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RESPONSIBLE MINING

A CHALLENGE FOR THE ENERGY TRANSITION AND JUSTICE



International Forum on Energy and Climate Law
First Edition

What is the IECL Forum ?

This forum aimed to provide a prospective analysis of international law and regulation in order to promote a fairer and more sustainable transition.
Several roundtables brought together scientists, policymakers, representatives of civil society and the private sector to discuss the principles of international energy law. Comparisons of legal frameworks were carried out in order to identify best practices and to foster cooperation among stakeholders. The forum thus made it possible to present advances in legal research.

What does this first edition contain ?

For this first edition, the Forum focused on issues related to responsible mining and critical materials for the energy transition and energy justice. It was structured around three main themes :

1/ State of play of responsible mining

2/ What are the main challenges to be integrated into the legal framework in order to achieve responsible mining?

3/ Which legal instruments could be used to implement responsible mining?

PLATEFORME EUROPÉENNE DE RECHERCHE EN DROIT DE L'ÉNERGIE ET DU CLIMAT

FRANCE 2030 PROGRAMME DE RECHERCHE SOUS-SOL

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EFELA EUROPEAN FEDERATION OF ENERGY LAW ASSOCIATIONS

Opening

Vicente López-Ibor Mayor, European Federation of Energy Law Associations

The legal history of the European Union is not without recalling what we are experiencing today. The European Coal and Steel Community was created, among other things, to pool energy resources. This link between integration and resources is re-emerging today through the critical materials that are indispensable to the climate transition. Subject to the principles of solidarity, security of supply, innovation and climate loyalty, mining has become a strategic pillar of energy law.



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Damilola Olawuyi, Academic Advisory Group

Conflicts related to mining have significantly increased worldwide.
The causes include: land grabbing, violations of the land rights of indigenous peoples, the unequal distribution of the costs and benefits of mining, pollution, environmental damage, child labour, corruption, and illicit financial flows. It is therefore more necessary than ever to understand how to promote justice and human rights within the mining value chain.

Keynote speech – Critical materials: geopolitics and economics on the global stage

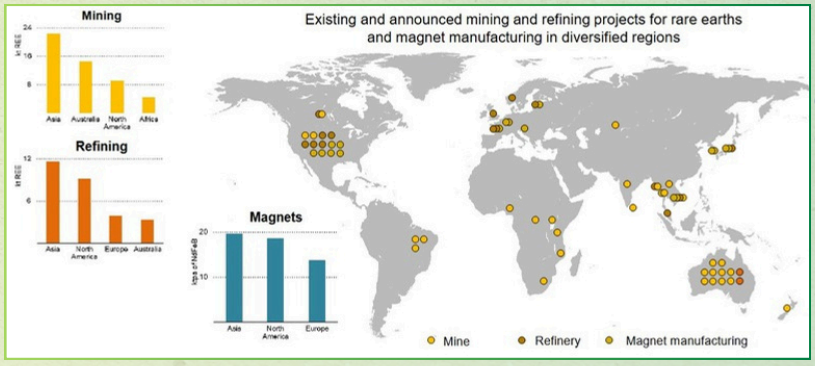
K.C. Michaels, International Energy Agency

The energy transition is increasing global dependence on critical materials, in a context marked in particular by rising demand and the geographical fragmentation of global value chains. Some regions concentrate resources, others refining capacities, and still others processing industries. This organisation creates structural dependencies and vulnerabilities.
Diversification of supply chains remains possible, but it requires close international cooperation between producing regions, refining regions and consuming regions.



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Global Value Chains



The diversification of supply chains for rare earths is possible: it requires international cooperation between resource-rich regions, regions with refining capacities, and downstream consumer regions. This diversification also raises issues of governance and justice.

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Session 1. State of play on responsible mining

Roundtable 1. State of play – Mining for the energy transition

Issues, analysis

Patrice Geoffreon, Université Paris-Dauphine

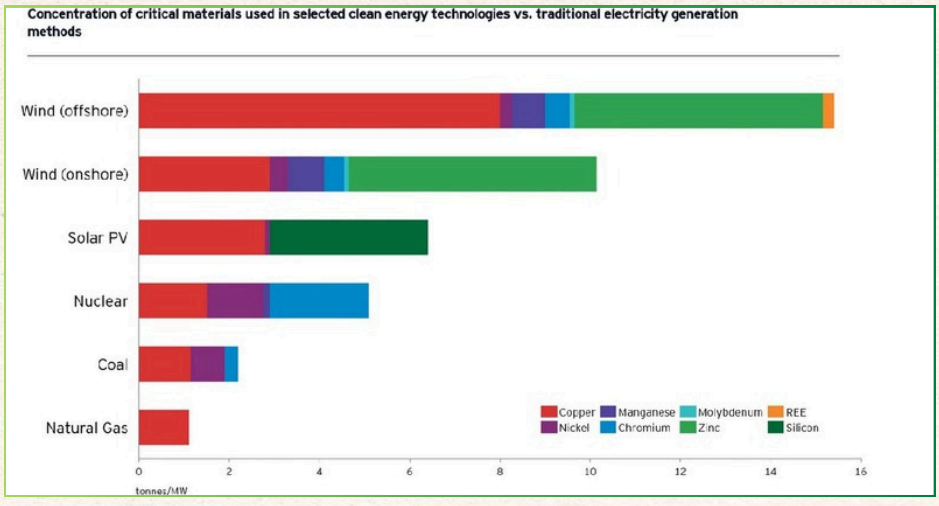
The return of mining activity in Europe is inevitable. The idea of a lasting externalisation of extractive impacts is no longer tenable. European States will have to reinvent their capacity to develop mining activities, despite social and political resistance. Mines do not belong to another time: they will be part of our future, even if this will be very difficult, including in France where projects are already encountering difficulties.

Gael Bellenfant, BRGM

Mining is not limited to the act of extraction, namely the opening and operation of a site: it also produces lasting impacts on the environment and territories. The closure of a mining site does not mark the end of its effects. A more responsible mine therefore requires thinking since the exploration phase: closure, rehabilitation, financial guarantees and future uses of sites.

Jean-François Gaillaud, Ministry for the Energy Transition

Mineral resources are now at the heart of our society. The energy transition relies on an intensification of their use. Indeed, low-carbon technologies, particularly renewable energy and batteries, require significantly larger quantities of critical materials, which shifts environmental pressures rather than eliminating them. In this respect, Europe depends on globalised value chains, some links of which are concentrated in a few regions of the world. This situation calls for reflection on the diversification of sources, the securing of supply, and the role of public policies in access to resources.



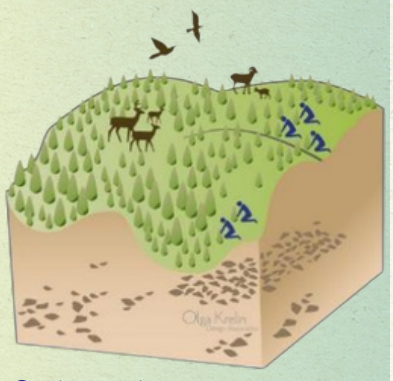
Reducing emissions does not mean reducing resource needs: several low-carbon technologies rely on an increased intensity of critical materials.
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From mine closure to post-mining



© ICMM

Best practice : progressive rehabilitation



© Olga Krelin

Jean-François Gaillaud

Ministry for the Energy Transition

"Mineral resources are at the heart of our society."

Key Message

The energy transition is driving unprecedented demand for critical raw materials, placing mineral resources at the heart of many national and international strategies. Mining is emerging as an increasingly important component of energy security, while highly concentrated value chains expose Europe to strategic dependencies. In this context, security, sustainability and social considerations should be addressed together in shaping resource policies.

Legal Framework

Three levels, incompletely articulated:

- International: State sovereignty over natural resources, increasingly challenged by transnational requirements on human rights, environment and governance.
- European: Sectoral instruments (Directive 2006/21/EC) and supply security law, notably the Critical Raw Materials Act (Regulation 2024/1252), progressively integrating sustainability objectives.
- National: Renewed strategic interest in mining, driven by energy transition, reindustrialisation and strategic autonomy objectives.

A structural imbalance persists: securing supply flows takes precedence over social, environmental and territorial justice. Reconciling these logics remains the central legal challenge.

Recommendations

1. Reinvent Europe's mining capacity

Mining is an essential foundation of the climate transition. Europe can no longer rely predominantly on the externalisation of extractive impacts and should progressively rebuild domestic mining capacity, including in France, while addressing legitimate environmental concerns and strengthening social acceptance.

2. Diversify supply chains through international cooperation

In the context of geographically fragmented value chains, security of supply depends on strengthened international cooperation, including the diversification of supply sources and closer coordination between producing and consuming regions.

3. Promote social justice and respect for human rights

Responsible mining requires high social and governance standards throughout the value chain, including the protection of the rights of Indigenous Peoples, and measures to strengthen transparency, integrity and accountability in permitting processes.

4. Plan mining activity over the long term

Responsible mining requires integrating post-mining considerations from the outset, including long-term financial guarantees, early rehabilitation planning, and effective management of environmental liabilities to safeguard the interests of future generations.



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Session 1. State of play on responsible mining

Roundtable 2. Why is responsible mining necessary for the energy transition?

Issues, analysis

David Brereton, University of Queensland

Responsible mining implies that industrial actors fully assume responsibility for their conduct and the impact of their activities.

Avoiding and remedying social and environmental harm must not be perceived as a mere pragmatic or strategic management consideration (“smart business”), but above all constitutes a moral imperative.
This responsibility must necessarily cover the entire mining life cycle and include, among other things, worker safety and the promotion of sustainable economic and social development for local communities.

In the current context of the energy transition, the massive increase in demand for critical minerals is shifting mining activity toward new and increasingly sensitive areas, where the environment and populations are particularly vulnerable. This trend considerably increases the risks of irreversible damage, which imposes a collective moral responsibility on decision-makers and companies: that of drastically raising standards of responsibility in order to prevent such harm.

Niki Aloupi, Université Paris-Panthéon-Assas

Deep seabed mining raises specific concerns.

Under the United Nations Convention on the Law of the Sea (UNCLOS), the seabed and its resources are defined as the Common Heritage of Humankind. This unique status prohibits any national appropriation and requires that exploitation be carried out for the benefit of humanity as a whole, with an equitable sharing of Benefits.

The “deep-sea dilemma” thus raises the question of whether there is an inherent paradox between Deep Seabed Mining and Sustainability.

The overall answer depends on the definition of sustainability. Polymetallic nodules take millions of years to form, making their extraction non-renewable on a human timescale. From a legal perspective however, the matter is more normative and technical. Can there be a legal framework that allows to reconcile sustainability and Deep Seabed Mining?

In principle, the UNCLOS regime and the International Seabed Authority (ISA) provide the legal tools to reconcile economic use and environmental protection – if they are properly implemented. The contradiction lies not in the legal texts themselves, but in the governance mechanisms, the institutional capacity of and challenges currently faced by the ISA, as well as the lack of sufficient scientific data.

Niki Aloupi
IHEI (Université Paris-Panthéon-Assas)
“The principle of the Common Heritage of Humankind is imbued with the idea of intergenerational equity.”

David Brereton
Sustainable Minerals Institute (Univ. Queensland)
“Responsible mining: not only a ‘smart business’ but a moral imperative.”

Key Message

Mining is not merely an economic opportunity for the energy transition; it is also a key enabler for achieving "Net Zero". As the transition drives unprecedented demand for critical minerals, extractive activities may generate significant social and environmental challenges, particularly for fragile ecosystems and vulnerable communities. Responsible mining therefore requires greater attention to justice, accountability and the rights of affected populations.

Legal Framework

The legal framework of this roundtable is structured around treaties, principles, objectives or decisions derived from the international level :

- UN Guiding Principles on critical minerals (UN Panel, 2024): ground the transition in equity and justice, placing human rights at the heart of mineral value chains, encouraging benefit-sharing and combating corruption.
- International courts (incl. Inter-American Court of Human Rights): reinforce obligations to conduct impact assessments and obtain the free, prior and informed consent of indigenous peoples.
- UNCLOS: defines the seabed beyond national jurisdictions as the Common Heritage of Mankind, requiring environmental protection (Art. 145) and equitable benefit-sharing (Art. 140).
- ISA Strategic Plan 2019–2023: integrates SDG 14 (life below water) into deep seabed governance.

Recommendations

1. Establish responsibility as a guiding legal principle

Industrial actors should ensure accountability throughout the mining lifecycle, with legal frameworks promoting the prevention and remediation of social and environmental harm, particularly in environmentally and socially sensitive areas.

2. Strengthen the legal framework for the commons and the seabed

A robust normative framework within the ISA, grounded in the Common Heritage of Humankind principle, should support the consistent application of the precautionary approach while limiting legal fragmentation and unilateral derogations.



Polymetallic nodules take millions of years to form, making their extraction non-renewable on a human timescale. © Ifremer

3. Plan a just transition from the outset

Companies should cooperate with public authorities to anticipate post-mining land uses and invest in local human capital through transferable skills, supporting resilient local economies beyond mine closure.

4. Integrate intergenerational equity into long-term governance

Long-term financial guarantees - extending over several decades - should support the management of environmental liabilities and post-closure monitoring, with intergenerational equity recognised as a guiding principle of sustainable mining governance.

Session 2. What are the main challenges to integrate within the responsible mining framework ?

Roundtable 1. How can security of supply be reconciled with socio-environmental concerns ?

Issues, analysis

E. Koomson-Yalley, Kwame Nkrumah University of Science and Technology

Artisanal and small-scale mining economies affect social groups, particularly women. While families traditionally own the land, the shift to mining activity deprives women of their authority over agricultural land intended for subsistence crops. They also carry out arduous tasks (extraction, transport, washing) under precarious conditions, while being exposed to health risks linked to the chemical contamination of local crops.

A fairer mining policy therefore requires a better integration of social and gender vulnerabilities into the assessment and governance of projects.

Iñigo Del Guayo, Universidad de Almería

Strategic projects for the energy transition may crystallise conflicts surrounding their location. Uranium and lithium mining projects in Spain, particularly in Cáceres, crystallise territorial, environmental and political opposition. The global vision of sustainability (the need for lithium for electric vehicles) must not come at the expense of the immediate concerns of local populations. Securing supply therefore calls for mechanisms capable of addressing controversies in such a way that critical sources are exploited but respecting territories and/or local concerns.

Pierre Petit de Pasquale, IRMA

Public mechanisms alone are not always sufficient to ensure responsible mining across the entire value chain. Multi-stakeholder mechanisms such as the IRMA standard ("the Initiative for Responsible Mining Assurance") can help to strengthen trust, thanks to radical transparency (IRMA requires the full publication of third-party audit reports) and parity-based governance: IRMA has an equal governance structure across six constituencies (industry, purchasers, finance, NGOs, trade unions and affected communities), each holding a right of veto.

E. Nana Mbrah Koomson-Yalley
KNUST, Ghana

"Particular attention must be paid to policies and research on women in artisanal and small-scale mining; otherwise, land dispossession will remain invisible and will continue to be a tacitly accepted outcome of resource development."



© Elizabeth Nana Mbrah Koomson-Yalley

Key Message

The energy transition creates structural tensions between the need to secure supplies of critical minerals and the protection of human rights and the environment at the local level. Cases of "invisible dispossession" — such as those reported among women involved in artisanal mining in Ghana — and territorial conflicts surrounding lithium projects in Spain illustrate the challenges of aligning global sustainability ambitions with local realities. Existing public mechanisms may prove insufficient, as fragmented regulatory approaches do not always address cumulative impacts or corruption risks effectively. In this context, hybrid co-regulation — combining national legal frameworks with independent standards such as IRMA — offers a promising avenue for strengthening responsible mining, particularly when grounded in distributive justice and meaningful community participation from the earliest stages of project development.

Legal Framework

The legal framework surrounding these issues is characterised by a hybridisation between national law and international standards:

- National law (Ghana): The Minerals and Mining Act 2006 grants State sovereignty over resources, enabling licence granting without local consent. Formalisation of artisanal mining creates conflicts between formal titles and customary rights, generating invisible dispossession — particularly of women.
- Soft law: Multi-stakeholder standards (IRMA) act as "pathfinders," requiring transparency and equal governance between companies, local populations and trade unions, each holding a right of veto.
- International law: UN principles and IACHR case law (Saramaka People v. Suriname, 2007) require Free, Prior and Informed Consent (FPIC) and equitable benefit-sharing.



© Elizabeth Nana Mbrah Koomson-Yalley

Recommendations

1. Protect local and customary rights

Reform legal frameworks to ensure that licence granting gives due consideration to the rights of local land users, supported by systematic gender impact assessments to identify and prevent invisible dispossession of women in artisanal mining economies.

2. Integrate territories as full stakeholders

Complement supply security objectives by better integrating the environmental and political concerns of host communities, and develop transparent mechanisms to address local concerns through dialogue and participation.

3. Promote co-regulation and institutionalise transparency

Encourage the use of multi-stakeholder standards such as IRMA, promote independent third-party audits and the full publication of their findings, and progressively integrate recognised international standards into national legal frameworks.

Session 2. What are the main challenges to integrate within the responsible mining framework ?

Roundtable 2. What outstanding challenges still need to be integrated within the responsible mining framework?

Issues, analysis

Louis de Fontenelle, Université de Pau

The governance of the subsoil entails irreversible effects and timeframes that far exceed the duration of the project.

The traditional social contract excludes future citizens who will nevertheless bear these liabilities. Responsible mining should therefore necessarily integrate more explicitly intergenerational justice and the rights of future generations into mining decision-making frameworks.

Hanri Mostert, University of Cape Town

Mining reveals two fractures: the solidarity gap (where producing countries absorb environmental damage while consuming countries capture added value) and the commons gap (mining impacts such as river or air pollution disregard national borders).

Mining cannot be responsible as long as it follows only logics of competition, sovereignty or immediate economic opportunity. It must instead follow the principles of solidarity, cooperation and commons.

Romain Mauger, CIIAE, Cáceres

Mining responsibility is not solely about the extraction method. It also leads to questioning the quantities extracted, the uses for which they are intended, and the needs that should truly be prioritised.

An approach guided by degrowth shifts the mining issue toward reducing demand and promoting sufficiency in the use of resources.



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Key Message

This roundtable invites discussion on a paradigm shift: from a logic of "conquest" — primarily focused on meeting immediate resource needs — to one of "stewardship", emphasising the prudent management of geological resources for the benefit of present and future generations. Three complementary ideas underpin this perspective:

- Intergenerational responsibility: Subsoil interventions may have long-lasting and sometimes irreversible consequences. Legal frameworks should therefore give greater consideration to intergenerational equity when assessing the long-term implications of today's decisions.
- Sufficiency first: Responsible mining also involves reflecting on the legitimacy and necessity of mineral demand, with the aim of encouraging efficient resource use and prioritising minerals that are essential to the energy transition.
- Sovereignty as solidarity: Because the environmental and social impacts of mining often extend beyond national borders, resource sovereignty can be understood not only as a sovereign right but also as a shared responsibility requiring international cooperation and stewardship.

Legal Framework

Mining law is evolving from a rule of extraction to a mission of heritage protection.
At the national level, sovereignty over resources is increasingly accompanied — notably in France and Colombia — by a duty to preserve communities and ecosystems.
At the international level, common standards combat transboundary damage and promote benefit-sharing, intergenerational equity and sufficiency.
In sum, mining law is no longer limited to stating how to dig, but is beginning to address why to dig and for whom resources are preserved.

Recommendations

1. Generalise intergenerational impact assessments

Systematically assess the impacts that mining projects may have on future generations before authorisation.

2. Integrate sufficiency into permitting processes

Incorporate sufficiency-based demand scenarios into permitting processes to prioritise genuinely essential needs and avoid unnecessary extraction.

3. Establish no-mining zones

Designate no-mining zones in areas where environmental or social damage is likely to be irreversible.

4. Ensure long-term financial guarantees

Require long-term financial guarantees to manage post-closure impacts and safeguard the interests of future generations.

5. Reform mining codes towards a commons-based approach

Align transparency and benefit-sharing standards at the transnational level to support coherent governance of shared resources across borders.

Session 3. Implementation – What legal instruments could be used to ensure just and responsible mining ?

Opening speech – Integrating justice into responsible mining: the role of international law

Lorenzo Cotula, International Institute for Environment and Development, Edinburgh

Growing demand for critical minerals in the context of the energy transition raises questions of justice in wide-ranging contexts - from international relations among the states where the minerals are extracted, processed and ultimately used; to relations among states, companies and the Indigenous Peoples and local communities on whose lands the minerals are found. International law and international soft-law instruments can provide important parameters for understanding and addressing these questions in efforts towards a just transition. This includes norms and instruments related to human rights, environmental protection, local beneficiation and equitable relations in critical minerals supply chains.

Roundtable 1. Legal instruments and tools for responsible mining

Issues, analysis

Sanja Bogojević, University of Oxford

The new European Critical Raw Materials Regulation (CRMA) is above all an instrument for regulating the internal market, whose objective is to secure supply chains. However, the European Critical Raw Materials Board may be criticised for its lack of transparency: it designates "strategic projects" without prior public consultation and according to unclear decision-making criteria. Once labelled as "strategic," these projects are considered urgent, raising concerns about the effective protection of public participation and environmental rights..

This results in tensions, as illustrated by two concrete cases. In Serbia, the EU signed a strategic partnership for lithium despite strong local opposition aimed at protecting agricultural land from mining pollution.

In Sweden, EU strategic projects are located on ancestral Sami lands, potentially undermining their rights and reindeer herding.

In sum, this regulation prioritises EU market security to the detriment of local social and environmental protections.

Ibrahim Khalil Sanogo, BRGM, Université de Pau

The regulation of responsible mining is based on numerous, scattered and sometimes inconsistent rules, which may weaken their effectiveness. The risk? "Compliance greenwashing": companies merely "tick boxes" without any real transformation. A more credible implementation therefore requires better articulation between binding law, voluntary standards, transparency obligations and multi-stakeholder governance mechanisms. Voluntary standards act as "innovators" which, once tested, must be anchored in law in order to become truly effective.

Christophe Krolik, Université Laval

Social acceptability must no longer be seen as an obstacle, but as a process of co-construction framed by law. Social acceptability is not a static "licence" that is obtained once and for all. It is the result of a collective opinion that evolves and is based on the ability of the project to adapt to the real aspirations and concerns of local populations. It must be sought as early as possible, from the exploration phase. Since there is often no legal definition of acceptability, legal indicators could make it possible to measure whether a law truly protects citizens, based on precise criteria. For example, is the obligation enshrined in law (strong protection) or in a simple guideline (weak protection)? Is the impact assessment mandatory or merely encouraged? Is the administration required to follow public opinion or does it retain discretionary power? Finally, does the law guarantee free digital access to documents for all citizens? These indicators should enable governments to foster a relationship of trust with territories.

Key Message

Implementing responsible mining calls for moving beyond the traditional distinction between binding law (Hard Law) and voluntary standards (Soft Law) towards hybrid co-regulation. In this perspective, social acceptance should be seen not as an administrative requirement, but as an ongoing dialogue that enables local communities to play an active role throughout the mining lifecycle.
A key challenge concerns the "fast-track" authorisation procedures introduced by the EU Critical Raw Materials Regulation. While designed to strengthen security of supply and accelerate the energy transition, these procedures should preserve meaningful consultation with local communities and Indigenous Peoples. Striking the right balance between efficiency and inclusive participation is essential to ensuring the long-term legitimacy of mining projects.

Legal Framework

Responsible mining increasingly rests on an interweaving of Hard Law and Soft Law forming a "co-regulation":

- International level: best-practice laboratories feeding into hard law — OECD due diligence guidelines, multi-stakeholder standards (IRMA, TSM).
- European level: Critical Raw Materials Regulation (strategic project fast-tracking) and Corporate Sustainability Due Diligence Directive (CSDDD).
- National level: evolving legislation integrating social acceptability, e.g. Canada's Impact Assessment Act, which explicitly incorporates voluntary standards to strengthen project compliance.

Recommendations

1. Institutionalise co-regulation

Establish a hybrid regulatory framework in which multi-stakeholder standards complement binding legislation and, once proven effective, inform future legal developments.

2. Strengthen transparency of the EU Critical Raw Materials framework

Make Strategic Project selection criteria public, ensure meaningful consultation before designation, and safeguard the rights of local communities and Indigenous Peoples throughout fast-track procedures.

3. Mandate cumulative impact assessment

Require assessment of the cumulative impacts of current and future mining projects on water, biodiversity and public health at the territorial level before permitting decisions.

4. Guarantee an effective right to information

Ensure full, free and open access to impact assessments and environmental data from the exploration phase to support informed public participation.

5. Develop legal acceptability indicators

Assess reforms based on operational criteria, including whether population rights are enshrined in law, participation procedures are mandatory, and public input is effectively considered in administrative decision-making.

Session 3. Implementation – What legal instruments could be used to ensure just and responsible mining ?

Roundtable 2. Soft law instruments and tools for responsible mining

Issues, analysis

David Krupka, AFNOR Group

Responsible mining exploration can rely on common voluntary standards, intended to better structure practices and dialogue between operators, experts, regulators and communities.

From this perspective, **the initiative to create a French AFNOR standard on responsible mining exploration pursues three objectives : targeting the upstream phase, facilitating dialogue, and enhancing transparency.**

More specifically, the standard focuses on the exploration phase (prospecting, preliminary studies), which is often neglected but crucial for establishing trust. It aims to organise the internal governance of companies in order to facilitate dialogue with local communities and authorities. The objective is to enhance transparency and efficiency by using risk management and stakeholder participation methods from the very beginning of the mining cycle.

Stéphane Brabant, Cabinet Trinity International AARPI

More responsible mining activity is not measured solely by its environmental or procedural performance ; it is also assessed by its capacity to generate economic benefits for the territories concerned. A mine is established on a territory and exhausts a resource in an irreversible manner; it is therefore morally and economically imperative not to leave "scorched earth" behind.

Local content thus makes it possible to invest in human capital and to gain the trust of local populations, in favour of a mining activity that is more sustainable and more profitable for the territory. Indeed, on the one hand, local content consists in transforming natural capital into human capital through education, training and the transfer of know-how, rather than merely "ticking administrative boxes." On the other hand, local content reduces the risks of conflicts and transport costs, thereby ensuring the sustainability of the project for both shareholders and local populations.

Stéphane Brabant
Cabinet Trinity International

"A mining project is always local and always long-term. [...] Local content is humanity."



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David Krupka
AFNOR Group

"Our objective is to develop a new French standard in order to facilitate dialogue between stakeholders, communities and exploration companies. This will help us to enhance transparency and acceptability."



© David Krupka

Key Message

Soft law and technical standards do not replace binding law, but they can play a key role in translating legal principles into practical implementation. The objective is to move from "imposed" mining towards "co-constructed" mining by embedding local content policies within the regulatory framework. Local content encompasses company commitments that ensure mining activities generate tangible benefits for host territories, including local employment, skills development and knowledge transfer, as well as the use of local suppliers and subcontractors. By strengthening human capital and local economic development, local content can reduce territorial tensions, support social acceptance, and contribute to both the sustainability and long-term viability of mining projects.

Legal Framework

The regulatory framework rests on the coexistence of three interlocking systems:

- Hard law: national, EU and international law.
- Soft law and standards: ISO, industry standards (TSM, IRMA), best practice guidelines — including the forthcoming AFNOR standard dedicated to exploration phases.
- Contractual framework: local content agreements and mining conventions, bridging gaps where general law is insufficient by imposing direct socio-economic development obligations.

These systems interact within a co-regulation logic: soft law acts as a normative "innovator," testing requirements — such as due diligence and transparency — which are subsequently hardened into binding law (e.g., the CSDDD). This roundtable captures the current movement of the "hardening of soft law," whereby corporate responsibility becomes simultaneously a condition of profitability and legal compliance.

Recommendations

1. Strengthen regulation of early-stage exploration

Promote robust standards, including the future AFNOR standard, from the prospecting phase, with structured stakeholder dialogue and strengthened governance from the earliest stages of project development.

2. Promote substantive local content strategies

Encourage companies to move beyond formal compliance by investing in education, training and knowledge transfer, transforming natural capital into sustainable human capital and strengthening local participation in mining value chains.

3. Adapt international norms to local contexts

Adapt core legal principles, including Free, Prior and Informed Consent (FPIC), to local contexts so they serve as effective tools for protecting rights, fostering dialogue and building trust among affected communities.

4. Use voluntary standards as drivers for legal development

Progressively integrate voluntary standards into mining titles and contractual frameworks to strengthen regulatory coherence and establish a common compliance baseline.

Session 3. Implementation – What legal instruments could be used to ensure just and responsible mining ?

Roundtable 3. Foresight – Desirable developments for a just transition: how should international and transnational mining law work?

Issues, analysis

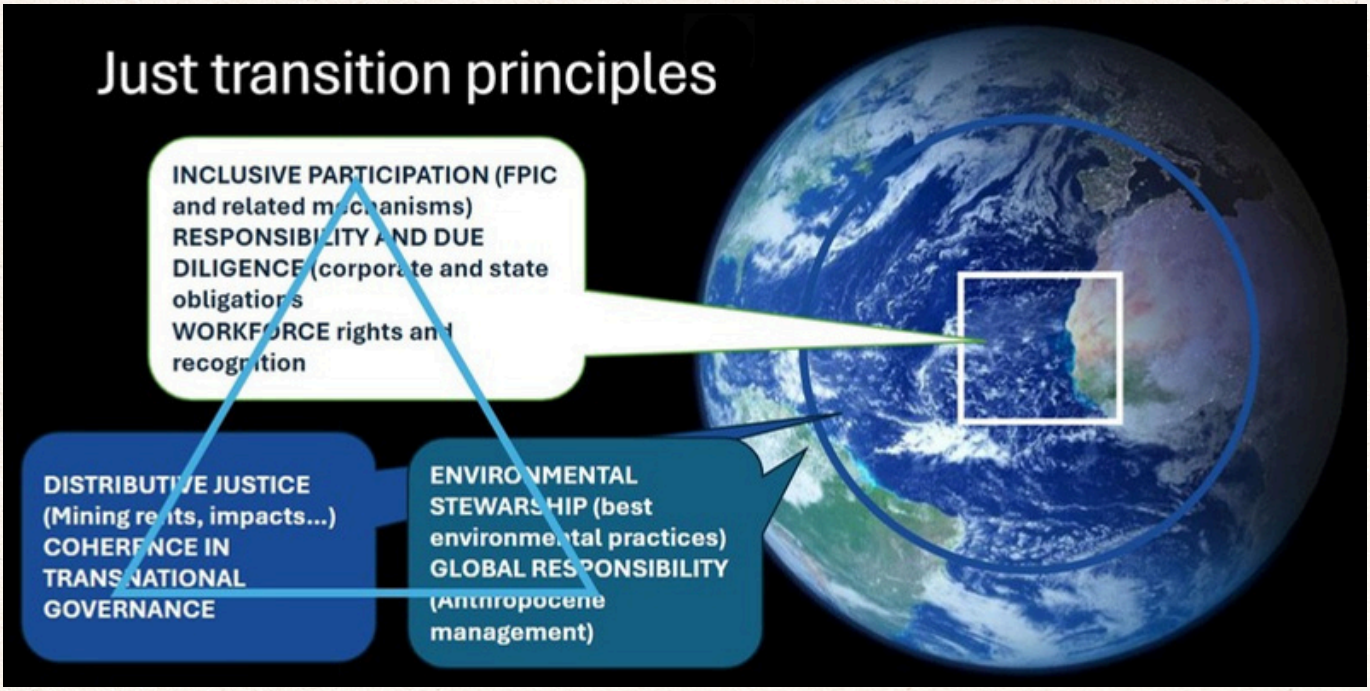
Florencia Heredia, Natural Resources & Energy practice, Buenos Aires

A just transition undoubtedly calls for an international and transnational mining law capable of better articulating resources, territories and sustainability requirements. This implies rethinking the concrete modalities of mining governance beyond strictly national frameworks.

Michel Jebrak, UQAM, Canada

Mining law has long primarily served to organise the extraction and economic valorisation of resources.
However, critical minerals are not merely commodities, but essential resources for collective life.

Critical minerals require legitimacy at three levels : local communities, States and the international community.
The law must evolve from a model focused on rent toward an approach aimed at protecting Earth systems.
The concept of the "commons" offers a neutral and inclusive framework for dialogue, making it possible to no longer oppose stakeholders, but to unite them around a collective objective. It provides a solution for reconciling three imperatives often perceived as contradictory : respect for the rights of local populations over their territory, the decision-making power of sovereign States, and the global responsibility to protect the planet's climate balance. By using this language, mining law can thus evolve from a model based on the mere extraction of wealth toward a mission of responsible stewardship for the benefit of present and future humanity.



A just transition cannot be conceived solely at the scale of the mining project. It requires articulating environmental, social and political issues from the local level to the international level.
© Michel Jebrak

Key Message

Mining law should continue to evolve to address the growing interdependencies created by the energy transition. As fragmented national regulations face increasing challenges, this roundtable highlights the potential of a governance approach based on "trans-scalar commons", shifting from a model centred primarily on resource extraction towards one of stewardship of resources and Earth systems, recognising mineral resources not only as economic assets but also as a shared heritage.
A just transition calls for greater coherence across legal and governance frameworks—potentially including an international treaty—to reconcile three complementary dimensions of legitimacy: the rights of local communities, the sovereignty of States, and the climate responsibilities of the international community.

Legal Framework

The current framework is considered inadequate, resting on poorly articulated, overlapping systems:

- National fragmentation: mining law historically organised extraction at domestic level, creating a "commons gap" as environmental impacts (pollution, water stress) disregard State borders.
- Lack of international coordination: the "Common Heritage of Mankind" principle — established for seabeds managed by the ISA — lacks equivalent coherence for terrestrial resources; land-based mining has no multilateral framework capable of harmonising global standards.
- Emergence of transnational law: growing demand for due diligence and transparency mechanisms applying across global value chains, progressively "hardening" voluntary standards to fill gaps left by fragmented national legislation.

Recommendations

1. Establish an international framework for strategic minerals

Promote the development of a multilateral treaty to strengthen normative coherence between producing and consuming countries and reduce conflicts of laws and regulatory fragmentation.

2. Integrate the commons principle into legislative reforms

Recognise mineral resources as trans-scalar commons and align national legislation with principles of collective governance and equitable long-term benefit-sharing.

3. Harmonise transnational transparency and accountability standards

Align due diligence requirements and benefit-sharing mechanisms across jurisdictions to strengthen regulatory coherence and reduce opportunities for regulatory arbitrage.

4. Embed subsoil stewardship within the social contract

Reframe State sovereignty over mineral resources as a responsibility that integrates ecosystem protection, climate objectives and stewardship for future generations.

Key ideas to retain...

1. A just transition is not only about securing supply

A just energy transition is not achieved solely by securing critical raw materials. While security of supply is essential, it must be considered alongside legal frameworks, territorial dynamics, community participation and long-term sustainability.

2. One concept, multiple scales

Responsible mining must be addressed across multiple levels of governance—from the mining site to the territory, the State, the European Union and the international legal order.

3. Hard law / Soft law

The regulation of responsible mining does not rely solely on binding law or voluntary instruments. The challenge is not to choose between the two, but to understand how they can be effectively articulated. Soft law instruments can provide a roadmap for the progressive development of national legislation.

4. Information and consultation are necessary—but not sufficient

Information, consultation and independent audits are essential components of responsible mining. However, they are not sufficient on their own to ensure a just mining project. Questions of value-sharing, the distribution of impacts and long-term sustainability remain central.

5. Reconciling objectives does not eliminate conflicts

Reconciling security of supply with environmental and social objectives requires recognising and addressing competing interests, rather than overlooking territorial concerns and local vulnerabilities.

6. The long term remains a blind spot

Mining policies should consider not only the immediate benefits of extraction, but also mine closure, rehabilitation and responsibilities towards future generations.

7. How far should extraction go?

Responsible mining is not only about improving extraction practices; it also raises broader questions about mineral demand, priority uses and resource sufficiency.

Thank you for reading !

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