Webinar Series

EU Taxonomy Explored: Talks with TEG Experts Manufacturing







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TAXONON Technical Report

Webinar 4: Thursday 16 April 15:00 CEST

(Environmental) Sustainability: Definitions

Sustainable Development





Source: United Nations Environment Programme Inquiry.



EU Taxonomy

Objective

Provide a classification tool to help investors and companies to make informed investment decisions on environmentally sustainable activities for the purpose of determining the degree of sustainability of an investment

We need a taxonomy that is robust, science-based, and ambitious, in line with our shared environmental objectives, including going towards climate neutrality in line with the Paris agreement

Use: is it obligatory ?

- Obligatory disclosures for institutional investors and asset managers marketing investment products as 'green'
- EU Member States are required to use the EU Taxonomy when creating public labelling schemes for 'green' investment products and corporate bonds

Further voluntary use by a range of actors

What is it?

A list of economic activities that are environmentally sustainable. To be included in the Taxonomy, an economic activity must meet the following criteria:

substantially contribute to 1 of the 6 objectives

Do not significantly harm any of the other 5 obj.

Minimum social* safeguards

Climate change mitigation Climate change adaptation 2.

6 environmental objectives

- Sustainable use & protection of water 3.
- Circular economy, waste prevent & 4. recycling
- 5. Pollution prevention and control
- Protection of healthy ecosystems 6.

What is it not?

- A rating of good or bad companies
- A mandatory list to invest in
- Making a judgement on the financial performance of an investment
- Inflexible or static



* Observe International Labour Organisation (ILO) core labour conventions

What has been agreed?

Taxonomy regulation



From:	Presidency
To:	Permanent Representatives Committee
No. Cion doc.:	COM (2018) 353 final
Subject:	Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the establishment of a framework to facilitate sustainable investment
	- Approval of the final compromise text

- Final compromise text 17
 December 2019
- Provides framework
- Allows for the progressive development of an EU-Wide classification system
- Sets out classification of economical activities that qualify as environmentally sustainable

What framework is provided?

Framework for classification of economic activities

Six environmental objectives

- 1. Climate change mitigation
- 2. Climate change adaptation
- 3. Sustainable use and protection of water and marine resources
- 4. Transition to a circular economy
- 5. Pollution prevention and control
- 6. Protection and restoration of biodiversity and ecosystems

Four requirements

- 1. Substantial contribution to at least one of the 6 objectives
- 2. No significant harm to any other environmental objectives
- 3. Compliance with robust and science based technical screening criteria
- 4. Compliance with minimal social and governance safeguards

Framework for classification of economic activities that are environmental sustainable

Type of activity	Criteria	Examples
Deep green: In and of themselves contribute substantially to one of the six environmental objectives	Likely to be stable and long-term	 Near to zero carbon manufacturing processes E.g. by high level of recycling or electrification using RE
Transition: Activities that contribute to a transition to a zero net emissions/green economy in 2050 but are not currently operating at that level.	Subject to 3-year revision, tending towards zero emissions.	 Hydrogen manufacturing < 5.8 tCO2e/t of t hydrogen Steel manufacturing, Electric Arc Furnace (EAF) high alloy steel < 0.352 tCO2e/t product
Enabling: Activities that enable those above.	Likely to be stable and long-term (already deep green) or subject to regular revision tending to zero (enabling activities that contribute to transition).	 Manufacture of wind turbines Installing pipelines for hydrogen transport Manufacturing of cars <50g CO2/km

Transition from environmentally harmful performance







What's in the Taxonomy for manufacturing?

Do No Significant Harm criteria identified?

Manufacturing	Can climate change mitigation criteria change in future?	Adaptatio n	Water	Circular economy	Pollution	Ecosystem s
Manufacturing of low carbon technologies	~	~		~	~	
Manufacture of Cement	~	~	~	~	~	~
Manufacture of Aluminium	~	~	~	~	~	~
Manufacture of Iron and Steel	~	~	~	~	~	~
Manufacture of hydrogen	~	~	~	~	~	~
Manufacture of other inorganic basic chemicals	~	~	~	~	~	✓
Manufacture of other organic basic chemicals	~	~	~	~	~	~
Manufacture of fertilizers and nitrogen compounds	~	~	~	~	~	~
Manufacture of plastics in primary form	~	~	~	~	~	*



TEG Reports: March 2020



Summary Report

- Key concepts & important design decisions
- Detailed guidance for investors and companies
- Commentary on future development



Technical Annex

- Full methodologies
- Detailed criteria with detailed rationale
- Mitigation + Adaptation + DNSH



Taxonomy spreadsheet

- All criteria in summary form
- Tables for economic classification systems

Technical annex: mitigation

Section: Technical screening criteria: substantial contribution to climate change mitigation

Sector classification and activity	
Mitigation criteria	
Rationale	
Do no significant harm assessment	

Below 3 examples taken from this section for cement, hydrogen and ammonia manufacturing

Example of threshold: Manufacture of Cement

Sector classification and activity		
Macro-Sector	C - Manufacturing	
NACE Level	4	
Code	C23.5.1	
Description	Manufacture of cement	
Mitigation criteria		
Principle	The manufacturing of cement is associated with significant CO_2 emissions. Minimising process emissions through energy efficiency improvements and switch to alternative fuels, promoting the reduction of the clinker to cement ration and the use of alternative clinkers and binders can contribute to the mitigation objective.	
Metric	(A) Specific emissions (tCO2e/t of clinker)	
	(B) Specific emissions (tCO2e/t of cement or alternative binder)	
	GHG emissions must be calculated according to the methodology used for EU-ETS benchmarks.	
Threshold	Thresholds for cement Clinker (A) are only applicable to cement clinker plants that are not producing finished cement (no cement mills). All other plants need to meet the thresholds for cement (B)For production of alternative binders only threshold (B) need to be met.	
	Cement clinker: Specific emissions (calculated according to the methodology used for EU-ETS benchmarks) associated to the clinker production processes are lower than the value of the related EU-ETS benchmark.	
	0,766 tCO2e/t of clinker	
	Cement: Specific emissions associated to the clinker and cement production processes are lower than: 0.498 tCO2e/t of cement	

Example of threshold: Manufacture of Hydrogen

Sector classification and act	ivity
Macro-Sector	C - Manufacturing
NACE Level	4
Code	C20.1.1
Description	Manufacture of hydrogen (CPA: 20.11.11.50)
Mitigation criteria	
Principle	The manufacturing of hydrogen is a highly carbon-intensive activity within the chemical industry.Reducing the emissions from the manufacturing activity itself can positively contribute to the mitigation objectives.
	Hydrogen generated as a process by product of the chlor-alkali production is not eligible.
	Mitigation measures are eligible provided they are incorporated into a single investment plan within a determined time frame (5 or 10 years) that outlines how each of the measures in combination with others will in combination enable the activity to meet the threshold defined below actions
Threshold	The following thresholds need to be met:
	• Direct CO2 emissions from manufacturing of hydrogen: 5.8 tCO2e/t Hydrogen in alignment with energy thresholds in the taxonomy.
	Electricity use for hydrogen produced by electrolysis is at or lower than 58 MWh/t Hydrogen
	• Average carbon intensity of the electricity produced that is used for hydrogen manufacturing is at or below 100 gCO2e/kWh (Taxonomy threshold for electricity production, subject to periodical update).

Example of DNSH: Manufacture of Ammonia and Nitric acid

Sector classification and activity		
Macro-Sector	C – Manufacturing	
NACE Level	4	
Code	C20.1.5	
Description	Manufacture of:	
	Anhydrous ammonia (CPA: 20.15.10.75)	
	• Nitric acid (CPA:20.15.10.50)	
Do no significant harm assessment		
The main potential si	gnificant harm to the environment from the production of nitric acid or ammonia production is associated with:	
• polluting emissions to air (especially nitrogen oxides (NOx), and ammonia (NH3)) from the production process;		
Vulnerable ecosystems might be damaged by the construction and/or operation of the production facilities.		
• the use of water resources for production purposes (especially for cooling processes) in water stressed areas; and		
• the generation o	f hazardous wastes (e.g. spent catalyst material).	
(2) Adaptation	Refer to the screening criteria for DNSH to climate change adaptation.	
(3) Water	• Identify and manage risks related to water quality and/or water consumption at the appropriate level.	
	Ensure that water use/conservation management plans, developed in consultation with relevant	
	stakeholders, have been developed and implemented.	
	In the EU, fulfil the requirements of EU water legislation.	

cont.

(4) Circular	Wastes and by-products, especially hazardous wastes, are managed in line with the BREF for Waste Treatment.
Economy	
(5) Pollution	Ensure polluting emissions to air (e.g. nitrogen oxides (NOx), and ammonia (NH ₃)) and water are within BAT-AEL ranges set in the BREF LVIC-AAF (Large Volume Inorganic Chemicals - Ammonia, Acids and Fertilisers), the BREF CWW (Common Waste Water and Waste Gas Treatment/Management Systems in the Chemical Sector) and the BREF EFS (Emissions from Storage).
	A minimum requirement is the implementation and adherence to a recognised environmental management system (ISO 14001, EMAS, or equivalent).
	A stringent level of BAT-AEL is required if an activity materially contributes to local air pollution levels, exceeding air quality standards
(6) Ecosystems	Ensure an Environmental Impact Assessment (EIA) has been completed in accordance with the EU Directives on Environmental Impact Assessment (2014/52/EU) and Strategic Environmental Assessment (2001/42/EC) (or other equivalent national provisions or international standards (e.g. IFC Performance Standard 1: Assessment and Management of Environmental and Social Risks) – whichever is stricter - in the case of sites/operations in non-EU countries) for the site/operation (including ancillary services, e.g. transport infrastructure and operations, waste disposal facilities, etc.) and any required mitigation measures for protecting biodiversity/eco-systems, in particular UNESCO World Heritage and Bey Biodiversity Areas (KBAs), have been implemented.
	[continued]