

2030 GLOBAL FOREST VISION



PRIORITY ACTIONS FOR THE PRIVATE SECTOR

MINING & MINERAL SUPPLY CHAINS

June 2026



Developed through extensive multi-stakeholder engagement and a review of successful policies and practices, these Actions contribute to a collective 2030 Global Forest Vision and complement previously published Priority Actions for Governments and Priority Actions for Deforestation- and Conversion-Free Finance.

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PRIORITY ACTIONS FOR MINING & MINERAL SUPPLY CHAINS

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INTRODUCTION

The world's forests are being cleared at staggering rates despite bold commitments from both the public¹ and private² sectors to protect and restore them. While the rate of tropical forest loss slowed in 2025, still 4.3 million hectares of tropical primary forests were destroyed – an area the size of Denmark and nearly 46% more than a decade ago.³

This loss threatens ecosystems and economies alike. Forests generate up to USD 150 trillion⁴ in value annually (nearly twice the value of global stock markets), providing critical ecosystem services and raw materials that underpin global industries and support the well-being of communities worldwide.

Deforestation, forest degradation, and ecosystem conversion for extracting and processing minerals threaten global supply chains, accelerate climate change and drought,⁵ reduce ecosystem resilience,⁶ drive biodiversity loss,⁷ and disrupt the livelihoods and cultural heritage⁸ of Indigenous Peoples (IPs), Afro-descendant Peoples (ADPs), local communities (LCs), women, and other marginalized groups.^a These impacts can contribute to reaching tipping points in critical ecosystems like the Amazon⁹ or the Congo Basin;^{10,11} tipping points, in turn, are likely to disrupt food supplies, destabilize markets, and create long-term risks for entire industries. Links to land conflicts and other human-rights harms can trigger boycotts, protests, and permit delays.

Companies in mining and mineral value chains play a particularly influential role in addressing forest risks and halting and reversing forest loss and degradation by 2030.¹² The entire mining lifecycle – from mine site prospecting and development to mineral extraction, processing, transportation, storage, and eventual site closure and post-closure remediation – drives significant direct, indirect, and cumulative forest risks; it leads to ecosystem conversion, biodiversity loss, pollution and depletion of

water, soil and air, and negative impacts on the livelihoods and cultural heritage of IPs, ADPs, and LCs.

At the same time, the mining sector is also on the receiving end of risks. With more than 90% of the gross value added across mining and mineral supply chains moderately dependent on nature,¹³ losing ecosystem services such as reliable water flows translates directly into operational, regulatory, and reputational risks.

The risks of inaction are real: companies that fail to address their social and environmental impact face regulatory scrutiny,^b community conflict, permitting delays, reputational damage, litigation, stranded assets, and reduced investor confidence.^c

The opportunity is equally significant: implementing credible forest safeguards opens access to capital and markets,¹⁴ secures long-term supply stability, and strengthens economic resilience. Companies that embed these responsibilities at the board level, adopt nature-positive practices, and uphold inclusive Free, Prior, and Informed Consent (FPIC) processes are better positioned for regulatory shifts and enjoy stronger relationships with affected communities and Indigenous rightsholders. The mining sector has the potential to unlock more than USD 430 billion of value by 2030 through nature-positive action.¹⁵ However, this can only be done with rigorous social and environmental safeguards in place. These need to be consistent with national forest regulations and relevant international agreements, as well as with the [IFC Performance Standard 6](#), [ICMM Principle 7](#), the [IRMA Standard for Responsible Mining](#), the upcoming [IRMA Standard for Responsible Mining V2.0](#), and applicable Environmental, Social and Governance (ESG) standards such as the [sectoral guidance for metals and mining](#) by the Taskforce on Nature-related Financial Disclosures (TNFD).

Some meaningful progress has already been made by individual companies in the sector and through collaborative initiatives such as the [International Council on Mining and Metals \(ICMM\)](#), the [Initiative for Responsible Mining Assurance \(IRMA\)](#), or [Copper Mark](#) for upstream companies; and downstream sustainability initiatives like [Drive Sustainability](#) and the [Global Battery](#)

^a These pressures are acutely visible in critical mining landscapes: the cumulative deforestation footprint of gold mining across the Amazon reached over [2 million hectares](#) by 2024, a 50% rise in six years, with over one-third occurring inside protected areas and Indigenous territories. In the eastern Democratic Republic of the Congo, artisanal and small-scale mining drove at least [6.6% of forest loss between 2001 and 2020](#). In Indonesia, at least [75,000 hectares](#) of forest were lost from 2001-2022 within concessions for open-pit mining of nickel.

^b For example, in the European Union, companies in the sector may be scrutinized for their environmental, social, and governance performance under the Conflict Minerals Regulation, the Critical Raw Materials Act, or the Batteries Regulation.

^c See also the Global Investor Commission on Mining 2030's [10-Year Vision and Recommendations](#) for investor expectations on responsible mining, value-chain sourcing, and legacy management.

Alliance. However, the awareness of and ambition to address forest risks, specifically, is more advanced in agricultural supply chains, such as palm oil, timber, and pulp and paper. Mining and mineral supply chain companies can look to these sectors for lessons.

Companies are not the only ones who need to act. Effective law enforcement, strong governance, and public finance are foundational to halting forest loss. Governments, multilateral development banks, and financial actors have an important, foundational role to play in mitigating harm and building global economic resilience to supply chain risks. Private companies, however, can and must work both independently and in collaboration with these actors to address challenges while realizing the advantages of implementing proactive measures co-created with local stakeholders and rights holders.¹⁶

The following sections detail high-impact, near-term actions that companies across mineral supply chains should drive forward in the next one to two years. **Together, these priority actions offer a practical pathway for companies across mining and mineral supply chains to get on track to protect and restore forests by 2030.**

We are now in the second half of this decade of forest pledges. As the deadline for meeting 2030 global forest goals nears, national governments are advancing their forest agendas through updated National Determined Contributions (NDCs), and the finance sector is poised to catalyze rapid, economy-wide transition to deforestation- and conversion-free economies. These recommendations for private sector companies in mining and mineral supply chains contribute to a collective 2030 Global Forest Vision.



CROSS-CUTTING PRINCIPLES FOR ACTION

Companies across the mining and mineral value chain need to take action to address forest risks. Yet, which actions are the most impactful in the short term depends on where in the value chain a company sits. At the same time, all companies should follow a set of cross-cutting principles that always apply:

- A. Measure, so you can manage.** Companies need to know their dependencies, impacts, risks, and opportunities (DIROs) related to nature, so they can act accordingly. For that reason, comprehensive DIRO assessments are key regardless of a company's position in the value chain.
- B. Prioritize addressing your operational impacts, then factors within your sphere of influence.** Companies should first address impacts they directly control (e.g., pit, plant, heap siting or pollution), and then those they can influence through sourcing contracts, and market leverage, in line with the United Nations (UN) [Guiding Principles on Business and Human Rights](#) and the [OECD Due Diligence Guidance for Responsible Business Conduct](#).
- C. Apply the mitigation hierarchy within a nature-positive framework.** Companies should adopt a comprehensive nature-positive approach which nests application of the mitigation hierarchy within regional or landscape conservation and restoration actions; supply chain transformation; and a transformation of the broader business models and culture.¹⁷ Avoiding impacts on high-integrity ecosystems including forests should be the top priority.
- D. Implement traceability and use data purposefully.** Traceability helps companies understand the origin and movement of materials or goods as the basis for assessing risks and tailoring mitigation approaches. It enables companies to demonstrate corporate responsibility and compliance to regulators, investors, and consumers. Although high implementation costs remain a key barrier, traceability data is crucial for effective environmental and human rights due diligence. Traceability data needs to be used responsibly to inform targeted engagement with suppliers on responsible practices.¹⁸
- E. Balance engagement and divestment.** To achieve responsible and circular supply, some companies may decide to withdraw from sensitive landscapes or supplier relationships altogether. However, disengagement and divestment may transfer risks to less responsible actors and should be a last resort option, reserved for cases where improvement efforts have failed or continued association would constitute complicity.
- F. Design for circularity from the outset.** Circularity requires forethought and intentionality. Designing for resource recovery and reuse, while minimizing waste, will reduce both long-term costs and impacts at all stages. Achieving true circularity requires collaboration across the value chain to ensure that materials remain in productive use across multiple life cycles.
- G. Strengthen internal accountability.** Corporate commitments to nature-positive or no net loss or net gain (NNL/NG) approaches can drive improved practices across the value chain but only if commitments are enforced internally. Boards and directors must feel ownership over nature-positive commitments and performance.
- H. Act beyond operational boundaries.** Nature risks and impacts are not confined to operational footprints – neither should companies' actions. Companies committed to nature-positive outcomes must engage and invest in multi-stakeholder landscape and jurisdictional initiatives that address cumulative impacts, safeguard ecosystem integrity, and support sustainable land-use planning.

PRIORITY ACTIONS FOR MINING & MINERAL SUPPLY CHAINS

For the purposes of this document, companies across mining and mineral value chains are grouped into three categories. Each group has distinct yet powerful avenues to influence forest outcomes in the near term:

- **Upstream companies** are involved in physical activities that directly drive direct forest loss and ecosystem conversion. These include siting, land-clearing, site operation, infrastructure construction (including for associated settlements), energy facilities development, waste management, and access and closure decision-making. Through direct mitigation and collaboration with other actors present in the mining area, upstream companies can avoid and minimize irreversible ecosystem loss where it can occur.
- **Midstream companies** process, refine, smelt, trade, or store and transport raw materials after extraction by upstream companies, transforming raw ore for use by downstream manufacturers. They directly impact forests through, for example, water use, pollution, and demand for electricity infrastructure. Due to their position in the value chain, midstream companies can influence dozens of upstream operators and downstream manufacturers at once, especially through demands for traceability and transparency and engagement with suppliers.
- **Downstream companies** engage in manufacturing, assembly, or retail. By setting requirements for procurement and mine-of-origin traceability and assurance, downstream companies can mobilize market demand for verified deforestation- and conversion-free materials.

The segment-specific sections that follow outline concrete priority actions tailored to each group's position in the value chain, leverage, and exposure to forest risks. The order in which the priority actions are presented should not be interpreted as a ranking of priority for each group of actors; companies should pursue all actions in parallel.



UPSTREAM COMPANIES

1. Protect high-integrity ecosystems and other restricted area sites throughout the mine site lifespan

Why

Mining companies can protect nature and become stewards of nature¹⁹ if they commit to nature positivity. Many mining companies are already applying the [mitigation hierarchy](#). This is a widely recognized and, when applied as intended, highly effective method for minimizing the environmentally harmful impacts of extractive and infrastructure-related activities. The sequential steps of the mitigation hierarchy – Avoid, Minimize, Restore, and, as a last resort, Offset or Compensate for residual impacts – must be taken seriously at each stage of the mining life cycle, even before exploration begins.

How

- **PUBLISH, IMPLEMENT, AND MONITOR A CORPORATE RESTRICTED AREAS POLICY:** Have a policy that is science-based and applies to all phases of mineral development and processing^d, commits to respecting restricted areas^e and following internationally recognized processes

^d According to the [second draft of the IRMA Standard V2.0](#), mineral development includes the following phases: exploration, project development, permitting, mining operations, reclamation, closure, and post-closure. Phases included in mineral processing are: development and permitting, processing operations, reclamation, closure, and post-closure.

^e Restricted areas are areas with critical environmental, ecological, natural, and social (IP, ADP, and LC rights) values, defined as: 1) Protected Areas under international conventions (IUCN categories I-IV, UNESCO, Ramsar, Antarctica, etc.); 2) High Conservation Value Areas such as Intact Forest Landscapes and Key Biodiversity Areas; 3) High Carbon Stock Areas—forests, peatlands, and wetlands critical for carbon sequestration; 4) Significant Natural Ecosystems, including marine, deep-sea, coastal habitats, wetlands and grasslands; 5) Critical Water Bodies such as oceans, rivers, lakes, and

for safeguarding IPs', ADPs', and LCs' right to FPIC (See **Box 1**), and documents and discloses alternatives analyses.

- **SCREEN ALL PROJECTS AGAINST SPATIAL DATA LAYERS ON RESTRICTED AREAS:** Screen for restricted areas or apply route-redesign screens during site selection and project design for mining operations and associated infrastructure (roads, pipelines, storage facilities for mine waste and tailings) as the most immediate and effective way to align operations with nature-positive goals. Consistent with [Target 3](#) of the Global Biodiversity Framework (GBF) and existing sectoral guidance, always omit World Heritage Sites and Key Biodiversity Areas (KBAs) from plans before permit applications are submitted, and work with governments to identify other high-integrity or high-vulnerability ecosystems that should be omitted. Make sure to get credit; document avoidance decisions in publicly available transition plans and sustainability reporting. Where projects move ahead, rely as much as possible on best practices to reduce impacts, such as precision mining and natural chemical or non-chemical extraction techniques.
- **EMBED “RESTRICTED AREAS” CLAUSES AND REMEDIATION OBLIGATIONS IN JOINT VENTURE AND CONTRACTOR CONTRACTS:** Embed responsibility and mechanisms for enforcing application of the restricted areas policy or other performance standards (e.g., the IFC Performance Standards or IRMA) into legally enforceable contracts with all entities involved in the mine site exploration, development, operation, and closure.
- **PROACTIVELY PLAN FOR MINE CLOSURE AND POST-CLOSURE MANAGEMENT:** Proactively plan ecological restoration and forest protection and regeneration measures at the earliest stage possible and throughout the mine site lifespan to reduce long-term liabilities, demonstrating environmental responsibility to stakeholders and preventing social and environmental costs of closure and post-closure from being passed to local decision-makers and communities. Define and secure long-term closure financing during project inception,

glaciers with protective buffer zones; and 6) Indigenous Peoples' and Local Communities' Territories, including in particular those of uncontacted or voluntary isolation tribes. For detailed information on all criteria to define restricted areas, see The University of Technology Sydney Institute for Sustainable Futures (2026). [Beyond Extraction: Pathways for a 1.5°C-aligned Energy Transition with Less Minerals](#). Prepared for Greenpeace International.

frontloading closure-related costs during the capital expenditure phase to insulate restoration plans from margin pressures and volatility typical of late-stage operational expenditure budgets. Involve relevant stakeholders – including affected IPs, ADPs, and LCs – early on, intensively, and on an ongoing basis, moving beyond formal consultation and FPIC to co-design of mine closure and post-closure site management plans and finance mechanisms. During planning, focus on true ecological restoration where possible rather than re-naturalization of the site. Implement measures concurrently and gradually. Ensure accessible grievance mechanisms are in place and communicated throughout the mine lifecycle, including post-closure.



The critical role of Free, Prior, and Informed Consent (FPIC)

A just and nature-positive future cannot be achieved if mining conflicts with the rights and territorial sovereignty of Indigenous Peoples. FPIC should be a continuous process; communities should be able to give their consent throughout the project cycle, or change their mind and withhold their consent at any time. Operators must embed FPIC across all project stages, not just to comply with legal obligations and maintain the social license to operate, but to ensure lasting community partnerships.

At minimum, mining companies must develop or strengthen their FPIC protocols in line with the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) and international best practices, including providing operational and responsive grievance mechanisms. Per ICMM's Position Statement on Indigenous People, it is the responsibility of mining companies to exercise human rights due diligence for any project, including conducting meaningful consultation and engagement, and ensuring that no exploration or development occurs without truly informed and documented consent.²⁰

Indigenous Peoples may not be formally recognized by their government, thus formal recognition is not a sufficient condition for a company to determine whether an affected community or group should be considered Indigenous. Indigenous Peoples' rights to lands and resources need to be respected whether or not they are explicitly recognized by a national government, in line with UNDRIP. See the IRMA Standard V1.0, [draft V2.0](#), and [Supplementary Guidance](#) for additional information.

Beyond FPIC, mining companies should seek to involve IPs, ADPs, and other local communities and stakeholders as project co-developers, co-designing community benefit-sharing and land use agreements to avoid conflict. Companies should also consider investing in Indigenous and community-led forest monitoring and restoration projects as part of its nature and biodiversity management strategy. Prioritizing local knowledge and tenure rights strengthens forest protection and enhances resilience of mining-affected areas. Engaging with IPs, ADPs, and LCs and respecting their rights – including FPIC – helps companies achieve more sustainable, efficient, and stable mining operations.

2. Conduct and disclose comprehensive nature-risk assessments and continuous monitoring

Why

Companies cannot manage risks that are not measured. Mine site operators and processors must prioritize conducting credible, science-aligned, and participatory assessments of nature-related DIROs for all active and planned sites. Established baselines combined with near-real-time alerts identify direct and indirect forest loss (e.g., roads, encroachment), enabling corrective action to safeguard ecosystem integrity and manage company dependencies on nature. In addition, disclosure of risks and efforts to manage them builds trust with financiers and communities, strengthening a company's social license to operate and reduce long-term liability. To ensure that disclosures translate into accountability and that affected stakeholders – including IPs, ADPs, and LCs – can raise concerns and access remedy, functioning grievance mechanisms are essential.

How

- **COMPLETE DIRO ASSESSMENTS AND SET MONITORING INDICATORS FOR PRIORITY SITES ASAP:** Use available resources to guide such assessments, including the TNFD's LEAP approach, WWF's Risk Filter Suite, the European Union's Corporate Sustainability Reporting Directive (CSRD), and ICMM's biodiversity guidelines. Alongside site-level data, leverage landscape-scale ecological tools and indicators (such as IUCN's Red List of Ecosystems, the Forest Landscape Integrity Index, etc.) to account for the broader contexts of risks and impacts affecting or stemming from site operations. Similarly, assess nature-related DIROs beyond the site level to understand company-wide operational and transition threats. Finally, transparently disclose baseline findings and

double materiality-based risk analyses to support sectoral policymaking and promote leadership and accountability.²¹

- **DEPLOY MONITORING SYSTEMS AND CORRECTIVE ACTION PROTOCOLS:** Utilize monitoring technologies (e.g. Sentinel-based monitoring) on and around mining concessions, targeting priority areas like rivers and roads, to detect changes in real-time; set timebound (e.g. within 30 days) corrective action protocols to address policy violations. Support and make use of collaborative monitoring approaches that engage local stakeholders and Indigenous rightsholders as a cost-effective alternative to conventional methods, delivering credible, locally-grounded data that informs decision-making within short timeframes.
- **PUBLICLY AND PERIODICALLY REPORT:** Publish geospatial footprints alongside the disclosure of nature-related metrics on a regular basis (in line with regulation or best practice, e.g. TNFD-aligned) to promote transparency. Make disclosures broadly accessible, particularly to IPs, ADPs, and LCs, in formats that are meaningful and usable for different audiences.

3. Engage in multistakeholder landscape collaboration

Why

As part of managing nature-related DIROs, mine site operators and processors should actively participate in multi-stakeholder landscape and jurisdictional initiatives, especially in conflict-affected and high-risk areas. In this context, upstream companies should pay special attention to respectful collaboration and engagement with artisanal and small-scale mining (ASM) since industrial-scale mining operations often overlap and interact with ASM.²² Overlapping economic activities and tenure and land use rights can create local conflicts between different rightsholders and affect the ability to uphold environmental safeguards. Engagement and collaboration between industry stakeholders, ASM miners, other natural-resource dependent actors like farmers and foresters, and governments can address the issue of overlapping rights and uses. It provides companies with an opportunity to help improve environmental practices landscape-wide, generating positive biodiversity, ecosystem, and human health outcomes and socio-economic benefits.

How

- **SUPPORT ENABLING PUBLIC FOREST POLICIES:** Support policies that embed forest protection – particularly for high-integrity forests – and Indigenous rights recognition into macroeconomic and land use planning, ensuring that companies' own nature-positive efforts are reinforced by strong regulatory and legal frameworks. Use landscape-level initiatives to address overlapping rights, including conflicting logging permits, mining concessions, ASM activity, and Indigenous lands, and to make transparent, participatory land allocation decisions.
- **COMMIT PROPORTIONAL MULTI-YEAR FUNDING:** Commit proportional, multi-year funding to multistakeholder landscape or jurisdictional programs in highest-risk geographies, as risk-reducing investment, not just Corporate Social Responsibility. Establish sustainable financial mechanisms such as Conservation Trust Funds and mitigation or habitat banks to ensure the long-term durability of conservation outcomes, de-risk private-sector action, and strengthen investment incentives.
- **ESTABLISH NATURE TARGETS, DATA SYSTEMS, AND RESTORATION PLANS:** Collaborate with local governments, IPs, ADPs, and LCs, other businesses including ASM enterprises and their business partners, and civil society to set landscape nature targets (forests, water, biodiversity) and key performance indicators (KPIs), establish shared data systems, and develop landscape-level action plans supporting ecosystem restoration, connectivity, and integrity. Shared systems improve traceability, enhance impact monitoring, and enable coordinated responses to ecosystem risks. Grievance mechanisms and mine closure plans should be treated as integral components of these initiatives from the outset.

4. Ensure benefit-sharing, compensation, and livelihood restoration for Indigenous Peoples, Afro-descendant Peoples, local communities, and affected and displaced persons

Why

Mining can generate significant economic value,²³ yet historically this wealth has not always translated into improved lives and livelihoods for the communities on whose territories operations occur. In many cases, mining has caused displacement and loss of access to forest lands²⁴ on which communities depend for their livelihoods. Where legal frameworks do not offer sufficient protections for Indigenous Peoples and their rights, corporate responsibility for benefit-sharing and livelihood restoration become all the more critical. Treating affected communities as partners in long-term development rather than stakeholders to be compensated creates mutual value. Genuine partnership helps reduce conflict, operational disruptions, and reputational risks that undermine the social license to operate.

How

- **CO-DESIGN BENEFIT-SHARING AGREEMENTS:** Develop legally binding benefit-sharing agreements with IPs, ADPs, LCs, and other affected and displaced persons from the earliest stages of project development, reflecting communities' own development priorities and including mechanisms for regular review. Benefit-sharing should go beyond monetary compensation to include co-ownership models, performance-based payments, revenue-sharing, and support for Indigenous-led enterprise, consistent with [IFC Performance Standard 5](#) and [IRMA Standard](#).

- **ENSURE FAIR COMPENSATION AND LIVELIHOOD RESTORATION:**

Physical and economic displacement of people must be avoided, and under no circumstances should there be any involuntary displacement. Never engage in activities that displace IPs, ADPs, LCs, and other people unless it is justifiable – if all feasible alternatives have been exhausted – and lawful, and there is documented, mutually accepted, good-faith negotiation and informed consent of the affected people based on their free will and choice, or FPIC of IPs. Prior to any potentially-displacing activities, assess tenure regimes, legal and customary rights and relationships of affected peoples' to affected areas and resources, all potential adverse impacts on such communities, and all feasible alternatives to displacement. If displacement is unavoidable, provide fair and meaningful compensation and livelihood restoration²⁵ to all affected people, including those without legally recognized tenure. Respective Resettlement Action Plans and Livelihood Restoration Plans must be developed through consultative and culturally appropriate process and where potentially affected people are enabled to participate effectively in all relevant decision-making processes. When affected communities include IPs their right to FPIC must be respected. Disclose plans prior to project concept finalization in a culturally appropriate, inclusive manner and make them accessible in local languages. Restoration of living standards is a minimum; projects should seek to improve them.

- **EMBED BENEFIT-SHARING OBLIGATIONS IN CONTRACTS AND CLOSURE PLANS:** Embed benefit-sharing commitments in joint venture and contractor agreements that extend through mine closure and post-closure phases, ensuring communities are not left without income or support when a mine ends. Establish collaborative post-closure financing mechanisms, such as community trust funds and investment platforms, governed jointly with affected communities from the outset.
- **IMPLEMENT ACCESSIBLE GRIEVANCE MECHANISMS:** Establish and maintain grievance mechanisms, ensuring disclosures and consultation processes are available to affected communities, particularly IPs, ADPs, and LCs. Jurisdictional REDD+ initiatives in Brazil^f, including Para, Acre, and Tocantins offer positive examples of accessibility safeguards in practice and should be considered as best-practice references.

^f REDD+ stands for Reducing Emissions from Deforestation and Degradation plus additional forest activities such as sustainable management and the conservation and enhancement of forest stocks.

MIDSTREAM COMPANIES

5. Mitigate direct operational impacts and invest in landscape-level conservation

Why

Midstream operations—including processing plants, tailings facilities, transportation infrastructure, and supporting utilities—generate direct environmental impacts that companies can control and mitigate. These include land conversion; water overabstraction and contamination; air pollution (sulfur dioxide, heavy metals); energy use and associated climate impacts; and infrastructure development (e.g. roads, railways, ports, etc.). Because midstream facilities are often located in or near the same landscapes as their suppliers, midstream companies have both direct operational responsibility and strategic opportunity. Their proximity to impacts gives them direct stake in landscape health and positions them to catalyze broader conservation outcomes through coordinated action with other stakeholders.

How

- **ADOPT INTERNATIONAL BEST PRACTICES, INCLUDING THE MITIGATION HIERARCHY IN THE DESIGN, DEVELOPMENT, AND OPERATION OF THEIR FACILITIES:** Conduct credible and comprehensive environmental impact assessments (EIA), covering all potentially affected ecosystems, before facility development. Apply Avoid, Minimize, Restore, and, as a last resort, Offset or Compensate across all facility development and operations, and implement traceability systems through a combination of supply chain controls, technology, and contractual leverage. Finally, conduct credible, science-aligned, and participatory assessments of nature-related DIROs for all active and planned facilities; and implement TNFD-aligned disclosures.

- **PROMOTE COLLECTIVE INVESTMENT IN HIGH-RISK SOURCING LANDSCAPES SHARED BY MAJOR SUPPLIERS:** Engage in multi-stakeholder platforms supporting the development of common-targets for high-risk sourcing landscapes. Co-finance restoration or conservation and support landscape monitoring systems, contributing to shared targets. Invest through Conservation Trust Funds or mitigation/habitat banks and support blended finance mechanisms to ensure durability and financial sustainability of conservation outcomes.



6. Promote responsible sourcing and transparency

Why

Midstream companies shape environmental outcomes primarily through their sourcing decisions. When supply chains lack transparency, companies cannot verify whether minerals originate from legal operations, avoid forest conversion, or respect Indigenous territories—creating both compliance and reputational risks. Without traceability, sourcing decisions may inadvertently enable the expansion of mining into Protected Areas, Key Biodiversity Areas, or high-integrity forests, fragmenting critical ecosystems. Additionally, commodity purchasing models that prioritize volume and cost over sustainability criteria can perpetuate harmful practices. Traceability systems enable companies to understand their supply chain risks, hold suppliers accountable to environmental and social standards, and demonstrate responsible sourcing practices.

How

■ **ADOPT “RESTRICTED AREAS” POLICIES FOR SOURCING FROM PROTECTED AREAS, KBAS, AND HIGH-INTEGRITY FORESTS:**

Include contractual clauses to suppliers requiring the application of the mitigation hierarchy, including forest protection and restricted areas commitments, aligning procurement with Nature Positive targets. Conduct regular monitoring linking supplier mine coordinates to satellite-based forest monitoring tools, screen sourcing areas against protected areas, KBAs, and high-risk deforestation zones, and suspend or terminate suppliers linked to illegal or Protected Area, KBA, and forest-risk activities. In addition, require FPIC with IPs, ADPs, and LCs.

■ **IMPLEMENT TRACEABILITY SYSTEMS TO EXCLUDE ILLEGAL OR DEFORESTATION-LINKED MINERALS:** Implement traceability systems through a combination of supply chain controls, technology, and contractual leverage and conduct an adequate supplier due diligence process. This includes mapping the full supply chain to the mine site; requiring disclosure of origin, permits, and environmental and social compliance documentation; and conducting risk-based screening for exposure to illegal mining, deforestation, and associated human rights abuses. Aggregation and blending points are where traceability gains are most commonly lost²⁶ – apply chain-of-custody controls at these points using digital tracking (e.g., blockchain, QR tagging, batch tracking) and the requirement for third-party audited chain-of-custody certification where available. Support small and artisanal suppliers as well as junior and mid-tier mining companies financially and technically to enable compliance. Disclose sourcing policies and risk assessments publicly in formats that are accessible to stakeholders including communities in sourcing areas. Where high-risk suppliers are identified, apply OECD-aligned targeted improvement plans rather than automatic disengagement to minimize the risk of suppliers transferring to less responsible actors.

DOWNSTREAM COMPANIES

7. Mandate and support mine-of-origin traceability and supplier disclosure

Why

Downstream companies and investors need access to information to make informed decisions about who they buy from, and governments and civil society need transparent supply chains to drive corporate accountability and responsible business conduct. Credible traceability and disclosure are essential for gaining insight into and managing nature risks along the value chain and adapting to emerging rules, regulations, and investor expectations. Collectively, downstream companies are well positioned to use their market leverage to require strong due diligence and mine-of-origin traceability and assurance among upstream companies, creating accountability while rewarding responsible suppliers.

How

- **REQUIRE SUPPLIERS TO DEMONSTRATE COMPLIANCE WITH PROVEN TRACEABILITY STANDARDS:** Include contractual requirements for suppliers to demonstrate compliance with leading standards (e.g., IRMA's Chain-of-Custody Standard). Implement compliance to enable the identification of mineral origins, production conditions, and environmental and social impacts for high-risk forest-impact minerals like nickel, cobalt, and copper as soon as possible, ideally within the next two years.
- **SET SUPPLIER NATURE DIRO DISCLOSURE EXPECTATIONS:** Require suppliers to assess and disclose nature-related DIROs, covering not only forests but the full range of environmental and social risks associated with

extraction and processing, including water contamination, biodiversity loss, soil degradation, air quality, mercury exposure, and impacts on IPs, ADPs, and LCs, in line with best practice approaches like the TNFD and CDP. To enable suppliers to meet these requirements, offer financial (e.g. forward contracts, concessional finance, in-kind support) and technical resources to help them implement robust assessments, best practices, and traceability systems. Coordinate with and support voluntary sustainability initiatives that provide capacity building and compliance support to enhance their service delivery, where possible.

- **ACT ON AVAILABLE DATA:** Use traceability and disclosure data to take targeted action. When findings reveal environmental or social risks, adapt mitigation activities accordingly and engage suppliers with clear expectations and time-bound improvement plans.
- **CO-FUND JURISDICTIONAL AND LANDSCAPE APPROACHES TO DE-RISK SUPPLY PRODUCTION CONTINUITY:** Enable jurisdictional or landscape level action to reduce the risk of supply chain shocks while accelerating forest and nature protection. Co-invest in multi-stakeholder landscape programs in high-risk sourcing geographies, through Conservation Trust Funds, blended finance mechanisms, and long-term offtake agreements that create stable incentives for upstream improvement.

8. Demand ambition and accountability – both internally and externally

Why

United industry voices can have a powerful effect on sector norms and public policy. Downstream companies should leverage their positions within value chains and the broader economy to exert positive influence on sector practices – including within their own company operations. Clear purchase requirements and site-level assurance can shift market incentives for upstream suppliers; while downstream commitments create leverage to raise upstream practice. This leverage only translates into outcomes when accountability is embedded internally. Finally, strong legal frameworks and enforcement create level playing fields that reward verified environmental and social performance and protect rights.

How

- **KEEP SUPPLIERS HONEST:** Adopt supplier codes and contract clauses that require the application of nature-positive practices such as implementing the mitigation hierarchy, forest and restricted areas policies, and FPIC, and prohibit sourcing from illegal mining, particularly in restricted areas such as protected areas and Indigenous territories. Prioritize mine-site audits (e.g., IRMA); where assurance is absent, conduct enhanced due diligence per OECD guidance and publish risk-mitigation plans. Set a 12–24-month phase-out roadmap for non-compliant sources and disclose annual progress.
- **EMBED BOARD-LEVEL ACCOUNTABILITY:** Embed supervision of nature-positive progress at the board level, perhaps via a dedicated board committee on nature-positive supply chains. Assign director-level oversight of and accountability for forest-risk KPIs and circularity milestones. Link senior-executive variable compensation to verified

progress on deforestation-free sourcing, biodiversity targets, and circular-economy KPIs. Disclose progress and outcomes in annual reports.

- **ADVOCATE FOR ROBUST BIODIVERSITY LAWS AND A LEVEL PLAYING FIELD:** Leverage the relative economic strength of the technology, auto, and manufacturing sectors to publicly endorse ambitious national biodiversity-mitigation regulations, submit supportive comments in policy consultations, and push for stronger enforcement. Using collective consumer-facing visibility as a lever, raise public awareness of the links between consumption and forest loss to create market demand that reinforces pressure on regulators. Let policymakers know that there is a clear demand from business and consumers for nature-positive signals and long-term policy certainty. Align on, support, and push for policy positions that improve baseline practices and mainstream nature-positive production, consumption, and reuse.⁸ Push for consolidated language on global forest goals that recognizes mining as a contributor to forest degradation.²⁷

⁸ Through sector sustainability initiatives like [Drive Sustainably](#) and the [Global Battery Alliance](#); responsible mining initiatives like IRMA, ICMM, [Towards Sustainable Mining \(TSM\)](#), and the [Consolidated Mining Standard Initiative \(CMSI\)](#); and broader sustainable business coalitions like Business for Nature, the We Mean Business Coalition, and the World Business Council for Sustainable Development; and international public-private platforms such as the World Economic Forum.

9. Design for circularity at scale across the value chain

Why

Circularity reduces demand for new extraction and public perception risks while reducing pressure on nature. It prepares companies for emerging regulations like the battery passport and right-to-repair; and it provides companies with a realistic scenario for transforming their business if more areas are restricted for mining for conservation purposes (including to achieve GBF Target 3 of conserving 30% of the world's land by 2030).

At the same time, increasing circularity and growing the supply of recycled materials must be complemented by measures to manage and reduce demand in the first place. A 2025 study²⁸ by Rainforest Foundation Norway and Fern found that measures to change mobility patterns in the European Union can reduce demand for transition minerals and the risk of deforestation associated with their extraction.

How

■ DESIGN FOR CIRCULARITY AND DEMAND REDUCTION AT SCALE:

Work with suppliers and customers to (re-)design products to increase supply of recycled materials and reduce demand for new extractives. This includes designing for easy disassembly and material recovery; dematerialization (i.e., using less material while achieving the same product functionality); product longevity, not planned obsolescence; as well as non-proprietary repair, not replacement, in line with “right to repair” laws. Set and report against material-intensity reduction metrics.

- **SET TARGETS FOR RECYCLED CONTENT WITHIN METAL AND MINERAL-INTENSIVE PRODUCTS LIKE BATTERIES AND ELECTRONICS:** Co-invest in feasible and scalable take-back, refurbishment, and close-loop recycling infrastructure in key markets. Ensure that recycled and scrap content is responsibly sourced by applying due diligence and traceability standards to recycled material supply chains.



ANNEX

Resources for mining & mineral supply chain companies

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ABOUT

The 2030 Global Forest Vision brings together civil society and research organizations around transformative actions to halt and reverse deforestation and ecosystem conversion by 2030. It provides a shared framework to align diverse actors and identify where immediate action is most needed.

The Priority Actions are the building blocks of the Vision—concise, targeted recommendations that translate global goals into actionable steps for specific stakeholder groups. The present set, focused on Mining & Mineral Supply Chains, offers concrete guidance for companies to align their business practices with global forest and climate goals.

This document builds on findings from the annual Forest Declaration Assessment and other key reports, and has been refined through consultation and collaboration with civil society organizations worldwide.

To learn more about the 2030 Global Forest Vision, visit:

www.forestdeclaration.org/vision

ACKNOWLEDGEMENTS

This publication was developed collaboratively by the Forest Declaration Assessment Partners (coordinated by Climate Focus) and non-Partner members of a dedicated working group. The authors thank the many civil society organizations and experts who contributed feedback through the April 2026 consultation and written review process.

The initiative is made possible with the support of multiple valued donors and partners.

Design by Elisa Perpignan.

CITATION

Please use the following citation:



Forest Declaration Assessment Partners. (2026). Priority Actions for the Private Sector: Mining & Mineral Supply Chains. 2030 Global Forest Vision. www.forestdeclaration.org/vision/mining-and-mineral-supply-chains

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