

Indications: the first part of the comments is visible once you open this sheet, the comments on the metrics follow below.

Link of the draft sector guidance: [https://tnfd.global/wp-content/uploads/2023/12/Draft\\_Sector-Guidance\\_Metals-and-Mining\\_Dec\\_2023.pdf?v=1701945335](https://tnfd.global/wp-content/uploads/2023/12/Draft_Sector-Guidance_Metals-and-Mining_Dec_2023.pdf?v=1701945335)

Number of companies of the metals and mining sector that submitted comments	2
Number of comments	40

**GENERAL COMMENTS ON THE DISCUSSION DOCUMENT:**

Topic	QUESTIONS	RESPONSE
1 ABOUT THE LEAP APPROACH	Does the form and structure of this guide support your understanding of how the LEAP approach applies in your sector?	Yes.
	Do you agree with the additional guidance offered in the Scoping guide? Are they enough? If you have comments on this, please post them.	As companies advance and mature their TNFD reporting, they should strengthen supplier mapping.
	Do you agree with the additional guidance offered by the guide for "L1"? Are they enough? If you have comments on this, please post them.	It would be very useful to offer a methodology for the value chain, prioritizing which suppliers and clients to evaluate according to their risks. If not, the topic is very broad and unlikely to be evaluated effectively.  For multinational companies with several operations, it will take considerable time to "build" the polygon that includes the main and supporting processes included in section L1. In addition, these interface polygons with nature will be variable depending on the phase of the mining project (exploration, exploitation, closure, etc.).  From the construction materials sector it is believed that, although the generality described in section L1 applies to this sector, Table 3 on "Examples of commercial activities in direct operations of metallurgical and mining organizations that can interact with nature", it excludes the sector when it names activities that are not generated in it, such as: in situ leaching mining methods, reprocessing/valorization of mineral waste, heap leaching, storage and transportation of dangerous substances, processing areas, tailings storage facilities (all forms, including dry-stacked and coal slag), deepwater tailings placement, river tailings placement, among others.
	Do you agree with the additional guidance offered by the guide for "L2"? Are they enough? If you have comments on this, please post them.	There is no agreement with the reference "Landscape approach - High Conservation Value assessment", since it does not offer a methodological guide so that the company can follow and apply to its need but rather it offers an evaluation service according to the selection of one of the consultants/advisors associated with HVC. This limits the company's freedom of choice and does not guarantee ceilings or limits on the costs of the evaluation service. <a href="https://www.hcnetwork.org/find-assessors">https://www.hcnetwork.org/find-assessors</a>
	Should the guidelines for "L2" show the possible impacts of the sector taking into account the impact drivers and ecosystem services such as those shown in the guide for the oil & gas sector (p. 8 and p. 9) and in that of energy generators (p. 9 and p. 10)?	Yes, the possible impacts of the sector should be shown, as in the Oil&gas guides and in the energy generators guide.  It is necessary to disaggregate these mining sector guides by mining subgroups, for example one specific to the construction materials sector.
	Do you agree with the additional guidance offered by the guide for "L3"? Are they enough? If you have comments on this, please post them.	A model should be established with georeferenced information systems to measure value chains according to the biomes and byproducts used in them in order to assess dependency and risks.
	Should "L3" provide a list of biomes with which the sector normally interacts, as presented in the oil & gas guides (p. 10), the food and agriculture guide (p. 14) and the forestry and paper guide? (p. 8)?	It is important to understand how to measure the value chain from the use of natural resources, and use for these the same methodology of strategic areas, coverage, as well as additional measures such as accreditations and environmental permits, policies, etc., generating monitoring models, and training in related areas, such as materials and purchasing.  A list of biomes with common interaction of the sector should be shown, this simplifies reading the guide, avoids so much external referencing and focuses us as a sector.  The guide needs to be simplified.
	Should more tools be offered for "L3" apart from the one presented in Table 9 (p. 28)?	Yes, a single reference can be counterproductive. In addition, the use of the environmental zoning of each country could be mentioned.
	Do you agree with the additional guidance offered by the guide for "L4"? Are they enough? If you have comments on this, please post them.	Yes, taking into account ecological integrity.
	Do you agree with the additional guidance offered by the guide for "E1"? Are they enough? If you have comments on this, please post them.	Yes, they are sufficient, they can become comparable with the stages used in Colombia for the application of methodologies for environmental impact studies.
	Do you agree with the additional guidance offered by the guide for "E2"? Are they enough? If you have comments on this, please post them.	Yes.
	Do you agree with the additional guidance offered by the guide for "E3"? Are they enough? If you have comments on this, please post them.	Yes, they are sufficient, they can become comparable with the stages used in Colombia for the application of methodologies for environmental impact studies.
	Do you agree with the additional guidance offered by the guide for "E4"? Are they enough? If you have comments on this, please post them.	Yes, however ENCORE is a tool that is valid and must be translated into Colombian functionality to ask these questions in a functional way for materiality analyzes of sustainability reports.
	Do you agree with the additional guidance offered by the guide for "A1"? Are they enough? If you have additional comments, please post them.	Yes, but a third point could be added in the space of transition risks associated with changes in legislation in areas of importance for biodiversity that modify the conditions for extracting mining resources, for example, declarations of natural reserves, etc. Which would generate an impossibility to extract resources and would change the operational and financial dynamics of the company.
	Do you agree with the additional guidance offered by the guide for "A2"? Are they enough? If you have comments on this, please post them.	This is an issue that depends on the internal risk management that each company has, it is appropriate to make suggestions but not "oblige" to have some type of specific mitigation measure to comply with.
	Do you agree with the additional guidance provided in the guide for "A3"? Are they enough? If you have comments on this, please post them.	An example or pilot case is necessary where you can see how financial quantification was applied. That would greatly guide the internal teams of the company.
	Do you agree with the additional guidance offered by the guide for "P1"? Are they enough? If you have comments on this, please post them.	Yes.
	Are the tools associated in the guide useful?	Yes.
	Which parts were most useful?	For the sections associated with the application of limits of the "boundaries" analysis and how to screen suppliers, one of the companies states that it is aligned with the prioritization criteria by Spend and by impact on nature.
	How could it be made more useful in practice?	Several tables could be simplified. It would be nice if TNFD also prioritizes the tools to recommend, so many tools can be confusing.
2 CONTENTS	What content was particularly insightful?	NR.
	Is there any material that you thought was unhelpful, confusing, or incorrect?	It is not clear how the financial quantification of dependencies can be done. Throughout the guide, help is offered to "identify" why the mining sector depends on nature, but reference sources that allow unifying the concession of value "price" of natural resources need to be clarified, this in order to standardize the criteria for the guide's applicants.
	What additional content would be useful to include in the guide?	Practical examples of financial quantification of impacts and dependencies.
3 INTERSECTORAL USE	Are there any materials that would be especially useful for other sectors?	Ecosystem services metrics.

**COMMENTS ON THE PROPOSED METRICS IN THE DISCUSSION DOCUMENT (Annex 1):**

Proposed guidance on the application of global core disclosure metrics

Questions asked:		<ul style="list-style-type: none"> <li>Do you agree with the proposed guidance?</li> <li>Is the metric useful for reporting and management?</li> <li>Is the metric useful for the business model, improving its corporate strategy, its value proposition, or can it guide the development of innovative projects?</li> <li>Is it within the company's capabilities to measure it?</li> </ul>					
Driver of nature change	Metric no.	Core global indicator	Core global metric	Proposed guidance for the sector	Source	Response	
Climate change	C1.0	GHG emissions	Refer to IFRS-S2 Climate-related Disclosure Standard.	In reporting the core global disclosure metric, an organisation should refer to the ICMC Scope 3 Accounting and Reporting Guidance, which provides a standardised framework for the calculation and reporting of an organisation's Scope 3 emissions aligned with the GHG Protocol.		By scope 3 it is understood that it is a metric that focuses on the value chain in TNFD terms, which is why it must be defined in more detail.	
	C1.1	Extent of land/freshwater/ocean use change	Extent of land/freshwater/ocean ecosystem conserved or restored (km <sup>2</sup> ); split into: <ul style="list-style-type: none"> <li>Voluntary; and</li> <li>Required by statutes or regulations.</li> </ul>	In reporting the core global disclosure metric, an organisation should indicate land conserved under some form of formal protection. An organisation should break down the land restored by stage of restoration work.	TNFD	Agree in general terms, but with the primary information that companies have available today, there is no way to report and manage. Companies must hire and consult to apply a single land use change evaluation methodology; this can take several years and resources.	
Pollution/pollution removal	C2.0	Pollutants released to soil split by type	Pollutants released to soil (tonnes) by type, referring to sector-specific guidance on types of pollutants.	<p>In reporting the core global disclosure metric, an organisation should include the:</p> <ul style="list-style-type: none"> <li>Total volume (m<sup>3</sup>) of moderate and high impact spills to soil according to the GRI 306-3 material spill classifications, including oil, fuel, wastes, chemicals etc.; and</li> <li>Number of incidents of significant pollution to soil within the reporting period associated with hazardous materials and waste management.</li> </ul> <p>Tailings (unless a spill comes from a tailings facility), and mineral waste with acid rock drainage or metal leaching potential, should be reported under waste generated (C2.2). Any pollutants to water bodies from these sources should be reported under water pollution (C2.1). Emissions that may settle and become soil pollutants (e.g. dust) should be reported under non-GHG air pollutants (C2.4).</p> <p>A significant incident is an incident that exceeds volume and concentration limits of local regulatory requirements or industry-accepted codes, or is otherwise included in the entity's financial statements (e.g. due to resulting liabilities) or recorded by the entity as an incident required to be reported by local jurisdictions; or is an event that is significant in the judgement of the operator, even though it did not meet the criteria above.</p>	GRI 306: Waste 2020 and SASB EM-MM150a.9	More technological and methodological development is needed for this report. It is necessary to include in the guide other sectors with a strong mining extraction component, such as the construction materials sector, and to incorporate specific and applicable GRI and SASB indicators. For example, for the construction materials sector the indicator that applies is EM-CM-150a.1 'Amount of waste generated, percentage hazardous, percentage recycled'.	
	C2.1	Wastewater discharged	Volume of water discharged (m <sup>3</sup> ), split into: <ul style="list-style-type: none"> <li>Total;</li> <li>Freshwater; and</li> <li>Other.6</li> </ul> <p>Including:</p> <ul style="list-style-type: none"> <li>Concentrations of key pollutants in the wastewater discharged, by type of pollutant, referring to sector-specific guidance for types of pollutants; and</li> <li>Temperature of water discharged, where relevant.</li> </ul>	In reporting the core global disclosure metric, the volume of water discharged should be broken down by: <ul style="list-style-type: none"> <li>Discharge destination category: surface water, groundwater, seawater and third party; and</li> <li>Pollutant type category: high and low water discharge quality, as defined in ICMC Water Reporting Guidance.</li> </ul>	ICMM Water Reporting: Good practice guide (2nd Edition), p33	The companies report it to the environmental authorities of Colombia.	
	C2.2	Waste generation and disposal	Weight of hazardous and non-hazardous waste generated by type (tonnes), referring to sector-specific guidance for types of waste.	<p>Weight of hazardous and non-hazardous waste (tonnes) disposed of, split into:</p> <ul style="list-style-type: none"> <li>Waste incinerated (with and without energy recovery);</li> <li>Waste sent to landfill; and</li> <li>Other disposal methods.</li> </ul> <p>Weight of hazardous and non-hazardous waste (tonnes) diverted from landfill, split into waste:</p> <ul style="list-style-type: none"> <li>Reused;</li> <li>Recycled; and</li> <li>Other recovery operations.</li> </ul>	In reporting the type of waste, an organisation should include mineral waste and non-mineral waste. Mineral waste should include: <ul style="list-style-type: none"> <li>Tailings and other sludges;</li> <li>Waste rock with metal leaching and/or acid rock drainage potential, radioactive material or asbestos-form content; and</li> <li>Overburden.</li> </ul> <p>An organisation should also report the composition of the waste diverted from disposal.</p>	Adapted from GRI 306: Waste 2020 and SASB EM-MM-150a	It is not believed that this indicator should be approved for the construction materials sector. This sector would be able to report the SASB indicator EM-CM-150a.1 Amount of waste generated, percentage hazardous, percentage recycled.
	C2.4	Non-GHG air pollutants	Non-GHG air pollutants (tonnes) by type: <ul style="list-style-type: none"> <li>Particulate matter (PM2.5 and/or PM10);</li> <li>Nitrogen oxides (NO<sub>2</sub>, NO and NO<sub>3</sub>);</li> <li>Volatile organic compounds (VOC or NMVOC);</li> <li>Sulphur oxides (SO<sub>2</sub>, SO, SO<sub>3</sub>, SO<sub>x</sub>); and</li> <li>Ammonia (NH<sub>3</sub>).</li> </ul>	<p>Additional pollutants to report under this core global disclosure metric for each mine site include:</p> <ul style="list-style-type: none"> <li>Carbon monoxide (CO), ground level ozone (O<sub>3</sub>) and hydrogen sulphide (H<sub>2</sub>S);</li> <li>Mercury (Hg);</li> <li>Lead (Pb);</li> <li>Hydrogen cyanide (HCN); and</li> <li>Dust fallout (under particulate matter).</li> </ul> <p>Categories of pollutants are not mutually exclusive. For example, substances contained in PM10 must also be reported where applicable in other categories. Quantitative concentration of non-GHG air pollutants should be measured by month and then annually by the company.</p>	Adapted from GRI 306: Waste 2020 and SASB EM-MM-120a	The stations are generally not conditioned for this type of samples. It is not believed that this indicator should be approved for the construction materials sector. This sector would be able to report the SASB indicator EM-M-120a.1 Air emissions of the following pollutants: (1) NO <sub>x</sub> (excluding N <sub>2</sub> O), (2) SO <sub>x</sub> , (3) particulate matter (PM10), (4) dioxins/furans, (5) volatile organic compounds (VOCs), (6) polycyclic aromatic hydrocarbons (PAHs), and (7) heavy metals.	
Resource use/replenishment	C3.0	Water withdrawal and consumption from areas of water scarcity	Water withdrawal and consumption (m <sup>3</sup> ) from areas of water scarcity, including identification of water source.	<p>An organisation should report water withdrawal broken down by use category – operational water and other managed water – and by quality, as defined in ICMC Water Reporting Guidance.</p> <p>Water consumption should include the volume of water removed by evaporation, entrainment (in waste or product) or other losses and not released back to surface water, groundwater, seawater or a third party.</p> <p>In addition to the core global disclosure metric, organisations should report:</p> <ul style="list-style-type: none"> <li>Water withdrawal in areas of water scarcity as a percentage of the total water withdrawn;</li> <li>The number and share (%) of sites located in areas of water scarcity; and</li> <li>Operational water reuse/recycle volumes.</li> </ul>	ICMM Water Reporting: Good practice guide (2nd Edition); SASB EMM-140a	In general yes. For the construction materials sector, the SASB EM-CM-140a.1 indicator is required (1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress.	

**Core disclosure indicators and metrics proposed for the sector**

Questions asked:		<ul style="list-style-type: none"> <li>Is the metric useful for reporting and management?</li> <li>Is the metric useful for the business model, improving its corporate strategy, its value proposition, or can it guide the development of innovative projects?</li> <li>Is it within the company's capabilities to measure it?</li> </ul>				
Metric category	Metric subcategory	Indicator	Proposed core sector disclosure indicator or metric	Source	Response	

2	State of nature	Ecosystem extent and condition Species population size and extinction risk	Soil quality Water quality Invasive alien species Species threat	<p>Metrics for the ecosystem condition. For example:</p> <ul style="list-style-type: none"> <li>• Soil quality in areas affected by an organisation's activities; and</li> <li>• Water quality in water bodies affected by an organisation's activities.</li> </ul> <p>Metrics for invasive alien species populations in the area surrounding the mine. For example:</p> <ul style="list-style-type: none"> <li>• The change in invasive alien species from a baseline (%).</li> </ul> <p>Metrics for species extinction risk based on, for example, a Calibrated STAR value.<sup>13</sup> For example:</p> <ul style="list-style-type: none"> <li>• Number of sites with a species threat reduction target in place; and</li> <li>• Number of sites with a calibrated (or realised) STAR score with an associated species threat reduction target in place.</li> </ul>	TNFD	Pilots could be done to understand implementation models.
	Impact driver	Land/freshwater/ocean use change	Proximity to protected areas	Number and area of sites within or directly adjacent to legally designated protected areas.	GRI 304: Biodiversity 2016	NR
			Site location in Indigenous territories	The percentage of land owned, leased and/or operated in Indigenous territories.	TNFD	NR
	Response	DIRO management	Impact management	<p>Number and proportion (%) of sites with:</p> <ul style="list-style-type: none"> <li>i. Biodiversity management plans in place; and</li> <li>ii. No net loss or net gain strategies in place.</li> </ul>	TNFD	In general yes. For the net profit or loss strategy indicator, hiring consultants must be planned to develop it, this may take time and resources.
				<p>Change against the baseline in the metrics used to evaluate no net loss (e.g. quality hectares, breeding pairs of endangered species), including:</p> <ul style="list-style-type: none"> <li>i. Total land disturbed by operations (ha);</li> <li>ii. Area disturbed that is available for restoration (ha);</li> <li>iii. Area previously disturbed that is under active restoration (ha); and</li> <li>iv. Land managed for offsets (ha).</li> </ul>		Yes.

**Proposed additional sector disclosure indicators and metrics for the sector**

3	Questions asked:	<ul style="list-style-type: none"> <li>• Is the metric useful for reporting and management?</li> <li>• Is the metric useful for the business model, improving its corporate strategy, its value proposition, or can it guide the development of innovative projects?</li> <li>• Is it within the company's capabilities to measure it?</li> </ul>				
	Metric category	Metric subcategory	Cross-sector indicator	Proposed additional sector disclosure indicator or metric	Source	Response
	Response	DIRO management	Impact management	<p>Number of the operational sites that:</p> <ul style="list-style-type: none"> <li>• Have closure and rehabilitation plans in place;</li> <li>• Have been closed; or</li> <li>• Are undergoing closure activities.</li> </ul>	GRI 12: Coal sector 2022	Companies are able to measure it but it is considered that it should not yet be reported publicly.
		Strategy	Capital allocation	Total monetary value of financial provisions made by the organisation for closure and rehabilitation, including environmental and socioeconomic post-closure monitoring and aftercare for operational sites, providing a breakdown of this total by project.	GRI 12: Coal sector 2022	It is considered that it should not yet be reported publicly.
DIRO management		Additional conservation and restoration activities	<p>Area of land (ha) with increased protection (either newly protected or with a higher protection level, in accordance with IUCN Protected Area or Kunming-Montreal Global Biodiversity Framework Target 3 categories).</p> <p>Total area (ha) covered by collaborative conservation or restoration initiatives supported in the wider landscape (i.e. not on land owned or leased).</p> <p>Percentage of conservation or restoration projects in the wider landscape with community engagement, human rights due diligence and agreement making protocols in place.</p>	TNFD	Yes.	

**OTHER GENERAL QUESTIONS ABOUT METRICS**

What other industry metrics should the taskforce consider? Should they be core or additional?	NR
What other metrics of positive impact and opportunities? Are they relevant in each sector?	NR

**ADDITIONAL CONTRIBUTIONS AND COMMENTS**

In general, the guide for the mining sector is a very detailed guide, it is suggested to simplify it with those tools that TNFD considers the "best practices" and place in an annex section, the other recommended tools, but which may not completely fill the TNFD expectations.

Will a specific guide be developed for the "construction materials" sector? Although the general guide for the mining sector can guide the construction materials sector, it would be beneficial and illuminating to have a guide that establishes the specific limits and limits the expectations of the framework for this sector.