







Climate Solution Investment Principles **Booklet**

Work in progress

April 2021

UN-CONVENED NET-ZERO ASSET OWNER ALLIANCE







































































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Green: open

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1. EXECUTIVE SUMMARY

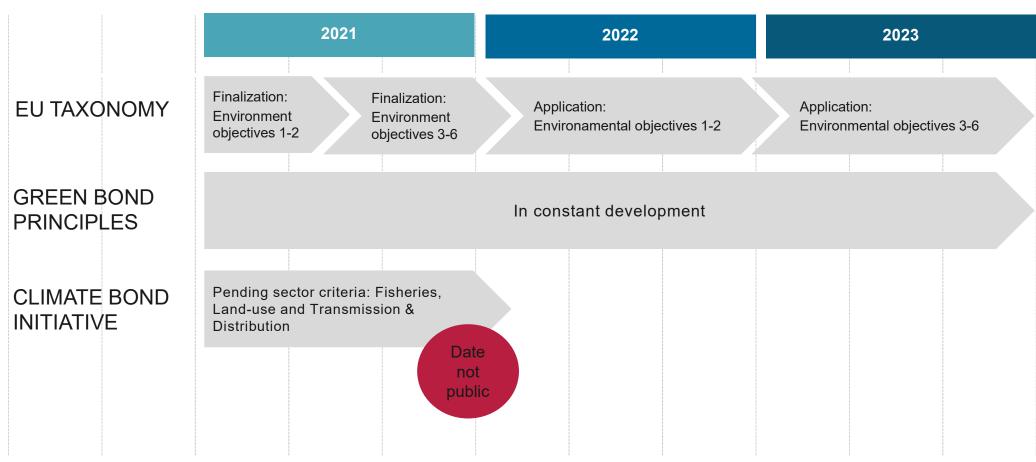
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OVERALL COMPARISON/ASSESSMENT OF PRINCIPLES

Criteria	Green Bond Principles (GBPs)	Climate Bond Initative (CBI)	EU Taxonomy
Ownership and governance	 Developed by industry body ICMA and governed by an executive committee including issuers, investors and underwriters. Other stakeholders (NGOs) can participate as observers. 	 Standard developed by the Climate Bond Initative (CBI), an international investor-focused not-for-profit organisation, and governed by the Climate Bonds Standards Board. 	Developed by the Technical Expert Group (TEG) on Sustainable Finance and will be further developed by the Platform on Sustainable Finance
Overarching objectives	 Categories which contribute to environmental objectives such as: climate change mitigation, climate change adaptation, natural resource conservation, biodiversity conservation, and pollution prevention and control. 	The CBI taxonomy is focused on climate mitigation, rather than other environmental objectives.	 Six environmental objectives: climate change mitigation; climate change adaptation covered so far. Sustainable use and protection of water and marine resources; transition to a circular economy; pollution prevention and control; protection and restoration of biodiversity and ecosystems.
Sectors covered	Suggested principles include: Energy, Buildings, Transport, Water management, Waste management & pollution control, Nature-based assets and land use, agriculture and forestry, Industry & energy-intensive commercial, ICT	Energy, transport, water, buildings, land use and marine resources, industry, waste and pollution, ICT	 Agriculture and forestry, manufacturing, electricity, gas, steam and air conditioning supply, water sewerage waste and remediation, transport, ICT, buildings
Technical standards Contains detailed performance criteria and thresholds	GBP do not opine on what is "green" except at high level of key areas of concern and broad project categories - but note that issuers can reference existing taxonomies or develop their own framework.	The CBI taxonomy uses only one metric/threshold, when necessary supported by a screening indicator.	For a given economic activity, the EU taxonomy uses six sets of metrics and thresholds, one for each environmental objective.
Integrating pathways in the technical standards	Not applicable, since no screening criteria is given	 Focus only on screening an economic activity based on a metric that is applied today and not a pathway. 	 The EU Taxonomy is screening a number of activities on the basis not just of a threshold met today, the threshold will be tightened over time.
Level of granularity	 GBP not granular, recognises that what is 'green' can vary across sectors but leaves it to issuer/refers to external screening criteria/taxonomies. 	 The CBI provides green definitions that are sector specific, developed by scientists and industry experts. Provides specific technical criteria for eligible projects and physical assets. 	 The technical screening criteria allows for a precise and granular determination which activities in a given economic sector qualify as sustainable.
Data availability Possibility for issuers to provide data on screening criteria	Not applicable, guideline that clarify how to launch a credible green bond, since no screening criteria is given no data available	Data availability can indirectly be an issue for CBI's screening indicators (but most indicators seem quantifiable) – sources: MSCI, Bloomberg and other	 Data availability issues likely given breadth of screening criteria – sources: MSCI, Bloomberg and other, maturity levels differ, convergence of data is expected in 2022.
Mandatory/voluntary	The reporting is voluntary and there are no penalties when there is a violation of the GBPs.	Reporting is mandatory under CBC as well as third- party assurance on the report.	 Mandatory requirement for financial market participants offering financial products within the EU and large public interest companies under the NERD

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TIMELINE









ASSET CLASS MAPPING TO RESPECTIVE PRINCIPLES

Asset Class Mapping

Which Principle can be used/translated for/to which asset classes?

HIGH LEVEL PRINCIPLE / Asset Classes	Public Equity	Corporate Bonds	Sovereign Debt	Private Debt	Infrastructure Debt	Infrastructure Equity	Private Equity	Real Estate
Green Bond Principles		x	in case of a green bond - yes	(x)	(x)	(x)		
Climate Bond Initiative		x	in case of a green bond - yes	(x)	(x)	(x)		
<u>EU Taxonomy</u>	x	x	x	x	x	x	x	hardly applicable for now
People's Bank of China Green Bond Endorsed Project Catalogue		x	x	(x)	(x)	(x)		
MSCI Internal Taxonomy and other providers	х	х		(x)			(x)	

(X) means could be translated







5.1.1 GREEN BOND PRINCIPLES

Voluntary Process Guidelines for Issuing Green Bonds

- The Green Bond Principles (GBP) are voluntary process guidelines that recommend transparency and disclosure.
- The GBP provide issuers with **guidance on the key components** involved in launching a credible Green Bond;
- They aid investors by promoting availability of information necessary to evaluate the environmental impact of their Green Bond investments.
- And they assist underwriters by moving the market towards expected disclosures that will facilitate transactions.
- The cornerstone of a Green Bond is the utilisation of the **proceeds of the bond for Green Projects**, which should be appropriately described in the **legal documentation for the security.**
- All designated Green Projects should provide clear environmental benefits, which will be assessed and, where feasible, quantified by the issuer.

5.1.1 GREEN BOND PRINCIPLES

Use of Proceeds

Green Projects should provide clear environmental benefits, which will be assessed and, where feasible, quantified by the issuer.

 Categories which contribute to environmental objectives such as: climate change mitigation, climate change adaptation, natural resource conservation, biodiversity conservation, and pollution prevention and control.

Process for project evaluation and selection

- Clear communication of Green Bond issuer to investors about sustainability objectives, how the projects fit within the eligible Green Projects categories, the related eligibility criteria
 - Issuers are encouraged to disclose this information within the context of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability and any green standards or certifications referenced in project selection.

Management of proceeds

- Net proceeds should be tracked by the issuer in an appropriate manner and attested to by the issuer in a formal internal process linked to the issuer's lending and investment operations for Green Projects
- Balance of tracked net proceeds should be periodically adjusted
- High level of transparency, third party should verify the internal tracking method and the allocation of the funds

Reporting

- Make up to date information on the use of proceeds annually available (list and description of projects, qualitative and quantitative performance indicators/measures, key underlying methodologies and assumptions)
- The annual report should include a list of the projects to which Green Bond proceeds have been allocated, a brief description of the projects and the amounts allocated, and their expected impact.

Source: https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Green-Bonds-Principles-June-2018-270520.pdf

5.1.1 GREEN BOND PRINCIPLES

Green Project Mapping = High-level mapping to GBP Environmental Objectives and other Green Classifications

Mapping of the GBP-project categories to environmental objectives

		Environmental o	Dje	tives		
GBP-project categories	Climate change mitigation	Climate change adaptation		Biodiversity	Natural resource conservation	Pollution prevention and control
Renewable energy	•••				•	•
Energy efficiency	•••					•
Pollution prevention and control					•	•••
Environmentally sustainable management of living natural resources and land use	•	• •		•••	•••	
Terrestrial and aquatic biodiversity conservation		•		•••	•••	
Clean transportation	•••				•	•••
Sustainable water and wastewater management		• •		• •	• •	•••
Climate change adaptation		•••				
Eco-efficient and/or circular economy adapted products, production technologies and processes	• •			•	•••	•
Green buildings	•••				•••	

tertiary |

High level equivalence across classification standards

GBP-project categories	China Green Bond Catalogue		CBI	MDB-IDFC (climate change mitigation only)	EU Taxonomy	
Renewable energy	Clean energy			Renewable energy		
Energy efficiency	Energy	saving	Energy	Energy efficient transmission and distribution systems		
Pollution prevention and control	Pollution preven	tion and control	Waste and pollution control	Waste		
Environmentally sustainable management of living natural resources and land use	-	otection and	Nature based	Agriculture, forestry and land use		
Terrestrial and aquatic biodiversity conservation		otection and age adaption	assets	Afforestation and reforestation, and biosphere conservation	TBD	
Clean transportation	Clean tran	sportation	Transport	Transport		
Sustainable water and wastewater management	Resource conserv	ation and recycling	Water	Wastewater		
Climate change adaptation	Ecological protection and climate change adaption		No relevant category	No relevant category		
Eco-efficient and/or circular economy adapted products, production technologies and processes	-	Resource conservation and recycling	Industry and energy intensive commercial	Low carbon technologies, energy efficiency in industry		
Green buildings	Energy saving		Low carbon buildings	Energy efficiency in buildings		

5.1.2 CLIMATE TRANSITION FINANCE HANDBOOK

Introduction

- The document seeks to provide clear guidance and common expectations to capital markets participants on the practices, actions and disclosures to be made available when raising funds in debt markets for climate transition-related purposes.
- Given that transition pathways must be tailored to the sector and operating geographies of an issuer and noting that issuers are
 generally at different starting points and on different pathways, this document does not seek to provide definitions or taxonomies of
 transition projects, noting that there are several efforts in this area underway globally.
- Rather, it clarifies the **issuer-level disclosures** which are recommended to credibly position the issuance of Use of Proceeds or Sustainability-Linked instruments to finance the transition, particularly of 'hard-to-abate' sectors.
- There are four key elements to these recommendations:
 - 1. Issuer's climate transition strategy and governance;
 - 2. Business model environmental materiality:
 - 3. Climate transition strategy to be 'science-based' including targets and pathways; and,
 - 4. Implementation transparency.

5.1.2 CLIMATE TRANSITION FINANCE HANDBOOK

Issuer's climate transition strategy and governance

 Issuer's strategy should be guided by the objective of limiting global temperature increases ideally to 1.5°C and, at the very least, to well below 2°C.

Disclosure

- Long-term target
- · Relevant interim targets
- Issuer's levers towards decarbonisation
- Clear oversight and governance of transition strategy

Independent review, assurance and verification

- Alignment of long-term and shortterm targets
- Credibility of the issuers strategy to reach the targets

Business model environmental materiality

 The planned climate transition trajectory should be relevant to the environmentally-material parts of the issuer's business model, taking into account potential future scenarios which may impact on current determinations concerning materiality.

Disclosure

 Discussion of the materiality of the planned transition trajectory may be included

Independent review, assurance and verification

 Not appropriate in all cases but accounting profession may provide guidance

Climate transition strategy to be 'science-based' including targets and pathways

Planned transition trajectory should:

- be quantitatively measurable
- be aligned with, benchmarked or otherwise referenced to sciencebased trajectories
- be publicly disclosed include interim milestones
- be supported by independent assurance or verification.

Disclosure

- Short, medium, and long-term GHG reduction targets aligned with Paris
- Baseline:
- Scenario utilised, and methodology applied
- GHG objectives covering all scopes
- Targets formulated in intensity and absolute terms.

Implementation transparency

- It is recommended to provide transparency with regard to the planned capital and operational expenditure decisions
- Issuers should report in qualitative and quantitative fashion the climate-related outcomes
- · if considered social expenditures

Disclosure

- percentage of assets/revenues/ expenditures/divestments aligned to the various levers outlined in Element 1
- Capex roll-out plan consistent with the overall strategy and climate science

Introduction

- The GBP recommend the use of both qualitative performance indicators and, where feasible, quantitative performance measures with the disclosure of the key underlying methodology and/or assumptions used in the quantitative determination. The handbook outlines general core principles and recommendations for reporting in order to provide issuers with a reference as they develop their own reporting. The handbook also offers impact reporting metrics and sector specific guidance for the aforementioned project categories.
- The compilation of the handbook was led by an informal Technical Working Group comprising EBRD, EIB, International Finance Corporation (IFC), KfW, NIB and the World Bank.

Core Principles and Recommendations

- 1. Green bond issuers are encouraged to report on both the use of green bond proceeds, as well as the expected environmental impacts at least on an annual basis.
- 2. Issuers are recommended to define and disclose the period and process for including projects in their report.
- 3. The report should indicate the **total signed amount, the amount of green bond proceeds allocated to eligible disbursements and additional information** such as year of signing or project stage from a financing point of view.
- 4. Issuers are encouraged to put in place a formal internal process for the allocation of proceeds linked to their lending and investment operations for Green Projects and to report on the allocation of proceeds.
- 5. It is recommended that issuers either provide a list of projects to which green bond proceeds have been allocated or report solely on a portfolio level and explain the key characteristics of the approach they select for their report.
- 6. Depending on the way in which proceeds are allocated, there can be differences in the approach to impact reporting.

 If allocations are to **individual projects: •** the specific projects, the total project results with information about the total project size and/or the issuer's share of total financing
 - Aggregates project-by-project results including only the pro-rated share of the total projects' results If allocations are to a **portfolio of projects:** overall results of the portfolio (portfolio report based on portfolio allocation)
- 7. The impact report should illustrate the **expected environmental impact made possible as a result of projects** to which green bond proceeds have been allocated
- 8. Report the **estimated lifetime results** and/or project economic life (in years) to provide users with a basis for understanding the impact of the project over its lifetime.

Core Principles and Recommendations

- 9. In case the issuer samples ex-post verification of specific projects: relevant results should be included in the reporting.
- 10. To facilitate comparison of project results, issuers should aim to report on at least a limited number of sector specific core indicators for projects included in their green bond programs.
- 11. For the calculation of indicators, where there is no single commonly-used standard, issuers may follow their own methodologies while making these available to investors. Issuers should provide full transparency on the applicable GHG accounting methodology and assumptions, which can be referenced.
- 12. Investors should be aware **that comparing projects**, **sectors**, **or whole portfolios is difficult** because general assumptions on inputs in calculations, like grid factors and calculation methods, as well as cost structures between countries also vary significantly
- 13. Issuers may elect, for consistency reasons, to convert units reported for individual projects. This should be based on a standard conversion factor to facilitate comparison and aggregation. However, complex recalculations that are not publicly disclosed in project documentation should be avoided.
- 14. Issuers are encouraged to be transparent about projects with partial eligibility
- 15. In case the expected impacts of different project components (such as for example energy efficiency ("EE") and renewable energy ("RE") components of the same project) may not be reported separately, issuers **may attribute the results to each component based on their relative share in the related financing, disclosing the attribution approach**. Alternatively, issuers could combine the reporting metrics for both sectors into a single table (option 2 in the reference reporting templates).
- 16. Issuers should be **transparent on how they report all green bond-related cash-flows in one currency** when they allocate green bond proceeds and report on the projects to which green bond proceeds have been allocated.

Sector Specific Guidance and Reporting Metrics (one selected Core Indicators for each section)

Renewable Energy

Annual GHG emissions reduced/avoided in t of CO2 equivalent

Energy Efficiency

Annual energy savings in MWh/GWh (electricity) and GJ/TJ (other energy savings)

Sustainable Water and Wastewater Management

Annual water savings: annual absolute water use before and after the project in m3/a, reduction in %

Clean Transportation

Reduction of air pollutants: particulate matter (PM), sulphur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO), and nonmethane volatile organic compounds (NMVOCs)

Waste Management and Resource Efficiency

Waste that is prevented, minimised, reused or recycled before and after the project in % of total waste and/ or in tonnes p.a.

Biodiversity

Protected areas and other effective area-based conservation measures (OECM): Maintenance/ safeguarding/increase of protected area/OECM/habitat/ natural landscape area in km² and in % for increase

Green Buildings

Energy performance: kWh/m² of GBA p.a.; and % of energy use reduced/avoided vs local baseline/building code **Carbon Performance:** kgCO2/m² of GBA p.a;

Climate Change Adaptation

Reduction in the number of power lines incapacitated due to storms

Reduction in the number of wildfires, and/or in the area damaged by wildfires in km²

Reporting Template (Energy Efficiency as example)

Illustrative Summary Template for Project-by-Project Report:

Energy Efficiency (EE)	Signed Amount <u>a/</u>	Share of Total Project Financing <u>b/</u>	Eligibility for green bonds	EE component	Allocated Amount <u>c/</u>	Project lifetime <u>d/</u>	energy (elect	nnual savings ricity / ner)	#2) Annual GHG emissions reduced/ avoided <u>e/</u>	Other Indicators
Project name <u>f/</u>	currency	%	% of signed amount	% of signed amount	currency	in years	MWh/ GWh	GJ/TJ	in tonnes of CO ₂ equivalent	
e.g. Project 1	×	xx	××	×	××	××	×	××	××	XX people benefited; XXX t CO ₂ eq. Absolute annual project emissions.

Illustrative Summary Template for Portfolio-based Report:

Energy Efficiency (EE)	Signed Amount <u>a/</u>	Share of Total Portfolio Financing <u>b/</u>	Eligibility for green bonds	EE component	Allocated Amount <u>c/</u>	Average portfolio lifetime <u>d/</u>	#1) Annual energy savings (electricity / other), possibly per unit of financing		possibly per unit of		#2) Annual GHG emissions reduced/avoided (possibly per unit of financing)	Other Indicators per unit (possibly per unit of financing)
Portfolio name	currency	%	%	%	currency	years	MWh /GWh	GJ/TJ	in tonnes of CO ₂ equivalent			
e.g. Portfolio 1	XX	××	××	×	×	xx	××	×	×	XX people benefited; XX t CO ₂ eq. Absolute annual project emissions.		

5.1.4 GREEN LOAN PRINCIPLES

Introduction

- Voluntary recommended guidelines, built on and refer to the Green Bond Principles
- aim is to create a **high-level framework of market standards and guidelines**, providing a consistent methodology for use across the green loan market, whilst allowing the loan product to retain its flexibility, and preserving the integrity of the green loan market while it develops

Green Loan Definition:

- any type of loan instrument made available exclusively to finance or re-finance, in whole or in part, new and/or existing eligible Green Projects
- Green loans must align with the four core components of the GLP (see next slide)
 - 1) Use of proceeds
 - 2) Process of Project Evaluation and Selection
 - 3) Management of Proceeds
 - 4) Reporting

5.1.4 GREEN LOAN PRINCIPLES

Use of Proceeds

- Fundamental determinant of green loan is the utilization of the loan proceeds for Green Projects
- Green Projects should provide clear environmental benefits, which will be assessed and, where feasible, quantified, measured and reported by the borrower.
- Categories which address key environmental concern such as climate change, natural resource depletion, loss of biodiversity, air/water/soil pollution

Process for Project Evaluation and Selection

- The borrower should clearly communicate to its lenders:
- sustainability objectives, the process by which the borrower determines how its projects fit within the eligible categories and the related eligibility criteria
- Borrowers are encouraged to position this information within the context of their overarching objectives, strategy, policy and/or and disclose any green standards or certifications to which they are seeking to conform.

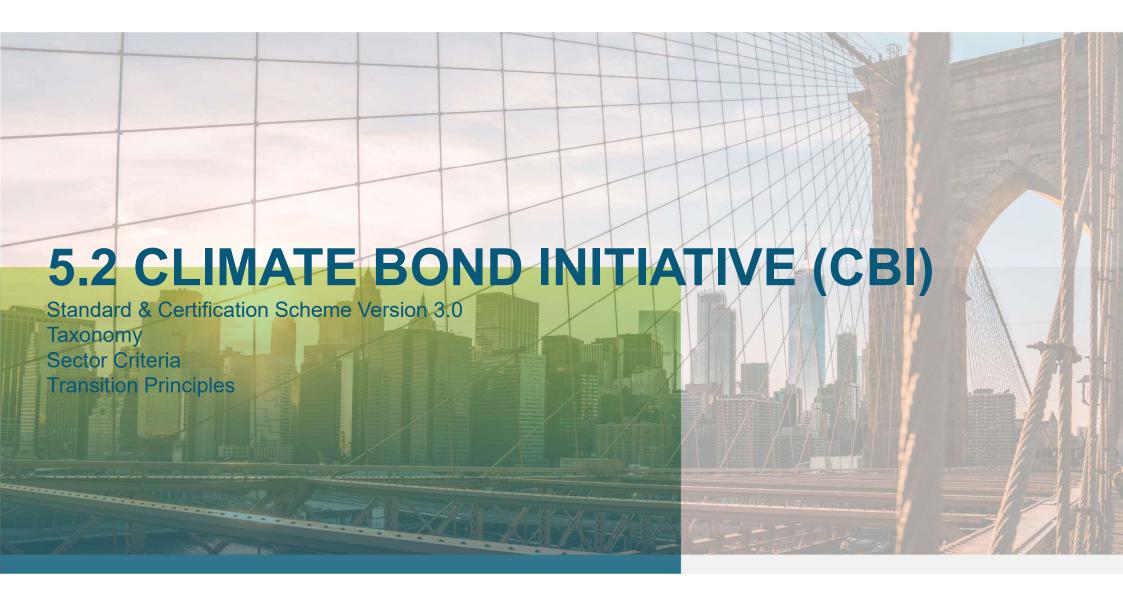
Management of Proceeds

- Net proceeds should be tracked by the borrower in an appropriate manner
- when green loan takes the form of one or more tranches, each tranche(s) must be clearly designated, with its proceeds credited to a separate account or tracked by the borrower in an appropriate manner.
- High level of transparency, internal governance process to track allocation of funds

Reporting

- Make up to date information on the use of proceeds annually available (list and description of projects, qualitative and quantitative performance indicators/measures, key underlying methodologies and assumptions)
- Transparency on expected impact particularly important
- External review is recommended through i.e. Consultancy, Verification, Certification or Rating

Source: https://www.lma.eu.com/application/files/9115/4452/5458/741_LM_Green_Loan_Principles_Booklet_V8.pdf







5.2.1 CLIMATE BOND STANDARD & CERTIFICATION SCHEME 3.0



Key Components Climate Bond Standard & Certification Scheme 3.0

- The Certification Scheme allows investors, governments and other stakeholders to identify and prioritise 'low-carbon and climate resilient' investments and avoid 'greenwash'.
- · aims to provide the green bond market with the trust and assurance that it needs to achieve scale
- builds on the broad integrity principles contained in the Green Bond Principles
- For investors: screening tool that labels bonds or loans as Certified Climate Bonds, Loans or Debt Instruments
- For issuers: a **voluntary initiative to** demonstrate to the market that **their bond or loan meets science-based standards for climate integrity,** and best practice standards for management of proceeds and transparency.

Key features:

- Full alignment with the Green Bond Principles, Green Loan Principles, the proposed EU Green Bond Standard, ASEAN Green Bond Standards, Japan's Green Bond Guidelines and India's Disclosure & Listing Requirements for Green Bonds
- Clear mandatory requirements for use of proceeds, selection of projects & assets, management of proceeds and reporting
- Sector criteria for determining the low-carbon and climate resilient credentials of projects and assets
- An assurance framework with independent verifiers and consistent procedures
- Certification awarded by the Climate Bonds Standard Board and is confirmed after issuance of the bond or loan with mandatory independent verification and annual reporting for the term of the investment
- The financing assets are consistent with achieving the goals of the Paris Agreement

5.2.1 CLIMATE BOND STANDARD & CERTIFICATION SCHEME 3.0



Key Components Climate Bond Standard & Certification Scheme 3.0

Key Components:

- · Climate Bonds Taxonomy,
- · Sector Eligibility Criteria,
- guidance material and certification documents

How the certification works:

- The requirements of the Climate Bonds Standard are separated into the two distinct phases of issuing a bond, loan or other debt instrument:
 - 1. **Pre-Issuance Requirements** which need to be met for issuers seeking certification ahead of issuance,
 - 2. Post-Issuance Requirements which need to be met by issuers seeking ongoing certification following the issuance.
- Verification by an **Approved Verifier is mandatory** in the Certification process. Ongoing Certification includes requirements for **annual reporting with public disclosure**.

Ongoing reporting:

- All issuers are required to **report annually** to maintain the Certification and the reporting is divided into
 - 1) Allocation reporting (confirming the allocation of bond proceeds to eligible projects),
 - 2) Eligibility reporting (rming the characteristics or performance of projects and assets to demonstrate their eligibility),
 - 3) **Impact reporting** (closure of metrics or indicators which reflect the expected or actual impact)

5.2.2 CLIMATE BOND INITIATIVE TAXONOMY



Introduction

- The Climate Bonds Taxonomy is the high-level roadmap for the relevant sectors.
- It forms the basis of the Climate Bonds green bond database methodology, used by Climate Bonds to **assess the climate alignment of all green bonds** (certified or uncertified) for inclusion in the database, which is then used by index providers, analysts and other market players.
- It identifies the assets and projects needed to deliver a low carbon economy and gives GHG emissions screening criteria consistent with the 2° global warming target set by the COP 21 Paris Agreement. It has been developed based on the latest climate science including research from the IPCC and the IEA and has benefited from the input of hundreds of technical experts from around the world.
- The following sectors are covered by the CBI Taxonomy:

ENERGY	WATER	LAND USE & MARINE RESOURCES	WASTE & POLLUTION
TRANSPORT	BUILDINGS	INDUSTRY	ICT

Source: https://www.climatebonds.net/files/files/CBI Taxonomy Tables January 20.pdf

5.2.2 CLIMATE BOND INITIATIVE TAXONOMY



Overview of heTaxonomy over the parts of each sector which already provides approved Certification Criteria

Source: https://www.climatebonds.net/files/files/CBI_Taxonomy_Tables_January_20.pdf

5.2.3 CLIMATE BOND INITIATIVE SECTOR CRITERIA



Key Components Sector Criteria

- The Sector Eligibility Criteria are science-based and provide detailed definitions for the eligibility of specific projects and assets.
- The Criteria ensure that projects & assets are **consistent with achieving the goals of the Paris Climate Agreement** and the rapid transition to a low-carbon & climate resilient future.
- sets climate change benchmarks for each sector that are used to screen assets and capital projects so that only those that have climate integrity, either through their contribution to climate mitigation, and/or to adaptation and resilience to climate change, will be certified. Where a bond encompasses a mixed portfolio of assets across several sectors, each sub-category of assets will be subject to the relevant Sector Criteria for those assets.
- Criteria Development Process: Criteria are developed in accordance with guidance for standard setting organisations published by ISEAL.

Source: https://www.climatebonds.net/standard/sector-criteria

5.2.3 CLIMATE BOND INITIATIVE SECTOR CRITERIA



Taxonomy table of asset and projects for the sector Transport

	4	
	7	

GEOTHERMAL

Generation facilities (power &	Electricity generation facilities	•	Direct emissions less than 100gCO2/kWh	
heat)	Direct heat application such as Geothermal Heat Pump (GHP)	•		
Supply chain facilities	Manufacturing facilities wholly dedicated to geothermal energy developments such as geothermal turbines	•		
	Dedicated storage, distribution, installation, wholesale and retail	•		
Infrastructure	Dedicated transmission infrastructure	•		
	Dedicated supporting infrastructure	•		

Source: https://www.climatebonds.net/files/files/CBI_Taxonomy_Tables_January_20.pdf



Introduction

- framework that identifies credible transitions aligned with the Paris Agreement Purpose:
- **Define transition as a concept** by presenting a starting point for the market to see a credible brown to green transition as ambitious, inclusive and aligned with the Paris Agreement (thereby avoiding greenwash).
- Put forward a framework for use of the transition label in practice and propose clearly demarcated roles for both a green and a transition label

Categories

- Economic activities can be catagorised in 5 categories (see side) based on:
 - i. how long the product or service delivered by the activity will be needed (which depends in turn on the availability of low carbon substitutes); and
 - ii. the viability of decarbonising the activity so that it aligns with the Paris Agreement.
- Enabling activities (enable decarbonization elsewhere like goods and services, e.g. manufacture of wind tubines) are across all categories
- Applicable on activity and entity-level (and proposed to apply on whole entities)

NEAR ZERO

at or near net-zero emissions that may require some further decarbonisation but not a significant transition - e.g. wind power generation.

PATHWAY TO ZERO

Activities needed beyond 2050 and have a clear 1.5-degree decarbonisation pathway – e.g. shipping

NO PATHWAY TO ZERO

Activities that are needed beyond 2050 but at present, do not have a clear 1.5 degree decarbonisation pathway to 2050 – e.g. long-haul passenger aviation.

INTERIM

Activities currently needed but should be phased out by 2050 - e.g. production of energy from municipal waste

STRANDED

be brought into line with global warming targets and have an alternative, low-emissions substitute - e.g. electricity generation from coa

5 Transition Principles



In line with 1.5 degree trajectory
 All goals and pathways need to align with zero carbon by 2050 and nearly halving emissions by 2030.



Established by science
 All goals and pathways must be led by scientific experts and be harmonised across countries.



3. Offsets don't count
Credible transition goals and
pathways don't count offsets,
but should count upstream scope
3 emissions.



4. Technological viability trumps economic competitiveness
Pathways must include an assessment of current and expected technologies.
Where a viable technology exists, even if relatively expensive, it should be used to determine the decarbonisation pathway for that economic activity.



A credible transition is backed by operating metrics rather than a commitment/pledge to follow a transition pathway at some point in the future. In other words, this is NOT a transition to a transition

- The principles define the characteristics of credible transition pathways which must align with 1.5 degree targets. They are consistent with the evaluating transition activities in the EU Taxonomy.
- Principle 1 Credible transition goals and pathways align with 1.5°C global warming limits: Global emissions need to drop by 45% from 2010 levels by 2030 and down to net zero globally by 2050. There is a need to go beyond Nationally Defined Contributions and best- in-class benchmarks
- Principle 2 Credible transition goals and pathways are established by the climate science community and are not entity specific: Transition pathways should not be determined by individual institutions on a case-by-case basis. Rather, pathways should be harmonized globally
- Principle 3 Credible transition goals and pathways don't count offsets but should count upstream scope 3 emissions as much as is possible: The only exception to this is if the offsetting is very directly linked to the key activity in question and offsets emissions that cannot be minimised in any way. Transition pathways should take into account scope 1 and 2 and upstream scope 3 emissions as under the control of the transitioning entity, but not downstream scope 3.
- Principle 4 Credible transition pathways take into account technological viability, but not
 economic competitiveness: Entities carrying out an activity that does not follow its
 decarbonisation pathway, even if the reason is maintaining cost- competitiveness, are not making a
 credible transition

Source: https://www.climatebonds.net/principles-transition

5 Transition Principles



I. In line with 1.5 degree trajectory All goals and pathways need to align with zero carbon by 2050 and nearly halving emissions by 2030



2. Established by science All goals and pathways must be led by scientific experts and be harmonised across countries

3. Offsets don't count Credible transition goals and pathways don't count offsets, but should count upstream scope



4. Technological viability trumps
economic competitiveness
Pathways must include an assessment
of current and expected technologies.
Where a viable technology exists, even
if relatively expensive, it should be
used to determine the decarbonisation
pathway for that economic activity

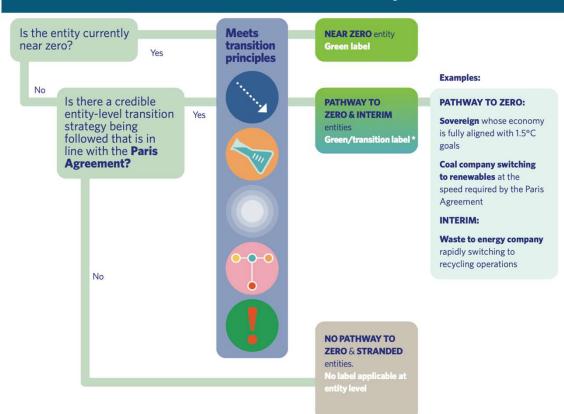


5. Action not pledges
A credible transition is backed
by operating metrics rather than
a commitment/pledge to follow a
transition pathway at some point in the
future. In other words, this is NOT a
transition to a transition.

- Principle 5 Credible transition means actually following the transition pathway pledges and policies are not sufficient:
 - For use-of-proceeds bonds: if the measure or activity aligns with a transition pathway over the financing term that meets principles 1-4 and it is needed post 2050, then it is delivering credible transition. While many investors may look for an accompanying entity-level decarbonisation strategy, particularly for a highly emitting sector, such strategies are welcomed rather than essential.
 - For fixed term but general purpose finance: if the entity follows a transition pathway over the financing term that meet principles 1-4 then it is delivering credible transition. This should be demonstrated via a credible entity-level transition strategy.
 - For open ended entity level finance (e.g. equity investments): if the entity follows a transition pathway that meet principles 1-4 then it is delivering credible transition. This should be demonstrated via a credible entity-level transition strategy.

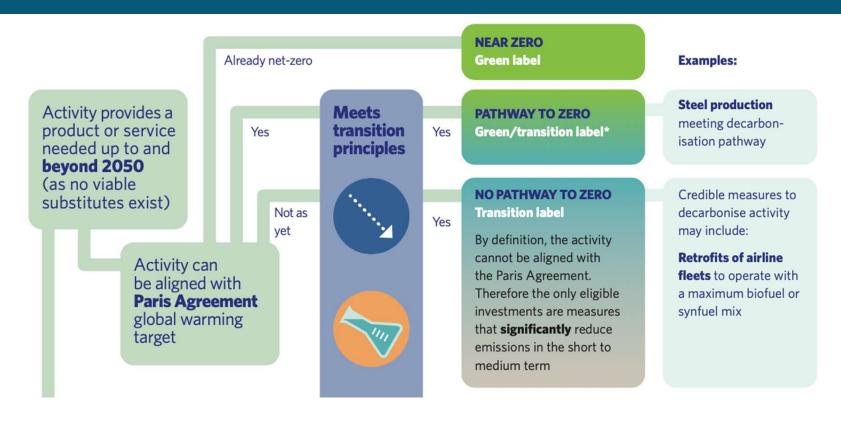
Source: https://www.climatebonds.net/principles-transition

Use of Green and Transition Label for Entity Level Investments

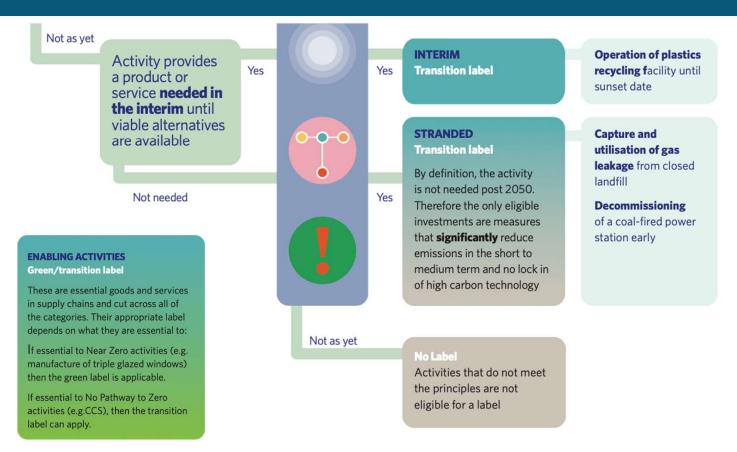


- 1) **Green label** continues to be used for eligible investments in activities or entities that have a long-term role to play and are either already near zero or are following decarbonisation pathways in line with halving global emissions by 2030 and reaching net zero by 2050
- 2) **Transition label** be used for eligible investments that:
 - are making a substantial contribution to halving global emissions levels by 2030 and reaching net zero by 2050 but will not have a long term role to play; OR
 - will have a long term role to play, but at present the long term alignment to net zero goals is not certain.

Use of Green and Transition Label for Investments in Activities and associated Measures 1/2



Use of Green and Transition Label for Investments in Activities and associated Measures 2/2

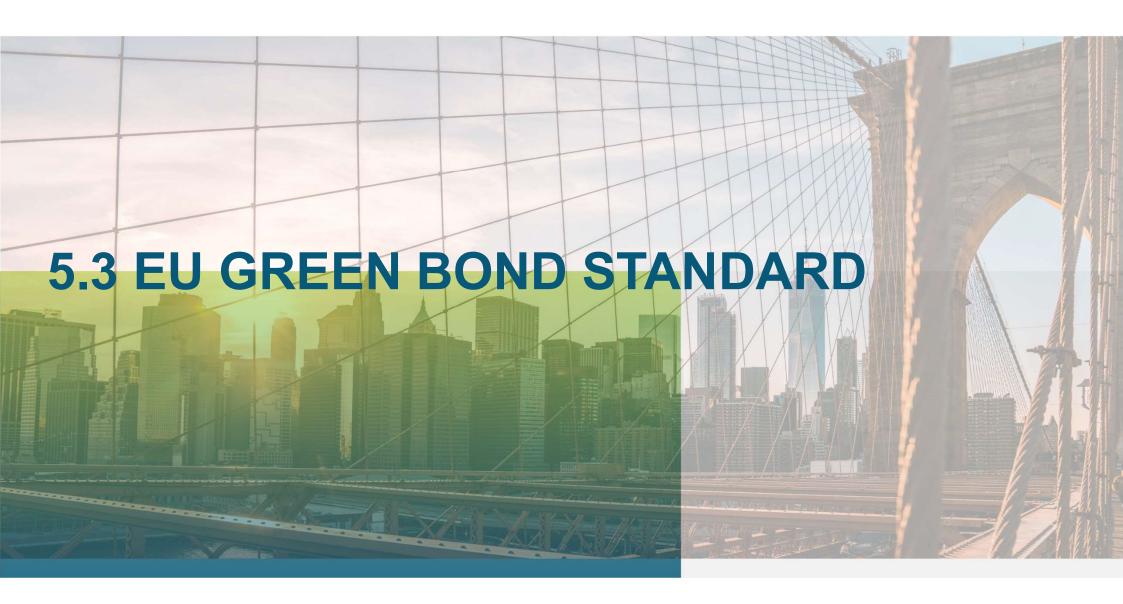


Categorisation of Activities and Transactions Already Reviewed

Activity category	Examples relating to power generation	Examples relating to transport	Other examples
Near zero	Solar energy generation Wind energy generation Generation of bioenergy from agricultural or forestry waste products	Manufacture or operation of electric modes of transport	Production of green hydrogen Landscape restoration
Pathway to zero	Hydropower generation	Shipping	Manufacture of steel, cemer Manufacture of packaging Crop production Property management
Interim	Waste to energy from municipal solid waste Production of energy from bioenergy (non-waste products) Gas power generation with CCS	Production of biofuels for shipping Gas production for heavy industry	Production of blue hydrogen Fossil-fuel plastics recycling Production of mineral water
No pathway to zero	Electricity generation from solid fossil fuels	Long-haul passenger aviation Manufacture or operation of fossil fuel powered passenger vehicles	Production of hydrogen using steam generated from fossil fur
Stranded	CCS for power generation	Manufacture of electric fuel cells or batteries	Single use fossil fuel plastics
Enabling	 Manufacture of renewables components 	Metals recycling	CCS for industry Energy storage

Table 6:	Table 6: A summary of transactions reviewed								
Issuer	Labelled	Sector	Use of Proceeds	Provisional assessment*					
Cadent	Transition	Gas distribution	Methane leakage control, network repairs & hydrogen readying, low- carbon vehicles	Green/transition bond - readying for hydrogen, a near zero solution, so long as fugitive emissions addressed, and decarbonising other high emitting activities with potential pathways to net zero					
EBRD	Green transition	Development bank	Energy efficiency of fossil fuel use in industry	Green/ transition bond - decarbonising high emissions activities with potential pathways to net zero, subject to following appropriate decarbonisation pathways					
ENEL	SDG	Power utility	NA (General corporate bond with renewable energy targets)	Green/ transition bond - entity transitioning to near zero activities					
Marfrig	Sustainable transition	Beef processing	Purchase of beef avoiding farms using deforested land or forced labour	Neither green nor transition - does not address key sources of emissions)					
Orsted	Green	Oil & gas	Renewables	Green bond - near zero activities					
Repsol	Green	Oil & gas	Energy efficiency of fossil fuel operations	Neither green nor transition - due to potential lock in of stranded activities					
SNAM	Climate action	Gas distribution	Renewable Energy, Energy efficiency of fossil fuels & methane capture	Transition bond - due to decarbonisation of a potential interim activity, alongside other green proceeds, subject to addressing fugitive emissions					

Source: https://www.climatebonds.net/principles-transition







5.3 EU GREEN BOND STANDARD

Summary

- EU-GBS aims to facilitate the awareness of sustainability by further clarifying how economic activities can be combined with positive environmental impacts in a credible and measurable way
- Standard contributes to the EU's long-term competitiveness and its economic and environmental resilience

Draft Model proposed by the TEG

- Scope: EU-GBS is a **voluntary standard** proposed to issuers that wish **to align with leading best practices** in the market. It is designed to be **globally relevant** and accessible to issuers located **in and outside the EU**. It builds on market best practices such as the Green Bond Principles (GBP).
- Objective: enhancing transparency, integrity, consistency and comparability of EU Green Bonds
- Definition:
 - 1) The issuer's Green Bond Framework shall confirm the alignment of the green bond with the EU-GBS;
 - 2) The proceeds shall be exclusively used to finance or re-finance in part or in full new and/or existing Green Projects
 - 3) The alignment of the bond with the EU-GBS shall have been verified by an accredited Verifier
- · Core Components:
 - 1) Green Projects
 - 2) Green Bond Framework
 - 3) Allocation and Impact Reporting
 - 4) Verification

EU GREEN BOND STANDARD

Specific topic	Green Bond Principles (GBP)	Proposed EU Green Bond Standard (EU-GBS)
Use of Proceeds in legal documentation	Recommended	Required in the legal documentation (for instance, in the Base Prospectus or in the Final Terms).
Eligibility criteria (1): Substantial contribution to environmental objectives	High-level categories for eligible Green Projects	Alignment with a detailed EU Taxonomy, including four requirements (1) substantial contribution to environmental objectives, (2) do-no-significant harm (3) minimum social safeguards; and (4) technical screening criteria (see below and detailed description in section 4.1 of the EU-GBS, Annex 1).
		Green Bond Framework (GBF) required (see section 4.2 of the EU-GBS). A template is provided in Annex 2.
		Specific requirements, related to capital/operating expenditures and look-back periods are provide in section 4.1 of the EU-GBS (Annex 1).
Eligibility criteria (2): Do-no- significant harm	n/a	Ensure that economic activities do-no-significant harm to any of the EU Taxonomy's Environmental Objectives
Eligibility criteria (3) : Social safeguards	Communicate clearly to investors the "process applied to identify and manage potentially material environmental and social risks associated with the projects"	Ensure compliance with minimum social safeguards represented by the principles and rights set out in the eight fundamental conventions identified in the International Labour Organisation's declaration on Fundamental Rights and Principles at Work.
Eligibility criteria (4): Technical Screening Criteria	n/a	Sector specific screening criteria, including principles, metrics and related thresholds on sectors that are deemed environmentally sustainable.

Specific topic	Green Bond Principles (GBP)	Proposed EU Green Bond Standard (EU-GBS)
Disclosure of proportion of proceeds used for refinancing	Recommended	Required. Specific technical requirements, see section 4.3 of the EU-GBS (Annex 1). A reporting template is provided Annex 3.
Impact monitoring and reporting	Recommended wherever possible	Required. A reporting template is provided Annex 3.
External review requirements	Recommended. External review may be partial, covering only certain aspects of an issuer's green bond or associated Green Bond Framework or full, assessing alignment with all four core components of the GBP ¹⁸	Required. Verification of the Green Bond Framework and the Final Allocation Report by an accredited verifier to confirm conformity with the EU-GBS. Detailed requirements are provided in section 4.4 of the EU-GBS in Annex 2.
Publication of external verification	Recommended	Required
Accreditation of external reviewers/ verifiers	Not addressed in GBPs	A centralised scheme of accredited verifiers, operated by ESMA. Voluntary interim registration scheme for an estimated transition period of up to 3 years.







EU TAXONOMY AND REAL ESTATE

The Delegated Acts proposed new criteria for Construction and Real Estate

Previously, the requirement was that the calculated performance of the building must be within the top 15% of the local existing stock in terms of operational primary energy demand.

Acquisition and ownership of buildings - the draft for climate change mitigation now states that, for buildings built before December 31, 2020, the building would require Energy Performance Certificate (EPC) class A.

Construction of new buildings – 20 % lower then the primary energy demand from the relevant NZEB requirements

Potential opportunities with updated criteria on acquisition and ownership of buildings:

- removes any sort of 'relative guarantee' that 15% of any region's or member state's building stock would be considered as Taxonomy-aligned, and that the new criterion is much stricter.
- This could push RE companies to accelerate renovations to get their buildings into the class A.

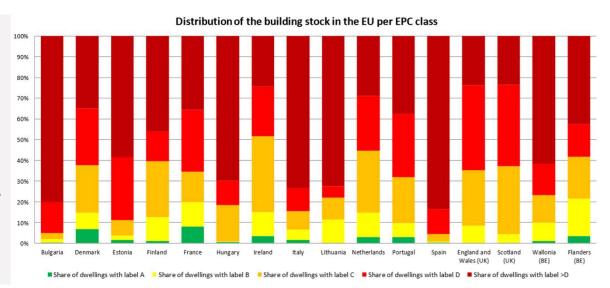
Potential challenges with updated criteria on acquisition and ownership of buildings:

- EPC classification methods differ from country to country, i.e. currently no absolute threshold of energy consumed per m2
- moreover, what energy performance entails in exact numbers for an EPC varies across time, as it is set in relative terms based on the current requirements for energy use for new buildings.

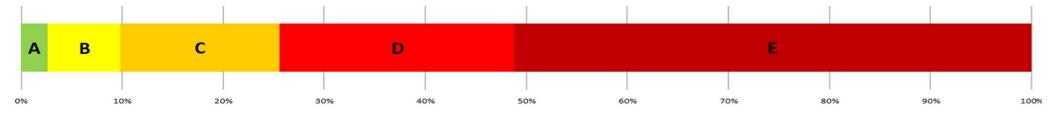
Source: http://bpie.eu/wp-content/uploads/2017/12/State-of-the-building-stock-briefing Dic6.pdf

EPC – ENERGY PERFORMANCE CERTIFICATE

- The European Union has established clear legislative frameworks to reduce energy demand from buildings. The directives on the Energy Performance of Buildings (EPBD) and on Energy Efficiency (EED) are being implemented by the EU Member States to this end.
- Under the EPBD, EU member States have established energy performance certification systems with independent mechanisms for implementing and controlling national pathways towards improving the energy efficiency of buildings.
- The building is given a rating between A (Very efficient), and G (Inefficient).



Distribution of the building stock in the EU per EPC class



Source: http://bpie.eu/wp-content/uploads/2017/12/State-of-the-building-stock-briefing_Dic6.pdf







6 INTERNATIONAL PLATFORM OF SUSTAINABLE FINANCE

Introduction International Platform of Sustainable Finance

- Launched in October 2019 and is a multilateral forum for facilitating exchanges
- Members are **public authorities** in charge of developing environmentally sustainable finance and policies and initiatives (Argentina, Canada, Chile, China, EU, Hongkong India, Indonesia, japan, Kenya, Morocco, New Zealand, Norway, Senegal, Singapore, Switzerland, UK)

The platform aims to

- Exchange and disseminate information to promote best practices in environmentally sustainable finance;
- Compare the different initiatives and identify barriers and opportunities to help scale up environmentally sustainable finance internationally;
- While respecting national and regional contexts, enhance international coordination where appropriate on environmentally sustainable finance issues. Where appropriate, some willing members could strive to align initiatives and approaches.

Objectives

- scale up the mobilisation of private capital towards environmentally sustainable finance at global level
- promote integrated markets for environmentally sustainable finance

6 OVERVIEW OF ENVIRONMENTAL RELATED DISCLOSURES

Key Characteristics	China	European Union	India	Table 1: Overview of taxonomies of China, EU
Mandatory vs voluntary	Mandatory (for specific purpose: issuance of green bonds)	Mandatory (for large undertaking & financial market participants: disclosure requirements; For MS & the EU: when setting out measures for green financial products)	Mandatory (for listing of green bonds on recognized stock exchanges)	
Scope of application [undertakings concerned, circumstances]	Green financial products, e.g. green bonds and green loans	Financial products; large undertakings	Green Bonds	
Objectives/goals pursued [climate change mitigation, climate change adaptation, environmental, etc.]	Environment improvement, climate change mitigation, more efficient resource utilization,	6 environmental objectives: 1. Climate change mitigation 2. Climate change adaptation 3. Sustain. use & protection of water 4. Circular Economy 5. Pollution prevention and control 6. Protection of healthy ecosystems To qualify, activities have to make a substantial contribution to one objective, and do no significant harm to the others, while complying with social safeguards.	Environmental sustainability, climate change	
Level of details [activities, corporates, financial assets]	Activities and projects within select sectors	Activities within select sectors <u>7 sectors</u> : Agriculture & forestry, manufacturing, electricity, gas, steam, air conditioning, water, transport, ICT & buildings	Projects funded by green bonds	
Different shades of green and/or brown activities	Binary	Binary (Solid fossil fuels are excluded)	Binary	
Incentives	No	No	No	

Source: https://www.finances.gov.ma/Publication/dtfe/2020/dt3%20international-platform-sustainable-finance-annual-report-2020 en%20(2).pdf

6 OVERVIEW OF ENVIRONMENTAL RELATED DISCLOSURES

Key Characteristics	Argentina	Canada	Chile	China	European Union	India
Mandatory vs voluntary	Mandatory (corporates) and voluntary (banks)	Mandatory for material risks	Mandatory (issuers of securities) and "comply or explain" (listed corporations)	Mandatory	Mandatory	Mandatory
Undertakings affected	Public listed companies	Reporting issuers	Listed corporations	Listed companies and Key Pollutant Discharging Enterprises	Large publi-interest entities with +500 employees)	Top 1000 companies based on market capitalization (incl. banks)
Reporting against International standards & frameworks	GRI (banks on a voluntary basis)	Voluntary use of recognized reporting standards and frameworks (e.g.	ISO 26000:2010, GRI or IIRC	NA	Voluntary use	Voluntary use by top 500 listed entities by market capitalization of IIRC
Location of disclosures	Annual report or other public report (eg. Corporate governance report)	Annual Information Form; Management Discussion & Analysis	Annual report or special report (eg. Corporate governance practices)	Annual and semi annual report	Annual report or separate report	Annual report
Information assured	NA	NA	NA	Third party verifiers	NA (ie. Statutory auditor or audit firm only checks existence of information)	Optional third party verification
Materially lens (financial and/or environmental materiality)	Financial materiality	Financial materiality	Environmental materiality	Double materiality	Double materiality	Environmental and social materiality

Table 2: Overview of environmental-related disclosure approaches in IPSF members

Source: https://www.finances.gov.ma/Publication/dtfe/2020/dt3%20international-platform-sustainable-finance-annual-report-2020 en%20(2).pdf

6 OVERVIEW OF ENVIRONMENTAL RELATED DISCLOSURES

Key Characteristics	Morocco	New Zealand	Norway	Singapore	Switzerland
Mandatory vs voluntary	Mandatory (for companies issuing securities on the market)	Voluntary	Mandatory	Mandatory	Voluntary
Undertakings affected	issuers of securities on the market (both financial and non- financial issuers)	Listed companies	Large companies	Listed companies	Voluntary for Financial and non- financial companies
Reporting against International standards & frameworks	Required use of an internationally recognized standard	Recommended use of GRI and IIRC	Voluntary use (e.g. TCFD)	Voluntary use (e.g. GRI, IIRC, SASB, TCFD, CDSB)	Voluntary use of SIX Exchange Regulation (eg. GRI and TCFD)
Location of disclosures	Annual report	Annual report	Annual report or other public document	Annual report or special report (sustainability report)	Sustainability report in accordance with International Standard
Information assured	Voluntary external assurance by independent professional bodies	NA	NA	Voluntary external assurance by independent professional bodies	NA
Materially lens (financial and/or environmental materiality)	Double materiality	Double materiality	Double materiality	Double materiality	Financial materiality

Table 3: Overview of environmental-related disclosure approaches in IPSF members

Source: https://www.finances.gov.ma/Publication/dtfe/2020/dt3%20international-platform-sustainable-finance-annual-report-2020 en%20(2).pdf







SFDR REQUIRES SUSTAINABILITY CLASSIFICATION FOR LIFE AND ASSET MANAGEMENT PRODUCTS FROM MARCH 10, 2021.1 DRAFT

	Article 6 / Article 7	Article 8	Article 9
Product category	For all products	Products with sustainability characteristics: "a financial product promotes, among other characteristics, environmental or social characteristics, or a combination of those characteristics, provided that the companies in which the investments are made follow good governance practices"	Sustainable investment products: 1) "a financial product has sustainable investment² as its objective and an index has been designated as a reference benchmark " or 2) "a financial product has sustainable investment as its objective and no index has been designated as a reference benchmark " or 3) A financial product has a reduction in carbon emissions as its objective
What needs to be disclosed (pre- contractual; periodic report; website)	Article 6: Describe how sustainability risks are integrated into investment decisions; and State the likely impact of sustainability risks on the return of the financial product or If sustainability risks are considered not to be relevant, provide a clear and concise explanation of the reasons therefor. Article 7: Describe if & how Principle Adverse Impacts (PAIs) are considered (from Jan. 2023) or If PAIs are not considered explain reasons therefore Proportion of the underlying investments that are taxonomy-aligned; if this not provided, disclaimer, that the product does not take into account EU taxonomy (from Jan. 2022)	 Information on how those characteristics are met; If an index has been designated as a reference benchmark, info on whether and how this index is consistent with those characteristics Ad 1.) From Jan. 2022 mandatory templates detailing, e.g. Investment strategy used to attain the E&S characteristics, incl. binding elements to attain E&S characteristics List of sustainability indicators used to measure the attainment of the characteristics Policies to assess good governance Share of "sustainable investments" Performance of sustainability indicators, also compared to previous periods Top investments of financial products Methodologies and data used to assess, measure and monitor the E&S characteristics Engagement policies From Jan. 2022, proportion of the underlying investments that are taxonomy aligned. 	 For 1): (a) information on how the designated index is aligned with that objective; (b) an explanation as to why and how the designated index aligned with that objective differs from a broad market index. For 2.) information on how sust. Investment objective is met (details below) For 3.) Explanation that the reference benchmark qualifies as an EU Climate Transition Benchmark or an EU Paris-aligned benchmark; where no EU Climate Transition Benchmark or EU Paris aligned benchmark is available , an explanation of the extent to which the product complies with the minimum standards for those benchmarks. Investment strategy used to attain the sust. Investment objective, incl. binding elements List of sustainability indicators used to measure the attainment of the sust. Investment objective Policies to assess good governance Share of "sustainable investments" and "others"; How do sust. Investments not significantly harm other sust. Investment objectives To what extent was sust. Investment objective met Performance of sustainability indicators, also compared to previous periods Top investments Methodologies and data used to assess, measure and monitor the sust. Investment objective Engagement policies From Jan. 2022, proportion of investments that are taxonomy aligned.
Examples for strategies used	 Conventional investment strategies "Basic" ESG strategies, integrating material ESG risk consideration into investment analysis and security selection with unconstrained investment universe. 	 Best-in-class approach Exclusions, that are material to the composition of the resulting portfolio and are not required by law anyways Sustainability themed investing Normative screening 	 Impact strategies investing in order to generate intentional env. and social outcomes aligned with e.g. SDGs that are measured against specific extra-financial KPIs; Majority of underlying investments have to be "sustainable investments"

^{1.} Level 1 disclosure as of March 10, 2021. Level 2 disclosure with more details required as of Jan 1, 2022.

^{2. &#}x27;sustainable investment' means an investment in an economic activity that contributes to an environmental objective, or an investment in an economic activity that contributes to a social objective, in particular an investment that contributes to tackling inequality or that fosters social cohesion, provided that such investments do not significantly harm any of those objectives and that the investee companies follow good governance practices,

ANNEX

GREEN BOND PRINCIPLES – TABLE II

The China Green Bond Catalogue:

https://policy.asiapacificenergy.org/sites/default/files/Preparation-Instructions-on-Green-Bond-Endorsed-Project-Catalogue-2015-Edition-by-EY.pdf

CBI:

https://www.climatebonds.net/files/files/CBI-Taxomomy-Sep18.pdf

MDB-IDEC:

https://www.eib.org/attachments/documents/mdb_idfc_mitigation_common_principles_en.pdf

EU Taxonomy:

https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en