

MSCI EU Taxonomy Methodology

MSCI ESG Research

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Summary

The European Union taxonomy for sustainable activities (EU Taxonomy) is a classification system for environmentally sustainable economic activities. The purpose of the regulation is to enable sustainable investments and to implement the European green deal.¹

MSCI's EU Taxonomy Methodology has been designed by MSCI ESG Research in response to the EU Sustainable Finance Action Plan to identify companies generating revenue from business activities that are eligible and "potentially aligned" with the EU Taxonomy. Revenue considered eligible for EU Taxonomy alignment is the portion of company revenue associated with activities described in the EU Taxonomy's delegated acts, regardless of whether the revenue meets any or all of the technical screening criteria set forth in the EU Taxonomy. Our screen for identifying potential EU Taxonomy alignment includes a list of companies and corresponding reported or estimated percentages of revenue from potentially qualifying sustainable activities. Companies that fail to meet the Do No Significant Harm (DNSH) and Minimum Safeguard criteria established by the EU Taxonomy methodology are excluded from the list of entities identified for potential alignment with the EU Taxonomy.

This methodology document explains the screening process for data points listed in the following table, and for information about the data directly reported by companies to be EU Taxonomy eligible and aligned.

¹ European Commission, "EU Taxonomy for Sustainable Activities: What the EU is doing to create an EU-wide classification system for sustainable activities," https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en, last modified Dec. 3, 2021.

² A potentially aligned business activity is one that is considered aligned but that cannot be fully verified as aligned. The concept of potential alignment was introduced in the Sustainable Finance: Technical Expert Group (TEG) final report on the EU Taxonomy to acknowledge the gap in available reporting that is needed to determine whether a business activity is completely aligned with the EU Taxonomy. MSCI ESG Research is using the potential alignment approach to ensure the inclusion of all relevant companies in its screen. Sources: European Commission, *Communication from the commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions Action Plan: Financing Sustainable Growth, COM/2018/097 final;* and EU Technical Expert Group on Sustainable Finance, Furopean Commission, 2020.

³ European Commission, *Official Journal of the European Union L*, "Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation," 443/9, December 10, 2021.



Exhibit 1: MSCI ESG factors pertaining to the EU Taxonomy

MSCI ESG Factor Name	MSCI ESG Factor Identifier	Description
Estimated EU Taxonomy Alignment - Maximum Percentage of Revenue	EST_EU_TAXONOMY_ MAX_REV	Estimated EU Taxonomy Alignment – Maximum Percentage of Revenue indicates whether a company's estimated maximum percent of revenue from products and services addresses environmental objectives. Companies which do not pass the MSCI ESG Research's Do No Significant Harm (DNSH) assessment ("No"), with Environmental Controversy scores =<1, and Social and Governance Controversy scores = 0 are excluded from the list as failing to meet the DNSH and Minimum Social Safeguards criteria of the EU Taxonomy. Excludes tobacco producers; companies generating 5% or more of revenue from supply, distribution or retail of tobacco products; and companies with any involvement in controversial weapons. ⁴
EU Taxonomy Estimated Substantial Contribution to Climate Mitigation – Maximum Percentage of Revenue	EST_EU_TAXONOMY_ MAX_CONTRIB_MITI GATION	EU Taxonomy Estimated Substantial Contribution to Climate Mitigation – Maximum Percentage of Revenue is the proportion of total revenue from products and services that provide solutions for reducing GHG emissions.
EU Taxonomy Estimated Substantial Contribution to Climate Adaptation – Maximum Percentage of Revenue	EST_EU_TAXONOMY_ MAX_CONTRIB_ADA PTATION	EU Taxonomy Estimated Substantial Contribution to Climate Adaptation – Maximum Percentage of Revenue is the proportion of total revenue from products and services that reduce the risk of adverse impacts resulting from climate change.
Environmental Impact Revenue Subcategory Classification	CT_SUBCATEGORIES	Environmental Impact Revenue Subcategory Classification displays a list of the Environmental Impact Metrics Subcategories from which the company is estimated to have generated revenue.
EU Taxonomy Estimated Eligible – Maximum Percentage of Revenue	EU_TAXONOMY_ELIG IBLE_MAX_REV	EU Taxonomy Estimated Eligible – Maximum Percentage of Revenue is the percentage of total revenue from economic activities covered by the Taxonomy Regulation, irrespective of whether the activity substantially contributes to one of the six environmental objectives or meets any of the technical screening criteria defined by the EU. Estimated EU Taxonomy eligible revenue is based on company-reported revenue breakdowns by Standard Industry Classification (SIC) and whether the revenue SIC code is eligible for inclusion in the EU Taxonomy. EU Taxonomy Eligible Revenue and Non-Eligible Revenue together will account for 100% of revenue for issuers within the coverage universe.

⁴ Companies that have ties to cluster munitions, landmines, biological weapons/, chemical weapons, depleted uranium weapons, blinding laser weapons, incendiary weapons and/or non-detectable undetectable fragments.



MSCI ESG Factor Name	MSCI ESG Factor Identifier	Description
EU Taxonomy Estimated Non-Eligible – Maximum Percentage of Revenue	EU_TAXONOMY_NON _ELIGIBLE_MAX_REV	EU Taxonomy Estimated Non-Eligible – Maximum Percentage of Revenue is the percentage of total revenue from economic activities not covered by the Taxonomy Regulation. EU Taxonomy Non-Eligible Revenue and Eligible Revenue together will account for 100% of revenue for issuers within the coverage universe.
EU Taxonomy Estimated Mitigation Eligible – Maximum Percentage of Revenue	EST_EU_TAXONOMY_ MITIGATION_REV	EU Taxonomy Estimated Mitigation Eligible – Maximum Percentage of Revenue is the estimated percentage of revenue from economic activities included in the climate change mitigation objective of the EU Taxonomy regardless of whether the revenue positively contributes to climate mitigation or meets any of the technical screening criteria defined by the EU. Estimated EU Taxonomy mitigation eligible revenue is based on company-reported revenue breakdowns by Standard Industry Classification (SIC) and whether the revenue SIC code is eligible for inclusion in the EU Taxonomy's mitigation objective. The data is provided for the most recent fiscal year.
EU Taxonomy Estimated Adaptation Eligible Maximum Percentage of Revenue	EST_EU_TAXONOMY_ ADAPTATION_REV	EU Taxonomy Estimated Adaptation Eligible – Maximum Percentage of Revenue is the estimated percentage of revenue from economic activities included in the climate change adaptation objective of the EU Taxonomy regardless of whether the revenue positively contributes to climate adaptation or meets any of the technical screening criteria defined by the EU. Estimated EU Taxonomy adaptation eligible revenue is based on company-reported revenue breakdowns by Standard Industry Classification (SIC) and whether the revenue SIC code is eligible for inclusion in the EU Taxonomy's adaptation objective. The data is provided for the most recent fiscal year.
EU Taxonomy Eligible – Year	EU_TAXONOMY_ELIG IBLE_YEAR	This is the most recent fiscal year of data available for EU Taxonomy Estimated Eligible – Maximum Percentage of Revenue and EU Taxonomy Estimated Non-Eligible – Maximum Percentage of Revenue.
EU Taxonomy DNSH - Mitigation	EU_TAXO_DNSH_MIT IGATION	Companies with a Red or Orange MSCI ESG Controversies flag in environmental categories related to climate change mitigation do not pass MSCI ESG Research's Do No Significant Harm (DNSH) assessment for mitigation (No). Companies without relevant Red or Orange flag environmental controversies pass MSCI ESG Research's DNSH assessment for mitigation ("Yes"). A complete mapping of environmental controversy types to the climate mitigation objective can be found in the EU Taxonomy methodology document on ESG Manager. Detailed definitions of Red and Orange controversy flags can be found in the MSCI ESG Controversies Methodology Document.



MSCI ESG Factor Name	MSCI ESG Factor Identifier	Description
EU Taxonomy DNSH - Adaptation	EU_TAXO_DNSH_ADA PTATION	Significant harm under the adaptation objective of the EU Taxonomy is largely defined by risk assessments, which are typically not disclosed by companies or captured within MSCI ESG controversies. Thus, MSCI ESG Research's Do No Significant Harm (DNSH) assessment is not currently available for the adaptation environmental objective — all output will be N/A.
EU Taxonomy DNSH - Sustainable Water	EU_TAXO_DNSH_SUS T_WATER	Companies with a Red or Orange MSCI ESG Controversies flag in environmental categories related to water do not pass MSCI ESG Research's Do No Significant Harm (DNSH) assessment for sustainable water ("No"). Companies without relevant Red or Orange flag environmental controversies pass MSCI ESG Research's DNSH assessment for sustainable water ("Yes"). A complete mapping of environmental controversy types to the sustainable water objective can be found in the EU Taxonomy methodology document on ESG Manager. Detailed definitions of Red and Orange controversy flags can be found in the MSCI ESG Controversies Methodology Document.
EU Taxonomy DNSH - Circular Economy	EU_TAXO_DNSH_CIR C_ECONOMY	Companies with a Red or Orange MSCI ESG Controversies flag in environmental categories related to the circular economy do not pass MSCI ESG Research's Do No Significant Harm (DNSH) assessment for circular economy ("No"). Companies without relevant Red or Orange flag environmental controversies pass MSCI ESG Research's DNSH assessment for circular economy ("Yes"). A complete mapping of environmental controversy types to the circular economy objective can be found in the EU Taxonomy methodology document on ESG Manager. Detailed definitions of Red and Orange controversy flags can be found in the MSCI ESG Controversies Methodology Document.
EU Taxonomy DNSH - Pollution Prevention	EU_TAXO_DNSH_POL L_PREVENT	Companies with a Red or Orange MSCI ESG Controversies flag in environmental categories related to the pollution do not pass MSCI ESG Research's Do No Significant Harm (DNSH) assessment for pollution prevention ("No"). Companies without relevant Red or Orange flag environmental controversies pass MSCI ESG Research's DNSH assessment for pollution prevention ("Yes"). A complete mapping of environmental controversy types to the pollution prevention objective can be found in the EU Taxonomy methodology document on ESG Manager. Detailed definitions of Red and Orange controversy flags can be found in the MSCI ESG Controversies Methodology Document.



MSCI ESG Factor Name	MSCI ESG Factor Identifier	Description
EU Taxonomy DNSH - Biodiversity	EU_TAXO_DNSH_BIO DIVERSITY	Companies with a Red or Orange MSCI ESG Controversies flag in environmental categories related to the biodiversity do not pass MSCI ESG Research's Do No Significant Harm (DNSH) assessment for biodiversity ("No"). Companies without relevant Red or Orange flag environmental controversies pass MSCI ESG Research's DNSH assessment for biodiversity ("Yes"). A complete mapping of environmental controversy types to the biodiversity objective can be found in the EU Taxonomy methodology document on ESG Manager. Detailed definitions of Red and Orange controversy flags can be found in the MSCI ESG Controversies Methodology Document.
EU Taxonomy DNSH - Overall	EU_TAXO_DNSH_OVE RALL	Overall, companies which do not pass the criteria in MSCI ESG Research's Taxonomy methodology and with a Red or Orange MSCI ESG Controversies flag are excluded from the list as failing to meet the Do No Significant Harm (DNSH) and Minimum Social Safeguards criteria of the EU Taxonomy ("No"). Companies without Red or Orange flag environmental controversies that pass MSCI ESG Research's DNSH assessment ("Yes"). Detailed definitions of Red and Orange controversy flags can be found in the MSCI ESG Controversies Methodology Document.
EU Taxonomy - Environmental Controversy Type	EU_TAXO_DNSH_CO NTRO_TYPE	EU Taxonomy - Environmental Controversy Type displays the controversy category name for any Red or Orange environmental controversy flag in which the issuer is involved based on MSCI ESG Research's ESG Controversy Methodology.
EU Taxonomy Min Safeguards	EU_TAXO_DNSH_MIN SAFEGUARDS	Companies that have Red or Orange flags for certain ESG controversies, generate 5% or more revenue from tobacco or have any involvement in controversial weapons, lack human rights due diligence process, or have no consideration of SFDR social principal adverse impact (PAI) indicators, do not pass MSCI ESG Research's Minimum Safeguards assessment ("No"). Companies that have no involvement in ESG controversies and controversial activities, implement human rights due diligence, and incorporate SFDR social PAIs pass MSCI ESG Research's Minimum Safeguards assessment.("Yes").
EU Taxonomy Estimated Aligned Revenue - Climate Change Objective	EST_EU_TAXONOMY_ ALIGNED_CLIMATE_C HANGE_REV	The estimated percentage of revenue for all economic activities aligned with the climate change objective of the EU Taxonomy, based on the MSCI Sustainable Impact Metrics framework. This includes the economic activities aligned with the Climate Change Mitigation objective and the Climate Change Adaptation objective.



MSCI ESG Factor Name	MSCI ESG Factor Identifier	Description
EU Taxonomy Estimated Aligned Revenue - Climate Change Mitigation Objective	EST_EU_TAXONOMY_ ALIGNED_CLIMATE_C HANGE_MITIGATION _REV	The estimated percentage of revenue for all economic activities aligned with the Climate Change Mitigation objective of the EU Taxonomy, based on the MSCI Sustainable Impact Metrics framework.
EU Taxonomy Estimated Aligned Revenue - Climate Change Adaptation Objective	EST_EU_TAXONOMY_ ALIGNED_CLIMATE_C HANGE_ADAPTATIO N_REV	The estimated percentage of revenue for all economic activities aligned with the Climate Change Adaptation objective of the EU Taxonomy, based on the MSCI Sustainable Impact Metrics framework.

MSCI EU Taxonomy alignment criteria

MSCI EU Taxonomy Alignment Methodology identifies issuers that meet the minimum criteria (i.e., potential alignment) of the EU Taxonomy. The minimum criteria are: Substantial Contribution to Environmental Objectives, Do No Significant Harm, and Minimum Safeguards.

Substantial Contribution to Environmental Objectives

MSCI Sustainable Impact Metrics are designed to identify companies that derive revenue from products or services with a positive impact on society and the environment.⁵ Issuers that are considered for inclusion in the screen must generate revenue from products and services that address one or more of the six environmental objectives within the EU Taxonomy. The environmental objectives listed below correspond with a number of MSCI ESG Research's Environmental Impact Solutions that are assessed under the MSCI Sustainable Impact Metrics.

Exhibit 2: EU Taxonomy environmental objectives versus MSCI Sustainable Impact Metrics Environmental Impact Solutions

EU Taxonomy Environmental Objectives	MSCI Sustainable Impact Metrics Environmental Impact Solutions	
Climate Change Mitigation	Alternative Energy	
	Carbon Energy and Efficiency	
	Green Building	
	Sustainable Agriculture (e.g., forest management, no- deforestation provisions)	
	Sustainable Water (e.g., smart metering)	
	Pollution Prevention (e.g., waste treatment)	

⁵ More details regarding the MSCI Sustainable Impact Metrics methodology can be found on MSCI's ESG Manager platform.



EU Taxonomy Environmental Objectives	MSCI Sustainable Impact Metrics Environmental Impact Solutions	
Climate Change Adaptation	 Carbon Energy and Efficiency (e.g., insulation solution) Green Building Sustainable Water 	
Sustainable Use and Protection of Water and Marine Resources	Sustainable WaterPollution Prevention & Control	
Transition to a Circular Economy	 Sustainable Water Pollution Prevention & Control (e.g., recycling) 	
Pollution Prevention and Control	Pollution Prevention & ControlSustainable Water	
Protection and Restoration of Biodiversity and Ecosystems	 Sustainable Water Sustainable Agriculture Pollution Prevention & Control 	

The EU has defined activities that contribute to climate change mitigation and climate change adaptation within the European Commission's Delegated Regulation 2021/2139 (the Climate Delegated Act), amended by Delegated Regulation (EU) 2023/2485.6

Revenue generated from contributing to climate mitigation focuses on products and services that reduce greenhouse gas emissions. Such activities include solar power generation, battery storage and smart metering. Revenue generated from contributing to climate adaptation includes revenue from products and services that reduce the risk of impact from climate change. Insulation products, a subcategory captured by Sustainable Impact Metrics, are an example of revenue-generating activities that reduce the impact of severe weather events and temperature changes.

Insulation products also provide energy efficiency for homes and businesses resulting in a reduction in energy demand and greenhouse gas emissions. This highlights how a Sustainable Impact Metric subcategory can apply to multiple environmental objectives, a principle put forth by the EU Taxonomy regulation.

⁶ European Commission, Official Journal of the European Union L, "Commission Delegated Regulation (EU) 2023/2485 of 27 June 2023 amending Delegated Regulation (EU) 2021/2139 establishing additional technical screening criteria for determining the conditions under which certain economic activities qualify as contributing substantially to climate change mitigation or climate change adaptation and for determining whether those activities cause no significant harm to any of the other environmental objectives," and "Commission Delegated Regulation (EU) 2023/2486 of 27 June 2023 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to the sustainable use and protection of water and marine resources, to the transition to a circular economy, to pollution prevention and control, or to the protection and restoration of biodiversity and ecosystems and for determining whether that economic activity causes no significant harm to any of the other environmental objectives and amending Commission Delegated Regulation (EU) 2021/2178 as regards specific public disclosures for those economic activities.", June 27, 2024.



A mapping of Sustainable Impact Metrics subcategories to each of the activities defined in the Climate Delegated Acts is provided on MSCI's ESG Manager platform. Leveraging this mapping, revenue substantially contributing to climate mitigation and adaptation can be calculated by aggregating revenue from Sustainable Impact Metric subcategories mapped to environmental objectives. The factor names for the two revenue estimates are:

- EU Taxonomy Estimated Substantial Contribution to Climate Mitigation Maximum Percentage of Revenue.
- EU Taxonomy Estimated Substantial Contribution to Climate Adaptation Maximum Percentage of Revenue.

The following MSCI ESG factor is used in the screen to identify companies and their corresponding revenue percentages from sustainable activities:

Exhibit 3: Environmental Impact Solutions - Maximum Percentage of Revenue factor

MSCI ESG Factor Name	MSCI ESG Factor Identifier and Criteria
Environmental Impact Solutions – Maximum Percentage of Revenue	CT_TOTAL_MAX_REV > 0

An overview of alignment between the Environmental Impact Solutions factor and the six environmental objectives in the EU Taxonomy is available in Appendix 1.

Do No Significant Harm

As outlined in the final report on the EU Taxonomy of the European Commission's Technical Expert Group on Sustainable Finance (TEG report),⁷ an economic activity which contributes to one environmental objective should not be made at the expense of the other five environmental objectives. At a minimum, companies are expected to comply with applicable environmental standards and regulations and avoid significant adverse impact on the environment. The EU Taxonomy Delegated Acts have developed, in aggregate, 121 broad technical screening criteria selectively applied to each economic activity and environmental objective that need to be met to prevent harm. The list of the DNSH indicators aggregated to EU Taxonomy technical screening criteria can be found in Appendix 4.

⁷ EU Technical Expert Group on Sustainable Finance, *Taxonomy: Final Report of the Technical Expert Group on Sustainable Finance*, European Commission, 2020.



MSCI ESG Research is enhancing its DNSH estimation model by adding an "ESG practice" screen to its existing "ESG controversy" screen with the aim of providing a more precise assessment of companies' alignment with the EU Taxonomy DNSH technical screening criteria beyond a simple entity-level controversy screen.⁸

We **reviewed and analyzed** each DNSH criterion published in the EU Taxonomy Delegated Acts,⁹ and mapped them to existing **MSCI ESG policy, program and process indicators**.

As of September 2023, we found relevant ESG indicators for **44** DNSH technical screening criteria. This represents **over a third** of the DNSH technical screening criteria published in the EU Taxonomy Delegated Acts for the economic activities contributing to climate change mitigation (n=121), as of February 2023.

The MSCI ESG Research DNSH estimation model only applies to companies that derive more than 0% of their revenues from any of the MSCI Sustainable Impact Metrics subcategories mapped to the economic activities defined in the Climate Delegated Acts. ¹¹The ESG Practices screen or the ESG Controversies screen must be met for the company to pass the DNSH filter.

New Model components - ESG Practices Screen

Defining applicable DNSH criteria for specific EU Taxonomy economic activities

We select and apply the DNSH criteria relevant to the economic activity where MSCI estimated that the company showed "substantial contribution" to one environmental objective. This is based on MSCI mapping of relevant Sustainable Impact Metrics subcategories to each of the economic activities defined as eligible in the Climate Delegated Acts.

Exhibit 4: Illustrative example of mapping MSCI SIM subcategories to activity based DNSH criteria for Company A

MSCI Sustainable Impact Metrics subcategories with revenue	2% revenues from Solar subcategory (in Alternative Energy Category)	20% revenues from Small Hydro subcategory (in Alternative Energy Category)
Mapped EU Taxonomy Economic activities	Electricity generation using solar photovoltaic technology	Electricity generation from hydropower
	Electricity generation using concentrated solar power (CSP) technology	

⁸ In the current model, MSCI ESG Research excludes issuers with MSCI ESG Controversies Red & Orange Flags for environmental controversies (Environmental Controversy Score of 0 or 1) which identifies companies involved in specific events or practices with severe and very severe adverse impacts on the environment as a proxy to estimate significant harm.

⁹ As of February 2023. All Sustainable Impact Metrics categories used to estimate substantial contribution to the EU Taxonomy are linked to the Climate Change Mitigation objective and, thus, such economic activities would need to meet the DNSH criteria of the remaining five environmental objectives. Thus, we limited this review to Climate Change Adaptation, Sustainable Water, Pollution Prevention, Circular Economy and Biodiversity DNSH technical screening criteria.

¹⁰ The full mapping is available on MSCI's Client Support Site.

¹¹ This mapping of Sustainable Impact Metrics subcategories to the EU Taxonomy economic activities is available on MSCI's Client Support Site.



	Cogeneration of heat/cool and power from solar energy	
	Production of heat/cool from solar thermal heating	
Activity-based DNSH criteria	9 individual DNSH criteria across sustainable water and biodiversity	15 individual DNSH criteria across sustainable water and biodiversity
Activity-based DNSH criteria mapped to MSCI ESG Indicators, when possible	3 out of 9 DNSH criteria are mapped to MSCI ESG Practices indicators*	6 out of 15 DNSH criteria are mapped to MSCI ESG Practices indicators*

^{*} One technical screening criterion can be mapped to several MSCI ESG indicators given that individual technical screening criterion can contain multiple requirements

1. Evaluating the company on MSCI ESG Practices indicators mapped to DNSH criteria

To pass the ESG Practices screen, a company's economic activities need to meet all the DNSH criteria that are activated as per MSCI ESG Research's mapping.

Companies are not evaluated on DNSH criteria where the mapping to existing MSCI ESG indicators is not possible. ¹² Similarly, if MSCI ESG Research does not cover a company on a specific indicator mapped to a DNSH criterion, this indicator will then not be taken into account in our estimated EU Taxonomy alignment DNSH screen.

Exhibit 5: Example of applying MSCI ESG Practices indicators for evaluating DNSH for Company A

ESG Practices being considered for the evaluation of the DNSH	•	Policy in place to minimize disturbances from operations on biodiversity Biodiversity impact assessment
criteria	•	Programs to protect natural ecosystems
	•	Policy to reclaim disturbed land
		Operations affect IUCN Red List species and/or national conservation list species
	•	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas
	•	Assessment and measurement of water risk
	•	Water usage reduction programs

Note: see mapping for further details on which MSCI indicators and thresholds are being applied for each DNSH criterion.

While DNSH criteria are evaluated at the activity level, ESG Practices are evaluated at the entity level as ESG disclosures at the activity level are not broadly available. We consider entity-level indicators as a reasonable proxy to estimate policy and programs at the activity level.

 $^{^{12}}$ The full mapping of DNSH criteria to MSCI ESG indicators is available on MSCI's Client Support Site.



Existing model components - ESG Controversies Screen

2. Screening companies on environmental controversies

Where there is lack of available data or mapping is not possible to the relevant ESG Practices indicators, the ESG Controversies screen (part of the current model) continues to be applied to identify alleged adverse environmental impacts based on third-party data (media and nongovernmental organization [NGO] reports).

Issuers with **MSCI ESG Controversies** Red & Orange Flags for environmental controversies (environmental controversy score of 0 or 1), which identifies companies involved in specific events or practices with severe and very severe adverse impacts on the environment, fail the DNSH flag.

Exhibit 6: MSCI ESG factor names, identifiers and criteria

MSCI ESG Factor Name	MSCI ESG Factor Identifier and Criteria			
Environment - Controversy Score	ENVIRONMENT_CONTROVERSY_SCORE = 0 OR ENVIRONMENT_CONTROVERSY_SCORE = 1			
Social - Controversy Score	SOCIAL_CONTROVERSY_SCORE = 0			
Governance - Controversy Score	GOVERNANCE_CONTROVERSY_SCORE = 0			

An overview the MSCI ESG Controversies Methodology is available in Appendix 2.



Exhibit 7: Mapping of MSCI ESG Controversy's environmental controversy categories to the EU Taxonomy environmental objectives¹³

Environmental Controversy Category	Environmental Controversy Theme	Climate Mitigation	Climate Adaptation*	Sustainable Water	Circular Economy	Pollution Prevention	Biodiversity
Operational Waste	Operational Waste (Non- hazardous)			x		x	x
Supply Chain Management	Supply Chain Management						X
Toxic Emissions to Air						x	
ODCs - Toxic Emissions to Air	. .					x	
Toxic Releases to Land/Water	Toxic Emissions and			х		х	х
Pesticides/PoPs - Toxic Releases to Water/Land	Waste			x		x	х
Oil Spills				Х		Χ	X
Water Stress	Water Stress			X			
Other	Other	X		X	X	X	X
Energy and Climate Change	Energy and Climate Change	x					
Biodiversity & and Land Use							х
Land Use and Endangered Species				x			x
Marine Biodiversity				X		x	X
Land Use Pesticides/ Persistent Organic Pollutants	Biodiversity and Land Use			x		x	x
Packaging Materials and Waste					X	x	
Electronic Waste					X	х	
Logging							X
Logging and Endangered Species							X

¹³ This indicative mapping is provided to help illustrate how MSCI ESG controversies may match criteria associated with the EU Taxonomy's DNSH by environmental objective. The information is provided "as is" and does not constitute legal advice or binding interpretations of the EU Taxonomy DNSH criteria. MSCI's mapping to the indicators are based on assumptions and ongoing client feedback. This table aims to help clients seeking to understand our estimation approach for EU Taxonomy data by mapping MSCI ESG Research LLC data points to the EU Taxonomy framework's criteria.

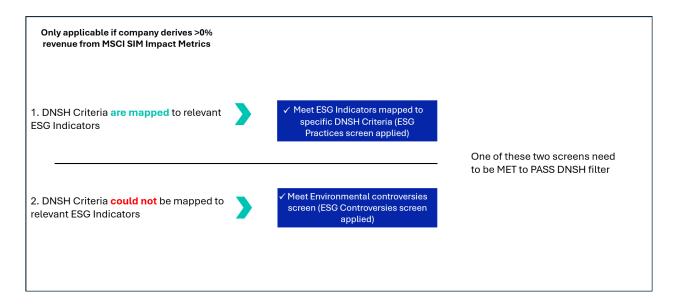


* In the EU Taxonomy Regulation, the DNSH criteria for climate change adaption stipulates that a physical climate risk assessment be performed, and that material risks be addressed. Activity-level risk assessments are not commonly disclosed by companies, nor are they directly in scope for MSCI ESG Controversies assessment. As such, a DNSH assessment for climate change adaptation is not available.

Overall assessment

The overall assessment for the enhanced estimated EU Taxonomy alignment DNSH screen is summarized as follows:

Exhibit 8: Overall assessment for the enhanced estimated EU Taxonomy alignment DNSH screen



Minimum Safeguards

As referenced in Article 18 of the EU Taxonomy Regulation, undertakings are required to comply with the Organisation for Economic Co-operation and Development (OECD) Guidelines on Multinational Enterprises (MNEs) and the UN Guiding Principles on Business and Human Rights, with specific reference to the International Labour Organization's (ILO's) Core Labour Conventions. Also, the principle of "Do No Significant Harm" referred to in the EU Sustainable Finance Disclosure Regulation (SFDR) shall be taken into consideration.¹⁴

¹⁴ European Commission, *Official Journal of the European Union L*, "Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088," 198/13, June 18, 2021.



The Platform on Sustainable Finance put forward the "Final Report on Minimum Safeguards," here it recommends assessing minimum safeguards, with the evaluation of human rights due diligence processes, corruption, taxation, and fair competition. The EU Commission also published a Commission Notice referencing SFDR principal adverse impact (PAI) indicators for social and employee matters "as a minimum" for the EU Taxonomy minimum safeguards assessment. 16

MSCI ESG Research enhanced its Minimum Safeguards estimation model by adding an "ESG practice" screen to its existing "ESG controversy" screen to provide a more precise assessment of companies' alignment with the EU Taxonomy minimum safeguards criteria beyond a controversy-based screen.

The enhanced Minimum Safeguards estimation model consists of six different screening criteria, combining social policy indicators (with a special focus on human rights due diligence), social principal adverse impact indicators from SFDR, as well as ESG controversies for certain aspects. Companies must meet the six criteria individually to pass the Minimum Safeguards screen. These are as follows:

1. Policy Commitment

Companies must embed a commitment to respect human rights by having at least one of a human rights policy or a labor due diligence policy. Also, an anti-bribery policy is mandatory for passing the corruption assessment. We exclude companies without an anti-bribery policy and eliminate those who don't have any commitment to support human rights and don't have presence of a code or policy covering the ILO core conventions (forced labor, child labor, working hours, paid overtime, minimum wage, anti-discrimination, freedom of association and health & safety).

2. Risk Identification

Companies must not be flagged by the MSCI ESG ratings model as being at significant risk of forced or child labor in their supply chains, or they must self-identify as being exposed to such risk. The MSCI ESG Rating materiality assessment determines key issue weights for each Global Industry Classification Standard (GICS®)¹⁷ sub-industry based on the sub-industry's contribution to the negative externality associated with the issue and the expected time horizon for the issue to materialize. Based on this assessment, we require companies to present zero weight of the Supply Chain Labor Standards Key Issue, indicating that they are not part of the industries that have supply chain labor issues. If not, then they must disclose that their operations and suppliers are at significant risk of child labor or forced labor. For any company that the MSCI ESG ratings model has identified as being at significant risk of forced and child labor in its supply chain, we exclude it if it has not self-identified as being exposed to such risk.

¹⁵ Final Report on Minimum Safeguards, Platform on Sustainable Finance, October 2022.

¹⁶ Commission Notice on the interpretation and implementation of certain legal provisions of the EU Taxonomy Regulation and links to the Sustainable Finance Disclosure Regulation (2023/C 211/01), June 2023.

¹⁷ GICS is the global industry classification standard jointly developed by MSCI and S&P Global Market Intelligence.



3. Due Diligence/Remediation

Companies must have at least one of the following four monitoring or grievance-handling mechanism to address violations of the UNGC principles or OECD Guidelines: a human rights due diligence policy, a grievance- or complaint-handling mechanism related to employee matters, regular audits of ethical standards, or a whistleblower protection policy. We exclude companies that don't have any of the above policies.

4. SFDR PAI indicators for social and employee matters

The Board Gender Diversity criterion refers to SFDR PAI 13 "Board gender diversity" — each company must have at least one female director on its board. We exclude companies with no female board member. For the remaining SFDR social PAIs, we cover:

- PAI 10 "Violations of UN Global Compact principles OECD Guidelines for Multinational Enterprises", covered through screening criterion (5) ESG Controversies.
- PAI 11 "Lack of processes and compliance mechanisms to monitor compliance with UN Global Compact principles and OECD Guidelines for Multinational Enterprises" is aligned with the due diligence and remediation screen of the minimum safeguards.
- PAI 14 "Exposure to controversial weapons (anti-personnel mines, cluster munitions, chemical weapons and biological weapons)" is covered through screening criterion (6) on 'Tobacco and controversial weapons involvement'.

PAI 12 "Unadjusted gender pay gap" is not covered in the current approach due to data limitations.

5. ESG Controversies

Companies with Red or Orange flags for anti-competitive and tax controversies with a case status of "Ongoing," "Partially concluded" or "Concluded" will be excluded. In addition, companies that have Red flags for social or governance controversies (Controversy Score equal to zero) will not pass the minimum safeguards screen.

6. Tobacco and Controversial Weapons Involvement

The screening criteria for tobacco and controversial weapons uses MSCI ESG Business Involvement Screening Research.¹⁸ Companies with revenue derived from MSCI Sustainable Impact Metrics are removed from the screen if they have any tie to controversial weapons or are generating 5% or more of revenue from the supply, distribution, or retail of tobacco products.

Exhibit 9: Factor list for the Minimum Safeguards screen

MSCI ESG Factor Names	MSCI ESG Factor Identifiers and Exclusion Criteria
Policy Commitment	
Human right policy	HUMAN_RGTS_POL = "Not Disclosed" AND

¹⁸ More details on MSCI ESG Business Involvement Screening Research's Tobacco and Controversial Weapons Screens can be found on MSCI's ESG Manager platform.



MSCI ESG Factor Names	MSCI ESG Factor Identifiers and Exclusion Criteria
Labor Due Diligence Policy	LABOR_DDIL_POL_ILO = "Not Disclosed"
Policy on anti-corruption and anti-bribery (UN Convention against Corruption)	CORR_BRIB_POLICY_UN = "Not Disclosed"
2. Risk Identification	
Operations at significant risk of child labor Operations at significant risk of forced or compulsory labor Supply Chain Labor Standards weight	OPS_SRISK_CHILD_LABOR = "Not Disclosed" AND OPS_SRISK_FORCED_LABOR = "Not Disclosed" AND SUPPLY_CHAIN_LAB_WEIGHT = 0 / blank
3. Due Diligence/Remediation	
Human rights due diligence Grievances or Complaints-handling Mechanisms Related to Employee Matters Regular audits of ethical standards Whistleblower protection policy	HUMAN_RGTS_DD LABOR = "Not Disclosed" AND GRIEV_COMPLAIN_PROCEDURE_VALUE LABOR = "Not Disclosed" AND BUS_ETHICS_AUDIT_ANTICORR LABOR = "Minimum practices expected based on domestic industry norms" or "No evidence" AND WHISTLEBLOWER_PROTECT_POLICY LABOR = "Not Disclosed"
4. SFDR PAI 13	,
Female Directors	FEMALE_DIRECTORS = 0
5. ESG Controversies	
Tax Controversies	CONTROVERSY_CATEGORY = "GOV-Taxes & Subsidies" AND CONTROVERSY_CASE_STATUS = "Concluded" OR "Partially Concluded" OR "Ongoing" AND CONTROVERSY_CASE_FLAG = "Orange" or "Red"
Anti-Competitive Behavior Controversies	CONTROVERSY_CASE_INDICATOR = "CUST-Anticompetitive Practices" AND CONTROVERSY_CASE_STATUS = "Concluded" OR "Partially Concluded" OR "Ongoing" AND CONTROVERSY_CASE_FLAG = "Orange" or "Red"
Social - Controversy Score	SOCIAL_CONTROVERSY_SCORE = 0
Governance - Controversy Score	GOVERNANCE_CONTROVERSY_SCORE = 0
6. Tobacco and Controversial Weapons Involvem	ent



MSCI ESG Factor Names	MSCI ESG Factor Identifiers and Exclusion Criteria
Tobacco Producer	TOB_PRODUCER = T
Tobacco Retailer – Maximum Percentage of Revenue Tobacco Distributor – Maximum Percentage of Revenue Tobacco Supplier – Maximum Percentage of Revenue	(TOB_RET_MAX_REV_PCT + TOB_DIST_MAX_REV_PCT + TOB_SUP_MAX_REV_PCT) ≥ 5
Controversial Weapons – Any Tie	CWEAP_TIE = T

Considering the policy indicators, controversies and business involvement screens from the table above, an overall signal for minimum social safeguards is used to determine if the company passes all the criteria (Yes) or fails one or more of the criteria (No).¹⁹

¹⁹ The data point, EU Taxonomy Min Safeguards, can be found in the EU Taxonomy data set available on MSCI's ESG Manager platform.



Alignment taxonomy factors

Exhibit 10: Alignment taxonomy factors

MSCI ESG Factor Names	MSCI ESG Factor Identifiers and Criteria
Estimated EU Taxonomy Aligned Revenue – Climate Change Objective	(CT_ALT_ENERGY_SOLAR_MAX_REV + CT_ALT_ENERGY_WIND_MAX_REV + CT_ALT_ENERGY_SMALL_HYDRO_MAX_REV + CT_ALT_ENERGY_WAVE_TIDAL_MAX_REV + CT_ALT_ENERGY_GEOTHERMAL_MAX_REV + CT_ALT_ENERGY_WASTE_TO_ENERGY_MAX_REV + CT_ALT_ENERGY_BIOMASS_MAX_REV + CT_ALT_ENERGY_BIOFUEL_MAX_REV + CT_ALT_ENERGY_FUEL_CELLS_MAX_REV + CT_ALT_ENERGY_EFF_LED_CFL_MAX_REV + CT_ALT_ENERGY_EFF_DEMAND_MGMT_MAX_REV + CT_ALT_ENERGY_EFF_SMART_GRID_MAX_REV + CT_ALT_ENERGY_EFF_SMART_GRID_MAX_REV + CT_ALT_ENERGY_EFF_INDUSTRL_AUTOM_MAX_REV + CT_ALT_ENERGY_EFF_ZERO_EM_VEH_MAX_REV + CT_ALT_ENERGY_EFF_LYBRID_VEH_MAX_REV + CT_ALT_ENERGY_EFF_CLN_TRAN_INFRA_MAX_REV + CT_ALT_ENERGY_EFF_INSULATION_REV + CT_ALT_ENERGY_EFF_SUPERCONDUCTORS_MAX_REV + CT_ALT_ENERGY_EFF_OPT_INFRA_MAX_REV + CT_ALT_ENERGY_EFF_OPT_INFRA_MAX_REV + CT_GREEN_BLDG_CONSTR_MAX_REV + CT_SUST_WATER_WASTE_TRTMT_MAX_REV + CT_SUST_WATER_SMART_METER_MAX_REV + CT_SUST_WATER_RAINWATER_REV + CT_SUST_WATER_RAINWATER_REV + CT_POLL_PREV_RECYCLING_MAX_REV + CT_PULL_PREV_WASTE_TREATMENT_MAX_REV + CT_SUST_AG_MAX_REV)



MSCI ESG Factor Names	MSCI ESG Factor Identifiers and Criteria
Estimated EU Taxonomy Aligned Revenue – Mitigation	(CT_ALT_ENERGY_SOLAR_MAX_REV + CT_ALT_ENERGY_WIND_MAX_REV + CT_ALT_ENERGY_SMALL_HYDRO_MAX_REV + CT_ALT_ENERGY_WAVE_TIDAL_MAX_REV + CT_ALT_ENERGY_GEOTHERMAL_MAX_REV + CT_ALT_ENERGY_WASTE_TO_ENERGY_MAX_REV + CT_ALT_ENERGY_BIOMASS_MAX_REV + CT_ALT_ENERGY_BIOFUEL_MAX_REV + CT_ALT_ENERGY_FUEL_CELLS_MAX_REV + CT_ALT_ENERGY_EFF_LED_CFL_MAX_REV + CT_ALT_ENERGY_EFF_DEMAND_MGMT_MAX_REV + CT_ALT_ENERGY_EFF_SMART_GRID_MAX_REV + CT_ALT_ENERGY_EFF_INDUSTRL_AUTOM_MAX_REV + CT_ALT_ENERGY_EFF_ZERO_EM_VEH_MAX_REV + CT_ALT_ENERGY_EFF_CLN_TRAN_INFRA_MAX_REV + CT_ALT_ENERGY_EFF_INSULATION_REV + CT_ALT_ENERGY_EFF_SUPERCONDUCTORS_MAX_REV + CT_ALT_ENERGY_EFF_OPT_INFRA_MAX_REV + CT_ALT_ENERGY_EFF_OPT_INFRA_MAX_REV + CT_GREEN_BLDG_PROP_MGMT_MAX_REV + CT_GREEN_BLDG_CONSTR_MAX_REV + CT_SUST_WATER_WASTE_TRTMT_MAX_REV + CT_SUST_WATER_SMART_METER_MAX_REV + CT_SUST_WATER_SMART_METER_MAX_REV + CT_SUST_WATER_RAINWATER_REV + CT_POLL_PREV_RECYCLING_MAX_REV + CT_POLL_PREV_WASTE_TREATMENT_MAX_REV + CT_SUST_AG_MAX_REV)
Estimated EU Taxonomy Aligned Revenue – Adaptation	(CT_ENERGY_EFF_INSULATION_MAX_REV + CT_GREEN_BLDG_CONSTR_MAX_REV + CT_SUST_WATER_INFRA_DISTRIB_MAX_REV + CT_SUST_WATER_RAINWATER_MAX_REV)

Research process overview

The MSCI EU Taxonomy Methodology builds on the underlying methodologies of MSCI Sustainable Impact Metrics, MSCI ESG Business Involvement Screening Research and MSCI ESG Controversies and Global Norms.

Data sources

We use a wide range of information derived from various tools and sources, including:

- · Company websites.
- Company annual reports and regulatory filings.



- Government financial agencies and disclosures.
- Financial data providers.
- Media and periodicals.
- NGO reports and websites.

Coverage universe

MSCI Sustainable Impact Metrics, as of December 2023, cover more than 15,000 corporate equity and fixed income issuers including constituents of the MSCI ACWI Investable Market Index (IMI).

MSCI ESG Business Involvement Screening Research (including tobacco and controversial weapons involvement) covers global equity issuers, selected bond-issuing subsidiaries, selected corporate bond issuers and selected government-owned entities that operate as corporations.

The MSCI EU Taxonomy coverage universe, as of December 2023, for data disclosed directly by companies includes approximately 12,581 equity and fixed income issuers, including constituents of the MSCI ACWI IMI.

Quality assurance process

Our initial company research and analysis is followed by a quality assurance process. Data accuracy and company profiles are peer-reviewed by ESG analytical personnel, then sent to ESG reviewers for final approval. In specific cases in which a company's business activity is not clearly defined by MSCI ESG Research's methodology and there is no precedent, the case is escalated to the Head of Screening Research. Cases that require further interpretation or an update to the methodology are brought to the MSCI ESG Impact Screening and Methodology Committee.

Ongoing monitoring and update cycle

Updates to the MSCI EU Taxonomy alignment screen are based on updates to the MSCI Sustainable Impact Metrics, MSCI ESG Controversies and Global Norms and MSCI ESG Business Involvement Screening Research (BISR) assessments.

The frequency of updates for each are listed below:

MSCI Sustainable Impact Metrics

Companies are reviewed throughout the year, based on fiscal-year reporting cycles.

- Constituents of the MSCI ACWI Index are reviewed within one quarter of their annual filings.
 New constituents are processed within one quarter of their index inclusion.
- The rest of the coverage universe is reviewed on a rolling schedule, within 12 months of an issuer's filings. New issuers are processed within two quarters of when they enter the index or coverage.



MSCI ESG Controversies and Global Norms

Companies within the ESG Controversies coverage universe are reviewed, updated and
published on an ongoing basis. Controversy assessments, scores and flags can change as
part of two separate research and updates processes: daily monitoring and targeted reviews
of very severe and severe cases, typically on either a quarterly or annual basis, depending on
the severity.²⁰

BISR (including Tobacco and Controversial Weapons Involvement)

- MSCI ESG Research regularly reviews all companies in the BISR coverage universe.
 Companies are reviewed throughout the year, based on fiscal-year reporting cycles.
- Constituents of the MSCI ACWI Index are reviewed within one guarter of their annual filings.
- The rest of the coverage universe is reviewed on a rolling schedule, within 12 months of the issuers' annual filings.
- New constituents to the MSCI ACWI Index, MSCI US IMI or MSCI China Indexes are
 processed within one quarter of their index inclusion. All other additions are processed
 within two quarters of when they enter an index or brought under MSCI ESG Research's
 coverage.

Corporate actions and related changes

MSCI ESG Research analysts review and incorporate certain corporate actions for inclusion in company research. These corporate actions include: acquisitions, consolidations, mergers, name changes, public offerings and spin-offs.

• Spin-offs: both the company that spins off operations as well as any new business entity created are assessed on any relevant ESG factors.

Constituents of the MSCI ACWI Index are assessed as a standalone entity within one quarter.

All other entities are assessed as a stand-alone entity within two quarters.

 Mergers and acquisitions: We assess merged entities, acquiring companies and acquired companies on relevant ESG factors.

Constituents of the MSCI ACWI Index are assessed within one quarter of the transaction completion.

All other entities are assessed independently within two quarters of the transaction completion.

 Name changes: The name of the company in MSCI ESG Research's systems will reflect the new company name; however, the body of the company's report may continue to reflect the old name until the company undergoes a scheduled data review.

²⁰ Additional details can be found in: MSCI ESG Research, MSCI ESG Controversies and Global Norms Methodology – Process, 2023.



Revenue estimation process

When companies do not report exact revenue figures for a business activity covered within MSCI Sustainable Impact Solutions, MSCI ESG Research estimates revenue from the business activity based on available disclosed or publicly available data, including segment revenue, product lines, and product specifications. First, the reported business segment is identified. Next, any other activities in that segment(s) are identified and considered to calculate an estimated percentage of revenue for each. All available disclosures are considered, including the number and characteristics of product lines within each reported segment. In the absence of information indicating otherwise, an assumption will be made that these product lines all contribute equal revenue.

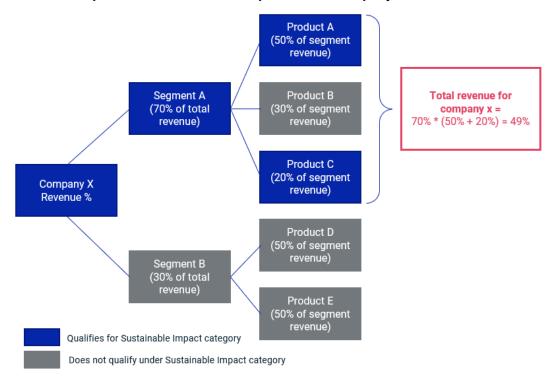


Exhibit 11: Example of revenue calculation process for Company X

Source: MSCI ESG Research

Taxonomy eligible revenue

In addition to screening EU Taxonomy aligned revenue, we provide data for company's EU Taxonomy eligible revenue and non-eligible revenue. Eligible revenue is an important component of the EU Taxonomy framework because it defines a company's level of involvement in activities that have the ability to positively contribute to an environmental objective, regardless of whether those activities meet any or all of the EU Taxonomy's technical criteria.



The EU defines economic activities based on the *Nomenclature Statistique des Activités Economiques dans la Communauté Européenne* (NACE) classification system. For each economic activity that has been defined by the EU Taxonomy, there are several NACE codes that may apply. A list of eligible NACE codes is available in the technical annex of the TEG report on EU Taxonomy regulation.

We collect issuer-reported revenue segment data based on SIC codes. In some cases, where further data granularity is needed, we make further distinctions within SIC codes to break down the revenue category more precisely. As an example, revenue data from the electric services SIC code is further broken down by us based on fuel source.

To estimate the percentage of revenue eligible for EU Taxonomy alignment, we map SIC codes to the EU Taxonomy activities and their respective NACE codes for climate change mitigation and adaptation. Through this process, we categorize eligible SIC codes and non-eligible SIC codes.

We estimate total eligible revenue as the sum of revenue percentages from SIC codes that we have classified as eligible. Estimated non-eligible revenue is 100% of estimated revenue minus estimated eligible revenue.

We also separately estimate the percentage of total revenue eligible for climate change mitigation and for climate change adaptation. In most cases, revenue is eligible for both mitigation and adaptation because the activities and eligible NACE codes overlap significantly. For this reason, revenue eligible for climate mitigation and revenue eligible for climate adaptation cannot be added together; to do so would mean double counting revenue. The revenue estimate for total eligible revenue takes this into consideration to ensure no double counting occurs.

Eligible revenue data review

Review by SIC code undergoes a complete quality review process. SIC-based revenue data is provided to us from a third-party data vendor and confirmed for accuracy by a second third-party data vendor.

Our Segment Data Platform (SDP) team further differentiates revenue segments into more-granular categories and completes its own quality checks before the data is used by MSCI ESG Research.

Company-reported EU Taxonomy data

In addition to the screening methodology for EU Taxonomy aligned and eligible revenue, MSCI's EU Taxonomy data set includes company-reported EU Taxonomy key performance indicators (KPIs).

For non-financial companies, the indicators are based on total turnover, total capital expenditures (CapEx), and total operating expenditures (OpEx). For financial companies, aligned and eligible assets are collected as a proportion of covered assets, in addition to underwriting activities for (re)insurance companies and commission fees for investment managers. Additionally, MSCI provides data on eligible assets and total assets.



There are four taxonomy templates per type of activity for financial companies (asset manager, credit institution, investment firm and (re)insurance). In December 2023, the EU Commission released a Draft Notice of particular relevance for financial companies' reporting practice.²¹ Amongst others, it addresses the situation where a company, i.e. a financial conglomerate or a mixed group, reports taxonomy KPIs for more than one type of activity. The Draft Notice requires the company to also report total consolidated KPIs, as average weighted by revenue per type of activity.

In practice, for Fiscal Year 2023, companies reporting taxonomy KPIs for more than one type of activity - e.g. asset manager and credit institutions - did not report a total KPI across types of activities. As a bridging solution and until companies report consolidated figures, MSCI ESG Research will release the taxonomy KPIs reported by the company's main type of activity -identified by its GICS Sub-industry classification – as the total for this company. The resulting factors will be indicated as 'Calculated' (see section Key Factors further down). Data reported by a company for its other types of activities will still be collected and accessible to clients at issuer level.

For investment firms, the Draft Notice requires a total weighted average of Taxonomy KPIs on activities of dealing on own account and on activities other than dealing on own account. Again, in reporting by such firms for 2023, this was rarely reported. Where needed, e.g. for aggregating financial companies' KPIs,²² MSCI ESG Research uses taxonomy KPIs related to dealing on own accounts only. This approach has been taken as dealing on other accounts is not allowing for active steering towards higher taxonomy alignment.

A complete list of company-reported metrics is available in the EU Taxonomy Factor Guide (see Appendix 5 for details). The list includes alignment data points for OpEx, CapEx, and turnover, as well as for eligible and non-eligible assets.²³ The Factor Guide includes the data points in a time series and most recent classification.

The Factor Guide also includes data points related to nuclear and gas activities as per the Complimentary Climate Delegated Act (EU) 2022/1214 and data points related to the four additional environmental objectives as per the Environmental Delegated Act (EU) 2023/2486).

It is important to note that MSCI collects EU Taxonomy reported data "as is" from the financial statements published publicly by the companies. MSCI offers various factors which show the status of the data collection process for the reported data. The following data points are important for filtering companies by date of latest reported information or determining the status of EU Taxonomy data for specific companies.

²¹ Draft Commission Notice on the interpretation and implementation of certain legal provisions of the Disclosures Delegated Act under Article 8 of the EU Taxonomy Regulation on the reporting of Taxonomy-eligible and Taxonomy-aligned economic activities and assets (third Commission Notice). December 21, 2023.

²² We have developed aggregated issuer factors based on reported data from financial and non-financial companies, in accordance with their respective GICS sector classification. These aggregated issuer factors will be utilized in the computation of portfolio and fund metrics.

²³ The templates for Asset Managers and Insurers do not ask for eligibility KPIs (only non-eligibility) and those for Credit Institutions and Investment Firms do not ask for non-eligibility KPIs (only eligibility). We may calculate those going forward but they are not part of the reported data set.



Exhibit 12: Factors pertaining to the data collection status of reported data

Factor Name	Factor Description
EU Taxonomy Reported - Info - Year	The most recent fiscal year of data reported for the metrics EU Taxonomy Reported - Research Completed, EU Taxonomy Reported - Source, and EU Taxonomy Reported - Assurance.
EU Taxonomy Reported - Research Completed	Issuer is in the standard MSCI EU Taxonomy coverage universe and has been researched on at least one EU Taxonomy-reported value in the reported fiscal year.

If the EU Taxonomy Reported – Research Completed flag is set to "T" (True) for a specific company for the most recent fiscal year, then it means that we have researched this company and data collection is complete for this specific company. If the EU Taxonomy Reported – Research Completed flag is set to "T" but there are blanks or no reported data for certain data points for that company, it means that the data collection is complete for that company for the recent fiscal year but the company did not disclose any data for those particular data points.

Key Factors

In addition to company-reported indicators, a complete list of key factors is available in the Factor Guide. The purpose of the key factors is to provide information on data that has been calculated by MSCI based on reported data. In addition, we have introduced a restatement factor that indicates whether the issuer has done a restatement of its EU Taxonomy KPIs for the corresponding fiscal year.²⁴

Non-Financial Reporting Directive

The Non-Financial Reporting Directive (NFRD) aims to provide transparency of social and environmental information and to improve non-financial disclosure for large companies including banks and insurance entities. The European Commission considers non-financial information "vital for managing change towards a sustainable global economy" and companies required to disclose EU Taxonomy key performance indicators are also subject to the NFRD regulation. MSCI partnered with a third-party vendor to provide an indicator designating companies which are in scope for the NFRD regulation. The methodology for flagging issuers subject to the regulation is based on company-disclosed data and eligibility thresholds set by the NFRD regulatory text.

²⁴ Note that in the EU's Draft Notice, Question 6, it is clarified that "Reporting financial undertakings would need to restate their own KPIs only to the extent the restated figures or KPIs from the counterparty undertakings have a material impact on the calculation of the reporting financial undertakings' KPIs." See footnote 22 for full reference.

²⁵ European Commission, Official Journal of the European Union L, "Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups," 330/1, November 15, 2014.

²⁶ Nora Hahnkamper-Vandenbulcke, Non-financial Reporting Directive. European Parliamentary Research Service, January 2021.



To be in scope for the NFRD, a public interest entity (PIE) must have more than 500 employees on average throughout the year as well as either (a) total assets of more than EUR 20 million and/or (b) a net turnover of more than EUR 40 million.²⁷ A PIE is an EU limited liability company which either has securities listed on an EU-regulated exchange, is a bank, and/or is an insurance company as specified in article 2(f) of the NFRD regulation. Only companies with listed securities within MSCI's EU Taxonomy coverage are considered for review of NFRD eligibility.

Exception from NFRD for subsidiaries

An exemption for NFRD reporting applies to companies which are part of a corporate group that at some level of majority ownership is required to publish a non-financial statement under the NFRD. This means that subsidiaries of PIEs are, in principle, excluded from the requirement to publish a non-financial statement under the NFRD. The EU Taxonomy KPIs are collected and displayed for entities included in our defined coverage universe. Subsidiaries of those entities are eligible for data mapping, subject to the requirements set out in the Entity Selection and Data Mapping Methodology Document.

Financial information

Financial information (i.e., net turnover, total assets and number of employees) necessary to determine the reporting obligation was retrieved from each company's annual report covering the consolidated figures for the relevant financial year:

- Net turnover means the amount of revenue derived from the core business activity i.e., sale of products and the provision of services — after deducting sales rebates and value added tax and other taxes directly linked to turnover.²⁹
- **Total assets** means the balance sheet total at the closing date of the financial year stated in the profit and loss account included in the consolidated financial statements.

Company-reported average number of employees can be presented using several definitions, such as employee headcount, full-time equivalents (FTEs), or number of employees at year end and average number of employees during the year. When both headcount and FTEs are provided, headcount is used. Moreover, when only end-of-year figures are provided, the average is estimated using the current and previous year-end employee numbers.

Any company which meets the outlined requirements is flagged as subject to the NFRD regulation.

²⁷ European Commission, *Official Journal of the European Union L*, "Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups," 330/1, November 15, 2014.

²⁸ An undertaking is a majority shareholder if it exercises significant influence over another undertaking through the control of the majority of its capital (more than 50%).

²⁹ As defined in Article 2(5) of: European Commission, *Official Journal of the European Union L*, "Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC," 182/19, June 29, 2013.



Exhibit 13: Factors for screening companies for NFRD assessment

Factor Name	Factor Description
NFRD Assessment Year – Time Series	Calendar year in which the company's Non-financial Reporting Directive (NFRD) eligibility is assessed.
NFRD Eligible – Time Series	Indicates (Yes/No) if the company fulfils the criteria to disclose non-financial information defined in the Non-Financial Reporting Directive (NFRD, Directive 2014/95/EU). The data is provided by fiscal year. Additional information on eligibility criteria is provided in the MSCI EU Taxonomy Methodology document.
NFRD Eligible	This factor indicates whether an entity with listed securities fulfils the criteria for companies that need to disclose the non-financial information defined in the Non-Financial Reporting Directive 2014/95/EU. The data is provided for the most recent fiscal year available.



Appendix 1: Taxonomy environmental objectives vs. MSCI Sustainable Impact Metrics environmental categories

This table represents MSCI ESG Research's best efforts to map the six environmental objectives outlined in the EU Taxonomy regulation and the TEG report and its technical annex against MSCI ESG Research's Environmental Impact subcategories.³⁰ For climate change mitigation and adaptation, a more detailed comparison between MSCI Environmental Impact Metrics and each activity in the Climate Delegated Act was completed (dark green checks in Exhibit 14 below). The mapping was done prior to the publication of the technical screening criteria for the four additional objectives (Environmental Delegated Act) in June 2023. Thus possible overlaps with the remaining objectives are indicated with light green checks in Exhibit 14. Activity-level definitions detailed in the technical annex were reviewed against the activity inclusions and exclusions of each of the Environmental Impact subcategories.³¹ 32

Exhibit 14: EU Taxonomy environmental objectives vs MSCI Environmental Impact Solutions³³

MSCI Sustainable Impact Metrics Categories	MSCI Sustainable Impact Metrics Subcategories	EU Taxonomy Environmental Objectives						
		Climate Change Mitigation	Climate Change Adaptation	Sustainable Use and Protection of Water and Marine Resources	Transition to a Circular Economy, Waste Prevention and Recycling	Pollution Prevention and Control	Protection and Restoration of Biodiversity and Ecosystem	
Alternative Energy: Includes products and services that support the transmission, distribution and generation of renewable energy and alternative fuels that reduce carbon and pollutant emissions. It excludes transition activities such as financing and investing in renewable energy and site assessment for wind and solar farms.	Biomass/Biogas	~						
	Natural Gas Cogeneration							
	Batteries/Energy Storage (alternative)	~						
	Fuel Cells	~						
	Solar	~						
	Wind	~						

³⁰ EU Technical Expert Group on Sustainable Finance, *Taxonomy Report: Technical Annex*, European Commission, 2020, 31-32; MSCI ESG Research, *MSCI Sustainable Impact Metrics Methodology*, 2021, available on MSCI's ESG Manager platform; and EU Technical Expert Group on Sustainable Finance, *Taxonomy: Final Report of the Technical Expert Group on Sustainable Finance*, European Commission, 2020, 56-63.

³¹ MSCI ESG Research, MSCI Sustainable Impact Metrics Methodology, 2021, available on MSCI's ESG Manager platform.

³² EU Technical Expert Group on Sustainable Finance, *Taxonomy: Final Report of the Technical Expert Group on Sustainable Finance*, European Commission, 2020, 56-63.

³³ This indicative mapping is provided to help illustrate how MSCI Environmental Impact Solutions data may match the EU Taxonomy's environmental objectives. It pre-dates the release of the Environmental Delegated Acts for the four additional environmental objectives in June 2023. The information is provided "as is" and does not constitute legal advice or binding interpretations of the EU Taxonomy DNSH criteria. MSCI's mapping to the indicators are based on assumptions and ongoing client feedback. This table aims to help clients seeking to understand our estimation approach for EU Taxonomy data by mapping MSCI ESG Research LLC data points to the EU Taxonomy framework's criteria.



MSCI Sustainable Impact	MSCI Sustainable	EU Taxonomy Environmental Objectives						
Metrics Categories	Impact Metrics Subcategories	Climate Change Mitigation	Climate Change Adaptation	Sustainable Use and Protection of Water and Marine Resources	Transition to a Circular Economy, Waste Prevention and Recycling	Pollution Prevention and Control	Protection and Restoration of Biodiversity and Ecosystem	
	Small Hydro	~						
	Wave Tidal	~						
	Geothermal	~						
	Waste-to-Energy	~						
Carbon Energy and Efficiency: Includes products and	LED/CFL) Lighting	~						
services that support the maximization of productivity in labor, transportation, power	Demand-side Management	~						
and domestic applications with minimal energy	Smart Grid	~						
consumption to ensure universal access to affordable, reliable and modern energy	Energy Efficient Industrial Automation	~						
services. It excludes corporate operational energy efficiency	Electric/Hybrid vehicles	~						
efforts, such as efficiency gains in manufacturing, transporting or distributing standard products or services, energy efficiency components of finished goods and consumer devices and appliances, cloud computing and automation technologies without notable energy benefits.	Clean Transport Infrastructure	~						
	Insulation	~	~					
	Superconductors	~						
	IT Optimization Svcs & Infrastructure Solutions	~						
	Batteries/Energy Storage (Conventional)	~						

Exhibit 15: EU Taxonomy environmental objectives vs MSCI Environmental Impact Solutions³⁴

MSCI Sustainable Impact Metrics Categories	MSCI Sustainable Impact Metrics Subcategories	EU Taxonomy Environmental Objectives					
		Climate Change Mitigation	Climate Change Adaptation	Sustainable Use and Protection of Water and Marine Resources	Transition to a Circular Economy, Waste Prevention and Recycling	Pollution Prevention and Control	Protection and Restoration of Biodiversity and Ecosystem
Green Building: Includes design, construction, redevelopment, retrofitting or acquisition of greencertified properties to promote mechanisms for raising capacity for effective climate change	Property Owners & Managers	~					
	Green Building Construction & Consultancy	~	~				

³⁴ This indicative mapping is provided to help illustrate how standard MSCI ESG & Climate data points may identify indicators associated with regulatory Climate and Net-Zero initiatives. The information is provided "as is" and does not constitute legal advice or binding interpretations of the said Climate and Net-Zero initiatives. MSCI's mapping to the indicators are based on assumptions and ongoing client feedback.



MSCI Sustainable Impact Metrics Categories	MSCI Sustainable Impact Metrics	EU Taxonomy Environmental Objectives					
	Subcategories	Climate Change Mitigation	Climate Change Adaptation	Sustainable Use and Protection of Water and Marine Resources	Transition to a Circular Economy, Waste Prevention and Recycling	Pollution Prevention and Control	Protection and Restoration of Biodiversity and Ecosystem
mitigation and adaptation. It excludes building materials, equipment or supplies that are included in the scope of other Sustainable Impact metrics and building that are only pre-certified.							
Sustainable Water: Includes products, services, infrastructure projects and technologies that resolve water scarcity and water quality issues, through minimizing and monitoring current water	Waste-water Treatment	~		~	~	~	
	Water Recycling Equipment & Services	~		~	~		
demand, improving the quality and availability of water supply to improve resource management in	Desalinization			~	~		
both domestic and industrial use. It excludes distribution of drinking	Drought-Resistant Seeds	~		~			~
water without measurable improvement to water quality or availability/water treatment for	Smart Metering Devices	~		~	~		
potability and generic water treatment chemicals.	Water Infrastructure & Distribution	~	~	~			
	Rainwater Harvesting	~	~	~			
Pollution Prevention & Control: Includes products, services,	Conventional Pollution Control					~	
infrastructure projects and technologies that reduce the volume of waste materials through	Low Toxicity/VOC				~	~	
recycling, minimize introduction of toxic substances and offer	Reuse & Recycling	~			~		
remediation of existing contaminants to significantly address pollution in all levels and	Waste Treatment	~			~		
its negative effects. It excludes recycled products.	Environmental Remediation				~		
Sustainable Agriculture: Includes revenue from forest and agricultural products that meet environmental and/or organic certification requirements to address significant biodiversity loss, pollution, land disturbance and water overuse. It excludes beef and beef products due to the high overall environmental impact of beef, forestry services (reforestation), services to assess the sustainability of a food product, products that use certified raw materials and buildings that use certified wood and building materials.	Material Certification	~					



Appendix 2: MSCI ESG Controversies

MSCI ESG Controversies assess ESG controversies, whether actual or alleged, involving publicly traded companies and fixed income issuers. The evaluation framework used to assess an ESG controversy is designed to be consistent with international norms represented in numerous widely accepted global conventions:

- The Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises,
- The United Nations Global Compact Principles (UNGC),
- The International Labour Organization's (ILO) conventions (Broad and Core Conventions), and
- The United Nations Guiding Principles on Business and Human Rights (UNGPs).

ESG controversy cases are scored based on a combination of severity, role and status. Within a given severity level, ongoing cases score lower than those that are Partially Concluded or Concluded, and those that are Direct score lower than those that are Indirect (Exhibit 16). The overall assessment is represented in a form of a score (0 representing direct involvement in one or more Very Severe, ongoing cases, 1 indicating no involvement in controversies) and a corresponding color (Red, Orange, Yellow, and Green).

Exhibit 16. MSCI ESG Controversies determination of case score and flag

		Status of the case				
Severity of the case	Company role	Ongoing	Partially Concluded	Concluded		
Very Severe	Direct	0	1	2		
Very Severe	Indirect	1	2	3		
Severe	Direct	1	2	3		
Severe	Indirect	2	3	4		
Moderate	Direct	4	5	6		
Moderate	Indirect	5	6	7		
Minor	Direct	6	7	8		
Minor	Indirect	7	8	9		

Source: MSCI ESG Controversy Methodology



Minimum safeguards

MSCI ESG Research has compared the OECD Guidelines, the UNGC Principles, the ILO conventions and the UNGPs against the issues assessed in MSCI Controversies. The OECD Guidelines outline practices and policies focusing on human rights, labor, environmental impact, community development, impacts on consumers, and governance and regulatory compliance. The UNGPs focus on concepts such as human rights, labor and governance and regulatory compliance. All these issues are addressed by the MSCI ESG Controversies data set, and there is considerable overlap between the MSCI ESG Controversies categories (KPIs) and the OECD Guidelines and the UNGPs.

Exhibit 17. MSCI Controversy KPIs alignment with international norms

Pillar or Sub- Pillar	OECD	UNGC	UNGP	ILO	MSCI ESG Controversies categories and Themes
Human rights	Х	х	х		Human Rights Violations, Civil Liberties, Censorship & Surveillance, Support for Controversial Regimes, Disputed Territories, Controversial Sourcing (e.g., conflict minerals), Indigenous Peoples Rights
Labor	Х	х	Х	х	Child Labor, Forced/Bonded/Slave Labor, Health & Safety, Kidnapping & Attacks, Working Conditions/Pay, Discrimination/Exclusion & Workforce Diversity, Harassment, Opposition to Unions /Unionization
Environment	Х	X			Land Use, Biodiversity & Endangered Species, Marine Biodiversity (e.g., overfishing), Electronic Waste, Packaging Material & Waste, Energy & Climate Change, Operational Waste, Pesticides/Persistent Organic Pollutants, Toxic Releases to Air/Water/Land (including oil spills)
Economic & business issues	х	х	х		Bribery & Corruption, Ethics & Fraud, Accounting, Money Laundering, Political Influence, Taxes avoidance, Director Ethics, Compensation Controversies, Censorship & Surveillance
Customer issues	х				Anticompetitive Practices, Predatory Lending, Fraud & Billing, Restricted Access to Products/Services, Misleading Claims, Pesticides, Chemical Safety, Product & Service Safety/Quality, Structural Integrity & Materials, Privacy & Data Security
Community development	Х				Impact on Local Communities, Political influence, Working Conditions / Pay, Discrimination / Exclusion, Workforce Diversity, Restricted Access to Services.

Source: MSCI ESG Research



Appendix 3: Methodology for portfolio- or fund-level EU Taxonomy aggregation

MSCI EU Taxonomy provides data supporting, among others, EU Taxonomy Annex IV and SFDR periodic product disclosure requirements. In the MSCI EU Taxonomy aggregation guide, we outline aggregation formulas that can be leveraged for entity-, portfolio- or fund-level reporting. The guide provides examples of how to leverage issuer-level EU Taxonomy data to produce portfolio-level metrics based on each type of required aggregation calculation. The worksheets follow a similar layout to the MSCI ESG Fund Ratings aggregation methodology.

The MSCI EU Taxonomy aggregation guide can be accessed via the link: MSCI EU Taxonomy Aggregation Guide - MSCI



Appendix 4: List of DNSH Indicators aggregated to EU Taxonomy technical screening criteria

The text in the "EU Taxonomy DNSH Technical Screening Criteria" column is taken from the Commission Delegated Regulation (EU) 2021/2139.

Exhibit 18: DNSH Indicators aggregated to EU Taxonomy technical screening criteria

EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Climate Change Adaptation	The physical climate risks that are material to the activity have been identified from those listed in the table in Section II of this Appendix (EU 2021/2139) by performing a robust climate risk and vulnerability assessment with the following steps: (a) screening of the activity to identify which physical climate risks from the list in Section II of this Appendix (EU 2021/2139) may affect the performance of the economic activity during its expected lifetime; (b) where the activity is assessed to be at risk from one or more of the physical climate risks listed in Section II of this Appendix (EU 2021/2139), a climate risk and vulnerability assessment to assess the materiality of the physical climate risks on the economic activity; (c) an assessment of adaptation solutions that can reduce the identified physical climate risk. The climate risk and vulnerability assessment is proportionate to the scale of the activity and its expected lifespan, such that: (a) for activities with an expected lifespan of less than 10 years, the assessment is performed, at least by using climate projections at the smallest appropriate scale; (b) for all other activities, the assessment is performed using the highest available resolution, state-of-the-art climate projections across the existing range of future scenarios (1) consistent with the expected lifetime of the activity, including, at least, 10 to 30 year climate projections scenarios for major investments. The climate projections and assessment of impacts are based on best practice and available guidance and take into account the state-of-the-art science for vulnerability and risk analysis and related methodologies in line with the most recent Intergovernmental Panel on Climate Change reports (2), scientific peer-reviewed publications, and open source (3) or paying models.	A1



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Climate Change Adaptation	For existing activities and new activities using existing physical assets, the economic operator implements physical and non-physical solutions ('adaptation solutions'), over a period of time of up to five years, that reduce the most important identified physical climate risks that are material to that activity. An adaptation plan for the implementation of those solutions is drawn up accordingly. For new activities and existing activities using newly built physical assets, the economic operator integrates the adaptation solutions that reduce the most important identified physical climate risks that are material to that activity at the time of design and construction and has implemented them before the start of operations.	A2
Climate Change Adaptation	The adaptation solutions implemented do not adversely affect the adaptation efforts or the level of resilience to physical climate risks of other people, of nature, of cultural heritage, of assets and of other economic activities; are consistent with local, sectoral, regional or national adaptation strategies and plans; and consider the use of nature-based solutions (4) or rely on blue or green infrastructure (5) to the extent possible.	A3
Sustainable Use and Protection of Water and Marine Resources	Environmental degradation risks related to preserving water quality and avoiding water stress are identified <u>and</u> addressed with the aim of achieving good water status and good ecological potential as defined in Article 2, points (22) and (23), of Regulation (EU) 2020/852, in accordance with Directive 2000/60/EC of the European Parliament and of the Council and a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders.	W1
Sustainable Use and Protection of Water and Marine Resources	Where an Environmental Impact Assessment is carried out in accordance with Directive 2011/92/EU of the European Parliament and of the Council (2) and includes an assessment of the impact on water in accordance with Directive 2000/60/EC, no additional assessment of impact on water is required, provided the risks identified have been addressed.	W2
Sustainable Use and Protection of Water and Marine Resources	In case of construction of offshore wind, the activity does not hamper the achievement of good environmental status, as set out in Directive 2008/56/EC, requiring that the appropriate measures are taken to prevent or mitigate impacts in relation to that Directive's Descriptor 11 (Noise/Energy), laid down in Annex I to that Directive and as set out in Decision (EU)2017/848 in relation to the relevant criteria and methodological standards for that descriptor	W3
Sustainable Use and Protection of Water and Marine Resources	The activity complies with the provisions of Directive 2000/60/EC, in particular with all the requirements laid down in Article 4 of the Directive.	W4
Sustainable Use and Protection of Water and Marine Resources	In accordance with Directive 2000/60/EC and in particular Articles 4 and 11 of that Directive, all technically feasible and ecologically relevant mitigation measures have been implemented to reduce adverse impacts on water as well as on protected habitats and species directly dependent on water.	W5



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Sustainable Use and Protection of Water and Marine Resources	Measures include, where relevant and depending on the ecosystems naturally present in the affected water bodies: (a) measures to ensure downstream and upstream fish migration (such as fish friendly turbines, fish guidance structures, state-of-the-art fully functional fish passes, measures to stop or minimise operation and discharges during migration or spawning); b) measures to ensure minimum ecological flow (including mitigation of rapid, short-term variations in flow or hydro-peaking operations) and sediment flow; (c) measures to protect or enhance habitats.	
Sustainable Use and Protection of Water and Marine Resources	The effectiveness of those measures is monitored in the context of the authorisation or permit setting out the conditions aimed at achieving good status or potential of the affected water body.	W6
Sustainable Use and Protection of Water and Marine Resources	In accordance with Article 4 of Directive 2000/60/EC and in particular paragraph 7 of that Article, prior to construction, an impact assessment of the project is carried out to assess all its potential impacts on the status of water bodies within the same river basin and on protected habitats and species directly dependent on water, considering in particular migration corridors, free-flowing rivers or ecosystems close to undisturbed conditions. The assessment is based on recent, comprehensive and accurate data, including monitoring data on biological quality elements that are specifically sensitive to hydromorphological alterations, and on the expected status of the water body as a result of the new activities, as compared to its current one. It assesses in particular the cumulated impacts of this new project with other existing or planned infrastructure in the river basin.	W7
Sustainable Use and Protection of Water and Marine Resources	On the basis of that impact assessment, it has been established that the plant is conceived, by design and location and by mitigation measures, so that it complies with one of the following requirements: (a) the plant does not entail any deterioration nor compromises the achievement of good status or potential of the specific water body it relates to; (b) where the plant risks to deteriorate or compromise the achievement of good status/potential of the specific water body it relates to, such deterioration is not significant, and is justified by a detailed cost benefit assessment demonstrating both of the following: (i) the reasons of overriding public interest or the fact that benefits expected from the planned hydropower plant outweigh the costs from deteriorating the status of water that are accruing to the environment and to society; (ii) the fact that the overriding public interest or the benefits expected from the plant cannot, for reasons of technical feasibility or disproportionate cost, be achieved by alternative means that would lead to a better environmental outcome (such as refurbishing of existing hydropower plants or use of technologies not disrupting river continuity)	W8



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Sustainable Use and Protection of Water and Marine Resources	All technically feasible and ecologically relevant mitigation measures are implemented to reduce adverse impacts on water as well as on protected habitats and species directly dependent on water. Mitigation measures include, where relevant and depending on the ecosystems naturally present in the affected water bodies: (a) measures to ensure downstream and upstream fish migration (such as fish friendly turbines, fish guidance structures, state-of the-art fully functional fish passes, measures to stop or minimise operation and discharges during migration or spawning); (b) measures to ensure minimum ecological flow (including mitigation of rapid, short-term variations in flow or hydro-peaking operations) and sediment flow; (c) measures to protect or enhance habitats.	W9
Sustainable Use and Protection of Water and Marine Resources	The plant does not permanently compromise the achievement of good status/potential in any of the water bodies in the same river basin district.	W10
Sustainable Use and Protection of Water and Marine Resources	In addition to the mitigation measures referred to above, and where relevant, compensatory measures are implemented to ensure that the project does not increase the fragmentation of water bodies in the same river basin district. This is achieved by restoring continuity within the same river basin district to an extent that compensates the disruption of continuity, which the planned hydropower plant may cause. Compensation starts prior to the execution of the project.	W11
Sustainable Use and Protection of Water and Marine Resources	Where the waste water is treated to a level suitable for reuse in agricultural irrigation, the required risk management actions to avoid adverse environmental impacts have been defined and implemented.	W12
Sustainable Use and Protection of Water and Marine Resources	Where installed, except for installations in residential building units, the specified water use for the following water appliances are attested by product datasheets, a building certification or an existing product label in the Union, in accordance with the technical specifications laid down in Appendix E to Annex I to this Regulation: (a) wash hand basin taps and kitchen taps have a maximum water flow of 6 litres/min;	W13
Sustainable Use and Protection of Water and Marine Resources	Where installed, except for installations in residential building units, the specified water use for the following water appliances are attested by product datasheets, a building certification or an existing product label in the Union, in accordance with the technical specifications laid down in Appendix E to Annex I to this Regulation: (b) showers have a maximum water flow of 8 litres/min;	W14



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Sustainable Use and Protection of Water and Marine Resources	Where installed, except for installations in residential building units, the specified water use for the following water appliances are attested by product datasheets, a building certification or an existing product label in the Union, in accordance with the technical specifications laid down in Appendix E to Annex I to this Regulation: (c) WCs, including suites, bowls and flushing cisterns, have a full flush volume of a maximum of 6 litres and a maximum average flush volume of 3,5 litres;	W15
Sustainable Use and Protection of Water and Marine Resources	Where installed, except for installations in residential building units, the specified water use for the following water appliances are attested by product datasheets, a building certification or an existing product label in the Union, in accordance with the technical specifications laid down in Appendix E to Annex I to this Regulation: (d) urinals use a maximum of 2 litres/bowl/hour. Flushing urinals have a maximum full flush volume of 1 litre.	W16
Sustainable Use and Protection of Water and Marine Resources	Any potential risks to the good status or the good ecological potential of bodies of water, including surface water and groundwater, or to the good environmental status of marine waters from the researched technology, product or other solution are evaluated and addressed.	W17
Protection and Restoration of Biodiversity and Ecosystems	In areas designated by the national competent authority for conservation or in habitats that are protected, the activity is in accordance with the conservation objectives for those areas.	B1
Protection and Restoration of Biodiversity and Ecosystems	There is no conversion of habitats specifically sensitive to biodiversity loss or with high conservation value, or of areas set aside for the restoration of such habitats in accordance with national law.	B2



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Protection and Restoration of Biodiversity and Ecosystems	Detailed information referred to in points 1.2(k) (Afforestation plan) and 1.4(i) (Forest management plan or equivalent system) include provisions for maintaining and possibly enhancing biodiversity in accordance with national and local provisions, including the following: (a) ensuring the good conservation status of habitat and species, maintenance of typical habitat species; (b) excluding the use or release of invasive alien species; (c) excluding the use of non-native species unless it can be demonstrated that: (i) the use of the forest reproductive material leads to favourable and appropriate ecosystem conditions (such as climate, soil criteria and vegetation zone, forest fire resilience); (ii) the native species currently present on the site are not anymore adapted to projected climatic and pedo-hydrological conditions. (d) ensuring the maintenance and improvement of physical, chemical and biological quality of the soil; (e) promoting biodiversity-friendly practices that enhance forests' natural processes; (f) excluding the conversion of high-biodiverse ecosystems into less biodiverse ones; (g) ensuring the diversity of associated habitats and species linked to the forest; (h) ensuring the diversity of stand structures and maintenance or enhancing of mature stage stands and dead wood.	B3
Protection and Restoration of Biodiversity and Ecosystems	The plan referred to in point 1 (Restoration plan) of this Section includes provisions for maintaining and possibly enhancing biodiversity in accordance with national and local provisions, including the following: (a) ensuring the good conservation status of habitat and species, maintenance of typical habitat species; (b) excluding the use or release of invasive species	
Protection and Restoration of Biodiversity and Ecosystems	An Environmental Impact Assessment (EIA) or screening (1) has been completed in accordance with Directive 2011/92/EU (2).	B4
Protection and Restoration of Biodiversity and Ecosystems	Where an EIA has been carried out, the required mitigation and compensation measures for protecting the environment are implemented.	B5
Protection and Restoration of Biodiversity and Ecosystems	For sites/operations located in or near biodiversity-sensitive areas (including the Natura 2000 network of protected areas, UNESCO World Heritage sites and Key Biodiversity Areas, as well as other protected areas), an appropriate assessment, where applicable, has been conducted and based on its conclusions the necessary mitigation measures are implemented.	B6



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Protection and Restoration of Biodiversity and Ecosystems	(In case of offshore wind) the activity does not hamper the achievement of good environmental status as set out in Directive 2008/56/EC, requiring that the appropriate measures are taken to prevent or mitigate impacts in relation to that Directive's Descriptors 1 (biodiversity) and 6 (seabed integrity), laid down in Annex I to that Directive, and as set out in Decision (EU) 2017/848 in relation to the relevant criteria and methodological standards for those descriptors.	B7
Protection and Restoration of Biodiversity and Ecosystems	Releases of ballast water containing non-indigenous species are prevented in line with the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM).	B8
Protection and Restoration of Biodiversity and Ecosystems	Measures are in place to prevent the introduction of non-indigenous species by biofouling of hull and niche areas of ships taking into account the IMO Biofouling Guidelines (258).	В9
Protection and Restoration of Biodiversity and Ecosystems	Noise and vibrations are limited by using noise reducing propellers, hull design or on-board machinery in line with the guidance given in the IMO Guidelines for the Reduction of Underwater Noise (259).	B10
Protection and Restoration of Biodiversity and Ecosystems	In the Union, the activity does not hamper the achievement of good environmental status, as set out in Directive 2008/56/EC, requiring that the appropriate measures are taken to prevent or mitigate impacts in relation to that Directive's Descriptors 1 (biodiversity), 2 (non-indigenous species), 6 (seabed integrity), 8 (contaminants), 10 (marine litter), 11 (Noise/Energy) and as set out in Commission Decision (EU) 2017/848 in relation to the relevant criteria and methodological standards for those descriptors, as applicable.	B11
Protection and Restoration of Biodiversity and Ecosystems	Where relevant, maintenance of vegetation along road transport infrastructure ensures that invasive species do not spread.	B12
Protection and Restoration of Biodiversity and Ecosystems	Mitigation measures have been implemented to avoid wildlife collisions	B13
Protection and Restoration of Biodiversity and Ecosystems	The new construction is not built on one of the following:(a) arable land and crop land with a moderate to high level of soil fertility and below ground biodiversity as referred to the EU LUCAS survey (294);(b) greenfield land of recognised high biodiversity value and land that serves as habitat of endangered species (flora and fauna) listed on the European Red List (295) or the IUCN Red List (296);(c) land matching the definition of forest as set out in national law used in the national greenhouse gas inventory, or where not available, is in accordance with the FAO definition of forest (297).	B14



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Protection and Restoration of Biodiversity and Ecosystems	Any potential risks to the good condition or resilience of ecosystems or to the conservation status of habitats and species, including those of Union interest, from the researched technology, product or other solution are evaluated and addressed.	B15
Transition to a Circular Economy	The silvicultural change induced by the activity on the area covered by the activity is not likely to result in a significant reduction of sustainable supply of primary forest biomass suitable for the manufacturing of wood-based products with long-term circularity potential. This criterion may be demonstrated through the climate benefits analysis referred to in point (2).	C1
Transition to a Circular Economy	Peat extraction sed.	C2
Transition to a Circular Economy	The activity assesses the availability of and, where feasible, adopts techniques that support: (a) reuse and use of secondary raw materials and re-used components in products manufactured; (b) design for high durability, recyclability, easy disassembly and adaptability of products manufactured; (c) waste management that prioritises recycling over disposal, in the manufacturing process; (d) information on and traceability of substances of concern throughout the lifecycle of the manufactured products.	C3
Transition to a Circular Economy	The activity assesses availability of and, where feasible, uses equipment and components of high durability and recyclability and that are easy to dismantle and refurbish.	
Transition to a Circular Economy	Recycling processes meet the conditions set out in Article 12 of Directive 2006/66/EC of the European Parliament and of the Council and in Annex III, Part B, to that Directive, including the use of the latest relevant Best Available Techniques, the achievement of the efficiencies specified for lead-acid batteries, nickel-cadmium batteries and for other chemistries. These processes ensure the recycling of the metal content to the highest degree that is technically feasible while avoiding excessive costs. Where applicable, facilities carrying out recycling processes meet the requirements laid down in Directive 2010/75/EU of the European Parliament and of the Council.	C4
Transition to a Circular Economy	A waste management plan is in place and ensures maximal reuse or recycling at end of life in accordance with the waste hierarchy, including through contractual agreements with waste management partners, reflection in financial projections or official project documentation.	C5
Transition to a Circular Economy	Measures are in place to manage waste in accordance with the waste hierarchy, in particular during maintenance.	
Transition to a Circular Economy	Measures are in place to manage waste, in accordance with the waste hierarchy, both in the use phase (maintenance) and the end-of-life of the fleet, including through reuse and recycling of batteries and electronics (in particular critical raw materials therein).	



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Transition to a Circular Economy	Measures are in place to manage waste, both in the use phase and in the end- of-life of the vessel, in accordance with the waste hierarchy, including the control and management of hazardous materials on board of ships and ensuring their safe recycling.	
Transition to a Circular Economy	For battery-operated vessels, those measures include reuse and recycling of batteries and electronics, including critical raw materials therein.	
Transition to a Circular Economy	A waste management plan is in place and ensures maximal recycling at end of life of electrical and electronic equipment, including through contractual agreements with recycling partners, reflection in financial projections or official project documentation.	
Transition to a Circular Economy	Separately collected waste fractions are not mixed in waste storage and transfer facilities with other waste or materials with different properties.	C6
Transition to a Circular Economy	Vehicles are (a) reusable or recyclable to a minimum of 85 % by weight; Vehicles are (b) reusable or recoverable to a minimum of 95 % by weight	C7
Transition to a Circular Economy	For existing ships above 500 gross tonnage and the new-built ones replacing them, the activity complies with the requirements of Regulation (EU) No 1257/2013 of the European Parliament and of the Council (249) relating to the inventory of hazardous materials.	C8
Transition to a Circular Economy	The scrap ships are recycled in facilities included on the European List of ship recycling facilities as laid down in Commission Decision 2016/2323	C9
Transition to a Circular Economy	The activity complies with Directive (EU) 2019/883 of the European Parliament and of the Council (251) as regards the protection of the marine environment against the negative effects from discharges of waste from ships.	C10
Transition to a Circular Economy	The ship is operated in accordance with Annex V to the International Convention for the Prevention of Pollution from Ships of 2 November 1973 (the IMO MARPOL Convention), in particular with a view to producing reduced quantities of waste and to reducing legal discharges, by managing its waste in a sustainable and environmentally sound manner.	C11
Transition to a Circular Economy	At least 70 % (by weight) of the non-hazardous construction and demolition waste (excluding naturally occurring material referred to in category 17 05 04 in the European List of Waste established by Commission Decision 2000/532/EC (271)) generated on the construction site is prepared for reuse, recycling and other material recovery, including backfilling operations using waste to substitute other materials, in accordance with the waste hierarchy and the EU Construction and Demolition Waste Management Protocol (272).	C12



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Transition to a Circular Economy	Operators limit waste generation in processes related to construction and demolition, in accordance with the EU Construction and Demolition Waste Management Protocol, taking into account best available techniques and using selective demolition to enable removal and safe handling of hazardous substances and facilitate reuse and high-quality recycling by selective removal of materials, using available sorting systems for construction and demolition waste.	C13
Transition to a Circular Economy	Building designs and construction techniques support circularity and in particular demonstrate, with reference to ISO 20887 (288) or other standards for assessing the disassembly or adaptability of buildings, how they are designed to be more resource efficient, adaptable, flexible and dismantleable to enable reuse and recycling.	C14
Transition to a Circular Economy	The equipment used meets the requirements laid down in Directive 2009/125/EC for servers and data storage products	C15
Transition to a Circular Economy	The equipment used does not contain the restricted substances listed in Annex II to Directive 2011/65/EU of the European Parliament and of the Council (309), except where the concentration values by weight in homogeneous materials do not exceed the maximum values listed in that Annex.	C16
Transition to a Circular Economy	At its end of life, the equipment undergoes preparation for reuse, recovery or recycling operations, or proper treatment, including the removal of all fluids and a selective treatment in accordance with Annex VII to Directive 2012/19/EU of the European Parliament and of the Council	C17
Transition to a Circular Economy	Any potential risks to the circular economy objectives from the researched technology, product or other solution are evaluated and addressed, by considering the types of potential significant harm as set out in Article 17(1), point. (d), of Regulation (EU) 2020/852.	C18
Pollution Prevention and Control	The use of pesticides is reduced.	P1
Pollution Prevention and Control	Alternative approaches or techniques, which may include non-chemical alternatives to pesticides, are favoured, in accordance with Directive 2009/128/EC of the European Parliament and of the Council (13), with exception of occasions where the use of pesticides is needed to control outbreaks of pests and of diseases.	P2
Pollution Prevention and Control	The activity minimises the use of fertilisers and does not use manure.	P3
Pollution Prevention and Control	The activity complies with Regulation (EU) 2019/1009 of the European Parliament and of the Council (14) or national rules on fertilisers or soil improvers for agricultural use.	P4



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Pollution Prevention and Control	Well documented and verifiable measures are taken to avoid the use of active ingredients that are listed in Annex I, part A, of Regulation (EU) 2019/1021 (15) of the European Parliament and of the Council (16), the Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade (17), the Minamata Convention on Mercury (18), the Montreal Protocol on Substances that Deplete the Ozone Layer (19), and of active ingredients that are listed as classification Ia ('extremely hazardous') or Ib ('highly hazardous') in the WHO Recommended Classification of Pesticides by Hazard (20). The activity complies with the relevant national law on active ingredients.	P5
Pollution Prevention and Control	Pollution of water and soil is prevented and cleaning up measures are undertaken when pollution occurs.	P6
Pollution Prevention and Control	The activity does not use pesticides or fertilisers.	P7
Pollution Prevention and Control	The activity does not lead to the manufacture, placing on the market or use of: (a) substances, whether on their own, in mixtures or in articles, listed in Annexes I or II to Regulation (EU) 2019/1021, except in the case of substances present as an unintentional trace contaminant;	P8
Pollution Prevention and Control	The activity does not lead to the manufacture, placing on the market or use of: (b) mercury and mercury compounds, their mixtures and mercury-added products as defined in Article 2 of Regulation (EU) 2017/852;	P9
Pollution Prevention and Control	The activity does not lead to the manufacture, placing on the market or use of: (c) substances, whether on their own, in mixture or in articles, listed in Annex I or II to Regulation (EC) No 1005/2009;	P10
Pollution Prevention and Control	The activity does not lead to the manufacture, placing on the market or use of: (d) substances, whether on their own, in mixtures or in an articles, listed in Annex II to Directive 2011/65/EU, except where there is full compliance with Article 4(1) of that Directive;	P11
Pollution Prevention and Control	The activity does not lead to the manufacture, placing on the market or use of: (e) substances, whether on their own, in mixtures or in an article, listed in Annex XVII to Regulation (EC) 1907/2006, except where there is full compliance with the conditions specified in that Annex;	P12
Pollution Prevention and Control	(f) substances, whether on their own, in mixtures or in an article, meeting the criteria laid down in Article 57 of Regulation (EC) 1907/2006 and identified in accordance with Article 59(1) of that Regulation, except where their use has been proven to be essential for the society;	P13
Pollution Prevention and Control	The activity does not lead to the manufacture, placing on the market or use of: (g) other substances, whether on their own, in mixtures or in an article, that meet the criteria laid down in Article 57 of Regulation (EC) 1907/2006, except where their use has been proven to be essential for the society.	P14



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Pollution Prevention and Control	Where applicable, vehicles do not contain lead, mercury, hexavalent chromium and cadmium, in accordance with Directive 2000/53/EC of the European Parliament and of the Council (90).	P15
Pollution Prevention and Control	Batteries comply with the applicable sustainability rules on the placing on the market of batteries in the Union, including restrictions on the use of hazardous substances in batteries, including Regulation (EC) No 1907/2006 of the European Parliament and of the Council (93) and Directive 2006/66/EC.	P16
Pollution Prevention and Control	Emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions, <u>including</u> the best available techniques (BAT) conclusions for the production of cement, lime and magnesium oxide.	P17
Pollution Prevention and Control	Emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions, including the best available techniques (BAT) conclusions for the non-ferrous metals industries.	
Pollution Prevention and Control	Emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions, including the best available techniques (BAT) conclusions for iron and steel production.	
Pollution Prevention and Control	Emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the relevant best available techniques (BAT) conclusions, including: (a) the best available techniques (BAT) conclusions for the production of chloralkali and the best available techniques (BAT) conclusions for common waste water and waste gas treatment/management systems in the chemical sector; (b) the best available techniques (BAT) conclusions for the refining of mineral oil and gas.	
Pollution Prevention and Control	Emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions, including: (a) the Best Available Techniques Reference Document (BREF) for the Large Volume Inorganic Chemicals – Solids and Others industry (126); (b) the best available techniques (BAT) conclusions for common waste water and waste gas treatment/management systems in the chemical sector.	
Pollution Prevention and Control	Emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions, including: (a) the Best Available Techniques Reference Document (BREF) for the manufacture of Large Volume Inorganic Chemicals - Ammonia, Acids and Fertilisers; (b) the best available techniques (BAT) conclusions for common waste water and waste gas treatment/management systems in the chemical sector.	



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Pollution Prevention and Control	Emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions, including the best available techniques (BAT) conclusions for large combustion plants.	
Pollution Prevention and Control	For <u>installations falling within the scope of Directive 2010/75/EU</u> of the European Parliament and of the Council, emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions, <u>including</u> the best available techniques (BAT) conclusions for large combustion plants.	
Pollution Prevention and Control	For composting plants treating over 75 tonnes per day, emissions to air and water are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out for aerobic treatment of waste in the latest relevant best available techniques (BAT) conclusions, including the best available techniques (BAT) conclusions for waste treatment.	P18
Pollution Prevention and Control	No significant cross-media effects occur.	P19
Pollution Prevention and Control	For manufacture of cement employing hazardous wastes as alternative fuels, measures are in place to ensure the safe handling of waste.	P20
Pollution Prevention and Control	Measures are in place to minimise toxicity of anti-fouling paint and biocides as laid down in Regulation (EU) No 528/2012 of the European Parliament and of the Council (161), which implements in Union law the International Convention on the Control of Harmful Anti-fouling Systems on Ships adopted on 5 October 2001	P21
Pollution Prevention and Control	For the operation of high-enthalpy geothermal energy systems, adequate abatement systems are in place to reduce emission levels in order not to hamper the achievement of air quality limit values set out in Directive 2004/107/EC of the European Parliament and of the Council (166) and Directive 2008/50/EC of the European Parliament and of the Council.	P22
Pollution Prevention and Control	For combustion plants with thermal input greater than 1 MW but below the thresholds for the BAT conclusions for large combustion plants to apply, emissions are below the emission limit values set out in Annex II, part 2, to Directive (EU) 2015/2193 of the European Parliament and of the Council.	P23
Pollution Prevention and Control	For plants in zones or parts of zones not complying with the air quality limit values laid down in Directive 2008/50/EC, measures are implemented to reduce emission levels taking into account the results of the information exchange which are published by the Commission in accordance with Article 6, paragraphs 9 and 10, of Directive (EU) 2015/2193.	P24



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Pollution Prevention and Control	For anaerobic digestion of organic material, where the produced digestate is used as fertiliser or soil improver, either directly or after composting or any other treatment, it meets the requirements for fertilising materials set out in Component Material Categories (CMC) 4 and 5 in Annex II to Regulation (EU) 2019/1009 or national rules on fertilisers or soil improvers for agricultural use.	P25
Pollution Prevention and Control	In case of anaerobic digestion of organic material, where the produced digestate is used as fertiliser or soil improver, either directly or after composting or any other treatment, it meets the requirements for fertilising materials set out in Component Material Categories (CMC) 4 and 5 for digestate or CMC 3 for compost, as applicable, in Annex II to Regulation EU 2019/1009 or national rules on fertilisers or soil improvers for agricultural use.	
Pollution Prevention and Control	The produced digestate meets the requirements for fertilising materials set out in Component Material Categories (CMC) 4 and 5 for digestate or CMC 3 for compost, as applicable, in Annex II to Regulation (EU) 2019/1009, or national rules on fertilisers or soil improvers for agricultural use.	P26
Pollution Prevention and Control	The compost produced meets the requirements for fertilising materials set out in Component Material Category 3 in Annex II to Regulation (EU) 2019/1009 or national rules on fertilisers or soil improvers for agricultural use.	P27
Pollution Prevention and Control	For anaerobic digestion plants treating <u>over 100 tonnes per day</u> , emissions to air and water are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set for anaerobic treatment of waste in the latest relevant best available techniques (BAT) conclusions, including the best available techniques (BAT) conclusions for waste treatment.	P28
Pollution Prevention and Control	Emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set for anaerobic treatment of waste in the latest relevant best available techniques (BAT) conclusions, including the best available techniques (BAT) conclusions for waste treatment.	P29
Pollution Prevention and Control	Overground high voltage lines: (a) for construction site activities, activities follow the principles of the IFC General Environmental, Health, and Safety Guidelines.	P30
Pollution Prevention and Control	Overground high voltage lines: (b) activities respect applicable norms and regulations to limit impact of electromagnetic radiation on human health, including for activities carried out in the Union, the Council recommendation on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz) and for activities carried out in third countries, the 1998 Guidelines of International Commission on Non-Ionizing Radiation Protection (ICNIRP).	P31
Pollution Prevention and Control	Activities do not use PCBs polyclorinated biphenyls.	P32
Pollution Prevention and Control	In the case of storage above five tonnes, the activity complies with Directive 2012/18/EU of the European Parliament and of the Council.	P33



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Pollution Prevention and Control	For biogas production, a gas-tight cover on the digestate storage is applied.	P34
Pollution Prevention and Control	Fans, compressors, pumps and other equipment used which is covered by Directive 2009/125/EC of the European Parliament and of the Council comply, where relevant, with the top class requirements of the energy label, and with implementing regulations under that Directive and represent the best available technology.	P35
Pollution Prevention and Control	Pumps and the kind of equipment used, which is covered by Ecodesign and Energy labelling comply, where relevant, with the top class requirements of the energy label laid down in Regulation (EU) 2017/1369, and with implementing regulations under Directive 2009/125/EC and represent the best available technology	P36
Pollution Prevention and Control	For air to air heat pumps with rated capacity of 12 kW or below, indoor and outdoor sound power levels are below the threshold set out in Commission Regulation (EU) No 206/2012.	P37
Pollution Prevention and Control	Discharges to receiving waters meet the requirements laid down in Council Directive 91/271/EEC or as required by national provisions stating maximum permissible pollutant levels from discharges to receiving waters.	P38
Pollution Prevention and Control	Appropriate measures have been implemented to avoid and mitigate excessive storm water overflows from the waste water collection system, which may include nature-based solutions, separate storm water collection systems, retention tanks and treatment of the first flush.	P39
Pollution Prevention and Control	Sewage sludge is used in accordance with Council Directive 86/278/EEC or as required by national law relating to the spreading of sludge on the soil or any other application of sludge on and in the soil.	P40
Pollution Prevention and Control	Where the resulting digestate is intended for use as fertiliser or soil improver, its nitrogen content (with tolerance level ± 25 %) is communicated to the buyer or the entity in charge of taking off the digestate.	P41
Pollution Prevention and Control	The Nitrogen content (with tolerance level \pm 25 %) of the digestate used as fertiliser or soil improver is communicated to the buyer or the entity in charge of taking off the digestate.	P41
Pollution Prevention and Control	The site has a system in place that prevents leachate reaching groundwater.	P42
Pollution Prevention and Control	The permanent closure and remediation as well as the after-care of old landfills, where the landfill gas capture system is installed, are carried out in accordance with: (a) general requirements set out in Annex I to Directive 1999/31/EC;	P43



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Pollution Prevention and Control	The permanent closure and remediation as well as the after-care of old landfills, where the landfill gas capture system is installed, are carried out in accordance with: (b) control and monitoring procedures set out in Annex III to that Directive.	P44
Pollution Prevention and Control	The activity complies with Directive 2009/31/EC.	P45
Pollution Prevention and Control	Engines for the propulsion of railway locomotives (RLL) and engines for the propulsion of railcars (RLR) comply with emission limits set out in Annex II to Regulation (EU) 2016/1628 of the European Parliament and of the Council.	P46
Pollution Prevention and Control	Engines in vessels comply with emission limits set out in Annex II to Regulation (EU) 2016/1628 (including vessels meeting those limits without type-approved solutions such as through after-treatment)	P47
Pollution Prevention and Control	For road vehicles of categories M, tyres comply with external rolling noise requirements in the highest populated class and with Rolling Resistance Coefficient (influencing the vehicle energy efficiency) in the two highest populated classes as set out in Regulation (EU) 2020/740 of the European Parliament and of the Council and as can be verified from the European Product Registry for Energy Labelling (EPREL).	P48
Pollution Prevention and Control	For road vehicles of categories M <u>and N</u> , tyres comply with external rolling noise requirements in the highest populated class and with Rolling Resistance Coefficient (influencing the vehicle energy efficiency) in the two highest populated classes as set out in Regulation (EU) 2020/740 and as can be verified from the European Product Registry for Energy Labelling (EPREL).	
Pollution Prevention and Control	Where applicable, vehicles comply with the requirements of the most recent applicable stage of the Euro VI <u>heavy duty</u> emission type approval set out in accordance with Regulation (EC) No 595/2009.	P49
Pollution Prevention and Control	Vehicles comply with the requirements of the most recent applicable stage of the Euro 6 light-duty emission type-approval set out in accordance with Regulation (EC) No. 715/2007.	P50
Pollution Prevention and Control	Vehicles comply with the emission thresholds for clean light-duty vehicles set out in Table 2 of the Annex to Directive 2009/33/EC of the European Parliament and of the Council.	P51
Pollution Prevention and Control	Vehicles comply with Regulation (EU) No 540/2014 of the European Parliament and of the Council.	P52
Pollution Prevention and Control	As regards the reduction of sulphur oxides emissions and particulate matters, vessels comply with Directive (EU) 2016/802 of the European Parliament and of the Council, and with Regulation 14 (253) of Annex VI to the IMO MARPOL Convention.	P53



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Pollution Prevention and Control	Sulphur in fuel content does not exceed 0,5 % in mass (the global sulphur limit) and 0,1 % in mass in emission control area (ECA) designated in the North and Baltic Seas by the IMO.	P54
Pollution Prevention and Control	As regards nitrogen oxides (NOx) emissions, vessels comply with Regulation 13 (255) of Annex VI to IMO MARPOL Convention.	P55
Pollution Prevention and Control	Tier li NOx requirement applies to ships constructed after 2011.	P56
Pollution Prevention and Control	Only while operating in NOx emission control areas established under IMO rules, ships constructed after 1 January 2016 comply with stricter engine requirements (Tier III) reducing NOx emissions.	P57
Pollution Prevention and Control	Discharges of black and grey water comply with Annex IV to the IMO MARPOL Convention.	P58
Pollution Prevention and Control	Measures are in place to minimise toxicity of anti-fouling paint and biocides as laid down in Regulation (EU) No 528/2012, which implements in Union law the International Convention on the Control of Harmful Anti-fouling Systems on Ships adopted on 5 October 2001.	P59
Pollution Prevention and Control	Measures are taken to reduce noise, dust and pollutant emissions during construction or maintenance works.	P60
Pollution Prevention and Control	Where appropriate, given the sensitivity of the area affected, in particular in terms of the size of population affected, noise and vibrations from use of infrastructure are mitigated by introducing open trenches, wall barriers, or other measures and comply with Directive 2002/49/EC of the European Parliament and of the Council.	P61
Pollution Prevention and Control	Building components and materials used in the construction that may come into contact with occupiers (289) emit less than 0,06 mg of formaldehyde per m3 of material or component upon testing in accordance with the conditions specified in Annex XVII to Regulation (EC) No 1907/2006.	P62
Pollution Prevention and Control	Building components and materials used in the construction that may come into contact with occupiers (289) emit less than 0,001 mg of other categories 1A and 1B carcinogenic volatile organic compounds per m3 of material or component, upon testing in accordance with CEN/EN 16516 (290) or ISO 16000-3:2011 (291) or other equivalent standardized test conditions and determination methods.	P63
Pollution Prevention and Control	Where the new construction is located on a potentially contaminated site (brownfield site), the site has been subject to an investigation for potential contaminants, for example using standard ISO 18400.	P64
Pollution Prevention and Control	In case of addition of thermal insulation to an existing building envelope, a building survey is carried out in accordance with national law by a competent specialist with training in asbestos surveying.	P65



EU Taxonomy Environmental Objectives	EU Taxonomy DNSH Technical Screening Criteria	MSCI Short Code
Pollution Prevention and Control	Any stripping of lagging that contains or is likely to contain asbestos, breaking or mechanical drilling or screwing or removal of insulation board, tiles and other asbestos containing materials is carried out by appropriately trained personnel, with health monitoring before, during and after the works, in accordance with national law.	P66
Pollution Prevention and Control	Any potential risks to generate a significant increase in the emissions of pollutants to air, water or land from the researched technology, product or other solution are evaluated and addressed.	P67



Appendix 5: EU Taxonomy Factor Guide

The EU Taxonomy factor guide includes a complete list of reported data points that are mapped to the different requirements in the regulatory reporting templates.

MSCI created this indicative mapping to help clients navigate the factors that MSCI created related to the EU Taxonomy regulation (more than 1,600 factors). It describes the various categories and subcategories MSCI is using to categorize the EU Taxonomy related factors and lists them under their respective categories.

The information is provided "as is" and does not constitute legal advice or binding interpretations of the EU Taxonomy regulation. MSCI's mapping to the indicators are based on assumptions and ongoing client feedback. The file is subject to change and does not reflect a comprehensive list of MSCI ESG Research and MSCI data sources.

This mapping aims to help clients seeking to leverage the MSCI EU Taxonomy factors by mapping them to the EU Taxonomy reporting templates.

The MSCI EU Taxonomy factor guide can be accessed via the link below:

MSCI EU Taxonomy Reported Factor Guide

MSCI also offers a detailed user guide to help users understand and fulfill the reporting templates using the reported data points. This reported data user guide can be accessed via the link below:

MSCI EU Taxonomy Reported Data User Guide



Contact us

msci.com/contact-us

AMERICAS

United States + 1 888 588 4567 *
Canada + 1 416 687 6270
Brazil + 55 11 4040 7830
Mexico + 52 81 1253 4020

EUROPE, MIDDLE EAST & AFRICA

South Africa + 27 21 673 0103 Germany + 49 69 133 859 00 Switzerland + 41 22 817 9777 United Kingdom + 44 20 7618 2222 Italy + 39 02 5849 0415 France + 33 17 6769 810

ASIA PACIFIC

* toll-free

China +86 21 61326611 Hong Kong +852 2844 9333 + 91 22 6784 9160 India Malaysia 1800818185 * South Korea + 82 70 4769 4231 Singapore + 65 67011177 Australia +612 9033 9333 Taiwan 008 0112 7513 * Thailand 0018 0015 6207 7181 * +81345790333 Japan

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