



GAIA
CLIMATE

TAXONOMY PRACTICES

Scope, Content and Prudentiality

EU Sustainable Finance Taxonomy and Global Practice

Gediz S. Kaya

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- **Legislative plan** to shift capital to sustainable investments to:
 - achieve sustainable and inclusive growth and create low-carbon and climate resilient, more resource efficient and circular economy
 - meet the EU's 2030 targets agreed in Paris, and
 - create an EU climate-neutral economy by 2050

Overview of EU taxonomy

– a unified EU green classification system

- Taxonomy sets out the criteria for determining if an economic activity is contributing to six environmental objectives:

- Climate change mitigation
- Climate change adaptation
- Protection of healthy ecosystems
- Transition to circular economy, waste prevention & recycling
- Pollution prevention & Control
- Sustainable use & protection of water & marine resources

Initial focus is on climate change mitigation and adaptation
 Aims to support sustainable development financing
 Strong emphasis on disclosure to determine eligibility
 Also applied to define EU Green Bond Standard



Source: MCSI 2019

10 point action plan by EU

1

Establishing
classification
system (taxonomy)

2

Creating standards
and labels for
sustainable
financial products
(i.e. green bond
standard)

3

Fostering
investment in
sustainable
projects

4

Incorporating
sustainability risks
and factors in
financial advice

5

Developing
sustainable
benchmarks

6

Better integration
of sustainability in
ratings & market
research

7

Clarifying
institutional
investor and AM
duties

8

Incorporating
sustainability in
prudential
requirements

9

Strengthening
disclosure and
accounting
rule-making

10

Fostering
corporate
governance and
attenuating
short-termism

Components of EU Taxonomy

- **EU Taxonomy is intended to underpin all business practice as it sets criteria for determining sustainable economic activities,**
- **7 NACE Macro Sectors (accounting for 93% of emissions),**
- **97 specific activities focused on climate change mitigation,**
- **However, this regulation is lagging behind the other streams such as ICT sector.**

5-Step implementation approach for investors



Source: MCSI 2019

EU Taxonomy: Do no significant harm framework



ASSESSMENT AREAS	KEY CRITERIA	EXAMPLES OF SPECIFICATION
CLIMATE	<p>Must show best effort in reducing physical risks</p> <p>Must not adversely affect adaptation efforts of others</p>	<p>Considers both current weather variability and future climate change, including uncertainty; • is based on robust analysis of available climate data and projections across a range of future scenarios; • is consistent with the expected lifetime of the activity</p>
WATER	<p>Must not lead to decrease in availability</p> <p>Must not lead to a decrease in quality</p>	<p>Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy</p>
CIRCULAR ECONOMY	<p>Must minimize waste</p> <p>Must minimize material use</p>	<p>For biogas production: The resulting digestate meets the requirements for fertilizing materials in Proposed Regulation COM (2016) 157 or national rules on fertilizers/soil improvers for agricultural use</p>
POLLUTION	<p>Must meet appropriate levels and apply appropriate techniques to prevent water and air pollution</p>	<p>Emissions to air (e.g. sulphur dioxide - SO₂, nitrogen oxide - NO_x, particulate matter, Total Organic Carbon (TOC), dioxins, , mercury (Hg), hydrogen chloride (HCL), hydrogen fluoride (HF), Total Fluoride, and (PFCs) polyfluorinated hydrocarbons (PFCs)) are within the BAT-AEL ranges set in the BRE</p>
ECOSYSTEMS	<p>Must not lead to a decrease in the diversity or abundance</p> <p>Must not contravene other conservation objectives</p>	<p>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)</p>

EU Taxonomy: Minimum Social Safeguards

International Labour Organization

- No Forced Labour
- No Child Labour
- Freedom of Association
- Right to organize
- Right to collective bargaining
- Equal Remuneration
- No Discrimination

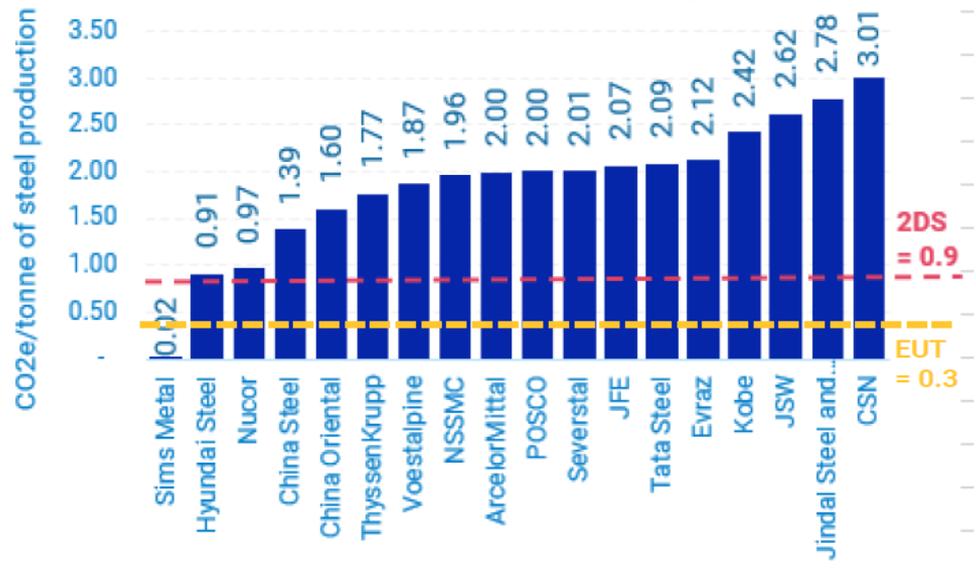
EU Taxonomy does not set specific thresholds for KPIs, nor defines tolerance levels for violations

Investors are expected to examine:

- Companies' policies to include compliance with core ILO conventions
- Companies' labor management systems
- Key performance indicators such as health and safety track records, gender mobility or gender pay gap
- Monitoring, auditing, reporting and remediation procedures

EU Taxonomy: Stringent Eligibility Criteria

EU Taxonomy eligibility threshold for steel: 0.283 tCO₂e/t product
 According to estimates by the IEA and the Science Based Targets Initiative, the steel industry will need to reduce its emission intensity by 55%, equivalent to **0.9 tCO₂e/t**. **None of the largest steel makers currently meet this criteria***



MSCI ESG Research 2018 Steel Industry Report: based on company disclosure, European Environmental Agency
 *Sims Metal is a scrap metal recycling company

The World Bank Study: Comparing Taxonomies

NATIONAL TAXONOMIES

CHINA

BANGLADESH

EU

TOOLS FOR DISCLOSURE AND E&S RISK INTEGRATION

MDBs
Common Principles for
Climate Change
Mitigation Finance
Tracking

CBI
Climate Bonds Initiative

TCFD
Task Force for Climate-
Related Financial
Disclosure

GRI
Global Reporting
Initiative

SASB
Sustainability
Accounting Standards
Board

IISD
International Institute
for Sustainable
Development

CDP
Carbon Disclosure
Project

CDSB
Climate Disclosure
Standards Board

Equator Principles (Eps)
(Project Finance E&S
Risk Integration Tool)

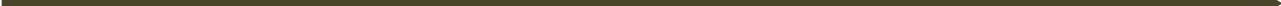
US SEC
United States Securities
Exchange Commission

GBP
Green Bond Principles

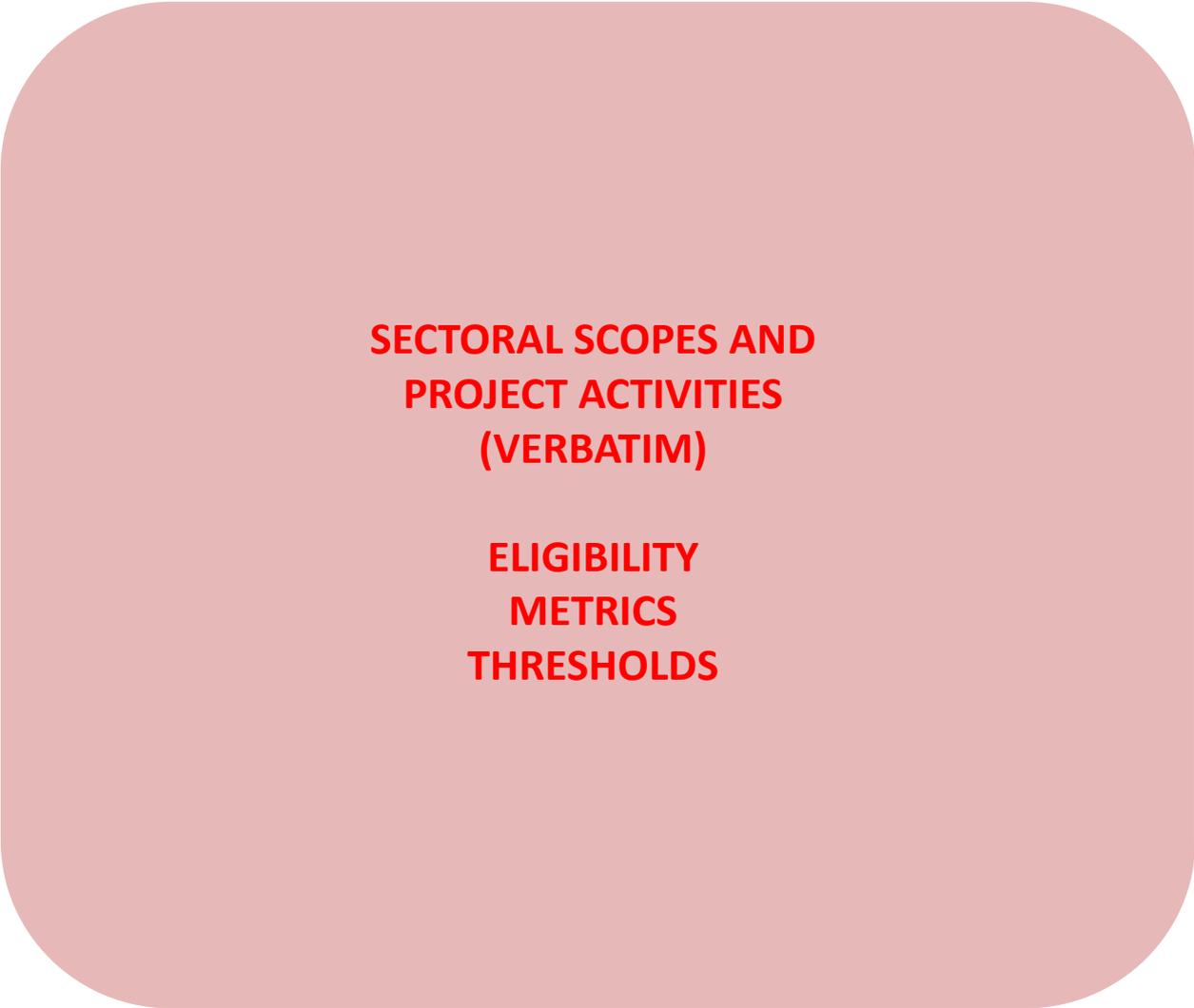
Mapping scope and eligibility

THEMES

CHINA BANGLADESH EU MDBs CBI GBP



- ENERGY EFFICIENCY
- POLLUTION PREVENTION AND CONTROL
- GREEN MANUFACTURING
- ALTERNATIVE ENERGY
- CLEAN TRANSPORTATION
- CLEAN AND RENEWABLE ENERGY
- NUCLEAR
- LOWER CARBON AND ENERGY EFFICIENT GENERATION
- WASTE MANAGEMENT
- GREEN CONSTRUCTION MATERIAL
- GREEN BUILDINGS
- ICT
- NONENERGY GHG REDUCTIONS
- ECOSYSTEM PROTECTION AND ADAPTATION
- FORESTRY AND AGRICULTURE
- CROSS CUTTING ISSUES



SECTORAL SCOPES AND PROJECT ACTIVITIES (VERBATIM)

ELIGIBILITY METRICS THRESHOLDS

	China (Green Bond)	Bangladesh	European Union (EU)
	Clean Energy	Renewable Energy	Electricity, gas, steam and air conditioning supply
CLEAN AND RENEWABLE ENERGY	Wind Power Generation Facility Construction and Operation	Not included	Wind: Demonstrate substantial avoidance of GHG emissions (Co2e/kwh) no threshold & do no significant harm assessment
	Solar Photovoltaic (PV) Power Generation Facility Construction and Operation	Water Purification Plant Pump, Solar PV Assembly Plant, Plant Capable of Producing 1 MW of power or more, Solar Cooker Assembly Plant, Water Heater Assembly Plant, Air Heater and Cooling	Solar: Demonstrate substantial avoidance of GHG emissions (Co2e/kwh) no threshold & do no significant harm assessment
	Smart Grid and Energy Internet Facility Construction and Operation/Upgrading	Not included	Not included
	Distributed Energy Resource Facility Construction and Operation		
	Solar Thermal Application Device/Facility Construction and Operation		
	Hydropower Generation Facility Construction and Operation	Hydro: Pico, micro and mini	Hydropower: Demonstrate substantial avoidance of GHG emissions (Co2e/kwh) no threshold & do no significant harm assessment Include power density assessment (watt/m2)
	Other New Energy Application Facility Construction and Operation	Energy Efficient Palm Oil Plant	Ocean Energy: Demonstrate substantial avoidance of GHG emissions (Co2e/kwh) no threshold & do no significant harm assessment Geothermal: Demonstrate substantial avoidance of GHG emissions (Co2e/kwh) & do no significant harm assessment Threshold applies, direct emissions should be less than 125gCO2e/kwh
	Biogas Specified under Resource Conservation and Recycling	Farm, Integrated Cattle Rearing and Setting up Plant, Organic Manure from Slurry, Mid-Range Plant, Biomass-ased Large-scale Plant, Poultry and Dairy-based Large-scale Plant	Not included
	Renewable Plants Retrofits Not included	Renewable Plants Retrofits Not included	Renewable Plants Retrofits Not included

	ACTIVITIES			
	China (Green Bond)	Bangladesh	European Union (EU)	MDBs (The World Bank)*
		Green (Environment-friendly) Establishments	Construction and Real Estate Activities	
GREEN BUILDINGS	Specified under Energy Efficiency	Green Industry or Green Building Constructed or Under Construction Accredited by USGBC-LEED, BREEAM, CASBEE, EDGE, GRIHA or any Green Building Rating System developed by SREDA, Bangladesh Green-Featured Building (green Features of any building) Ensuring Safety and Work Environment (for Safety System, Disaster Management System and Health Safety System of Workers) of Factories	Construction of new buildings (residential and non-residential) Renovation of existing buildings (residential and non-residential)	Specified under Energy Efficiency
ICT INFORMATION AND COMMUNICATIONS TECHNOLOGY	Not included	Not included	Not included	Not included
	China (Green Bond)	Bangladesh	European Union (EU)	MDBs (The World Bank)*
	Ecological Protection and Climate Change Adaption			
SYSTEM PROTECTION AND ADAPTATION	Natural Ecological Protection and Protective Development of Tourism Resource Ecological Agriculture, Husbandry and Fishery Forestry Development Emergency Prevention and Control of Disaster	Not included	Not included	Not included
FORESTRY AND AGRICULTURE	Specified under Adaptation	Not included	Aforrestation Rehabilitation/Reforestation Existing Forest Management	Agriculture Reduction in energy use in traction (such as efficient tillage), irrigation and other agricultural processes Agricultural projects that improve existing carbon pools (such as rangeland management, collection and use of bagasse, rice husks or other agricultural waste, reduced tillage techniques that increase carbon content of soil, rehabilitation of degraded lands, peatland restoration, and so on)

Results

- ✓ Target participants are largely banks, FIs, investors and businesses.
- ✓ Intended use varies depending on mandate.
- ✓ Sectoral scope of all five catalogues is quite similar.
- ✓ Approach to developing and establishing taxonomy varies between entities.
 - ✓ EU, MDBs and CBI provide thresholds for some technologies or boundaries for some sectors as well as the metrics to be used for project performance under each sector.
 - ✓ GBP/GLP and TCFD only provide a general framework, leaving room for market actors to develop their own definitions within certain parameters. The GBP/GLP only identify eligible sectors and highlight sectoral boundaries without any reference to technology nuances.
 - ✓ Controversial sectors such as nuclear energy or aviation are excluded from the sectoral scope of all taxonomies, except CBI.
- ✓ Depth of sectoral scope varies.
 - ✓ China taxonomy lists compatible technologies applicable to project activities
 - ✓ Bangladesh lists specific project technologies only.
- ✓ Interestingly, Information and Communications Technology (ICT), a carbon intensive sector, is only covered by CBI.
- ✓ National taxonomies such as China and Bangladesh refer to national environmental issues in addition to climate change. While climate change mitigation is the primary goal for these taxonomies, the underlying project activities are expected to target the improvement of environmental quality in general. For international disclosure mechanisms and environmental risk integration tools, the main target is climate change mitigation and other positive externalities from the projects are secondary.
- ✓ A key strength of the national taxonomies is the inclusion of E&S risk management strategies for environmentally sensitive sectors. Some of the international taxonomies such as CBI do not mention or integrate the assessment of externalities in the taxonomy.



Gediz S. KAYA

Maslak Meydan Sok. No: 1 Beybi Giz Plaza Kat:26 Maslak-İstanbul
T: +90.212.224 04 50 M: +90.533.308 97 08 www.gaiacf.com
E-mail: gkaya@gaiacf.com Skype: [gedizskaya](#)