooked by insurers' coal policies. As highlighted in a report by Public Citizen and Insure our Future,<sup>101</sup> the absence of metallurgical coal in insurers' policies creates a loophole that makes it possible for them to provide insurance to current and new coal mines without violating their policy commitments. This is the case of Zurich, for instance, which from 2020 until November 2022 insured two subsidiaries of Alpha Metallurgical Resources, the third largest coal producer in the US operating metallurgical coal mines.<sup>102</sup> While the mines insured produce metallurgical coal, it does not constitute a

breach of Zurich's policy since it only applies to companies that mine a majority of thermal coal. This further highlights the need for insurers to explicitly address metallurgical coal in their coal policies. As of now, no insurer has adopted a metallurgical coal policy applicable to its underwriting activities.

Financial institutions must adopt exclusion policies to reduce emissions from metallurgical coal. By doing so, they would target one of the main causes of steel emissions: the extraction and use of metallurgical coal in blast furnaces. Setting decarbonization targets is a complementary approach to the adoption of policies, but is not enough in itself. Of the 100 financial institutions in this report, 18 banks have adopted steel decarbonization targets.<sup>103</sup> For now, adopting targets has not been followed by concrete actions to reduce emissions from metallurgical coal. MUFG's decision to finance the construction of new blast furnaces by ArcelorMittal and Nippon Steel in India,<sup>104</sup> despite having adopted steel decarbonization targets,<sup>105</sup> demonstrates the inefficiency of targets alone to secure the alignment of the steel sector with a robust 1.5°C trajectory.



### 3 common misconceptions used to justify the absence of metallurgical coal in policies

#### 1. "Because steel demand will increase, metallurgical coal demand will increase too."

The increase in steel demand will not be automatically linked to the growth of metallurgical coal demand. Indeed, green steel demand is simultaneously increasing, for instance in the car industry,<sup>106</sup> and the transition to fossil-free steel technologies is moving forward at a fast pace.<sup>107</sup> Besides, in the IEA's NZE scenario, coking coal production falls by about 25% by 2030, and by 90% by 2050, based on 2022 levels.<sup>108</sup> Even with a growth in steel demand, studies show that a coal phase-out in steelmaking is technically feasible by the early 2040s.<sup>109</sup>

#### 2. "There is no alternative to metallurgical coal in the steelmaking process."

Alternatives to metallurgical coal are now commercially available and need to be increasingly deployed. This includes hydrogen-based steelmaking. The transition away from metallurgical coal also involves increasing scrap-based steelmaking in electric arc furnaces (EAF), which is already used in the steel industry. In the US, for instance, two-thirds of steel production comes from EAFs.<sup>110</sup> The transition from metallurgical coal is therefore already happening, and is now accelerating.<sup>111</sup> Studies show that the steel sector has the potential to move from "hard-to-abate" to "fast-to-abate".<sup>112</sup> This reinforces the fact that, as already mentioned, no more new metallurgical coal mines are needed to sustain steel production.

#### 3. "Coal-free steel is more expensive."

Coal-free steel production is estimated to cost between 30% and 60% more than conventional coal-based steel.<sup>113</sup> However, transitioning to net-zero steel would only increase the final cost of end products by 1% to 2%.<sup>114</sup> Additional costs can and must be mitigated through the adoption of adequate public policies. Indeed, implementing comprehensive policies, such as the Carbon Border Adjustment Mechanism for importers of iron and steel, would help reduce these costs.

Regardless of the costs of coal-free steel, a high risk of stranded assets would come with the expansion of metallurgical coal capacity. If all BF-BOF capacity currently proposed or under construction is fully developed, the steel industry could face a stranded asset risk of between US\$368 billion and US\$554 billion.<sup>115</sup> Recently, Baowu, a leading state-owned steel company in China, paid almost \$300 million to terminate a costly contract with the Wiggins Island Coal Export Terminal in Queensland. This enabled the sale of its stake in the Eagle Downs coking coal mine and marked its exit from the Queensland coal sector.<sup>116</sup> More and more metallurgical coal projects are facing this situation. Not transitioning from coal will likely become an increasingly risky bet.

**Table 4 - Metallurgical coal restriction policies for banks listed in the report**

Banks listed in the global top 50 supporters of metallurgical coal	Does the bank have a thermal coal policy?	Does the bank have a steel decarbonization target?	Does the bank have a metallurgical coal policy?	Does the bank exclude metallurgical coal mine projects?	Does the bank exclude financing to metallurgical coal developers?	Support to metallurgical coal developers from 2016 to June 2023 (US\$ million)
Mitsubishi UFJ Financial	YES	YES	NO	NO	NO	21,236
Mizuho Financial	YES	NO	NO	NO	NO	13,707
SMBC Group	YES	NO	NO	NO	NO	12,052
Citigroup	YES	YES	NO	NO	NO	9,815
Sumitomo Mitsui Trust	YES	NO	NO	NO	NO	6,916
Bank of America	YES	NO	NO	NO	NO	6,713
JPMorgan Chase	YES	YES	NO	NO	NO	5,965
Norinchukin Bank	YES	NO	NO	NO	NO	5,860
Barclays	YES	YES	NO	NO	NO	5,201
Scotiabank	YES	NO	NO	NO	NO	4,692
BNP Paribas	YES	YES	YES	YES	NO	4,491
BMO Financial Group	YES	NO	NO	NO	NO	4,474
Toronto-Dominion Bank	YES	NO	NO	NO	NO	4,291
Deutsche Bank	YES	YES	NO	NO	NO	4,133
ING Group	YES	YES	NO	NO	NO	4,115
Royal Bank of Canada	YES	NO	NO	NO	NO	3,869
Goldman Sachs	YES	NO	NO	NO	NO	3,838
UBS	YES	NO	NO	NO	NO	3,816
Santander	YES	YES	NO	NO	NO	3,757
Crédit Agricole	YES	NO	NO	NO	NO	3,740
Société Générale	YES	YES	YES	YES	NO	3,494
Morgan Stanley	YES	NO	NO	NO	NO	3,496
CIBC	YES	NO	NO	NO	NO	3,482

State Bank of India	NO	NO	NO	NO	NO	3,397
ABN Amro	YES	NO	NO	NO	NO	3,330
Credit Suisse	YES	YES	NO	NO	NO	3,283
HSBC	YES	YES	YES	YES	NO	3,202
DBS	YES	NO	NO	NO	NO	3,185
UniCredit	YES	NO	NO	NO	NO	3,039
Standard Chartered	YES	YES	NO	NO	NO	3,024
ANZ	YES	YES	NO	NO	NO	2,987
NatWest	YES	YES	NO	NO	NO	2,866
National Australia Bank	YES	NO	NO	NO	NO	2,822
Commerzbank	YES	YES	NO	NO	NO	2,742
Banco Bilbao Vizcaya Argentaria (BBVA)	YES	YES	NO	NO	NO	2,620
Industrial and Commercial Bank of China	NO	NO	NO	NO	NO	2,397
Commonwealth Bank of Australia	YES	NO	NO	NO	NO	2,240
United Overseas Bank	YES	NO	NO	NO	NO	1,996
Bank of China	YES	NO	NO	NO	NO	1,821
Daiwa Securities	YES	NO	NO	NO	NO	1,784
Rabobank	YES	NO	NO	NO	NO	1,712
Groupe BPCE	YES	NO	NO	NO	NO	1,580
Westpac	YES	NO	YES	YES	NO	1,577
La Caixa Group	YES	YES	YES	YES	NO	1,547
JBIC	NO	NO	NO	NO	NO	1,455
Intesa Sanpaolo	YES	NO	NO	NO	NO	1,361
Skandinaviska Enskilda Banken	YES	NO	NO	NO	NO	1,335
DZ Bank	YES	YES	NO	NO	NO	1,295
ICICI Bank	NO	NO	NO	NO	NO	1,243
First Abu Dhabi Bank	YES	NO	NO	NO	NO	1,206

**Table 5 - Metallurgical coal restriction policies for investors listed in the report**

Investors listed in the global top 50 supporters of metallurgical coal	Does the investor have a thermal coal policy?	Does the investor have a metallurgical coal policy?	Does the investor exclude financing to metallurgical coal developers?	Support to metallurgical coal developers as of June 2023 (US\$ million)
BlackRock	YES	NO	NO	18,098
Vanguard	NO	NO	NO	15,792
Government Pension Investment Fund (GPIF)	NO	NO	NO	8,458
State Street	NO	NO	NO	7,644
Qatar Investment Authority	NO	NO	NO	6,231
Berkshire Hathaway	NO	NO	NO	5,390
AustralianSuper	NO	NO	NO	4,129
Government Pension Fund Global (GFPG)	YES	NO	NO	3,233
Mitsubishi UFJ Financial	NO	NO	NO	2,824
Nomura	NO	NO	NO	2,633
Fidelity Investments	YES	NO	NO	2,466
JPMorgan Chase	NO	NO	NO	2,255
Sumitomo Mitsui Trust	NO	NO	NO	2,246
Capital Group	NO	NO	NO	2,164
Dimensional Fund Advisors	NO	NO	NO	2,125
Life Insurance Corporation of India	NO	NO	NO	2,052
China Investment Corporation	NO	NO	NO	1,909
Geode Capital Holdings	NO	NO	NO	1,902
Meiji Yasuda Life Insurance	NO	NO	NO	1,803
Dodge & Cox	NO	NO	NO	1,549
Wellington Management	NO	NO	NO	1,367
TIAA	NO	NO	NO	1,326
Tokio Marine	NO	NO	NO	1,308

Future Fund	NO	NO	NO	1,299
GQG Partners	NO	NO	NO	1,287
Deutsche Bank	YES	NO	NO	1,264
Daiwa Securities	YES	NO	NO	1,263
Fisher Investments	NO	NO	NO	1,225
KKR Group	NO	NO	NO	1,165
Pension Fund Association for Local Government Officials	NO	NO	NO	1,146
T. Rowe Price	NO	NO	NO	1,118
Royal Bank of Canada	NO	NO	NO	1,052
Mizuho Financial	NO	NO	NO	1,039
Sun Life Financial	NO	NO	NO	1,003
Nippon Life Insurance	NO	NO	NO	1,000
Charles Schwab	NO	NO	NO	947
Schroders	YES	NO	NO	926
Commonwealth Superannuation Corporation	NO	NO	NO	915
Aviva	YES	NO	NO	864
Abrdn	NO	NO	NO	835
Affiliated Managers Group	NO	NO	NO	788
Northern Trust	NO	NO	NO	785
Groupe BPCE	NO	NO	NO	782
National Pension Service	NO	NO	NO	736
HSBC	YES	NO	NO	724
UBS	YES	NO	NO	713
Power Corporation of Canada	NO	NO	NO	708
HostPlus	NO	NO	NO	689
California Public Employees' Retirement System (CalPERS)	YES	NO	NO	673
Invesco	NO	NO	NO	665

# RECOMMENDATIONS

**F**inancial institutions have a key role to play in turning the steel industry away from metallurgical coal. Many financial institutions already have policies that cover thermal coal. Now is the time to complete these policies by also addressing metallurgical coal.

- The first priority of financial institutions when it comes to metallurgical coal must be to stop expansion. This involves:
  1. Immediately ending dedicated financial services, including advisory services, insurance coverage, and dedicated financing to new metallurgical coal projects. This includes the development of new metallurgical coal mines, the expansion of existing ones, and all related infrastructure.
  2. Committing to no longer provide services, including the provision of financial services, holding companies in portfolio, and providing insurance coverage, for companies that have plans to develop, or are developing, metallurgical coal projects. This includes no longer providing services to companies that do not have a detailed asset-by-asset and mine-by-mine closure (not selling) timetable aligned with a 1.5°C scenario, and a just and sustainable transition plan for workers, local communities, and the environment.<sup>117</sup>
- Financial institutions should also require companies in their portfolio to commit to reducing the methane intensity of coal mines. Until metallurgical coal mines are closed, financial institutions should engage with metallurgical coal producing companies and demand they mitigate the methane emissions of their operating mines. The potential for methane mitigation is higher in underground mines, but all means to reduce overall methane emissions should be implemented, including in surface mines.<sup>118</sup>
- In order to adopt a comprehensive approach to steel decarbonization, financial institutions must simultaneously make commitments regarding steel companies. Financial institutions must aim to bring about a stop to the development of new coal-based blast furnaces and the relining of existing blast furnaces, and push steelmakers to transition away from coal in all their operations and facilities, including coking ovens, blast furnaces, captive coal-based power plants, and steel mills that include any element that uses coal. This should also include a commitment to increasing finance for key enabling sectors, like sustainable energy and green hydrogen for steelmaking.<sup>119</sup>



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## **METALLURGICAL COAL FINANCING: Time to call it off**

Reclaim Finance is an NGO affiliated with Friends of the Earth France. It was founded in 2020 and is 100% dedicated to issues linking finance with social and climate justice. In the context of the climate emergency and biodiversity losses, one of Reclaim Finance's priorities is to accelerate the decarbonization of financial flows. Reclaim Finance exposes the climate impacts of financial players, denounces the most harmful practices and puts its expertise at the service of public authorities and financial stakeholders who desire to bend existing practices to ecological imperatives.

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