

Schulze, Meike; Schrolle, Mark

Research Report

Saudi Arabia strives to become major player in mineral supply chains: A questionable pillar of Europe's diversification strategy

SWP Comment, No. 52/2024

Provided in Cooperation with:

Stiftung Wissenschaft und Politik (SWP), German Institute for International and Security Affairs, Berlin

Suggested Citation: Schulze, Meike; Schrolle, Mark (2024) : Saudi Arabia strives to become major player in mineral supply chains: A questionable pillar of Europe's diversification strategy, SWP Comment, No. 52/2024, Stiftung Wissenschaft und Politik (SWP), Berlin, <https://doi.org/10.18449/2024C52>

This Version is available at:

<https://hdl.handle.net/10419/306295>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>

SWP Comment

NO. 52 NOVEMBER 2024

Saudi Arabia Strives to Become Major Player in Mineral Supply Chains

A Questionable Pillar of Europe's Diversification Strategy

Meike Schulze and Mark Schroll

Saudi Arabia has entered the geopolitical competition for mineral resources – and it has done so in a determined manner and with substantial funds at its disposal. As part of its Vision 2030, the Kingdom aims to strengthen local processing and industrial value added. Currently, Saudi Arabia secures its mineral resources through international investments and offtake agreements; but, in the long term, it plans to develop its domestic mining industry. Many initiatives remain in the conceptual phase. As it looks to realise its ambitions, Saudi Arabia continues to rely on international partners. Positioning itself as a geopolitically neutral “link” between the major powers, the Kingdom is seeking closer ties with China while at the same time competing with the People's Republic. Simultaneously, it presents itself to the West as a potential partner for resource diversification. The EU appears to regard cooperation with Saudi Arabia as a viable option for securing its raw material supply. However, the key conditions for a strategic partnership have still not been met.

The intensifying US-China rivalry and, not least, Russia's war against Ukraine have strengthened the political will of the European Union (EU) to become more autonomous in strategic sectors, including mineral resources. Many of the mineral supply chains are dominated by China. Through the Critical Raw Materials Act (CRMA) of May 2024, the EU aims to diversify its raw material supply by expanding European extraction, processing and recycling capacities, on the one hand, and forging strategic partnerships with resource-rich third countries, on the other.

Geopolitical factors are increasingly playing a role in how such partners are selected. The United States has embraced “friendshoring” or “allyshoring” in the raw materials sector, whereby it prioritises partnerships with states that share its (geo)political interests. At the same time, Washington is the initiator and head of the Minerals Security Partnership (MSP), a coalition of primarily Western industrialised nations focused on making resource supply chains more resilient. Though a member of the MSP, the EU approaches this issue with greater diplomatic caution than does the US, partly ow-



ing to its considerable economic dependence on various regions around the world. The Union remains primarily concerned about its own supply security while at the same time upholding its own, increasingly stringent standards for sustainability in supply chains.

On the global stage, Saudi Arabia presents itself as a new partner for the supply of mineral resources. In line with its “Vision 2030”, the Kingdom is seeking to modernize and diversify its domestic economy; engaging in the global mineral resource market is an important part of that strategy. By positioning itself as a geopolitically neutral partner and “link” in supply chains, Saudi Arabia is aiming to expand its foreign economic relations, not least to secure lucrative cooperation agreements in the raw material sector.

Saudi Arabia is already working together with the US, a close ally, while simultaneously strengthening its ties with China, although Beijing and Riyadh are proceeding cautiously. Its entry into the global mineral resource market and its strong ties to the US make it an attractive diversification option for the EU. To date, there is no institutionalised cooperation on mineral resources between the Kingdom and the EU; indeed, Saudi Arabia would be a questionable pillar of the Union’s mineral resource diversification strategy. Furthermore, the challenges for the realisation of Saudi Arabia’s ambitious plans are numerous, while the dominance of the Saudi Public Investment Fund (PIF) in the sector raises concerns. Finally, there remain significant risks regarding environmental and human rights standards.

Vision 2030: Mining and industrial value added

Saudi Arabia’s prosperity is rooted primarily in the production and export of oil and gas. However, the decline in global oil prices in 2014–15 and the acceleration of the green transition have put pressure on the Kingdom to diversify its economic model. In

2016, Saudi Arabia responded to that pressure by launching “Vision 2030”, which provides for significant investments in tourism, renewable energy and large-scale construction projects such as the NEOM megacity. At the same time, it is ambitiously expanding its mining industry, with the focus not only on tapping its mineral resource reserves but, more important, on boosting local processing capacity. Also, Saudi Arabia is aiming to increase industrial value added through battery and hydrogen production as well as the manufacture of electric vehicles (EVs). To achieve these goals, the Kingdom is actively seeking partners and expertise from both the West and China (the latter’s strategic approach to the resources sector closely resembles Saudi Arabia’s current strategy). It is the financial strength of the PIF that largely underpins the Saudi efforts across various stages of the supply chain – from resource extraction to EV production – raising questions about the market viability of those projects and the potential risks for partnerships.

Until now, mining has played a minor role in the Saudi economy, contributing less than 1 per cent to GDP. The main focus has been on gold, while phosphate, bauxite, copper, zinc, feldspar and silver are mined, too. Those minerals the EU considers strategic, copper and feldspar, account for just 0.3 per cent and 1.6 per cent of global production, respectively. However, Saudi Arabia has repeatedly pledged to invest heavily in domestic mining: it recently set the target of investing some US\$46 billion by 2030. For its part, the consortium Ajlan & Bros, in partnership with the British firm Moxico Resources, plans investments of around US\$14 billion by 2030.

Internationally, Saudi Arabia is seeking to establish a favourable image on the global resource market. Since 2022 it has hosted the annual Future Minerals Forum (FMF), in a bid to position itself as a hub for international resource diplomacy. At the last FMF, which took place in January 2024, the Kingdom released a new estimate of the value of its mineral resource reserves, including untapped deposits such as rare

earth elements: approximately US\$2.5 trillion. Currently, the state-owned Saudi Arabian Mining Company (Ma'aden) operates 17 local mines and sites. Because geological data are lacking, Saudi Arabia launched a US\$530 million geological survey programme in 2020 in cooperation with the Chinese Geological Survey. The Kingdom, which relies on foreign expertise and investment for exploration and new mining projects, has been actively seeking to attract international companies. In 2021, new legislation that aims to facilitate foreign access to mining licences went into effect. By the end of 2023, the number of mining licences had increased from eight to 19 and exploration licences from 58 to 259.

Currently, foreign investors have to obtain a licence from the Saudi Ministry of Investment to operate in the country. Starting in February 2025, a legislative amendment will streamline this process: instead of the licence requirement, applicant will have to complete a simplified registration process and foreign investors will receive equal treatment with Saudi companies. Other regulations for mining companies, including licences for extraction projects, are drawn up by the Ministry of Industry and Mineral Resources, which in January 2024 launched a US\$182 million exploration funding programme aimed at reducing financial risks for companies. Despite all these measures, it will take years for Saudi Arabia's mining sector to significantly increase production, as both the planning and construction of new mines are time-intensive.

Strategic Metals: Focus on Processing

A core objective of Vision 2030 is to develop strategic industries with a view to boosting value added in Saudi Arabia and creating jobs for the country's young population. The current focus is on metals crucial for the energy transition and battery production (such as nickel, lithium and copper) as well as iron. By pursuing this strategy, Saudi Arabia is competing both with China,

which already has significant production capacities, and with Global South countries aiming to develop their own local processing and downstream supply chains. Currently, Saudi Arabia is striving to secure its raw material needs through overseas investments and offtake agreements because of its limited domestic reserves and its underdeveloped mining sector.

In early 2023, the Manara Minerals Investment Company was established as a joint venture between Ma'aden and the PIF to invest in mining projects and companies abroad. Manara bought a nearly 10 per cent stake in the metal division of the Brazilian mining corporation Vale for approximately US\$2.5 billion. At the same time, there are planned investments in a copper and gold mine in Pakistan and a Canadian-run copper mine in Zambia. In July 2024, Manara expressed interest in partnering with the Chilean mining company Codelco in lithium extraction; and it has also engaged in discussions with African countries such as Guinea, Tanzania and the Democratic Republic of Congo. However, it seems that Saudi Arabia prefers to play a backseat role by acquiring shares in strategic projects via Manara, without necessarily assuming managerial control. The investments are contractually backed by offtake agreements, with Manara planning to become a raw material trader.

The industrial mining sector plays only a minor role in Saudi Arabia's efforts to create jobs and promote the "Saudisation" of the workforce, as large-scale mining operations offer relatively few well-paid jobs. The employment potential is greater in manufacturing and downstream supply chains, where Saudi Arabia is actively seeking international partners. For example, Saudi Arabia plans to develop its steel industry through investments of around US\$12 billion in projects to be implemented jointly with Turkish and Chinese companies, among others. Since 2009, the Kingdom has cooperated with the US-based Alcoa in bauxite extraction and local processing to manufacture rolled aluminium products. And in November 2022, the PIF

established Ceer Motors as a joint venture with the Taiwanese electronics company Foxconn to produce EVs under its own Saudi brand. (BMW is involved in that project, too, as a supplier of various automotive components.)

However, the ambitious Vision 2030 plans face challenges and delays. For instance, the Ceer Motors production facility was initially scheduled to start manufacturing EVs by 2025, but the construction of the plant began only recently. Indeed, Saudi Arabia may struggle to compete internationally in its efforts to establish local processing and automotive production. Recruiting skilled labour and securing foreign expertise are key challenges that Saudi Arabia is addressing by reaching out to German as well as Chinese companies, among others, and leveraging location advantages such as relatively low energy costs and significant financing opportunities through the PIF.

Dominance of the Public Investment Fund

The PIF finances not only the implementation of Vision 2030 but also the strategic development of the mineral resource sector and downstream industries. The objective is to leverage public-private partnerships to bring expertise and technology into the country so that Saudi Arabia's private sector can be developed over the long term. The extensive financial involvement of the PIF gives the state considerable control over the sector.

The PIF holds a majority stake of approximately 65 per cent in Ma'aden, the country's leading mining company, and is behind Saudi Arabia's foreign investment in the mining sector through Manara. Initially, the fund was allocated US\$15 billion; but in early 2024, Governor Yasir Al-Rumayyan announced that US\$25–30 billion would be invested in foreign mining projects and mineral supply chains over the next decade. This highlights the structural advantage of the PIF: with total funds planned to reach US\$1 trillion, it can provide generous

amounts of capital to mining companies and projects that might otherwise face financial challenges owing to production risks.

Additionally, the PIF can invest in relevant downstream segments of the supply chain, including battery and EV production. Alongside Ceer Motors, the PIF holds a stake (roughly 60 per cent) in California-based Lucid Motors, which has opened an EV factory near the port city of Jeddah with the aim of assembling around 150,000 EVs annually from 2026 onwards. While the PIF has made significant investments across various sectors and companies abroad in recent years, these investments are increasingly subject to conditions such as creating local jobs and working with Saudi suppliers.

But the PIF is not merely a financially powerful vehicle for promoting the economic agenda under Vision 2030; it also ensures state dominance in the resource sector and serves to consolidate the power of Crown Prince and Prime Minister Mohammed bin Salman. Since his political ascent in 2015, bin Salman has wielded control over the fund as chairman of the board and thus has considerable influence over the allocation of financial resources. As a result, the PIF's investment decisions are not driven solely by potential returns on investment or industrial strategy; they often follow a clientelist template that favours well-established economic elites who have close ties to the Saudi royal family. This gives rise to a range of risks regarding the transparency of investment decisions, the long-term viability of projects (Lucid Motors, for instance, has repeatedly required capital injections from the PIF), corruption and the possible political instrumentalisation of supply relationships.

Saudi Arabia's alliances: Balancing between West and East

Within the framework of Vision 2030, Saudi Arabia is seeking to strengthen transactional economic relations and present itself as a geopolitically neutral partner. It is this status that it leverages in its resource diplo-

macy, as was evident at the FMF in January 2024, which attracted 14,000 participants and 75 government representatives. Numerous memoranda of understanding were signed across geopolitical divides. In practice, however, Saudi Arabia appears to be aligning more closely with the West, promoting itself as a reliable partner for the latter's diversification efforts.

This westward orientation is also reflected in Saudi Arabia's "Green Shoring Initiative", aimed at appealing to Western investors interested in Saudi Arabia's green energy potential. The Kingdom is cooperating especially closely with the US, which remains its most important political partner, despite recurring tensions. In 2023, the US ranked sixth in terms of Saudi exports and second in terms of imports. Also, US and other Western companies are active in Saudi mining, where networks are already established and the number of joint ventures with Western firms, such as Alcoa (bauxite extraction), is growing.

However, at the institutional level, resource cooperation with the US is limited: there is no free trade agreement enabling Saudi companies to benefit directly from the Inflation Reduction Act (IRA), nor is Saudi Arabia a member of the US-led MSP; moreover, such membership is unlikely, as it would contradict Saudi Arabia's declared geopolitical neutrality. Nonetheless, amid the US push to decouple from China, Saudi Arabia is an important partner for the United States. The two countries have already discussed securing critical minerals in Africa. For its part, the US seems to view Saudi Arabia as a strategic partner for investments in mineral-rich countries and regions that Western companies consider too risky and in which they are therefore reluctant to invest.

Such cooperation could also appeal to the EU and Germany. Although there is no institutionalised form of collaboration in mineral resources between Saudi Arabia and the Union, the groundwork is being laid. In 2022, the EU and the Gulf Cooperation Council (GCC) issued a joint declaration on a strategic partnership. At the inaugural

EU-GCC summit in October 2024, discussions focused, among other things, on regional security, cooperation in energy and mineral supply chains, and the potential for a free trade agreement. Currently, mineral supply relations between the EU and Saudi Arabia remain marginal; for instance, just 12 per cent of Saudi aluminium exports went to the EU in 2022. Meanwhile, German companies are active in Saudi Arabia: Siemens, for example, secured a billion-dollar power plant contract in 2024. And there are plans for a second lithium processing plant, which would process Austrian lithium ore and supply companies like BMW.

To the east, Saudi Arabia is also deepening its relationship with China, which until now has remained primarily transactional and is considered at the political level to be expandable. This relationship is driven largely by the energy sector: China is by far the largest buyer of Saudi oil. Mutual investments are increasing, although they lag those with Western nations. In the resource sector, the geological survey agencies of the two countries are working together and agreements have been signed on the downstream processing of mineral resources.

So far, there is no known major Chinese-Saudi investment project in the mining sector. One likely reason for this is potential competition between the two countries within the resource sector. China already has significant processing capacities, from which it can benefit strategically. It remains unclear to what extent the People's Republic is willing to share its technology or pursue joint ventures. Competition is emerging in resource diplomacy, too. At the FMF in 2024, Riyadh introduced the concept of a "super-region" extending from Africa to Central Asia under Saudi leadership — a project that strongly resembles China's Belt and Road Initiative.

A similar dynamic can be observed in BRICS+ cooperation in the resource sector. The invitation extended to Riyadh to join BRICS+ attracted international attention, as Saudi membership would add a raw material producer and investor to the forum.

But the Kingdom has shown little interest in becoming a full-fledged member. While it participates in BRICS+ meetings, it is seen as playing a passive role and has not yet responded officially to the membership invitation. Furthermore, BRICS+ resource cooperation is less active than public perception suggests. Although there have been initial steps taken towards cooperation among geological survey agencies, the plans to establish a preferential trading platform (similar to the plans by the MSP) among BRICS+ remain vague. Concerns among Western actors that BRICS+ may be preparing to form a cartel in the resource sector are unfounded at this time. Unlike the oil market, mineral supply chains are complex, which makes the formation of a cartel more difficult. Also, there is significant rivalry between the various production locations, especially in processing, which is a sector dominated by China.

Saudi Arabia's diplomatic efforts — like those of other Gulf states — are increasingly targeting resource-rich countries of the “Global South”, primarily in Africa and Latin America, to secure stakes in mining projects. In July 2024, Saudi Mining Minister Bandar Al-Khorayef visited Chile and Brazil. The topic of resources featured prominently at the first Saudi Arabia-Africa summit in 2023, while delegations from Riyadh have been active in mineral rich countries — such as Zambia — where Saudi Arabia is planning for investments.

Saudi engagement in the Global South is perceived ambivalently. On the one hand, the Kingdom is welcomed both as a geopolitically “neutral” actor with no Western colonial past and as a financially strong, fast-track investor alongside China. On the other hand, some actors are wary of this newcomer — for two reasons. First, while the Kingdom offers investment packages similar to those of China, its lack of experience and doubts about proper implementation are cause for concern, not least because of the rapid conclusion and opaque nature of deals. Second, Saudi plans to establish local processing and technology production within its own borders are

viewed critically by many producers in the Global South, as this plan conflicts with their own ambitions to add local value.

Supply chain standards and transparency risks

As it seeks to diversify its supplies of raw materials, the EU remains concerned about the issue of transparency and standards setting in resource supply chains. Although Saudi Arabia has shown the will to implement “best practices” with respect to environmental, social and governance (ESG) criteria, the Union should take a closer look at what it is doing, as there are gaps in standards setting and implementation both in Saudi Arabia's mining sector and along its supply chains. This is of direct relevance for European buyers: with the adoption of the EU Corporate Sustainability Due Diligence Directive (CSDDD) and the impending ban on products made with forced labour on the EU market, there has been a significant expansion of legally mandated corporate due diligence obligations. Furthermore, information on sustainability governance in the Saudi mining sector remains limited. While the revised mining law of 2021 is considered the most progressive in the Gulf region, analyses point to deficiencies in standards setting and enforcement. Observers also criticize the restricted access to up-to-date and transparent data.

Decarbonisation is central to Saudi Arabia's Vision 2030. Riyadh hopes that cheap green energy will serve as a competitive advantage, especially for energy-intensive industries like steel and aluminium, which are subject to the EU's Carbon Border Adjustment Mechanism (CBAM). Ma'aden, for instance, aims to achieve climate neutrality by 2050. However, there is still a long way to go, as currently Saudi Arabia's energy cost advantage is based largely on fossil fuels. In 2023, renewables accounted for just 1.4 per cent of Saudi electricity generation. Besides decarbonisation, there are other environmental standards that need to be significantly improved in the

Saudi mining sector. Licence applicants are required to submit environmental impact assessments and management plans and (since 2021) provide financial guarantees for environmental rehabilitation. However, a study suggests that these regulations should be amended: the current provisions are deemed too vague, while the lack of clear guidelines and weak sanctions hinder effective implementation.

With regard to the ambitious plans to develop the sector, there are challenges related to social and labour rights as well as human rights risks. Although Ma'aden has a community management system, which guides the companies' engagement with mining-affected local communities, overall Saudi Arabia lacks legal requirements for corporate responsibility or a social licence to operate — namely, the approval of, and ongoing support from, all local stakeholders, which is common in other mining geographies. Meanwhile, reports by international human rights organizations have raised concerns: activists opposed to forced relocation for the NEOM megaproject have allegedly been persecuted and, in some cases, sentenced to death.

Among the efforts to increase jobs for the local population, the “Saudisation” policy stands out. According to Ma'aden, Saudi nationals already make up 70 per cent of the company's workforce, but finding qualified professionals remains challenging despite competitive salaries. Many new positions — especially temporary ones created for the construction of mines and processing facilities — are for lower-skilled workers and offer less attractive conditions of employment; whether Saudi nationals will fill those positions remains uncertain. Moreover, labour conditions for foreign workers in Saudi Arabia have come under intense scrutiny. Despite improvements in the legal framework, the enforcement of the law remains weak and there is a significant risk of abuse. Amnesty International highlighted these issues in the context of a memorandum of understanding between the United Kingdom and Saudi Arabia about collaboration in the mineral sector.

Additionally, labour protection in the mining industry is considered insufficient not least because effective complaint mechanisms are lacking and both the formation of independent labour unions and strikes are prohibited.

Going forward, Saudi Arabia is likely to become more important as a trading and processing hub. However, like China, it would act as a “link” in the supply chain, issues of transparency and insufficient standards could present challenges for European buyers. In this context, multilateral frameworks are essential to promote international cooperation and standards. Saudi Arabia's participation in those frameworks would be important. The Kingdom is now a member of the International Governmental Forum on Mining and Minerals (IGF) but is still not taking part in key initiatives such as the Extractive Industries Transparency Initiative (EITI) and the new United Nations Panel on Transition Minerals.

Recommendations for targeted cooperation with Saudi Arabia

Strengthening the resilience of Europe's resource supply and de-risking from China are top political priorities for the EU and Germany. To this end, Europe is seeking strategic partners to diversify its supply chains. For its part, Saudi Arabia is actively positioning itself as a potential partner in this area; the groundwork for closer cooperation is currently being laid through the GCC. However, there are obstacles to forging a strategic raw material partnership with Saudi Arabia that could be deemed suitable.

First, significant systemic differences exist between Saudi Arabia and the EU, especially with regard to governance, which has direct implications for economic policy. Through Vision 2030, Saudi Arabia is seeking to diversify its economy while maintaining state control over it. Not least, it is the resource sector that is subject to direct political influence owing to the dominance of the PIF, which holds majority stakes in



This work is licensed under CC BY 4.0

This Comment reflects the authors' views.

The online version of this publication contains functioning links to other SWP texts and other relevant sources.

SWP Comments are subject to internal peer review, fact-checking and copy-editing. For further information on our quality control procedures, please visit the SWP website: <https://www.swp-berlin.org/en/about-swp/quality-management-for-swp-publications/>

SWP

Stiftung Wissenschaft und Politik
German Institute for International and Security Affairs

Ludwigkirchplatz 3–4
10719 Berlin
Telephone +49 30 880 07-0
Fax +49 30 880 07-100
www.swp-berlin.org
swp@swp-berlin.org

ISSN (Print) 1861-1761
ISSN (Online) 2747-5107
DOI: 10.18449/2024C52

(English version of
SWP-Aktuell 54/2024)

Ma'aden and Manara. This could impact the operational efficiency of the sector and poses the risk of supply relationships being co-opted for foreign policy objectives. Moreover, direct state control does not foster transparency and concerns are rife about environmental and human rights standards in mining and processing. For this reason, a strategic raw material partnership with Saudi Arabia is currently not advisable as it might be perceived by EU companies as offering political support and could involve state financing – for example, from German resource funds.

Nonetheless, targeted, selective cooperation should be pursued. Saudi Arabia is playing an increasingly important role in mineral supply chains and has demonstrated the will to improve its standards setting so that they align with international best practices. The EU, alongside MSP partners such as the United States and the United Kingdom (which already cooperate with Saudi Arabia), could intensify dialogue in areas such as governance and standards setting and encourage Saudi Arabia's involvement in international frameworks, including the EITI.

Furthermore, European companies are expected to become increasingly involved in Saudi Arabian supply chains through both direct investments and offtake agreements, as in the case of BMW. German support for the private sector should therefore be stepped up. For example, the German Chambers of Commerce Abroad (AHK) and the German Mineral Resources Agency (DERA) could offer their expertise and advice about the opportunities and risks of cooperating with the Saudi raw minerals sector as well as the specific due diligence requirements.

Meike Schulze is a researcher in the Africa and Middle East Research Division at SWP. She works on the project "International Raw Material Cooperation for Sustainable and Resilient Supply Chains", funded by the German development agency (Deutsche Gesellschaft für Internationale Zusammenarbeit, GIZ). Mark Schrolle is an information and data manager at SWP and part of the "Research Network Sustainable Global Supply Chains", funded by the German Federal Ministry for Economic Cooperation and Development (BMZ).