¢	CENTRO NACION ACUA Y LA BIODIV	NAL DEL FD Fin	kforce on Nature-related ancial Disclosures	TOR GUIDANCE: ELECTRIC UTILITIES AND POWER GENERATORS		
ndic ink	ations: the first part of the draft sector g	of the comments is visible once guidance: https://tnfd.global/w	e you open this sheet, the comments on the metrics follow below. p-content/uploads/2023/12/Drat_Sector-Guidance_Electricutilities-and-power-generators_Dec_2023.pdf	2v=1701945338		
lum ann	ber of companies of nission sector that s	f the energy generation and submitted comments	2			
lum	ber of NGOs that su	ibmitted comments	1			
lum	ber of comments		44			
			GENERAL COMMENTS ON THE DISCUS	SION DOCUMENT:		
	Торіс	Does the form and structure o	this guide support your understanding of how the LEAP approach applies in your sector?	If the LEAP is a voluntary methodology for applying the TNFD framework, what other methodologies would be recommended? The restrict is provide, it usually be recomplication to have a event - hade that are halo with neah stars of the LEAP.		
		Do you agree with the addition	al auklance offered in the Scooling aukle? Are they enough? If you have comments on this please post			
		them.	- g	wore specific internation could be collaring non onne generation sources in abolicit to hydroeecurc.		
		Do you agree with the addition	al guidance offered by the guide for "L1"? Are they enough? If you have comments on this, please post	It is not clear how to define the range in L1 for transmission. Transportation and distribution (T&D) lines must be included.		
		inem.		Provide more guidance on how to analyze the value chain by supplier levels, and provide a time horizon to incorporate the different supplier levels as the adoption of the framework in companies matures.		
				Table 2, page 9: Consider the impacts generated in energy transmission.		
				Geothermal generation sources or bioenergy are not considered.		
		Do you agree with the addition them.	al guidance offered by the guide for "L2"? Are they enough? If you have comments on this, please post	Some of the dependences are suggested to be changed from high to the changed with the dependency (CSP), there is a medium use of resource. Dependency should be changed from high to very high in terms of hydropower for mass stabilization and erosion control due to the river		
				erosion that is caused. It is necessary to provide more information on the impacts and dependencies by sector, offering examples to better clarify the everose. For necessary loads one or to be on the only of the destribution control more array to control information, would be reven useful.		
				n'u seulos cubey connecteu la nalure souri as ine decinicay seulor, more granular seulor inicimation voora de nicle decid.		
		Do you agree with the addition	al guidance offered by the guide for "L3"? Are they enough? If you have comments on this, please post	Consider that in energy transmission, as it is linear infrastructure, there is a crossing of the project by diversity of ecosystems and biomes. Considering all the biomes does not necessarily generate value to the report since it does not always go through strategic accounters or consulters of innovations for biothysecsily or on which there is a bind meandence for the bursinese.		
		them.		ecosystems or ecosystems of importance to biodoversity, or on which mere is a night dependence for the business. The recommendation to cross biomes should be added to access roads, for example, to a certain hydroelectric plant.		
		Should "I 3" provide a list of h	omes with which the sector normalivinteracts as reasonted in the oil & rase nuicles (n. 10) the ford and	It would be more relevant to classify the biornes by relevance or by ecosystem integrity.		
		agriculture guide (p. 14) and t	he forestry and paper guide? (p. 8)?	The problem is that the biomes must be homologated to the specific ecosystems of Colombia and in the country ecological characteristics are being added instead of disaggregated, losing information on strategic ecosystems in the process.		
		Do you agree with the addition them.	al guidance offered by the guide for "L4"? Are they enough? If you have comments on this, please post	Yes. There is also RE Data Explorer for the identified tools that also has databases on areas where to locate the projects: https://www.re- explorer.org/		
		Do you agree with the addition	al guidance offered by the guide for "E1"? Are they enough? If you have comments on this, please post	It is not enough to be able to provide an answer. The prioritization criteria for the evaluation to identify environmental assets and transmission business processes are not clear.		
		inem.		It is necessary to make more visible the positive impacts (e.g. ecosystem services provided by the sector, which can be very relevant for interest groups).		
1	ABOUT THE LEAP APPROACH			Error multifieliments there is not alwave information available to calculate them, or the scale does not alwave minimite with		
				environmental impact studies. GHG emissions must be explicit: CO2 (combustion), CH4 (combustion and diffusion), N2O (combustion) and SF6 as electrical insulator		
		Do you agree with the addition them.	al guidance offered by the guide for "E2"? Are they enough? If you have comments on this, please post	in high voltage equipment. It must be taken into account that for solar energy generation, cleaning uses water and the panels must be cleaned once or twice a week decending on the location.		
				For hydrogower there is also another threat: transfers from one river to another with a tunnel or diversion. There must also be a stage before flooding since the vegetation cover must be removed.		
		Should "E2" show a table with	positive impacts as presented in the metals and mining guide (p. 51)? As which?	Yes, a table of positive impacts should be included such as: investments, biolic and carbon offsets, biodiversity monitoring that allows th collection of scientific information, efficient management of water, waste, work with the value chain and suppliers, etc., as mechanisms to		
				neutralize the impacts.		
				For impacts and dependencies, the energy transmission business needs to be included (Table 7).		
		Do you agree with the addition post them.	al guidance offered by the guide for "A1"? Are they enough? If you have additional comments, please	In Table 8, the transmission business is missing. All sources have reputational risk. Additionally, transition irrigation also applies to everyone.		
		2				
		them.	an guidance oilered by the guide for initial Are they enough this you have comments on this, please post	Yes.		
		Are the tools associated in the	guide useful?	There are too many tools that must be reviewed and analyzed in each part, the information is not centralized and it is necessary to search in many sources of information.		
				Guiding questions that included support tables and examples.		
		Which parts were most useful	?	Knowledge dialogue between representatives of different departments and business units. Adjustment of qualifications at the sector level to adapt to the reality of the company.		
				The guide encourages the interdisciplinary collaborative process. Good structure and methodology, with clear steps.		
				T would be useful if the guide was uploaded to the website interactively and not as a PDF, this would allow only the information relevant		
		How could it be made more us	seful in practice?	to the sector to appear. Just as it was in v0.3. Greater clarification of information by sector.		
				Different scenarios between the average sector and the reality of the asset itself. Greater simplification in the localization stage, especially at the intersections of geographic layers.		
		What content was particularly	insightful?	The mitigation hierarchy.		
		Is there any material that you thought use unhalited monthline or incommon		What is requested in L and E is very confusing, since it sounds repetitive and does not allow us to narrow down the scope of the report.		
2	CONTENTS	is mere any material that you t	noogna waa dhinagada, conadang, or mooffect/	n is invesses y that the guides and does be unicarly transition into spanish. Need for greater granularity in sectors. Ex. Oil and gas sector.		
				More examples of the energy transmission subsector.		
		What additional content would	be useful to include in the guide?	The indicators are not designed for the power transmission business. Include elements to identify and define the scope of the analysis in the value chain. A guide should be published for this point.		
	INTERSECTORAL			Accompany the dialogues and layers with Geographic Information Systems.		
3	USE	Are there any materials that w	ould be especially useful for other sectors?	More information on the harmonization of the different reporting standards.		

COMMENTS ON THE PROPOSED METRICS IN THE DISCUSSION DOCUMENT (Annex 1):								
Proposed guidance on the application of global core disclosure metrics								
Questions asked:	estions asked: + b o you agree with the proposed guidance? + is the metric useful for reporting and management? - is the metric useful for the business model, improving its corporate strategy, its value proposition, or can it guide the development of innovative projects? - is it within the company's capabilities to measure it?							
Driver of nature ch	ange Metric no.	Core global indicator	Core global metric	Proposed guidance for the sector	Source	Response		
Land/freshwater/ocean-use change	C1.0	Total spatial footprint	Total spatial footprint (km2) (sum of): • Total surface area controlled/managed by the organisation, where the organisation has control (km2); • Total disturbed area (km2); and • Total rehabilitated/restored area (km2).	No further guidance.		This indicator is relevant for the transmission sector. Include only the area where the organization has a presence. Disturbed area: consider the area that was intervened for the construction of the projects. Restored area: the areas where biotic compensations are made.		
	C1.1	Extent of land/ freshwater/ocean use change	Extent of land/freshwater/ocean ecceystem conserved or restored (km2), split into: • Voluntary; and • Required by statutes or regulations.	No further guidance.		Limit the change in land use to a period or phase of the project, type of ecceystem. There are permanent impacts and other temporary ones that do not necessarily imply a change in to use. For transmission projects, there is change in and use is substations and toxer sites (permanent change), for laying, temporary changes may occur only in the construction phase or permanent changes depending on the project.		
Pollution/pollution rem	oval 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.	No further guidance.		The electric energy transmission business has identified the risk of splits mainly due to dielectric oil is a risk that has a low probability of materializing, however at times where said event may occur, all the required information is available, additionally, the events that have occurred so far are not categorized as having high or moderate impact.		
Pollution/pollution removal	C2.1	Wastewater discharged	Volume of water discharged (m3), split into: • Total; • Freshwater, and • Other, Incomposition of the y polutants in the waterwater discharged, by type of polutant, referring to sector-specific guidance for types of polutants; and • Temperature of water discharged, where relevant.	Nuclear; Thermal In reporting the core global disclosure metric, an organisation should include thermal discharges.	TNFD	In general, it is considered useful. But it is necessary to consider transmission within the energy sector. For the transmission sub-sector, this indicator is not a material issue, taking into account that it is n a significant impact and that there is only residual water discharge in some substations.		
	C2.2	Waste generation and disposal	Weight of hazardous and non-hazardous waske generated by type (tornes), indering to sector-specific guidance for types of waske. Weight of hazardous and non-hazardous waste, tornes) disposed of, split into weight of hazardous and non-hazardous weight process; "Waste sent to landfill; and • Other disposal methods. • Reused; • Reused; • Reused; • Recyclad; and • Other recovery operations.	No further guidance.		The builness of decidical energy transmission does not have a significant impact on the generation wate, however, for the purposed of autability reports and environmental management of some companies, the information required throughout the life cycle of the asset is available.		
	C2.4	Non-GHG air pollutants	Non-GHG air polutants (tonnes) by type: - Particulate matter (PMC 5 and/or PM10); - Hottogen addes (MC2, NG and NG2, NG and SO (SO (SO (SO (SO (SO (SO (SO (SO (SO	Thermal From the Isis of pollutants under the core global disclosure metric, an organisation should look to report Social and Social and Social Annual (PAC) Social and Social Annual (PAC) Social and Social Annual (PAC) Additional pollutants to report under the core global disclosure metric include: Pheary metails (PM) an efferred to in Annue I of EU Dincelle 2016/2264; Precipitant dust; and Pesteroir dravation dust. An organisation should alto report. Semission for mould alto report. Semission for mould and the pollutants per MWh net generation.	Directive (EU) 2016/2284 of the European Parliament and of the Council, GRI EN20	In general, it is considered useful. However, for transmission only: PM10, NOx, SOx would apply.		
Resource use/replenit	shment C3.0	Water withdrawal and consumption from areas of water scarcity	Water withdrawal and consumption 12 (m3) from areas of water scarcity, including identification of water source.	Nuclear, Thermal In reporting the core global disclosure metric, an organisation should include: • Water usage for processing, cooling and consumption in powerplants, including use of water in ath handling.	GRI EN8, TNFD	In general, it is considered useful. However, it would not apply to power transmission.		
Core disclosure indicators and metrics proposed for the sector								
Questions asked: • Is the metric useful for reporting and management? • Is the metric useful for the builness model, improving its corporate strategy, its value proposition, or can it guide the development of innovative projects? • Is it within the company's capabilities to measure e?								
Metric categor	y Metric subcategory	Indicator	Proposed core secto	or disclosure indicator or metric	Source	Response		
Impact driver		Environmental flow	Hydropower Percentage of environmental ² ecological flow versus total flow		TNFD	Percentage of ambient flow: ok		
	Land/freshwater/ ocean use change	Sediment	Hydropower Quantity of sediment retired.		TNFD	The scope of the metric and what it is intended to measure must be specified. Example: what type sediment is referred to and under what removal condition. For Colombia in would not be applicable because there is no regulation for the controlled discharge sediments into reservoirs.		
		Coal combustion residuals	Thermal Amount of cosi combustion residuals (CCR) generated. Percentage that is recycled.		SASB IF- EU150a.1	NR		
	Pollution/pollution removal		Thermal Total number of coal combustion residual (CCR) impoundments, broken down by hazard potential dissification and structural integrity assessment.		SASB IF- EU150a.2	NR		
		Nuclear waste storage	Nuclear Total amount of nuclear waste permanently and safely stored (e.g. deep underground storage).		TNFD	NR		
	Resource use/ replenishment	Heat rate	Thermal Heat rate by plant (Btu/KWh).		TNFD	It is useful and within companies capabilities to measure it.		
	Other	Species casualties	Wind Number of bird and bat casualities.		TNFD	Proposal for energy transmission: Motality in number of birds due to collision with the line. The indicator as proposed would not measure the real impact. It is proposed that the indicator can b modified to this proposal: Number of Species affected / Number of individuals per species affected.		
	OTHER GENERAL QUESTIONS ABOUT METRICS							

What other industry metrics should the taskforce consider? Should they be core or additional?	following metrics are proposed for energy transmission: tally in number of birds due to collision with the line. solved oxygen indicator is missing both upstream and downstream. Jude an indicator of species that are under conservation or protection and that are in some of the threat categories under the IUCN listing. And it would be recommended as a global metric.					
What other metrics of positive impact and opportunities? Are they relevant in each sector?	Hectares protected/restored by ecosystem type.					
ADDITIONAL CONTRIBUTIONS AND COMMENTS						
The metrics proposed for the sector do not apply to the transmission subsector.						
For E3, the sector is highly dependent on water stress. It can be caused by population increase or upstream deforestation.						

The global land use change metric would not be applicable for operating assets because it would not represent land use changes over time. It would be a stable and linear indicator