

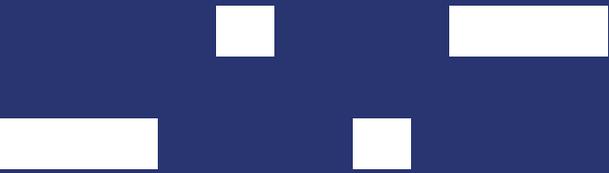


Extractive Industries
Transparency Initiative

Making the grade: Strengthening governance of critical minerals

POLICY BRIEF





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May 2022

Critical minerals and the energy transition

The global transition to a low-carbon economy is driving the advancement of technologies that rely heavily on minerals such as cobalt, copper, lithium, nickel and rare earths. Demand for these critical minerals will increase significantly as countries seek to meet their targets under the Paris Agreement.

According to the International Energy Agency (IEA), limiting global warming to below 2°C could require a fourfold increase in the supply of minerals for clean energy technologies within the next two decades.² Some analysts predict the energy transition will cause a new commodities “supercycle”³ which could see sustained demand over the long-term. For producing countries, this could be an opportunity to attract investment, generate government revenue and create jobs.

However, exact demand trajectories are difficult to predict, and past minerals booms provide a cautionary tale. Disruptions in supply chains, policy uncertainty and technological shifts could result in volatile mineral markets. While a surge in demand is expected, the prospects for specific minerals are likely to be uneven. Governments will need to compete for investment and ensure that governance and tax regimes are aligned with best practices while providing sufficient stability to attract responsible companies.

Governance risks for critical minerals

For countries that host reserves of minerals needed for low-carbon technologies, increased demand could present a range of challenges. Failure to tackle these head on could result in a missed opportunity to encourage the growth of a profitable and responsible mining sector to deliver the energy transition.

Demand and price fluctuations could make it difficult for governments to anticipate how much revenue they will earn. While the minerals sector has always been subject to fluctuations in supply and demand, these could be exacerbated by the dynamics of the energy transition. Technological innovations, minerals substitutions and improved recycling rates could reduce demand for specific minerals.⁴ Supply shortages – triggered for instance by conflicts or restrictive trade policies – could result in sudden price spikes. This volatility could destabilise public finances and make it harder for governments to use the sector’s revenues effectively.

The critical minerals sector could also be vulnerable to heightened corruption risks. It is estimated that over USD 1 trillion in mining investments will be needed by 2035 to ramp up the supply of just five metals – aluminium, cobalt, copper, lithium and nickel.⁵ The business opportunities associated with this anticipated investment drive – particularly the acquisition of new mining licenses and contracts – could be vulnerable to corruption. For companies investing in jurisdictions with weaker governance structures, this increases the need for due diligence and may give rise to operational, legal and reputational risks.

Meeting the targets of the Paris Agreement could require a fourfold increase in the supply of minerals for clean energy technologies¹

In addition, high prices could push mining into more environmentally and socially sensitive areas. Companies could face growing pushback from communities, regulators and consumers over where and how they mine. For certain minerals, demand growth could drive an uptick in artisanal and small-scale mining (ASM), which is associated with a distinct set of environmental and social challenges.

Finally, perceptions around the economic and strategic value of critical minerals are anticipated to lead to calls for greater state participation in the mining sector. Without adequate governance safeguards, a growing role for state-owned enterprises (SOEs) could increase risks related to revenue management, corruption, and environmental and social impacts.

The role of transparency and multi-stakeholder dialogue

Transparency and multi-stakeholder dialogue can shed light on governance challenges, help to identify solutions, and provide a platform for collective action in the critical minerals sector. The EITI, together with other standards and frameworks, can help governments, companies and civil society reduce risks and capitalise on opportunities.

EITI disclosures and processes provide a range of entry points for strengthening governance in the critical minerals sector. Data on a country's exploration and production potential can inform dialogue and planning on how to allocate the sector's revenues in a manner that supports long-term development objectives. Transparency on contracts and licensing can mitigate corruption risks at vulnerable points in the mine lifecycle. Disclosures of the ultimate beneficiaries of mining activity can help mitigate risks associated with the use of anonymous companies. Environmental disclosures can shed light on the performance of mining companies, while information and dialogue on ASM can help to address risks associated with informal mining. Transparency related to state participation can help to ensure SOE operations are aligned with the public interest.

Global standards and reporting frameworks

Beyond the EITI, several other standards and reporting frameworks help to advance good governance in the critical minerals sector:

- The [Performance Standards on Environmental and Social Sustainability](#) of the International Finance Corporation (IFC), the [Mining Principles](#) of the International Council on Mining and Metals (ICMM) and the [Standard for Responsible Mining](#) of the Initiative for Responsible Mining Assurance (IRMA) are among the key best practice standards guiding the environmental, social and governance (ESG) performance of mining companies.
- OECD's [Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas](#) is the main reference point for companies purchasing minerals.
- For the ASM sector, the [CRAFT Code](#) helps to advance good practices.
- The [Global Reporting Initiative Standards](#) provide guidance on how to report impacts on the economy, environment and people.
- The [Resource Governance Index](#) provides a comparative view of resource governance in key oil, gas and mining jurisdictions, including several major critical minerals producing countries.
- A [corruption diagnostic tool](#) developed by the Natural Resource Governance Institute and the [Mining Awards Corruption Risk Assessment](#) tool developed by Transparency International's Accountable Mining programme can support the identification and management of corruption risks in the critical minerals sector.

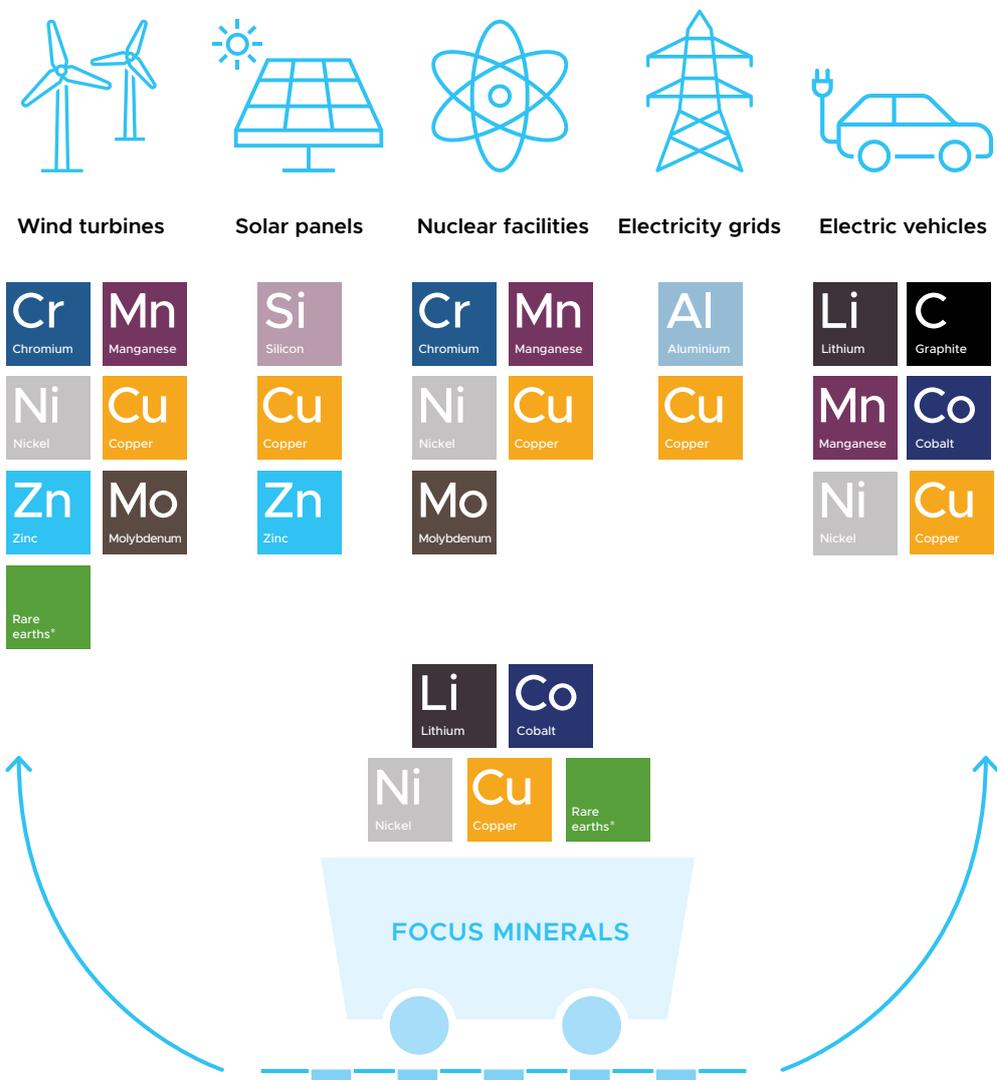
Use of critical minerals

Critical minerals – sometimes referred to as “strategic minerals” – are minerals that are vital to the global economy yet whose supply may be at risk. This brief focuses specifically on minerals used in low-carbon technologies, which are expected to see significant demand volatility in coming decades due to global efforts to tackle climate change.

Supply vulnerabilities for this group of minerals are shaped by a range of factors, including geological scarcity, trade policies, geopolitical considerations and ESG risks in producing countries.

Electric vehicles and battery storage have surpassed consumer electronics to become the largest consumer of lithium, and are set to be the largest end user of nickel by 2040⁶

Key minerals used in selected energy transition technologies⁷



* 17 heavy metals including neodymium, dysprosium, praseodymium and terbium

Benefits of improved governance of critical minerals

Demand volatility in the critical minerals sector could present challenges related to revenue management, corruption, environmental and social impacts and the performance of SOEs. Strengthening governance of the sector would help to leverage opportunities provided by strong demand for the benefit of citizens, governments and companies.



Benefits for citizens

Transparent and accountable governance of critical minerals can help ensure that citizens benefit from mining investments and mitigate negative environmental and socio-economic impacts.

- Access to information on environmental and social impacts, as well as to platforms for meaningful engagement on governance issues, can help to advance community rights. This is particularly important for marginalised and vulnerable groups if high prices push mining into more sensitive areas.
- Strengthened transparency and oversight can allow citizens to hold governments and companies accountable and reduce the scope for corruption and mismanagement. This can help to ensure that the awards of business opportunities in the critical minerals sector are free from conflicts of interest and political interference.
- Awareness of the timing and quantity of current and expected revenue flows, including at the subnational level, can help citizens to advocate for better spending decisions in light of the anticipated volatility in critical minerals markets.



Benefits for governments

Transparent and accountable governance of critical minerals can help attract investment and ensure the sector contributes to sustainable development outcomes.

- Strong and predictable legal and contractual frameworks can help governments capitalise on growing investor interest and attract companies with the expertise and experience to develop and operate profitable and responsible mines.
- Data can inform decisions on state participation and support effective measures for mitigating ESG risks for both SOEs and other companies operating in the sector.
- Understanding the potential volatility of revenue flows can inform sustainable spending decisions and mitigate the risk of inefficiency, waste, corruption and political instability.



Benefits for companies

Transparent and accountable governance of critical minerals can help companies to reduce investment risks while building trust with governments and citizens.

- Contributing to the sustainable development of host countries and communities can strengthen a company's social license to operate and respond to growing investor and consumer expectations around ESG performance.
- Strong due diligence processes and anti-corruption safeguards can help companies to protect themselves from potential operational, legal and reputational risks associated with investments in challenging jurisdictions.
- For state-owned mining companies, building an understanding of a country's mineral potential and investment attractiveness can help inform decisions that are aligned with long-term national interests.

Critical minerals in EITI countries

Several EITI implementing and supporting countries are major producers of critical minerals that are particularly important to the energy transition.⁸ Other EITI countries also produce these minerals at a smaller scale or have important reserves. Further EITI countries are relevant when taking into consideration the broader set of minerals that are vital to the energy transition.⁹

Canada



United States



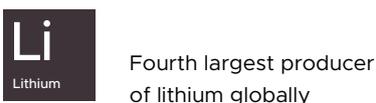
Mexico



Peru



Argentina

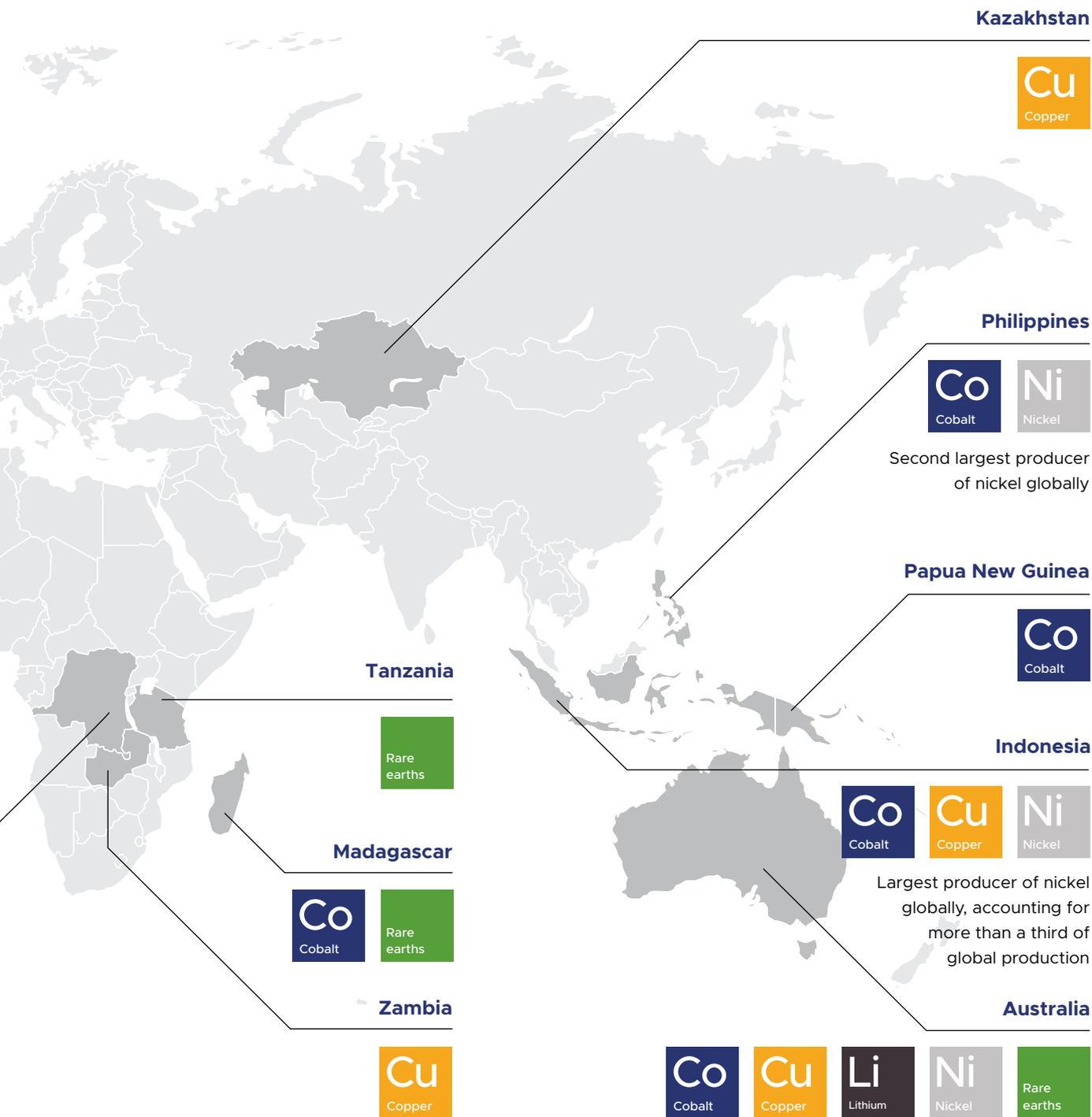


Democratic Republic of the Congo



Largest producer of cobalt globally, accounting for approximately 50% of global reserves and 70% of global production

Map based on production data published in the US Geological Survey's Mineral Commodity Summaries 2022. Additional EITI countries also have documented reserves and production of these minerals.



Addressing governance risks through EITI implementation

The critical minerals sector could be vulnerable to risks related to revenue volatility, corruption, environmental and social impacts, and the role of SOEs. The EITI's disclosure requirements can help to address such challenges, and those highlighted below offer entry points for improved governance of the sector.



1. Planning for revenue volatility and resource dependency

Demand trajectories and investment trends for critical minerals are anticipated to be volatile. A minerals boom could present economic opportunities for producing countries but could encourage wasteful public spending. Sudden demand fluctuations could result in the mining sector generating less public revenue than expected. Such volatility could undermine the government's ability to fund public services and could drive political instability.

Transparency over exploration and production, revenue collection and revenue allocations from critical minerals can inform more prudent public financial management and help to ensure government spending is aligned with long-term public interests.

How EITI data can be used

Assessing future production and revenues

For many countries, there is a pressing need to better understand the potential of the minerals sector and to prepare for a potential increase in investor interest. The EITI Standard requires countries to disclose data on exploration activity, as well as on the volumes and value of production and exports.

This information can enable countries to understand the sector's exploration and production potential and the contribution it could make to their economy. The disclosures can feed into dialogue and decision-making on the value of the sector to the economy, how to address obstacles to the sector's growth, as well as on how to use mining revenues to advance sustainable development objectives, including spending on the domestic energy transition and measures to respond to climate change.

Related EITI Requirements

3.1 Exploration

3.2 Production

3.3 Exports

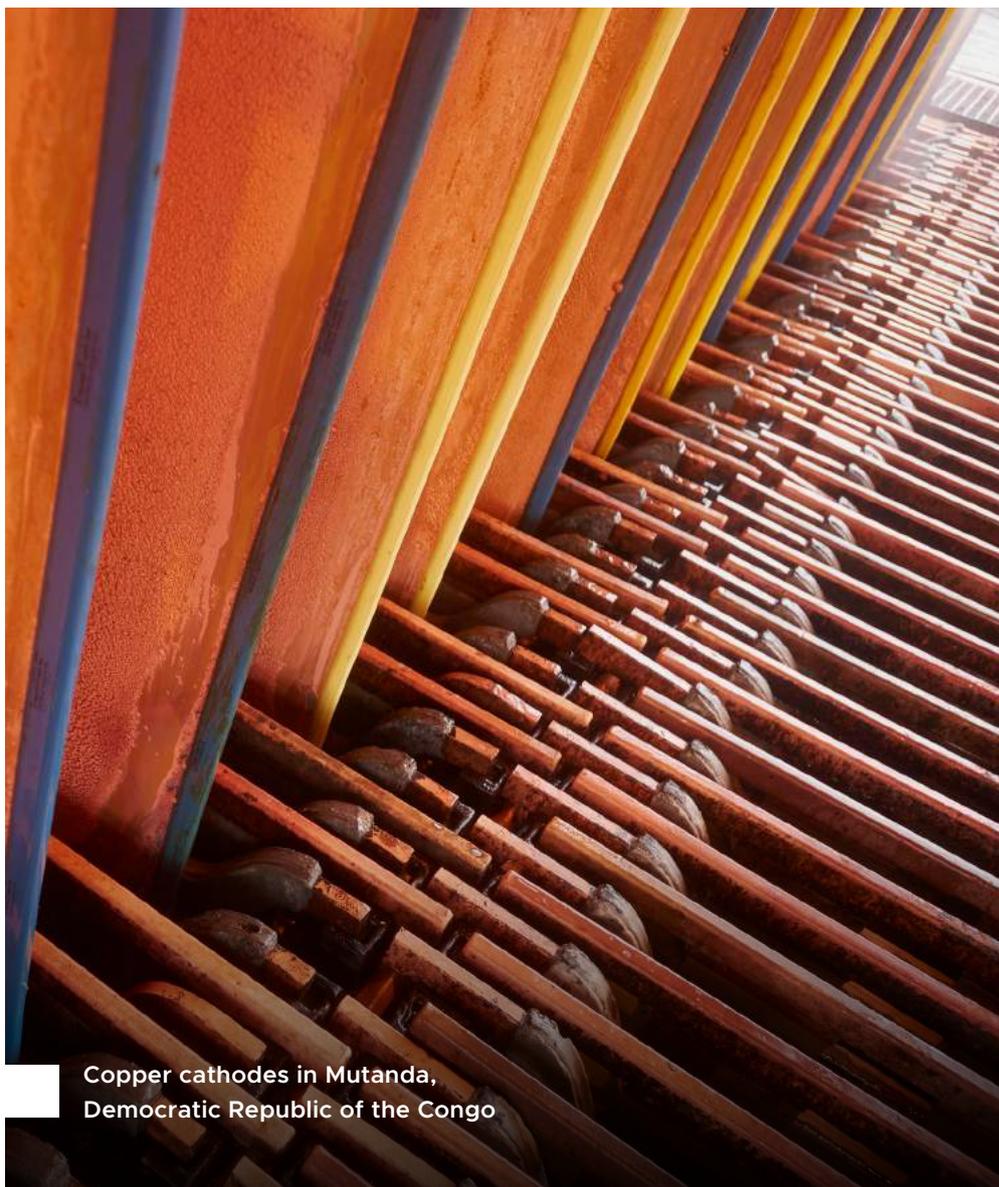
4.1 Comprehensive disclosure of taxes and revenues

5.3 Revenue management and expenditures

CASE STUDY

Democratic Republic of the Congo

The DRC has the world's largest production and reserves of cobalt, a mineral used in electric vehicle batteries. The country's EITI reporting has included information on pricing, production, exports and reserves of cobalt, as well as on the impact of the COVID-19 pandemic on exports. In the first quarter of 2020, cobalt exports decreased by 15% compared to the previous year. However, government revenues increased between 2018 and 2020, mainly due to a tripling of prices since 2017. This data helps stakeholders understand the evolution of cobalt on international markets and the impact on domestic revenues, and can inform public debate on the management of this resource.



Copper cathodes in Mutanda,
Democratic Republic of the Congo

PHOTO: GLENCORE PLC



2. Curbing corruption in licensing and contracting

Substantial reserves of critical minerals are found in countries that are perceived to have high levels of corruption.¹⁰ An uptick in mining investment in these jurisdictions – or merely the anticipation of a mining boom – could increase corruption risks related to license allocations and contract negotiations.

Transparency over licensing processes, mining agreements and company ownership is important for guarding against corruption in the development of the critical minerals sector.

How EITI data can be used

Identifying corruption risks in licensing and contract awards

Publishing contracts is an important means for tackling corruption. As of January 2021, EITI countries are required to disclose the contracts signed between governments and companies. This can shed light on contracts that deviate from industry norms, give unduly favourable treatment to specific companies or lack adequate ESG safeguards.

Publishing information on licensing processes and outcomes can help identify instances where decision-makers have deviated from the rules or where awards were made to companies that have conflicts of interest or a reputation for bad practices. A number of tools developed by partner organisations can help to identify corruption risks in this area, including a [corruption diagnostic tool](#) developed by NRGi and the [Mining Awards Corruption Risk Assessment tool](#) developed by Transparency International's Accountable Mining programme.

Related EITI Requirements

2.2 Contract and license allocations

2.4 Contracts

2.5 Beneficial ownership

CASE STUDY

Mongolia

Mongolia's Oyu Tolgoi mine is one of the world's largest copper mines. Mining began in 2011 and is expected to increase as global copper demand grows. Key documents for Oyu Tolgoi are publicly available on the project's website, including the 2009 investment agreement and 2015 mine development and financing plan.¹¹ EITI reporting includes references to these agreements, as well information on revenues, community investments and environmental payments, among other data.¹² This enables stakeholders to scrutinise the terms of the project, understand the role of the company and government, and identify instances of non-compliance.

Identifying the ultimate beneficiaries of critical minerals supply

An anticipated increase in demand for critical minerals will generate business opportunities that could be vulnerable to corruption. Intensified competition for critical minerals related to the energy transition could raise the risk of contracts being granted by governments, without adequate public oversight or beneficial ownership information being required, recorded or stored.¹³

Beneficial ownership transparency can help anti-corruption actors identify whether mining licenses and contracts have been awarded to politically-connected companies. While the EITI's efforts in this area focus on companies holding exploration and production licenses, beneficial ownership transparency is also relevant when it comes to suppliers, commodity traders and midstream and downstream companies.

CASE STUDY

Philippines

EITI reporting in the Philippines has shown a rise in metal production in 2019 largely driven by the nickel industry, which accounted for 25% of government revenues from the mining and quarrying sector.¹⁴ Fifty companies, including several of the country's major nickel miners, either participated fully or partially in efforts to report beneficial ownership information. Reporting revealed the presence of 11 politically exposed persons, though none of these were linked to nickel mining companies.¹⁵ Oversight actors can use these disclosures to gain assurances around whether the awards of business opportunities are benefitting individuals or companies that have potential conflicts of interest.

Company disclosures of beneficial owners

In tandem with the global launch of *Opening Extractives* – a global programme jointly implemented by the EITI and Open Ownership that aims to transform the availability and use of beneficial ownership data – six companies, including major mining companies and a major trading company, committed to strengthen their beneficial ownership declarations and to use beneficial ownership information in due diligence processes. The EITI and partners are working with these companies to support improvements in the quality of their beneficial ownership disclosures and to increase the number of companies who are making this commitment.

The revised *Expectations for EITI supporting companies* also strengthened commitments on beneficial ownership, which over 60 companies commit to when becoming EITI supporting companies.¹⁶



Production of nickel ore in Sorowako, Indonesia

PHOTO: SHUTTERSTOCK



3. Shedding light on environmental and social impacts

Anticipated demand growth for critical minerals could incentivise mining investments in more environmentally and socially sensitive areas. Nearly two-thirds of lithium resources are in areas facing pressures related to the availability of fresh water.¹⁷ A similar proportion of copper ore bodies is located within or near areas critical to biodiversity conservation, and nearly half occur on or close to indigenous peoples' lands.

For major minerals like copper, even a small relative increase in global demand could result in large land disturbances. For minerals like cobalt, where production from ASM accounts for a significant proportion of output, demand growth could fuel impacts associated with informal mining.¹⁸ In addition, supply concerns are driving discussions around unconventional and potentially controversial mining practices. Seabed mining for copper, manganese, cobalt and zinc is expected to increase, particularly in small island states, and presents a unique set of environmental challenges.¹⁹

Transparency over potential impacts and multi-stakeholder dialogue around how best to address them can help shed light on risks and inform policymaking.

How EITI data can be used

Monitoring environmental impacts

The environmental impact of the extractive industries is often a focal point of public debate. This is likely to continue to be a priority if anticipated demand growth pushes mining into more sensitive areas.

Clear and regular environmental reporting is vital in ensuring a sustainable critical mineral sector. The EITI's requirements on environmental reporting can help to raise awareness among affected communities, stimulate debate and promote responsible natural resource management. In addition to shedding light on regulatory compliance, environmental reporting can give citizens access to information on the environmental impacts of operations and on environmental payments made by companies.

Related EITI Requirements

6.1 Social and environmental expenditures by companies

6.3 Contribution of the mining sector to the economy

6.4 Environmental impact

CASE STUDY**Peru**

Peru is the world's second largest producer of copper and has the world's third largest reserves of the mineral. As such, the country plays an important role in meeting the energy transition's copper demand.²⁰ EITI reporting in Peru explains environmental requirements for mining companies. Reporting has also included information on environmental and social management expenditures by companies, the number of environmental-related conflicts and sanctions, and data on the management of impact assessment evaluations.

Estimating ASM production

EITI reporting can help to address challenges related to artisanal and small-scale mining. Regulation of the sector is often weak and its economic contribution difficult to estimate. ASM does not typically generate material revenues at the national level and is thus often excluded from EITI reporting. However, the EITI does require that an estimate of informal sector activity be disclosed. Further EITI disclosures on ASM can include fiscal revenues, employment, exports, livelihoods, investment and contribution to GDP. Inclusion of ASM within the EITI process has the potential to improve citizen awareness of the sector and of potential issues associated with ASM operations, and can support an evidence-based debate on the sector's costs and benefits.



Open-pit copper mine in Peru

PHOTO: SHUTTERSTOCK



4. Strengthening governance of the state's participation

Perceptions around the strategic and economic importance of critical minerals may prompt governments to seek to exercise greater control over the mining sector. This could take the shape of SOEs wanting to secure larger ownership stakes in mining projects or more stringent requirements related to domestic processing and local content. Without adequate safeguards, however, state participation can exacerbate many of the governance challenges discussed above. SOE investments can become a strain on public finances and can be vulnerable to corruption. The sale of the state's share of production and the deals agreed with commodity traders can also present governance risks.

How EITI data can be used

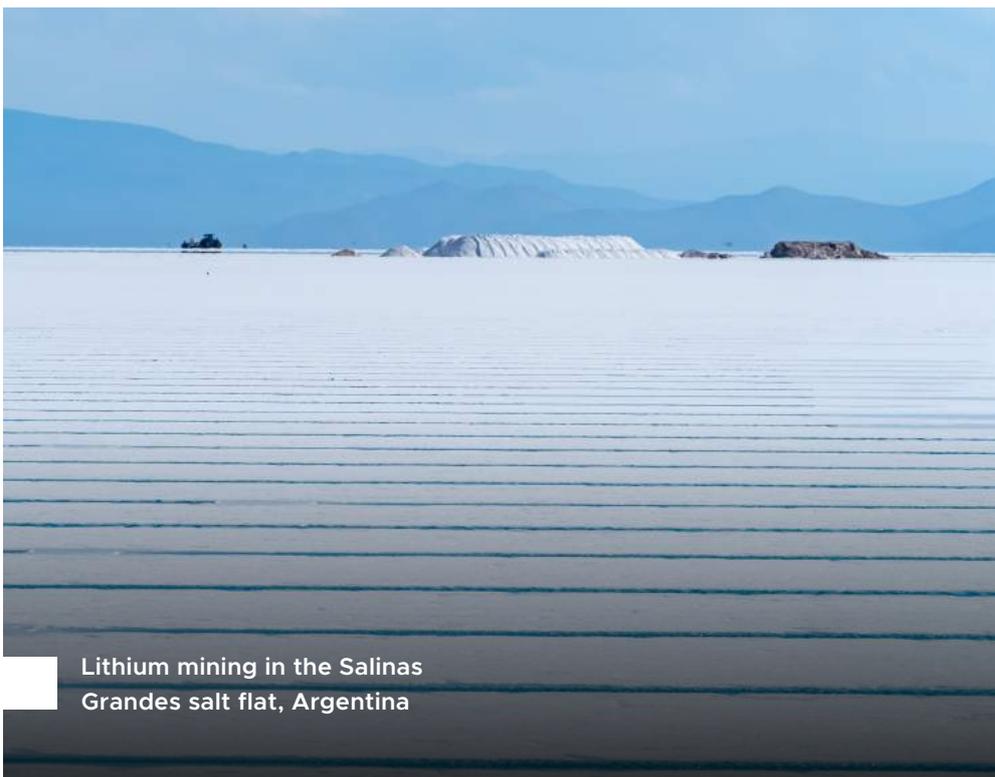
Supporting responsible management of SOEs

The EITI requires countries to disclose the roles and responsibilities of SOEs and the rules and practices governing their financial relationship with the state. This can help to shed light on how much revenue SOEs are transferring to the government and how much money they are retaining in their own accounts. Implementing countries are also encouraged to disclose information related to SOEs' operating and capital expenditures, procurement and subcontracting, and corporate governance. Stakeholders can use this information to better understand whether SOEs are making spending decisions that are aligned with public interests and to get assurances on whether adequate safeguards against corruption and conflicts of interest are in place.

Related EITI Requirements

2.6 State participation

4.2 Sale of the state's share of production



Lithium mining in the Salinas
Grandes salt flat, Argentina

PHOTO: SHUTTERSTOCK



Transparency and dialogue across value chains for low-carbon technologies

The EITI was formed to promote transparency and multi-stakeholder dialogue in the extractive industries. To this end, it has a vital role to play in advancing good practices in the “upstream” of the value chains of low-carbon technologies. The EITI can help to promote better revenue management, tackle corruption risks, encourage stronger environmental and social performance, and support improved SOE governance in the critical minerals sector.

However, the risks outlined in this brief do not only apply to critical minerals exploration and production. Risks can arise across the value chains of low-carbon technologies – from the trading and processing of minerals to the manufacturing of low-carbon technologies and their deployment (e.g. in renewable energy projects).

The EITI’s experience can provide important lessons, whether around how to help stakeholders understand and plan for fluctuations in revenue flows, tackle corruption risks, manage environmental and social impacts, or put in place safeguards related to state participation. The EITI’s disclosure requirements and multi-stakeholder approach can help to manage risks across the value chains of low-carbon technologies and help to deliver an energy transition that leaves no one behind.

Endnotes

- 1 International Energy Agency (2021), *The Role of Critical Minerals in Clean Energy Transitions*, p. 8. Retrieved from www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions.
- 2 Ibid.
- 3 Janes, A., Stringer, D. and Leung, A. (2021, September 21), There's a Fortune to Be Made in the Obscure Metals Behind Clean Power, *Bloomberg*. Retrieved from www.bloomberg.com/graphics/2021-materials-silver-to-lithium-worth-big-money-in-clean-energy/.
- 4 Toledano, P., Brauch, M.D., Kennedy, S. and Mann, H. (2020), *Don't Throw Caution to the Wind: In the Green Energy Transition, Not All Critical Minerals Will Be Goldmines*, Columbia Centre on Sustainable Investment. Retrieved from <https://ccsi.columbia.edu/content/dont-throw-caution-wind-green-energy-transition-not-all-critical-minerals-will-be-goldmines>.
- 5 Flowers, S. (2020, October 29), The Energy Transition Will Be Built With Metals, *Forbes*. Retrieved from www.forbes.com/sites/woodmackenzie/2020/10/29/the-energy-transition-will-be-built-with-metals.
- 6 International Energy Agency (2021), *The Role of Critical Minerals in Clean Energy Transitions*, p. 5.
- 7 International Energy Agency (2021), *The Role of Critical Minerals in Clean Energy Transitions*, p. 248. See also: Church C., and Crawford, A. (2018), *Green Conflict Minerals: The Fuels of Conflict in the Transition to a Low-Carbon Economy*, International Institute for Sustainable Development. Retrieved from <https://www.iisd.org/publications/report/green-conflict-minerals-fuels-conflict-transition-low-carbon-economy>.
- 8 International Energy Agency (2021), *The Role of Critical Minerals in Clean Energy Transitions*, p. 22.
- 9 The IEA identifies 32 critical minerals used in low-carbon technologies. See International Energy Agency (2021), *The Role of Critical Minerals in Clean Energy Transitions*, p. 248.
- 10 Church, C., and Crawford, A. (2018), *Green Conflict Minerals: The Fuels of Conflict in the Transition to a Low-Carbon Economy*, International Institute for Sustainable Development.
- 11 Oyu Tolgoi, "Agreements". Retrieved from www.ot.mn/agreements.
- 12 Mongolia EITI (2021), *Mongolia Fifteenth EITI Reconciliation Report 2020*, pp. 94, 126, 130, 135, 142. Retrieved from <https://eiti.org/documents/mongolia-2020-eiti-report>.
- 13 Markle, A. (2022). *Shining a light on company ownership: The role of beneficial ownership transparency in the energy transition*. Opening Extractives. Retrieved from <https://eiti.org/documents/shining-light-company-ownership>.
- 14 PH-EITI (2021), *2019 EITI Report: Contextual Information*. Retrieved from <https://eiti.org/documents/philippines-2019-eiti-report>.
- 15 PH-EITI (2021), *2019 EITI Report: Annexes*. Retrieved from <https://eiti.org/documents/philippines-2019-eiti-report>.

- 16 EITI (2021), "Statement by companies on beneficial ownership transparency". Retrieved from <https://eiti.org/documents/statement-companies-beneficial-ownership-transparency>.
- 17 Lebre, E., Stringer, M., Svobodova, K., Owen, J.R., Kemp, D., Cote, C., Arratia-Solar, A. and Valenta R.K. (2020), *The Social and Environmental Complexities of Extracting Energy Transition Metals*, Nature Communications. Retrieved from <https://www.nature.com/articles/s41467-020-18661-9>. Kemp, D., Lebre, E., Owen, J.R. and Valenta, R.K. (2021, April 7), Clean energy? The world's demand for copper could be catastrophic for communities and environments, *The Conversation*. Retrieved from www.theconversation.com/clean-energy-the-worlds-demand-for-copper-could-be-catastrophicfor-communities-and-environments-157872.
- 18 Bridle, A., Bellmann, C., Loyola, V., Mostafa, M. and Moerenout, T. (2021), *Driving Demand: Assessing the impacts and opportunities of the electric vehicle revolution on cobalt and lithium raw material production and trade*, International Institute for Sustainable Development, p. 6. Retrieved from <https://www.iisd.org/publications/electric-vehicle-cobalt-lithium-production-trade>.
- 19 Several major companies and conservation organisations have called for a moratorium on deep-sea mining. See: Shukman, D. (2021, April 3), Companies Back Moratorium on Deep Sea Mining, *BBC*. Retrieved from www.bbc.com/news/science-environment-56607700; Kapoor, K. (2021, September 9), Conservation Body Calls for Global Moratorium on Deep-Sea Mining, *Reuters*. Retrieved from www.reuters.com/business/environment/conservation-body-calls-global-moratorium-deep-sea-mining-2021-09-09/.
- 20 US Geological Survey (2022), *Mineral Commodity Summaries: Copper*. Retrieved from <https://pubs.usgs.gov/periodicals/mcs2022/>.





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