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CORPORATE &
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The New Geography of Taxonomies

A Global Standard-setting Race

July 2023

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EXECUTIVE SUMMARY

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Since the first edition of this report in 2021, 10 new taxonomies in Europe, Asia-Pacific and the Americas were published and another 12 were initiated, including in Africa. Taxonomy development is continually expanding, and we should see other countries joining this growing list. **The evolution in Taxonomy development over the past two years is captured in this updated edition of our study the "New Geography of Taxonomies".**

There have been important milestones in the market in 2022 and 2023. These are featured in the taxonomy progress status section, which provides a high-level overview on the development process across jurisdictions, including delays, advances and the launch of these taxonomies. A few examples are Colombia (2022), Indonesia (2022), South Africa (2022), Mexico (2023) and Thailand (2023). **Further details are explored in the section on newcomers**.

This update also captures the growing focus on transition taxonomies, particularly in Asia Pacific. Countries as Singapore and Australia are looking to incorporate hard-to-abate activities, such as industry, into their eligibility criteria to address main decarbonization levers and align to a 1.5ºC trajectory. In addition to transition, **resilience is emerging as another important theme to be addressed in Taxonomy development**. The Climate Bonds Initiative has published a Whitepaper proposing a structure for a Resilience Taxonomy to focus on the capacity of sectors such as agrifood, infrastructure, health, and nature to respond, resist and adapt to hazardous events, trends or disturbance, while maintaining their essential function and structure.

Regional frameworks are also being proposed to facilitate Taxonomy development. In Latin America, a common framework has been published to guide Taxonomy development. This includes best practices on guiding principles, objectives, sectors and technical screening criteria. While in Asia, a second version of the ASEAN Taxonomy was published.

Other case studies have been included in this edition. In Latin America, we selected the Mexican Taxonomy, as it includes gender as an eligible category; in Asia-Pacific, we included the Australian Taxonomy, as it looks to incorporate transition categories; and in Europe, we included Georgia's Sustainable Finance Taxonomy, which includes the social thematic.

We will continue accompanying and assessing Taxonomies around the world, so stay tunned for future updates.

Our continued work & coverage on Taxonomies

TEG 101 - EU Taxonomy of sustainable activities

>> Read

EU Sustainable Finance Action Plan

Extended Taxonomy: acknowledging "in betweenness" to soften elitism

03 Jun 2022 / Cédric Merle, Fabien Cobat, Antonin Brisson-Félix / Newsletter

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As the global landscape of Taxonomies has developed, we have enlarged our scope of work on Taxonomies…

Nuclear and gas inclusion in the taxonomy creates a "between in and out"

05 Aug 2022 / Gratien Davasse / Newsletter

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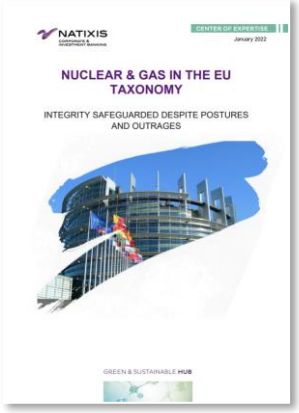
Natixis' GSH continued coverage of Taxonomies

Find out our Taxonomy-related publication since 2017



"Vade mecum to digest the 414-page Report from the TEG": our analysis of the "encyclopedia" on sustainability delivered by the Technical Expert Group (TEG)	"Why we need a shaded taxonomy from green to brown and in between": Natixis shared its position on the European Union's work	"EU Taxonomy for Sustainable Activities": Our analysis on EU Taxonomy Delegated Acts on climate objectives	"The New Geography of Taxonomy": Extension of our scope of work on Taxonomies	"Nuclear & Gas in the EU Taxonomy": Nuclear and gas inclusion in the taxonomy creates a "between in and out"

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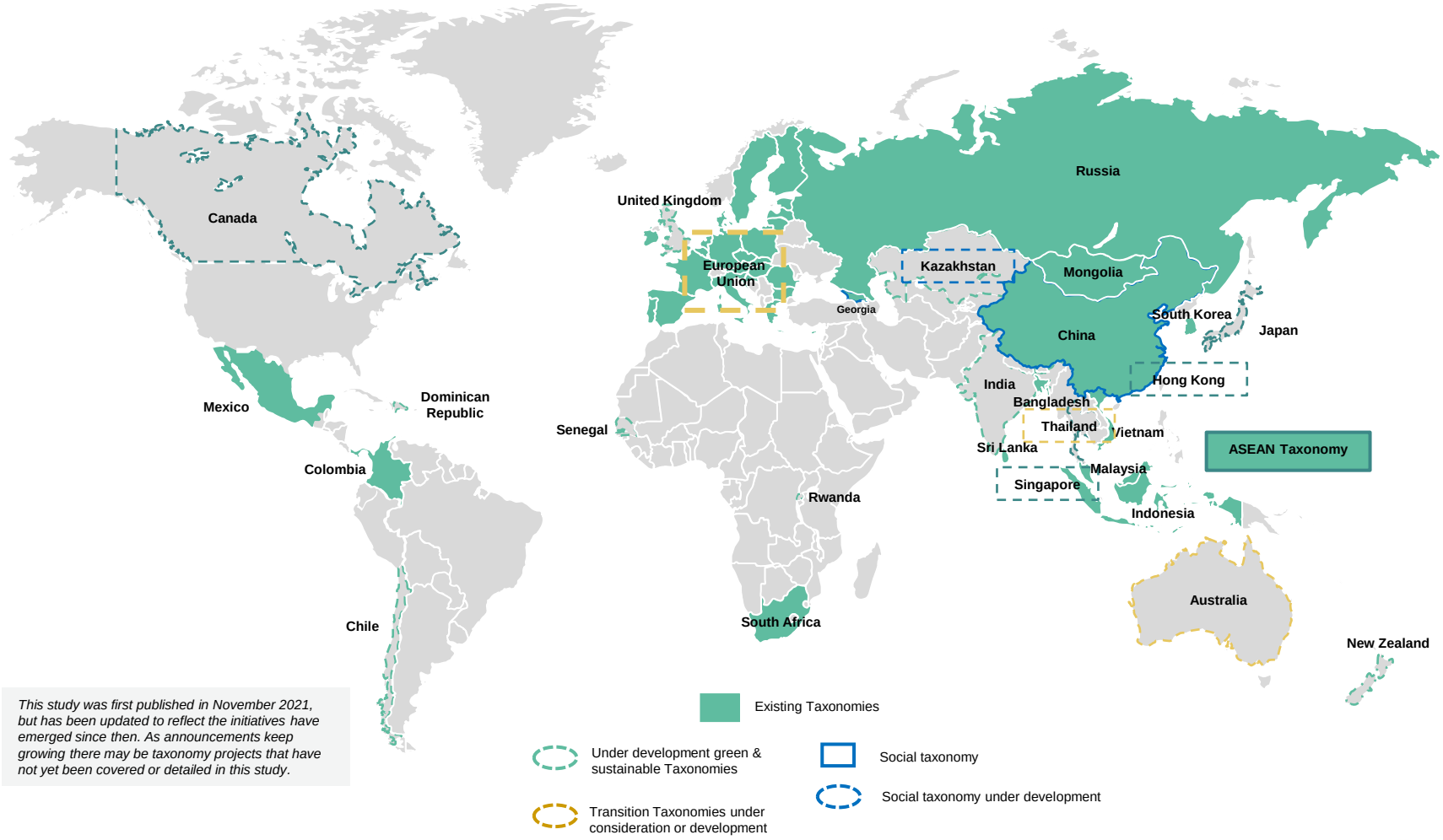
- Updated Common Ground Taxonomy, the crowbar of international green capital flows? (August 2022)
  - EU Social Taxonomy Proposal: simpler and meaningful but half-way through (March 2022)
  - EU-China Common Ground Taxonomy, a painkiller to taxonomy headaches? (November 2021)
- Sustainable Taxonomy development worldwide: a standard-setting race between competing jurisdictions (July 2021)
  - Draft guidance on Taxonomy alignment disclosure published by the European Commission (June 2021)
    - The EU Social Taxonomy Draft: promising buildings blocks (June 2021)
- The European Commission adopts an ambitious Sustainable Finance package including the long-awaited Taxonomy Delegated Acts (April 2021)

I. CURRENT LANDSCAPE

A Global Phenomenon

The multiplication of Taxonomies worldwide

Overview of existing and under development sustainable finance classifications of activities



This study was first published in November 2021, but has been updated to reflect the initiatives have emerged since then. As announcements keep growing there may be taxonomy projects that have not yet been covered or detailed in this study.

The Taxonomy Global Standard-setting race

Our benchmark sample

Currently there is no **"brown"** (significantly harmful activities) **Taxonomy** officially in the making, only **prohibited activities** or **exclusion lists**.

Green and Sustainable Taxonomies

Existing

- CBI Green Taxonomy
- EU Taxonomy of sustainable activities
- ASEAN
- Thailand (Green & Transition)
- Bangladesh Sustainable Finance Policy
- China Green Bond Endorsed Projects Catalogue
- Colombia Green Taxonomy
- Georgia Sustainable finance Taxonomy
- Indonesia Green Taxonomy 1.0
- Malaysia Climate Change & Principle-based Taxonomy
- Mexico Sustainable Taxonomy
- Mongolian Green Taxonomy
- Russian Green Taxonomy
- South Africa Green Finance Taxonomy
- South Korea K-Taxonomy
- Sri Lanka Green Finance Taxonomy
- Vietnam

Under development

- Australia (Sustainable)
- Canada (Green & Transition)
- Chile (Sustainable/Green)
- India (Green)
- Japan (Green & Transition)
- Kazakhstan (Green)
- New Zealand (Climate)
- Singapore (Green & Transition)
- United Kingdom (Green)
- Peru (Green)
- Hong Kong (Green)
- Dominican Republic (Green)
- Panama (Green)
- Costa Rica (Green)
- Senegal (Green)
- Rwanda (Green)

Social Taxonomies

- Technical Report on SDG Finance Taxonomy
- Georgia Sustainable finance Taxonomy

Under consideration

- Kazakhstan - Social Projects for ESG Finance Markets
- EU Social Taxonomy draft report (shelved indefinitely)

"Transition" Taxonomies under consideration

Canada and Japan ponder the development of transition Taxonomies defining criteria for high-emitting activities not yet aligned with Paris Agreement benchmarks. The EU performed a public consultation on a Taxonomy extension, including Transition & Intermediate Performance levels. In Australia, Transition categories are also envisioned.

Traffic-light Taxonomies

- CBI Green Taxonomy
- ASEAN Taxonomy for sustainable finance
- Indonesia Green Taxonomy 1.0
- Singapore Green & Transition Taxonomy
- Thailand (Green & Transition)

3. Where are the existing Taxonomies?

You can access Taxonomies texts and criteria (when publicly available) by clicking on the flags (URL links).

Taxonomy influence scorecard

COMPREHENSIVENESS	Sectorial span, amount of GHG emissions covered, number of activities reviewed, sub-categories granularity
+	
SOPHISTICATION	Criteria refinement (e.g., mere qualitative and aspirational criteria such as “eco-friendliness”, whitelist, principles-based guidelines, quantitative thresholds) ; existence of intermediary levels, cumulative set of conditions, ESG safeguards
+	
USABILITY	Nature and complexity of the demonstration and verification process, data inputs required
+	
STRINGENCY	Ambition level of the criteria (easiness to achieve)
+	
OPENNESS	Recipients or end-users' involvement at different life stages (advisory groups, public consultation, grievance mechanisms, criteria updates)

The overall acceptance and legitimacy of a Taxonomy

X

The economic weight of the Taxonomy's jurisdiction and the role played by its currency and law in international business affairs (extra-territorial effects)

=

The global influence of one jurisdiction’s Taxonomy

Taxonomy influence scorecard: examples

COMPREHENSIVENESS	The ASEAN taxonomy uses a hierarchical classification (ISIC), with 21 sectors for the Plus Standard and identifies 3 “Enabling sectors” / identified 6 focus sectors (based on their GHG emissions). / CBI classifies asset types
+	
SOPHISTICATION	The CBI Green taxonomy uses screening indicators, degree of compliance and whether climate certification exists for each category.
+	
USABILITY	The CBI’s labels / degree of compliance enables clear usability. The EU taxonomy’s DA in comparison require time to be easily used.
+	
STRINGENCY	The EU Taxonomy, esp. thresholds are overall stringent, hardly achievable.
+	
OPENNESS	Most taxonomies launched call for feedback,

The overall acceptance and legitimacy of a Taxonomy

X

The economic weight of the Taxonomy's jurisdiction and the role played by its currency and law in international business affairs, or the technical assistance it provides and its influence

=

The global influence of one (jurisdiction’s) Taxonomy

Three of the most influential taxonomies in our view

EU Taxonomy of sustainable activities

CBI Green Taxonomy

ASEAN Taxonomy

II. THE ABC OF TAXONOMIES

Back to basics: what a Taxonomy is about?

A Taxonomy is a **classification tool or system meant to help investors and companies to make informed investment decisions on sustainable economic activities**. It aims at establishing market clarity on what is robustly and consensually "sustainable" when it comes environmental or social issues.

In the context of Sustainable Finance, a Taxonomy

✓ *SHOULD BE*

- **A list of projects/technologies/products/activities exhibiting** a set of green or social patterns, benefits or performance criteria
- A framework supporting **product structuration & integrity safeguards**
- A classification tool fit for **different investment styles and strategies**
- Anchored into **latest scientific findings & industry experience**
- **Dynamic**, responding to technological and scientific knowledge changes

✗ *SHOULD NOT BE*

- A rating of companies
- A mandatory list of "potential" investments
- Judgmental on the financial performance of an investment (i.e. only about environmental performance)
- Inflexible or static

WHO INITIATES THEIR CREATION?

- Usually, **Finance ministers or supervisors** are spearheading their development. Almost all countries mandated technical working groups , while others decided to cooperate with institutions like the, the IADB IFC, the UNDP or the World Bank. Environment, agriculture and energy ministries often contribute.
- **Industrials, private organizations or academics** marginally initiate/oversee Taxonomies, but they decisively contribute to their development, especially on criteria related to their sectorial areas of specialization (e.g., Canada, Japan).

WHAT KIND OF CRITERIA ARE USED?

- **Economic sectors**
  (ex: railway transportation)
- **Type of technology or asset**
  (ex: Photovoltaic, Battery electric vehicles)
- **Environmental performances** (norms A to E, energy consumption thresholds, improvement against a baseline)

Three criteria to assess Taxonomies' development stages & relevance

Taxonomies are mostly created **to spur investment towards sustainable activities and** endow businesses with **low-carbon transition management guidance**. When assessing them, one should ask whether they are…

…Usable?

- **Simplicity is crucial.** Taxonomies are meant to pick and synthetize existing findings (ex: environmental and social standards) and **turn them into ready-to-use criteria.**
- Their nature is **prescriptive, discriminatory and** aiming at **operationalization.**
- Usability largely depends on the **availability of the underlying data** necessary to verify eligibility/ alignment, and on the **easiness of interpretation/verification** (closed question/criteria).

…Used?

- Using Taxonomy is **rarely compulsory**, but alignment disclosure is strongly encouraged (e.g., Taxonomies aligned revenue or CAPEX).
- As Taxonomies are recent, their **use is rather nascent and heterogeneous.**
- In a foreseeable future, **monetary or budgetary authorities might refer to them** as they offer unargued / official criteria. The ECB for instance contemplates **Taxonomy-tilted asset purchasing programs.**

…Useful?

They already provide guidance / resources referred to by market participants. Data shortages are progressively addressed thanks to them.

However, Taxonomies have **not everywhere decreased market discrepancies nor lowered transaction costs yet**. They are not completely interoperable yet.

Source: The European Commission provided a FAQ: What is the EU Taxonomy and how will it work in practice? with use-cases.

The variety of Taxonomies use-cases is astonishing

Taxonomies are rarely standalone documents, but the linchpin of entire ecosystems of laws & incentives

1

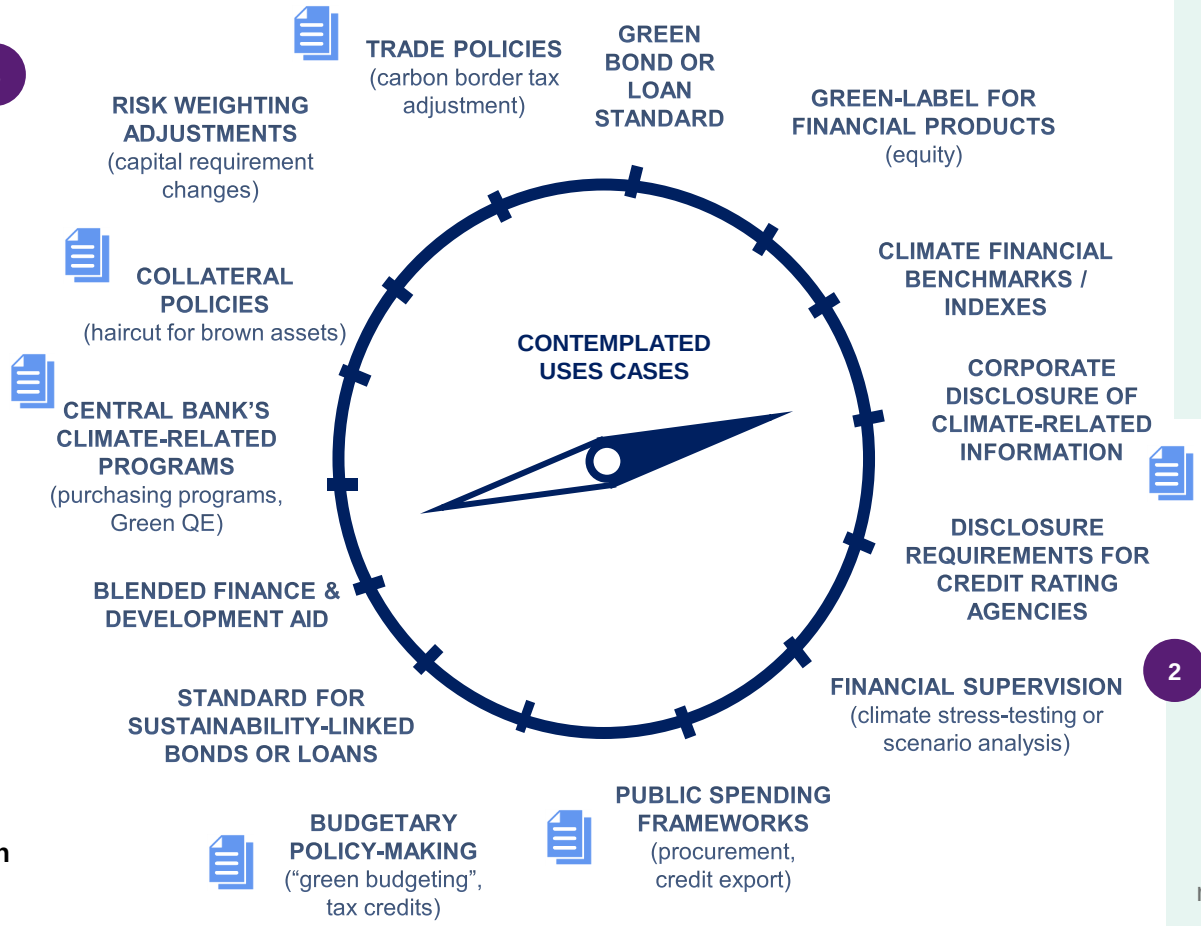
For the time being, Taxonomies primarily underpin voluntary standards on Green Bonds issuances

Apart from labels on dedicated and specific financial products, disclosure against Taxonomy criteria is the most common use case. Such reporting is mandatory solely in the EU.

3

Use-cases **beyond mere transparency** with **direct material financial consequences** are in the making (taxonomy-titled monetary or prudential policies).

Such unfolding largely depends on the **usability and reliability of the classifications**, on the acceptance and penetration of these classifications in market participants operational processes (alignment data availability)



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In a near future, marketing a financial product or service allegedly green or sustainable within a jurisdiction without referring to its national Taxonomy is likely to be dissuaded or forbidden.

Voluntary usage of Taxonomy prevails over compulsory ones

There is a dichotomy between mandatory and voluntary uses of Taxonomies.

i. **Mandatory uses of the Taxonomy** revolve mainly around **disclosure requirements**.

In China, use of the Green Industry Guiding Catalogue is **mandatory for sustainable financing purposes** (e.g. issuance of Green Bonds, supply of green credit, and statistics.)

In the EU, larger investee-companies will have **a duty to disclose their alignment with the taxonomy** (see dedicated timeline) The proposal for the **European Green Bond Standard** requires that issuers must allocate 100% of the proceeds raised by their bond to economic activities that meet the EU Taxonomy. When marketing "green products", investors must refer to its criteria.

ii. **Voluntary uses** revolve around the **design of sustainable finance products or funds**; definition of criteria for financing /investing programs, central banks' interventions, public procurement requirements, industrial policies, etc.

The French climate strategy for public export financing (Oct. 2020)*

- Creation of a "**climate reward mechanism" for export project support** (through credit-insurances) for activities **deemed sustainable based on the EU Taxonomy.**
- To be applied by Bpifrance Assurance Export, guarantor of export credit-insurances & lender of last resort**.**

How can the French public-export mechanism reward Taxonomy-aligned projects?

- Stronger pre-financing
- Further resources available (direct loans, better tariffs)
- Lower risk premium requirements for underwriting of sustainable projects

Monetary policies

Asked about the negative impact of the ECB's policy on climate and adjustments to prevent monetary policy from benefiting carbon-intensive firms, C. Lagarde states: *"I understand that **favouring or penalizing specific assets on the basis of environmental criteria was so far not possible as objective criteria had not been defined.** […] a so-called taxonomy, which I understand the ECB is actively supporting, will improve transparency and facilitate a more objective identification of what constitutes a green financial instrument. **As soon as such a taxonomy is agreed, the ECB will need to assess whether and how it can apply it to its Asset Purchasing Programme**."*

At the end of 2020, Sweden's Central Bank (the "Riksbank") announced its intention to increase its assets purchasing programs and to include green considerations (see our article).

* Sources: French Directorate-General of the Treasury, (October 2020) Climate strategy for public export financing – Report to the Parliament. To go further, see our article "France's strategy on export financing: a stick and carrot approach with fossil fuels funding phasing out and a supporting factor for EU Taxonomy compliant activities", available here.

Coverage and alignment concepts & type of criteria

How are Taxonomies designed and what concepts must be understood?

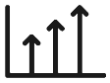
- ***Covered*** activities are those for which criteria exist (i.e., are explicitly defined to assess sustainability), while ***aligned*** activities are those that **comply/fulfill these criteria**.
- *Covered* activities are usually belonging to sectors or economic activities (in terms of economic classification codes, ex: NACE Codes) **with high GHG emissions abatement potential**. For instance, the EU Taxonomy Climate Delegated Act reportedly cover almost 80% of direct GHG emissions in Europe.
- Some **enabling activities** are also covered. They enable other activities to make a substantial contribution to one or more of the environmental objectives (without leading to a lock-in, examples being manufacture of batteries or energy efficiency equipment for buildings, storage of thermal energy).
- *Nb: There are **confusions between "coverage", "alignment" or "eligibility" of activities among market participants** (some rudimentary Taxonomies are mere lists of green activities, while others such as that of EU one define for individual activities the conditions to be fulfilled. The semantics of eligibility also refers to the satisfaction of criteria set in green, social or sustainable bond frameworks, i.e., assets or projects meeting the eligibility criteria as per the framework and to which proceeds can be earmarked).*

What are the types of criteria used?

I.
The very nature of the product or technology used


II.
Its relative (compared to a baseline) and / or **absolute performance** (thresholds).

Power generation < 100gCO2e/kWh.



III.
The respect of norms or standards*

Green building certifications: LEED, EDGE, BREEAM, CASBEE, GRIHA*

Norms or standards can be national or international and with different levels/classes (A, B, C, etc.). They can be versatile and relate to specific technology and/or performance level of the activity or product. Examples include those related to energy consumption of products, emission limits/class for vehicles, certifications for buildings.

*LEED: Leadership in Energy and Environmental Design; BREEAM: Building Research Establishment Environmental Assessment Method; USGBC: U.S. Green Building Council; CASBEE: Comprehensive Assessment System for Built Environment Efficiency; GRIHA: Green Rating for Integrated Habitat Assessment

Sectorial or technological trends across taxonomies

Examples of activities that are included, excluded and covered in most Sustainable Finance Taxonomies

	Sectors or activities	Type of alignment	Comments
Based on nature of the technology used	• Renewable energy • Electric mobility • Public mobility 	**Recurrently included in Taxonomies with little caveats**	Life Cycle Analysis (LCA) are not required (despite legitimate concerns, but simplicity prevails), a few Do No Significant Harm (DNSH) criteria exist especially for biomass/biofuels, geothermal, hydropower and public transport.
	• Fossil fuel extraction, transport and distribution • Thermal power plants • Coal related activities • Forest and land exploitation on protected areas • Internal combustion engine (ICE) vehicles 	**Often excluded from Taxonomies**	The Russian Taxonomy considers eligible projects increasing efficiency and reduction in harmful emissions of thermal power plants. Hybrid vehicles are in general not excluded.
Based on relative or absolute performance and / or non-climate objectives	• Energy efficiency • "Green" buildings and construction • Sustainable agriculture, land use, forestry and biodiversity measures • Heavy industries (cement, steel, aluminum) 	**Whose alignment/eligibility is determined on the basis of relative levels of performance**	Quantitative performance criteria (quantitative or qualitative) are set in the CBI, EU, Mongolian Taxonomies. Agriculture and land use are assessed according to location, maintenance of the ecosystem and protected areas.
	• Gas heating and power generation • Nuclear energy • Large-scale hydro • Industrialized agriculture 	**With discrepant criteria due to their ambivalent impacts and social/political sensitivity**	Gas related activities or products (including gas-fueled vehicles) tend not to be excluded from Taxonomies due to its lower emission intensity compared to coal. Nuclear energy is included in the Chinese and CBI Taxonomies.
	• Metals & mining • Air & maritime transport 	**Absent despite their economic and emission sheer weight**	Criteria for air and maritime transport is lacking as well as for mining, which is rarely assessed against its impact on water and soil pollution.

Our Taxonomy analysis grid

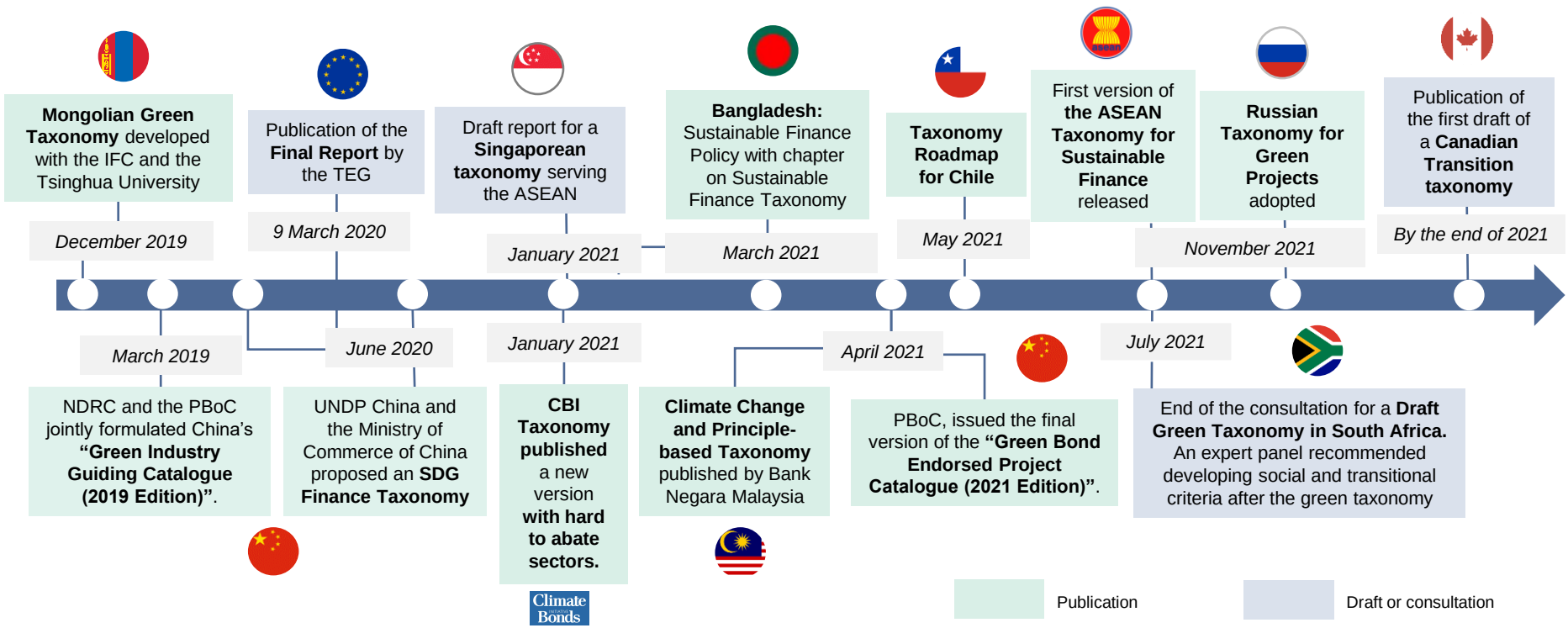
We benchmarked Taxonomies based on their **progress status** (development stage), their **explicit goals and purposes**, the **sustainability objectives** they addressed, their **sectorial coverage**, and the **typology of criteria** (incl. ESG negative screening criteria).

Criteria	Description
1. Progress status	• The classification is based on the **different life stages of the Taxonomies** (announcements/rumors, mention in sustainable finance roadmaps, drafts, consultation, final version, adoption & implementation), with details on different authors/contributors.
2. Stated goals & use-cases	• Each jurisdiction establishes a Taxonomy according to its **political needs**, priorities and constraints, as well as the primary users targeted (only issuers, or also investors). • Taxonomies can contribute to combat greenwashing, **improve disclosure, reduce market fragmentation**, help **monitoring progress**, equip companies with guidance, greening public policies (climate conditionality), touch upon financial regulation or supervision. • Depending on criteria and thresholds, and the level of **integration of the Taxonomy into other regulations or schemes**, it can create strong alignment incentives and become a keystone of sustainable finance policies.
3. Sustainable objectives addressed	• Entities and governments display **different regulatory frameworks according to their geographic and economic context** (decarbonization profile, acuteness of pollution and biodiversity erosion issues). • The same environmental goals are often labeled differently from a Taxonomy to another hindering comparisons. • Their purpose can be to define **significant contribution and/or significant harm** (ex: “socially beneficial activities”) as well as DNSH or even **transition criteria.**
4. Sectors covered	• The coverage (wideness and granularity) varies, with discrepant number of activities tackled. Often use and adaptation of economic sector classifications. • Focus varies between purely green activities, *intermediate* levels of greenness, fossil fuels and/or brown assets
5. Typology of criteria	• The nature of criteria depends on the sectorial coverage, pursued objectives and ambition of the Taxonomy. • The type of criteria used can include **international standards and definitions, national norms or regulations, relative or absolute performance of products, services, activities, etc.** • Additional criteria can be used to apply ESG negative screening/Minimum Safeguards. • The ambition/stringency in terms of climate change pathway or sustainability is expressed by the criteria and thresholds.

III. TAXONOMIES' DEVELOPMENT STATUS

Progress status: 2021

The timeline of taxonomy development worldwide



Sources

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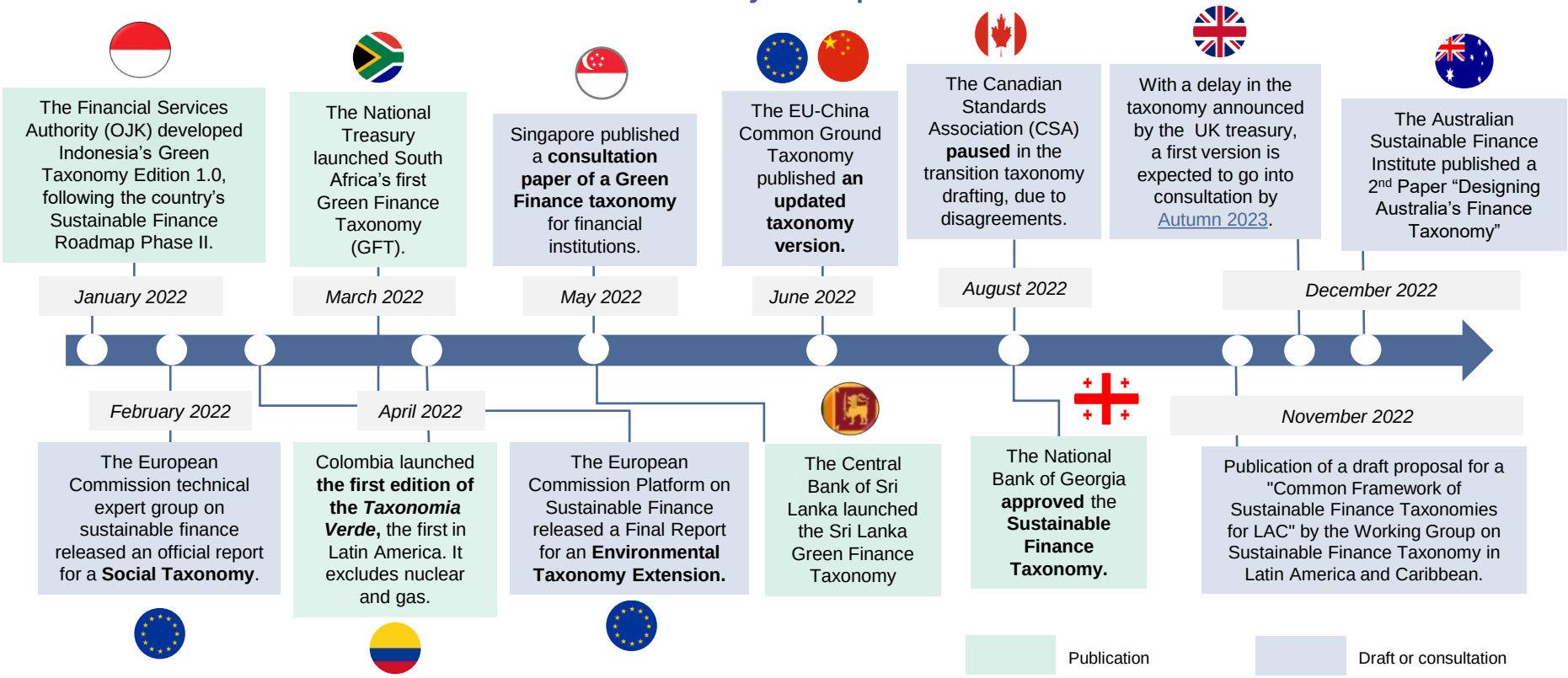
- Mongolian Green Taxonomy – available here.
- Climate Bonds Taxonomy – available here.
- Sustainable Finance Policy of Bangladesh – available here.
- Chinese Green Bond Endorsed Project Catalogue (2021 Edition) – available here.
- Technical report on SDG Finance Taxonomy of China – available here.
- Malaysian Climate Change and Principle-Based Taxonomy – available here.
- Russian Taxonomy for Green Projects – available here.
- South African Draft Green Finance Taxonomy – available here.
- Taxonomy Roadmap for Chile – available here.
- Roadmap for Sustainable Finance in Georgia – available here.

Progress status: 2022

The timeline of taxonomy development worldwide

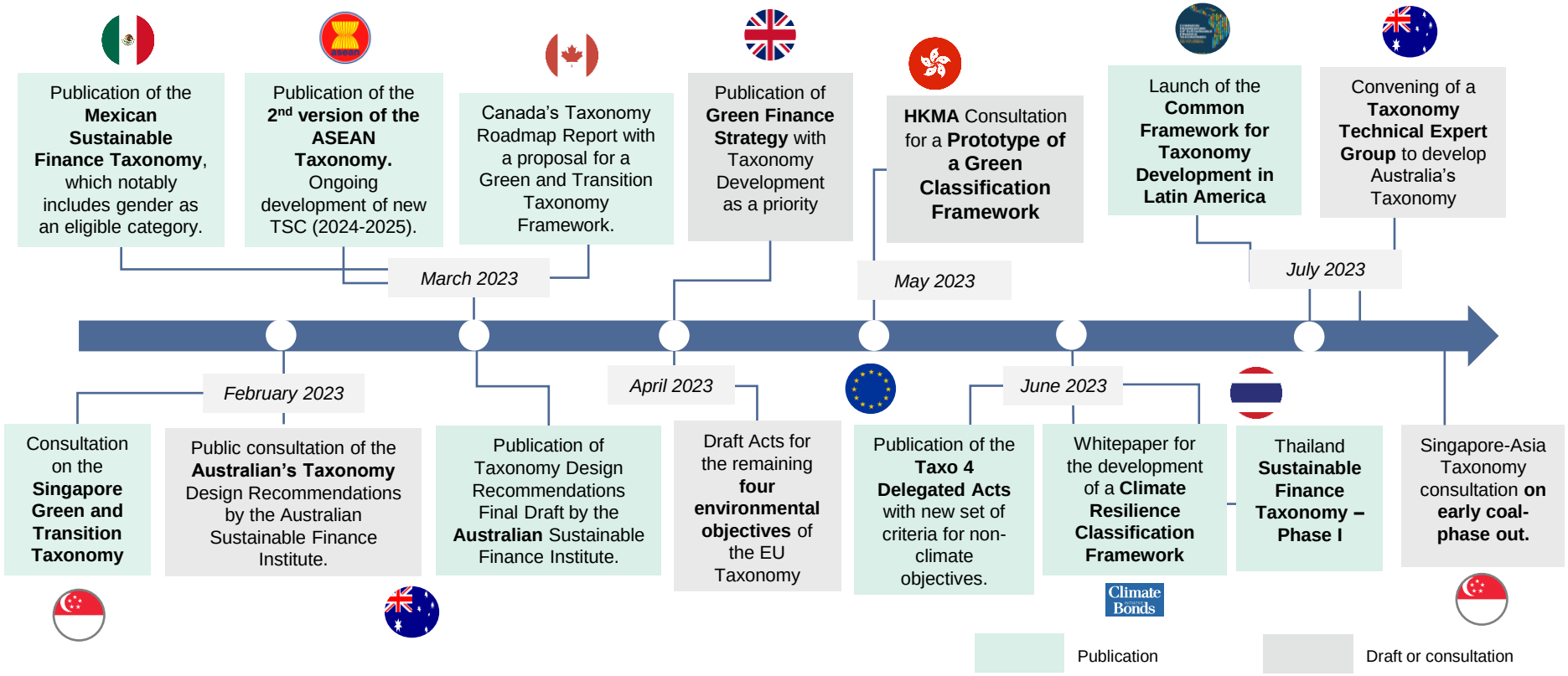


Sources

- South African Green Finance taxonomy (1rst edition) available here
- Sustainable Finance Taxonomy for Georgia 2022 available here.
- The Common Ground Taxonomy's latest Instruction Report and Tables of Activities are available here and here.
- Sri Lanka's Green Finance Taxonomy is available here.
- Indonesia' Green Taxonomy 1.0 is available here.
- Australia's sustainable finance Taxonomy's latest paper is available here.

Progress status: 2023

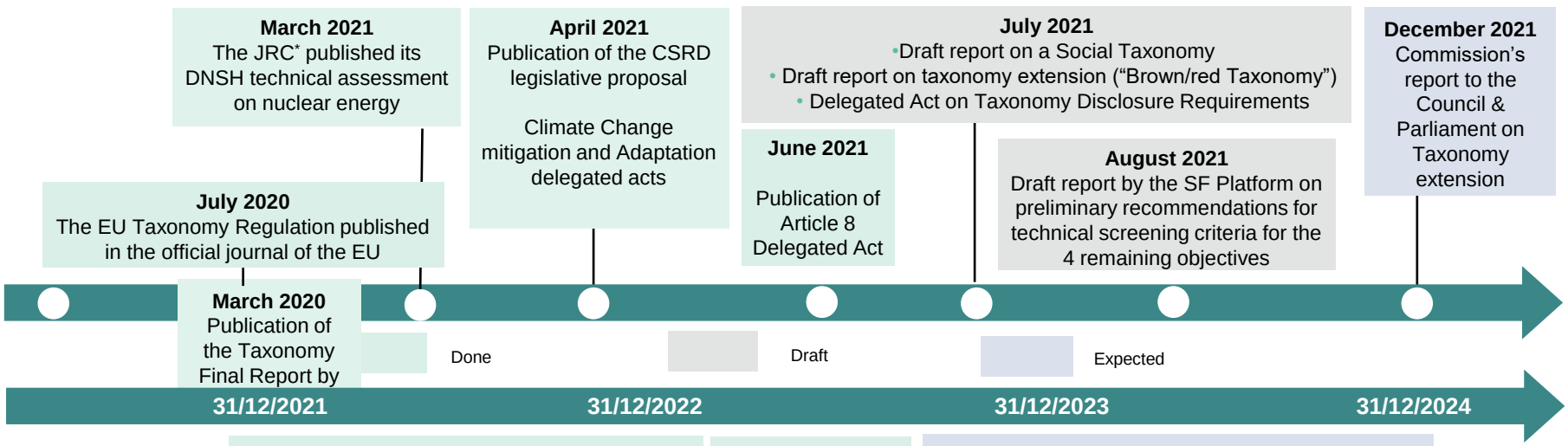
The timeline of taxonomy development worldwide



Sources

- Mexican Sustainable Finance Taxonomy available here
- ASEAN Taxonomy V2 available here
- Canada's Taxonomy Roadmap Report is available here
- The draft and final design recommendations for the Australian Taxonomy are available here and here.
- The UK's Green Finance Strategy is available here
- HKMA Prototype of a Green Classification Framework is available here.
- Taxo4 Delegated Acts available here
- Thailand publishes its Sustainable Finance Taxonomy Phase I available here
- Climate Bonds Climate Resilience Taxonomy Whitepaper is available here
- Singapore-Asia coal-phase out consultation available here.
- Launch of Latin America Common Framework is available here.

Timeline of the EU Taxonomy of sustainable activities



2022
Corporates have to disclose from January on the eligibility of their activities with **Climate objectives**(i.e., % of activities covered with Taxonomy criteria) during the year.

October 2022
PFS report on taxonomy usability and implementation of minimum safeguards.

February 2022
EU taxonomy for sustainable activities
Adoption of CDA on Nuclear and Gas

End 2022
PFS published its report on the 4 remaining objectives TSC.

2023
First disclosures of corporates about *the alignment* of their activities (i.e., % of activities fulfilling the taxonomy criteria) for the 2022 exercise with the EU Taxonomy on Climate Change Adaptation and Mitigation, as part of Article 8 of the EU Taxonomy (Regulation (EU) 2020/852)

June 2023
Adoption delegated acts for the 4 remaining objectives

2024
First disclosures of financial entities about *the alignment* of their portfolios (2023 exercise) with the EU Taxonomy **all 6 objectives**

Acronym

*JRC: The Joint Research Centre is the European Commission's science and knowledge service that carries out research to provide independent scientific advice and support to EU policy.

The 2022 newcomers: Indonesia, South Africa, Colombia, Sri Lanka, Georgia

Indonesia Green Taxonomy 1.0

- Indonesia launched a first edition of its Green Taxonomy in **January 2022.**
- Its structure is based on the **Indonesia Standard Industrial Classification (KBLI)** and includes "green sectors" as well as sectors / groups / activities **that are yet to be classified as "green".**
- 2, 733 sectors were studied and 919 could be mapped into sub-sectors, 904 of them are not green "yet" and 15 can be considered as green.
- **3 colors :** Unlike other taxonomies, Indonesia's applies **a traffic light system**: green "protect or improve the environment", yellow "not significantly harmful to the environment", red "harmful to the environment" (source).

South Africa Green Finance Taxonomy

- South Africa's National Treasury released its Green Finance Taxonomy's first edition in **March 2022**.
- It offers an official classification defining a minimum set of sectors, assets and projects eligible to be deemed "green" and the standards these need to meet. (source).
- It focuses on climate change, but the future drafts are expected to include other key issues (biodiversity, land use).

Colombia Green Taxonomy

- Colombia launched its green Taxonomy (Taxonomia verde) in April 2022.
- It covers 18 sectors, assets and economic activities contributing to climate mitigation **and detailed objectives for 3 land-use sectors (forestry, agriculture and livestock sectors)**, responsible for **59% of the country's GHG emissions**.
- Colombia also launched a Taxonomy alignment tool.

Sri Lanka Green Finance Taxonomy

- Sri Lanka's central bank launched a Green Finance Taxonomy with the IFC in May 2022.
- This is the first taxonomy to use both the EU International Platform on Sustainable Finance's Common ground Taxonomy along references from the IFC's blue finance guidelines and climate smart agriculture advice.
- The taxonomy covers climate mitigation and adaptation, as well as ecological conservation.
- It does not mention nuclear power, but **rather gas fired power plants** (with lifecycle emissions lower than **100gCO2/kWH** eligible) (source).

Georgia Sustainable Finance Taxonomy

- The National Bank of Georgia approved the Sustainable Finance Taxonomy in August 2022 (source.)
- It englobes **both social and green finance** and identifies sectors and activities for these 2 categories.
- The taxonomy identifies, for each sub sector, different criteria and technical standards.

The 2023 newcomers: Mexico, EU Taxo 4, ASEAN V.2, and Thailand

- Mexico published its Sustainable Taxonomy in March 2023.
- The Taxonomy includes 124 economic activities across 6 economic sectors and focuses on : i) climate change mitigation; ii) climate adaptation and iii) gender equality.
- Mexico's core **environmental objectives** mirror the EU Taxonomy's ones. Mexico also defined **social objectives**: Gender equality, Access to basic services related to sustainable cities, Health, Education and Financial inclusion
- Use of the Taxonomy is currently voluntary, but it is expected to provide an influential framework to guide capital flows in the jurisdiction that are focused on sustainability.

Mexican Sustainable Finance Taxonomy

EU Sustainable Finance Taxonomy

- In June 2023, there EC made amendments to the EU Taxonomy Climate Delegated Act, which include the non-climate objectives. The first objectives of the Taxonomy were adopted in June 2021 and have been applicable since January 2022.
- With the Taxo4 **new batch of 48 assessed economic activities were introduced** (*versus* 51 in the publication made by the Platform on Sustainable Finance on March 2022). The EC also took advantage of this Delegated Acts to develop criteria for **13 new economic activities** contributing to the climate **mitigation and adaptation objectives. Next steps:** The final delegated acts should **be fully in force by the 1st of January 2024.**

- Publication of an updated version of the Taxonomy, the ASEAN Taxonomy Version 2. New version provides guiding question, decision trees and case studies for all environmental objectives (Eos) and essential criteria (EC).
- Taxonomy categorizes economic activities as **green** (contribute or enable mitigation), **amber** (contribute to decarbonization where mitigation of other harm to environment activities is necessary) or **red** (do not contribute or enable mitigation and do not meet safeguards).
- The Taxonomy also includes Plus Standards with three tiers: Tier 1 (green) and Tier 2 and 2 (amber). Further technical screening criteria is being developed. **The expectation is to finalize this by 2025.**

ASEAN V. 2

Thailand

- In June 2023, the Bank of Thailand (BOT) and the Securities and Exchange Commission (SEC), co-leads, of Thailand's Taxonomy, published the first phase of their taxonomy. (source)
- The Thailand Taxonomy Phase I focuses on the energy and transportation sector, which represent the largest proportion of the country's emissions.
- The Taxonomy follows a traffic light system with metrics and thresholds from green, amber (transitional) and red (excluded). As to date the taxonomy only has two sectors, generic DNSH criteria was created (source).

Focus on Taxonomies under development

Sample of announcements

Kazakhstan

According to the Astana International Financial Centre (AIFC), **Kazakhstan intends to develop a green taxonomy**.
The Tsinghua University "*proposed to adapt the Taxonomy of Mongolia, given the similarity of countries in terms of environmental and climatic parameters*". No draft document, discussion or working paper is available online.
In June 2022 : **a social Taxonomy draft ("**Taxonomy of Social Projects for ESG Finance Markets") was proposed with **social financing criteria** for social bonds and loans (source).

Creation of the "Green Technical Advisory Group" in charge of **developing a green taxonomy** in June 2021. Like the EU TEG, it will propose the approach to develop "*a UK Taxonomy that is **usable and practicable for financial and non-financial firms***". (source)
In October 2022 : the GTAG published "Advice on the Development of a UK Green Taxonomy". It recommends a two-track approach of "adopt some and revise some". This involves using the majority of the EU Taxonomy's Screening Criteria (EU TSC) and putting aside elements deemed problematic, such as DNSH criteria. In March 2023: Government Published its updated Green Finance Strategy to highlight its priority in developing its Taxonomy.

United Kingdom

Canada

Published a **Taxonomy Roadmap** **in March 2023**, with the support of 25 of the largest financial institutions in the country. **A unique feature of the Canadian Taxonomy is that it is considering transition activities, high-emitting activities not yet aligned with Paris Agreement benchmarks. Exclusion:** projects related to solid fossil fuels (e.g., thermal coal mining, coal-fired power generation) or that create carbon lock-in and path dependency.
Short-form taxonomy expected by Summer 2023.

The private sector led Australian Sustainable Finance Institute (ASFI) released more details on the sustainable finance taxonomy in December 2022. **Transition categories, using a traffic light system** will be included (with a color-coding system), similarly to the ASEAN, Singaporean and European Extension draft taxonomies. (source). In March 2023, ASFI published the final recommendations for the Australian Taxonomy and is currently convening a Technical Expert Group to develop its Taxonomy throughout 2023-2025.

Australia

Hong Kong

In May 2023, the Hong Kong Monetary Authority published a prototype proposal to develop a Green Taxonomy for Hong Kong. This has gone a public consultation phase and the next steps are for the development of technical screening criteria for energy, transport, water and buildings. (source)

*GIZ: Deutsche Gesellschaft für Internationale Zusammenarbeit
** International Financial Corporation

Taxonomies are evolutive: stages of life & regular review

THE BEDROCK OF SUSTAINABLE FINANCE ROADMAPS

Some jurisdictions have announced their **intent to develop** sustainable finance Taxonomies. It often take the form of **national roadmaps, guidance or reports** about a sustainable finance **strategy** where the development of a Taxonomy is sometimes described as a **catalyst and as the bedrock of future product design and integrity.** Examples:

- Roadmap for Sustainable Finance in Georgia
- Final Report of the Expert Panel on Sustainable Finance & Taxonomy Roadmap Report for Canada

DIALOGUE & CONSULTATION

In some cases, before publishing a final document, **drafts** are being open to consultation. This practice is and has been used in the European Union and in China. During this **intermediate stage**, authors of the Taxonomy already know the direction and the objectives pursued. These intentions can also be disclosed in **technical reports**. Examples:

- **Draft Green Finance Taxonomy** - South Africa
- **Public Consultation Report on Taxonomy extension options linked to environmental objectives** – EU
- **Social Taxonomy draft report** – EU

EVOLVING & ITERATIVE NATURE

Ideally, Taxonomies evolve over time as technologies develop and as more and more entities and countries shift their business models. They should be classifications evolving in hand with **scientific, economic and technical knowledge and capabilities**. For the moment, few Taxonomies include continuous review and development models.

Examples:

- The Mongolian Green Taxonomy is to be reviewed every 3 to 5 years "*policy shifts, scientific developments, technological changes, and new industry needs in the green finance space*"
- The EU Taxonomy and the underlying technical screening criteria outlined in Delegated Acts are subject to review and modification.

Taxonomies' strategic objectives are manifold

Extra-territorial effects of Taxonomies

Depending on the market and economy they are designed for (in terms of scale, dependance), **Taxonomies can have extra-territorial effects** that can be indirect (i) or direct (ii):

i. **Companies may want to align their products with local Taxonomies in countries where they sell products** like they do for any other standards (health, technical characteristics).

ii. **Taxonomy regulations may apply to market participants located outside a jurisdiction or engaged in free trade agreements**. Ex: European Disclosure obligations will apply to financial actors offering products in the EU*.

The quest for independence and criteria sovereignty

Several countries developed Taxonomies with implicit **sovereignty and independence objectives**. As a reminder, existing Taxonomies include those of the European Union, Mongolia, Malaysia, Russia, Bangladesh and China for instance. The UK clearly states that it aims at positioning itself at the **forefront of green finance**.

Accommodating domestic high emitting industries

Japan and Canada currently develop transition Taxonomies that would reportedly help heavy-emitting industries' transition towards carbon neutrality in 2050 rather than focusing on pure green activities. In the case of Canada, there is an ambition to "export" the Taxonomy to mining or resource-heavy economies (Australia, Chile) but also to be used in the United States, or the Americas more broadly. Chile aims to develop criteria for its mining industry (as does New Zealand with criteria only for agriculture).

In July 2021, the EU launched a consultation over Taxonomy extension, including transitional criteria. **Taxonomies of Malaysia, Bangladesh**, South Africa and Singapore may include similar criteria.

Becoming an influential financial Center

Singapore has similar objectives to the UK and aims at creating a Taxonomy that would serve financial institutions in the entire ASEAN region and to become **leading green finance hub** in Asia.

- One can thus notice some **intrinsic/hidden competition in the APAC region** with the Malaysian Taxonomy - that has been released in April 2021 - and probably to some extent with the Chinese Catalogue and the under development Japanese taxonomy.
- In the Americas, Canada and Chile will both develop Taxonomies with criteria for **resource-heavy economies** (incl. mining).
- In Europe, cooperation is difficult regarding the creation of a green finance hub and its location (Paris, London, Frankfurt, etc.).

* Source: EU Commission: "FAQ about the work of the European Commission and the Technical Expert Group on Sustainable Finance on EU Taxonomy & EU GBS", available here.

Progress status in the largest GHG emitting countries

Out of the major emitting economies, two jurisdictions already have sustainable finance Taxonomies (China, EU).

6% of Worldwide GHG emission *(Worldbank, 2016)*

- The EU Commission adopted **Delegated Acts** with technical criteria related to climate change mitigation and adaptation in June 2021.
- The first companies' reports and investors' disclosures using those criteria are **due at the beginning of 2022**.
- In July 2021, draft reports on social and transition/brown Taxonomies were released. The social taxonomy was shelved indefinitely.
- In June 2023, the EU published the Delegated acts for the remaining four environmental objectives of the EU Taxonomy (Taxo 4). With this new activities are covered in sectors such as manufacturing, water supply, buildings and environmental protection. It is expected that the Taxo4 will only be applied from 1 January 2024 onwards.
- **The EU Taxonomy remains the most comprehensive and sophisticated scheme (See our studies about the EU Taxonomy)**

25% of Worldwide GHG emission

- In April 2021, the **People's Bank of China** (PBoC), the National Development and Reform Commission (NDRC) and the China Securities Regulatory Commission (CSRC) jointly issued the "**Green Bond Endorsed Project Catalogue** (2021 Edition)".
- The 2021 Edition of "**Green Bond Endorsed Project Catalogue**" removed "clean coal" from the previous version.
- This new Catalogue might serve as a bedrock for a more **standardized and clarified Chinese taxonomy** in the future. (***See our article on the draft Green Bond Endorsed Project Catalogue*)**

Yet, India and the Unites States still do not have sustainable finance Taxonomies

7% of Worldwide GHG emission

- India **does not yet have a sustainable finance taxonomy**. As the Reserve Bank of India laid out in its "2019 Report on Trend and Progress of Banking in India", there is a **lack of a standardized terminology allowing for the development of green financial markets**.
- However, in May 2017, the Securities and Exchanges Board of India released **a circular defining green debt securities** through a list of generic use-of-proceeds categories (available here) and a detailed memorandum about green bond disclosure requirements (available here).
- To our knowledge, the only attempt to develop a green taxonomy was a report defining green finance supported by the UNEP and the Shakti Foundation, an NGO facilitating India's energy transition (available here).

12% of Worldwide GHG emission

- **The United States have not announced any plan to develop a sustainable finance Taxonomy yet.**
- However, through his 2021 executive order on "tackling the climate crisis" (see our article here), President Biden is paving the way for such developments as the US is to develop a ***comprehensive climate finance plan*** to promote climate-aligned investments.
- Moreover, the **White House Office of Domestic Climate Policy** has been created and is tasked with coordinating domestic climate policy and ensuring the consistency thereof.

Sources:
EC Europa (Oct 2020), International Platform on Sustainable Finance
Natixis GSH (2020), Eu taxonomy for sustainable activities Skydiving Kit

*The four remaining environmental objectives are: the sustainable use and protection of water and marine resources; the transition to a circular economy; pollution prevention and control; the protection and restoration of biodiversity and ecosystems

The quest for customization and criteria sovereignty

Country	Details - Strategies to Taxonomy development, partnerships and specific goals
Mexico 	• Cooperation of the Association of Mexican Banks (ABM) with the German Corporation for International Cooperation (GIZ), UNEP/UNDP and the Network for Greening the Financial System (NGFS). Taxonomy published in March 2023.
United Kingdom 	• The UK Green Technical Advisory Group (composition here) ***reviews the UE taxonomy metrics to adapt them*** • Joined the International Platform on Sustainable Finance to support & benefit from developments of common international standards on Taxonomies • The first set of Technical Screening Criteria for the Taxonomy was planned to be legislated no later than 1 January 2023. A public consultation on the Taxonomy is expected for Autumn 2023. • Ambition: to position itself at the ***forefront of green finance*** and be the 1st to make TCFD* disclosures fully mandatory across the economy by 2025
Georgia 	• Cooperation with the IFC, National Bank of Georgia in the Sustainable Banking Network. • Align with global definitions (e.g., EU) to facilitate ***cross-border investments*** • Align with local requirements to help local institutions to **achieve Georgia's sustainability goals**
South Africa 	• "Differences between international and South African contexts studied to develop localized standards." (Briefing report) • Work on green & transitional thresholds to prepare ground for the incorporation of social and [just] transitional dimensions • Coop. with IFC and the Sustainable Banking Network (like Georgia), the National Business Initiative and the Carbon Trust • Consultation on the Draft Green Finance Taxonomy closed. The Draft mimics the EU Taxonomy, many criteria are similar
Bangladesh 	**Existing taxonomy -** Working group to review ***national regulations and international standards*** (according to the World Bank) and consult with industries, experts and advisors to create a ***comprehensive list of green products and initiatives eligible for financing and a clearly defined scope for financing green innovations***. Taxonomy is available here.

Many countries view the **EU Taxonomy as a benchmark,** follow other international developments and **best practices. Countries** seek to **adapt criteria to local contexts** with the main goal of **accelerating sustainable investment through better data.**

*TCFD: Task Force on Climate-related Financial Disclosures

Several local Taxonomies have leveraged the EU Taxonomy

Various countries have seen the **EU Taxonomy as a source of inspiration** providing some metrics and benchmarks. They seek to close **existing Taxonomies gaps or include activities not covered**. Pure green and transitional metrics will be distinguished and included.

Country	Details - Strategies to Taxonomy development, partnerships and specific goals
Malaysia 	• **Existing Taxonomy –** In April 2021, Malaysia released its Climate Change Taxonomy with 5 levels: CC mitigation – CC adaptation – no significant harm to the environment - remedial measures to transition – prohibited activities. • The Taxonomy has been published following a discussion paper and survey in December 2019 by the Central Bank. More than 80 institutions responded in September 2020.
Mexico 	• **Existing Taxonomy –** In March 2023, Mexico released its Sustainable Taxonomy. • Its development has been led by the Ministry of Finance with the participation of more than 200 technical experts from various industries, sectors and international organizations. • The Taxonomy has been leveraging on the EU Taxonomy, especially for the Do No Significant Harm elements. The Mexico Taxonomy leverages on the EU 6 environmental objectives and adds the following social objectives: Contribution to gender equality, Access to basic services related to sustainable cities, Health, Education and Financial inclusion.
Canada 	• In Canada, the development of a **Transition Taxonomy** was **not sponsored by the Federal Government but rather by the private sector** (6 major banks, pension funds and insurance companies) and some corporations. With the creation of the Sustainable Finance Action Council, government has become involved, with the publication of a Taxonomy Roadmap report in early March 2023. The Roadmap has been backed by the country's 25 largest financial institutions. • The **Canadian Standards Association** (CSA) Technical Committee for Sustainable Finance initially led the Taxonomy, which will aim at being **additive to the EU Taxonomy,** and then the **SFAC** took over. It will include the following sectors: Energy (up-, mid-, downstream), Power production, Agriculture, Forestry, Cement, Steel, Aluminium, Mineral & Mining.
Chile 	• Cooperation with the German International Climate Initiative*, Climate Bonds Initiative (CBI) and the Inter-American Development Bank. • Inclusion of **mitigation** but also **adaptation & resilience**, due to climate risks & adverse impacts on various sectors, such as **water** in Chile. • Will cover activities not covered by EU Taxonomies like mining (big copper and lithium exporter) and nature-based solutions.
Singapore 	• On January 28th 2021, the **Green Finance Industry Taskforce** - convened by the Monetary Authority of Singapore (MAS) - proposed to develop a Taxonomy that would be used by Singapore-based financial institutions who are also active in the **ASEAN region**. • Serves a **sovereignty / influence objective** as the goal is to turn Singapore into a **leading green finance hub** in Asia. • Would also encompass transition activities (see here). Intends to carry an analysis of the gaps between the European, the Malaysian (considered pure Climate Change) and Chinese Taxonomies. Thresholds mirror EU Taxonomy but adapting it to ***make it more flexible in an evolving international system. As of July 2023, is considering early coal-phase out and thus the Taxonomy is yet to be published.***

*Since 2008, the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) has been **financing climate and biodiversity projects** in developing and newly industrializing countries, as well as in countries in transition.

Source: Inter-American Development Bank, sustainable Finance Action Council, Bank Negara Malaysia; Monetary Authority of Singapore.

International coordination efforts

For now, the EU Taxonomy remains the most comprehensive, sophisticated and usable taxonomy

It offers a high level of ambition and granularity with **thresholds and minimum safeguards (i)**, an **understandable classification** that could be used by various financial, corporate and public actors (**ii**).

i. Few Taxonomies are as detailed/granular as the EU taxonomy. The criteria used to assess sustainability are varied: they can involve criteria related to the absolute and/or performance of the products, the nature of the product, activity or technology (technical characteristics). **Several Taxonomies are based (or being inspired) on the EU taxonomy such as ISO 14030 or the UK & South Africa's Taxonomies under development.**

ii. **A broad scope of 88 activities are assessed for climate change mitigation, and 95 for adaptation** for now in the Climate delegated acts. The activities are classified according to the Statistical Classification of Economic Activities in the European Community, commonly referred to as NACE, which is the industry standard classification system used in the European Union.

To avoid having to navigate among Taxonomies, investors and issuers might look for standardized market practices as they create a level-playing field for all actors. Some platforms or organizations can be part of harmonization efforts.

The International Standardization Organization (ISO) is a well-recognized organization that develops standards and norms.
It developed a series of environmental management norms under the umbrella of the ISO 14000 Norms. **ISO / DIS 14030 more specifically focus on green debt instrument.** It is composed of four parts, one being associated with the process for green bonds, the second one for green loans, the **third one is a Taxonomy** mimicking the EU Taxonomy, while the fourth chapter is the verification process of green debt instruments.

Climate Bonds Initiative is an international, investor-focused not-for-profit enjoying wide legitimacy among investors and is therefore in the position to propose standards. In January 2021, the Climate Bonds Taxonomy released an updated version of its taxonomy. **It is an easy-to-use climate-focused taxonomy for investors**.

The International Capital Market Association, or ICMA, is the global professional organization, with *de facto* regulatory competence, of investment banks and securities companies. It creates market standards and developed **the Green Bond Principles, the Social Bond Principles, the Sustainability Bond Principles and the Sustainability-Linked Bond Principles.** In December 2020, it released a **Climate Transition Finance Handbook** for issuers of transition bonds. The ICMA did not develop a Taxonomy *per se*, but the Social Bond Principles eligible projects seem to have inspired the **Chinese SDG Finance Taxonomy**.

The International Platform on Sustainable Finance (IPSF) is a **dedicated working group on Taxonomies,** co-chaired by China and the EU. Its objectives are to compare existing Taxonomies for environmentally sustainable investments developed by public authorities of member countries, identify similarities and differences in their respective approaches, criteria and outcomes. This working group published the IPSF Common Ground Taxonomy Instruction Report on 4 November at COP 26 which displays commonalities and differences between the EU and China's taxonomies.
This work will provide an important basis for **developing a common classification tool for the global green and sustainable finance market**.

- Source : EC Europa (Oct 2020), International Platform on Sustainable Finance
- Natixis GSH (2020), Eu taxonomy for sustainable activities Skydiving Kit

The International Platform on Sustainable Finance

The IPSF is a forum. It cannot create binding, legal or financial obligations, nor does it create standards. It facilitates exchanges, compares, coordinates initiatives of public authorities to scale up sustainable finance. The creation of **a Common Ground Taxonomy** compiling similarities between existing Taxonomies is one of its projects.

Many countries see the IPSF as a competent coordinating body

In the Taxonomy Roadmap of Chile, four pathways are identified:

1. To adopt the activities and criteria from an international taxonomy such as the EU Taxonomy
2. To adapt and modify the international Taxonomies to suit the local context in Chile
3. To develop a new taxonomy from scratch
4. To collaborate with other countries in the region to develop a regional-level taxonomy (the roadmap has been developed in association with the Inter-American Development Bank (IDB)).

Under pathway #2, the approach is to: adopt criteria that can be used directly ("low-hanging fruit"), modify criteria when a gap or national need is seen, **develop criteria for activities unique to Chile**. As Chile has an important mining industry (especially copper), "***Chile can lead the initiative*** *and work with experts globally through* ***collaborations with the members of the IPSF*** *to develop technical criteria required to transition towards* ***zero-emission mining***" (page 45)

"*The UK taxonomy will take the* ***scientific metrics in the EU taxonomy*** *as its basis and [...] review these metrics to ensure they are* ***right for the UK market*** *and to support and* ***benefit from the development of common international standards on Taxonomies****, the UK also intends to join the International Platform on Sustainable Finance*." (HM Treasury)

"A number of key stakeholders need to embrace the Taxonomy in order for it to be considered a success; […] the following could be considered as useful measures of success:

a) ***The extent to which the taxonomy is compatible / consistent with other Taxonomies****. Given capital is global, as are capital market participants, it is important that the* ***taxonomy is compatible / consistent with other Taxonomies****. […] the taxonomy should make use of a consistent approach and language, be inter-operable with other Taxonomies[…]. Efforts at tracking such developments are being conducted by the* ***International Platform on Sustainable Finance***." (page 6)

Members of the IPSF

ARGENTINA, CANADA, CHILE, CHINA, HONG KONG SAR, INDIA, INDONESIA, JAPAN, KENYA, NEW ZEALAND, NORWAY, SENEGAL, SINGAPORE, SWITZERLAND, EUROPEAN UNION, UNITED KINGDOM, MOROCCO

- 55% of global GHG emissions
- 55% of Global GDP
- 50% of World population

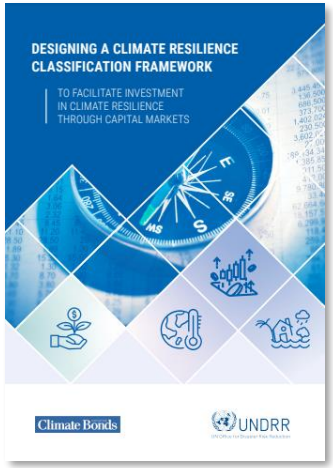
Observers of the IPSF

European Bank for Reconstruction and Development; The Coalition of Finance Ministers for Climate Action; NGFS; European Investment Bank; OECD; UNEP; EDFI European Development Finance Institutions; IFRS; UNDP; OICV-IOSCO; International Monetary Fund

- Source : EC Europa (Oct 2020), International Platform on Sustainable Finance
- Chilean Ministry of Finance, "Taxonomy Roadmap for Chile" (May 2021) – available here

Proposal for a Climate Resilience Taxonomy

Blueprint for developing a climate resilience classification framework



While most taxonomies focus on climate, mitigation has been the main objective addressed, and consequently most financing have gone toward mitigation asset and projects. Taxonomies such as the EU, the UK and the Climate Bonds, do include adaptation, but there is no fully dedicated resilience taxonomy. **To address this gap and expand climate resilience financing, the Climate Bonds Initiative published a Whitepaper with a proposal for a climate resilience classification framework**.

Types of Investments

- **Adapted investments**: integrated measures that reduce material physical climate risk to the asset, activity or entity (asset-focused).
- **Enabling investment:** enable the climate resilience of other assets, activities or entities (system-focused).

Principles

- **Key principle 1:** Substantial Contribution to climate resilience
- **Key principle 2:** Avoiding maladaptation and significant harm to sustainability objectives

Eligibility

- **Automatically eligible:** substantial contribution, does not have the potential for maladaptation, does no significant harm.
- **Standardized checks:** ensuring specific technical specifications are met.
- **Further assessment:** must meet technical screening criteria.

Sectors Covered by the Resilience Taxonomy

- Resilient Agrifood System
- Resilient Health
- Resilient Industry & Commerce
- Resilient Societies
- Resilient Cities
- Resilient Nature & Biodiversity
- Resilient Infrastructure

Example of Finalized Framework

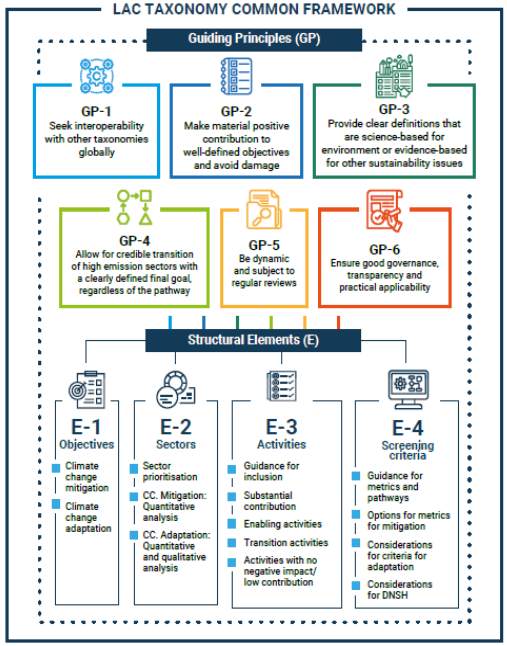
Sector	Subsector	Investment	Climate resilience outcome	Considerations for screening criteria – climate resilience	Considerations for screening criteria – significant harm
Water	Flood management	Stormwater warning systems	Other sectors more resilient to flooding	n/a	n/a
	Water storage	Groundwater storage	Water supplies more resilient to water stress	Further assessment: • Resilience of other water users	Standardized checks: • Environmental and social (E&S) impacts
	Wastewater treatment	Construction/ expansion/ operation/ upgrade of wastewater treatment system	Wastewater treatment more resilient to flooding	Further assessment: • Flood risk mapping • Resilient to [x] year flood • Resilience of affected parties	Standardized checks: • E&S impacts

Latin America & Caribbean Common Taxonomy Framework (1/1)

An example of a regional set of principles for taxonomies' development in LAC

Source : Common Framework on Sustainable Finance Taxonomies, July 2023.

- On 10 July 2023, the Working Group on Sustainable Finance Taxonomy in Latin America and the Caribbean published the Common Framework of Sustainable Finance Taxonomies f**or Latin America and the Caribbean (LAC)**.
- The Common Framework was originally proposed to identify guiding principles and key structural elements (objectives, classification systems to identify sectors/ activities eligibility criteria through metrics and thresholds) to ensure **comparability and interoperability** of taxonomies. **These last two principles are crucial to avoid market fragmentation.**
- The Framework aims for taxonomies to be interoperable and harmonized.
- Its two main objectives are **climate change mitigation and climate changed adaptation.**
- **The Framework should be tested in** at least three countries.



The "EU-China's" Common Ground Taxonomy (1/7)

Background

- In July 2020, the EU and China initiated a Working Group within the International Platform on Sustainable Finance (IPSF) to undertake a **technical comparison of the taxonomies from the two jurisdictions**.
- On 4th November 2021, the Working Group released its **first phase report:** the **IPSF Common Ground Taxonomy (CGT)*.**
- The IPSF Common Ground Taxonomy identifies **commonalities and differences** between the two classifications.
- This document also aims at enhancing worldwide **comparability and interoperability** of sustainable finance standards.

The Common Ground Taxonomy (CGT)…

✓ *IS*

- A benchmark identifying commonalities and differences in EU and China's taxonomies on climate change mitigation criteria
- Technical documents for voluntary reference
- A generic methodology for benchmarking taxonomies in general
- An analytical tool or reference (guidance) for other jurisdictions when developing their own taxonomies

✗ *IS NOT*

- A 'common' or 'single' taxonomy nor a standard
- Formally or legally endorsed by any IPSF member jurisdictions
- A legal documentation entailing requirement/obligation for either jurisdiction to change their taxonomy
- Covering all eligibility features in the EU and China taxonomies yet

CGT's recipients & use-cases

- **Mostly Chinese and European Green bond issuers and verifiers** (e.g., in the context of offshore green bond issuances from Chinese companies, or panda bonds issued in mainland China by western companies)
- **Various entities, including banks and financial institutions**, willing to assess their business alignment with low carbon economy objectives.
- **Development finance institutions** and reporting entities interested in international definitions of climate finance. International standard setting bodies considering the CGT as a reference for working on other sustainable finance standards.
- **Jurisdictions such as national governments or regional bodies** looking for **toolkits or guidance to develop their own taxonomy.**

*November 2021 Deliverables

Instruction Report
(background, methodological explanations)
43 pages

Activities' table
(the taxonomy itself, covering 61 activities)
62 pages

Feedback/ consultation document
6 pages

The “EU-China’s” Common Ground Taxonomy (2/7)

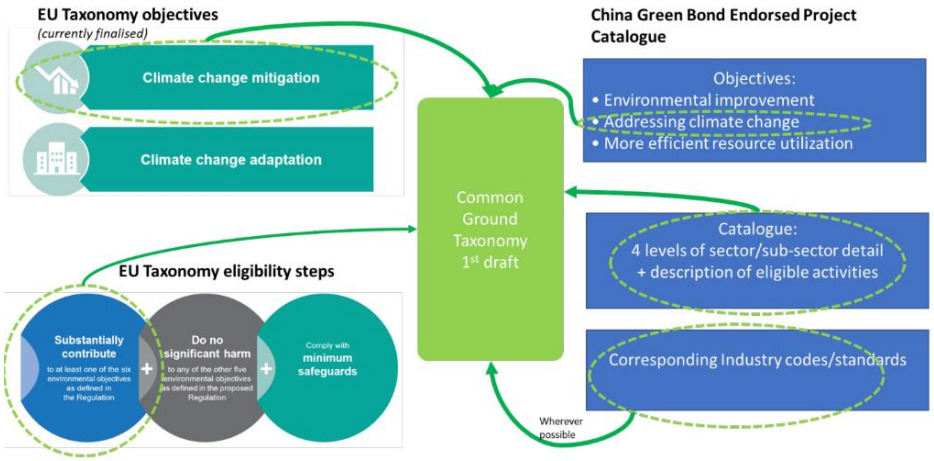
Environmental objectives and sector coverage mapping

EU Taxonomy environmental objectives	China Taxonomy environmental objectives
Climate change mitigation	Climate change response
Climate change adaptation	
The sustainable use and protection of water and marine resources	Environmental improvement (pollution control and ecological conservation)
The protection and restoration of biodiversity and ecosystems	
The transition to a circular economy	
Pollution prevention and control	More efficient resource utilization (circular economy, waste recycling and pollution prevention)

Common Ground Taxonomy Environmental Objective

Climate Change mitigation

Chart | Scope of comparison



Although, the environmental objectives of EU and China taxonomies can be broadly matched, it **varies at more granular level**. Thus, the working group **limits the scope of analysis to climate change mitigation**, where the 2 taxonomies share more similar features.

- The CGT **is based on the International Standard Industrial Classification of All Economic Activities** (ISIC, available here) for sector classification and mapping.
- **Only sectors included in both the EU and China taxonomies are covered yet** (i.e., ICT and green services are not in the scope).
- The Common Ground Taxonomy on climate mitigation comprises **7 sectors**, 6 of them are in line with ISIC. Activities not fitting into the ISIC classification framework are categorized under “Others”.
- A **total of 61 activities** are included in the current version of CGT, **covering 87 activities under the EU Taxonomy and 94 activities under the China Taxonomy**, within the scope of **climate mitigation.**

Macro-sectors coverage in the CGT:

- Agriculture, forestry and fishing
- Manufacturing
- Electricity, gas, steam and air conditioning supply
- Water supply; sewage, waste management and remediation activities
- Construction
- Transportation and Storage
- Others (i.e., Underground permanent geological storage of CO2 and Hydrogen storage)

Source: *Ibid.* IPSF, Instruction report, November 2021

The “EU-China’s” Common Ground Taxonomy (3/7)

Analysis grids– Our approach VS. IPSF’s approach

Approach followed by the Common Ground Taxonomy	Description	Natixis’ corresponding analysis grid	Comments
History of development process	The CGT introduces respective contexts and development process of the EU and China taxonomies.	Progress status	• The CGT presents EU and China taxonomies background, purposes and differences, in order to better understand respective contexts.
Scope of analysis	The **EU taxonomy sets 6 environmental objectives,** whereas **China taxonomy reflects 3 objectives.** The CGT only covers **climate mitigation activities** during this 1st phase. It also identifies **priority sectors based on emission levels** for further sector and criteria mapping.	Sustainable objectives addressed & Sector covered	• China taxonomy is not built on how economic activities contributing to 3 overarching environmental objectives (the approach is slightly different)
Section mapping	The CGT’s sector classification system is based on the International Standard **Industrial Classification of All Economic Activities (ISIC).** Activities of EU and China taxonomies are mapped against this ISIC neutral code to enhance the comparability.	Sector covered	• Different from Natixis’s approach to benchmark against the EU taxonomy, the CGT’s sector classification is based on the international recognized ISIC. Majority of jurisdictions use it as their sector classification or derive from it. • Benchmarking at ISIC provides a neutral approach to categorize activities and generate greater reference significance to other jurisdictions.
Scenario analysis methodology	The CGT concludes the descriptions and technical screening criteria of each activity into **6 scenarios**. It proposes to reach common ground without minor changes of either taxonomies.	Not comparable	• The **methodology of CGT is not designed to develop common criteria**. • It shows the results of the comparison on which area of activities and criteria are overlapped, more stringent, or obvious divergence.

The “EU-China’s” Common Ground Taxonomy (4/7)

Scenario analysis & criteria

The Common Ground Taxonomy uses a “**scenario analysis approach”** to evaluate the detailed descriptions and technical screening criteria of each activity and ascribe them with 6 scenarios.

Scenario	Description	Indication
Scenario #1: Areas with clear overlaps	Activities in the two taxonomies assessed have overlaps and can be considered comparable within the scope/for the purpose of the CGT report.	Recipients can either refer to EU or China criteria/definition, they are deemed as the **same or equivalent.**
Scenario #2: EU criteria are more stringent and/or detailed	Activities that were clear to map but where the EU screening criteria were either narrower in scope or more stringent and/or more detailed than Chinese criteria.	**EU criteria/definitions are used** in the CGT as it is more stringent. Recipients can check China criteria in its taxonomy with activity reference number stated in the CGT.
Scenario #3: China criteria are more stringent and/or detailed	Activities that were clear to map but where the China criteria were either narrower in scope or more stringent and/or detailed than EU criteria. The stringent and/or detailed criteria are described more precise in the CGT (i.e.. China definition/criteria).	**China criteria/definitions are used** in the CGT as it is more stringent. Recipients can check EU criteria in its taxonomy with activity reference number stated in the CGT.
Scenario #4: Identifiable overlap	Activities that have some alignment in scope of activities. Both criteria are described.	Due to lack of clarity in criteria, some are technically difficult to compare, **both EU and China criteria are stated** for this phase. Recipients can refer to the criteria that best fit.
Scenario #5: Unclear overlap	Activities that were very difficult to map in the other taxonomy.	**Excluded from the CGT.**
Scenario #6: Obvious divergence	Activities that there was obvious differentiation.	**Excluded from the CGT.**

NATIXIS’ VIEW ON THE CGT

- This first piece of work undertaken by the IPSF is very much welcome
- However, there are several shortcomings as it stands today:

✓ Explanations are not provided on the scenario chosen (absence of justifications)

✓ Readers must “blindly trust” the text without disclosure about the underlying information and specific criteria leading to pick a scenario rather than another

✓ Overlap in terms of activity or sector perimeter and overlap regarding criteria nature and/or stringency should be distinguished

✓ Stringency and granularity are mixed up while they should not

✓ Stringency cannot only be assessed in terms of thresholds, especially as the same metrics are not always used

✓ The table document is not self-sufficient as the technical criteria from the Chinese Catalogue are not quoted (readers must refer to the sections mentioned in the Catalogue, which themselves often incorporate reference to legal documents)

✓ As a bedrock, having official translations in both languages of the EU Taxonomy (in Mandarin) and of the Catalogue (in English, although a version was recently released) would be very helpful for market participants

✓ All in all, the usability is limited for the moment

The “EU-China’s” Common Ground Taxonomy (5/7)

Examples of scenarios 1 and 2

In the next slides, we have been adding explanations or clarifications that we would consider as helpful for CGT users and adding usability (track changes on the original text.

Scenario 1: Areas with clear overlap

CGT Number and Activity Name	D1.3 Electricity generation from wind power
Description	~~Construction or operation of electricity generation facilities that produce~~ electricity from wind power.
Substantial contribution criteria	Activity meets description above
Additional notes	China activity: 3.2.2.1 Construction and Operation of Wind Generators EU activity: 4.3 Electricity generation from wind power
~~Overlap scenario~~Scenario selected and explanations	Scenario #1 Areas with clear overlaps Explanations: China and EU have the same description and technical criteria, which is related to the nature of the technology or asset itself

The source of the description should be mentioned, ie. whether it is a copy paste of the EU taxonomy, of the Chinese Catalogue or a mix of both

There is a confusion between “description” and “criteria”, although it is right that quantitative threshold does not apply in this specific instance (the technology agnostic threshold of 100gCO2/KWh of the EU Taxonomy does not apply in the case of electricity generation from wind power).

Overlap in terms of activities covered (scope and sector granularity) and in terms of criteria must be differentiated.

Scenario 2: EU criteria are more stringent

CGT Number and Activity Name	E2.2 Recycling non-hazardous waste
Description	Construction and operation of facilities for the sorting and processing of separately collected non-hazardous waste streams into secondary raw materials involving mechanical reprocessing, except for backfilling purposes.
Substantial contribution criteria (EU one)	At least 50% of the weight of collected materials is converted into secondary raw materials
Additional notes	The China activity that overlaps with but is broader than the specified scope includes: 1.5.2.2 Recycling of waste and discarded resources
Scenario selected and explanations ~~Overlap scenario~~	Scenario #2 EU criteria are more stringent Explanations: • The EU taxonomy set weight percentage threshold for waste recycling, whereas China’s taxonomy does not have such threshold, nor specifies qualitative stricter activities features. • EU criteria are shown above and is more stringent in terms of screening criteria.

Source:
IPSF, International Platform on Sustainable Finance on Common Ground Taxonomy Table, November 2021

The “EU-China’s” Common Ground Taxonomy (6/7)

Examples of scenarios 3

Scenario 3: China criteria are more stringent

CGT Number and Activity Name	D1.1 Electricity generation using solar photovoltaic technology
Description	Construction or operation of electricity generation facilities that produce electricity using solar photovoltaic (PV) technology.
Substantial contribution criteria (Chinese one)	The component products selected for solar photovoltaic power generation facilities should meet the following requirements: 1) The minimum photoelectric conversion efficiency of polycrystalline silicon cells and monocrystalline silicon cells shall not be less than 19% and 21% respectively; 2) The minimum photoelectric conversion efficiency of polycrystalline silicon cell modules and single crystal silicon battery modules shall not be less than 17% and 17.8% respectively; 3) The minimum photoelectric conversion efficiency of silicon-based, CIGS, CdTe and other thin-film battery modules shall not be less than 12%, 14% , 14% , 12% ; 4) The decay rates of polycrystalline silicon battery modules and monocrystalline silicon battery modules shall not be higher than 2.5% and 3% in the first year, and not higher than 0.7% per year, and not higher than 20% within the period of 25 years; the attenuation rate of thin-film battery module shall not be more than 5% in the first year, no more than 0.4% per year in the following year, no more than 15% within the period of 25 years.
Additional notes	The EU activity that overlaps with but is broader than the specified scope includes: 4.1. Electricity generation using solar photovoltaic technology
~~Overlap scenario~~Scenario selected and explanations	Scenario #3: China criteria are more stringent Explanations: • China taxonomy sets minimum/maximum conversion efficiency and attenuation rate indexes for PV projects, whereas EU taxonomy does not have such limits. • China’s criteria are shown above and is more granular and prescriptive in terms of eligible projects (efficiency and lifespan criteria that somehow serve as DNSH criteria).

Suggested layout
CGT Number and Activity Name
Description and its source
Scenario selected
Substantial contribution criteria
Explanations
Additional notes

Source: IPSF, International Platform on Sustainable Finance on Common Ground Taxonomy Table, November 2021

The “EU-China’s” Common Ground Taxonomy (7/7)

Next steps

- Stakeholders were invited to **provide feedback on the Common Ground Taxonomy Table** (available here) by 14 January 2022.
- As emphasized in the Common Ground Taxonomy Instruction Report, the working group compared only some features of the EU and China taxonomies for the first phase, other missing parts are planned to be incorporated into future work.

Envisioned Extensions

- **Additional sector**: The current CGT only covers the sectors that significantly contribute to the GHG emissions to both jurisdictions, other enabling sectors such as ICT and services will be considered for future iteration of work.
- **Additional environmental objectives**: In the next step, the working group will put forward additional environmental objectives, map and assess corresponding criteria in the two taxonomies.
- **Transition considerations**: The working group will work to evolve more transition considerations and activities, to enable the transition of high emissions activities.
- **New areas of alignment** in existing activities where mapping alignment was challenging, and more research work needed to understand possible commonalities. The working ground assessed 80 activities in total, there are 19 of them are still pending for further analysis.
- **Other eligible features**: features such as DNSH and minimum safeguards would be considered in the future stage to strengthen the comparability and interoperability.
- **Other jurisdictions**: Other finalized taxonomies could be added to the current analysis.

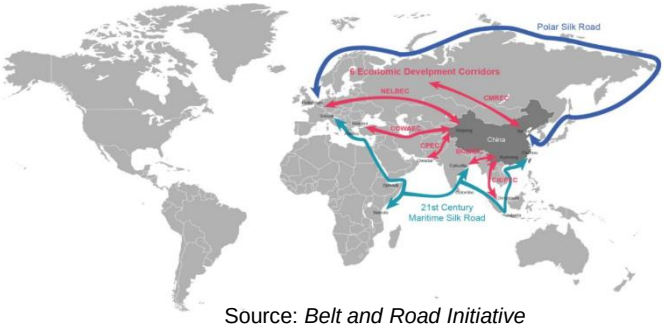
The Hong Kong Monetary Authority (HKMA) intends to take the Common Ground Taxonomy as reference to design its tailored sustainable finance taxonomy according to its own economic structure. By referring to the common ground taxonomy, Honk Kong is expecting to participate more actively to the international green capital flows.

Case study, the Belt and Road Initiative Taxonomy (1/3):
An example of a classification aiming at a global influence

The Belt and Road Initiative (BRI) was proposed by China's president XI Jinping in 2013, inspired by the historical Silk Road. It aims at promoting the connectivity of Asian, European and African continents and their adjacent seas, increase trade and investment volumes, boost economic growth and establish all-dimensional networks. China is the lead investor, in 2020, investments reached around USD 47 billion despite a 54% decline compared with 2019. As of June 2021, 172 countries and international organizations have signed cooperation agreements with China for the BRI (BRI Portal, available here).

Greening the BRI

Infrastructure investments within the framework of BRI can accelerate economic growth and promote social development, but it can also lead to rising pollution, greenhouse gas emissions and biodiversity loss. In particular, the **large amount of investment flowing into fossil fuels** has elicited much controversy and criticism. This is both inconsistent with the climate goals of international communities, increases the risk for investors and ecologically fragile areas. Since 2017, China has been advocating **"high quality" and green development of the BRI**, a series of overarching documents released by China and its international partners, including Green Investment Principles for Belt and Road.
(Read our 2018 flagship report on the topic, available here)



Source: *Belt and Road Initiative*

Green Development Guidance for BRI Projects (GDG)

- ❑ The BRI taxonomy was released in December 2020, by the Belt and Road Initiative International Green Development Coalition (BRIGC). (Available here)
- ❑ BRIGC was established after the second Belt and Road Forum in April 2019, with over 140 Chinese and international organizations, including World Resources Institute, UNEP, Tsinghua University etc. It is supervised by the Chinese Ministry of Ecology and Environment. It aims to guide BRI investment to shift from brown to green.
- ❑ It provides 9 recommendations for greening the BRI, a classification system and the positive and negative lists focusing on the environmental, climate and biodiversity impacts of projects. A potential BRI taxonomy is under development.
- ❑ In May 2021, BRIGC launched the phase II of the research, with the purpose of specifying application guidelines for financial institutions, developers and stakeholders involved, and refine technical criteria.

BRI Projects Classification

Environmental Goals
- Pollution prevention
- Climate change mitigation
- Biodiversity conservation

Categories of economic activity
- Energy
- Transport
- Manufacturing
- Mining
- Agriculture
- Land-use

Targeted audience: governments, financial institutions, owners of investment projects and all stakeholders involved

Case study (2/3)
BRI Projects classification and lists

Classification methodology

A 3-color method is proposed (**Traffic light system**) based on environmental impacts of the projects:

- **Green** (encouraged projects, positive list)
- **Yellow** (neutral projects)
- **Red** (require stricter supervision and regulation, negative list)

2 steps to identify and label/characterize the projects:

It considers 2 factors: **significant harm and benefits on environment + mitigation/compensation/adaptation** mechanisms.

- Step 1: Evaluation on positive contribution and significant harm potential based on the 3 environment goals:

- Positive contribution→ **Green**
- Neither harm nor benefit→ **Yellow**
- Significant harm→ **Red**

- Step 2: Evaluation on mitigation and/or compensation (M/C) effort for red projects identified in step 1

- No M/C measures→ **Red**
- With M/C measures, generate positive contribution→ **Red/Green**
- With M/C measures, neither harm nor benefit →**Red/Yellow**

Each project is evaluated based on its **project characteristics** and **M/C measures**. M/C measures evaluation provides **potential opportunities for the transition of high-emitting activities**, further criteria needs to be specified in later stage of research.

Examples of Positive & Negative BRI Project Lists

Label	Red	Green	Yellow	Red/Green	Red/Yellow
Sector	Energy	Energy	Energy	Transport	Transport
Project	Construction and operation of coal-fired power production	Construction and operation of wind power generation, projects	Construction and operation of waste-to-energy infrastructure	Construction and maintenance of freight rail transport infrastructure	Construction and operation of gas fired power plant and associated facilities
Specification	Significant harm to the environment	Specify bird migratory areas, design standards, GB/ISO, or other local relevant standards	Including pollution control	Not used for transportation of fossil fuels, electrified or existing plan to implement electrification within 5 years. Mitigation measure on strict protection of biodiversity and minimization of impacts on biodiversity	Gas-fired energy can only be seen as a transition technology if no other forms of baseline energy supply is available.. Mitigation measure: Application of CCUS to reach less than 100g CO2e/kWh

Case study (3/3)
Sample of BRI's screening criteria

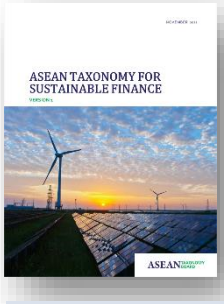
	Environment objective #1: Pollution prevention	Environment objective #2: Climate change mitigation	Environment objective #3: Biodiversity conservation
Positive contribution	**For all sectors to follow neutral criteria +** • Improvement of either air, water, and/or soil quality through project, relative to pre-project implementation status; *and/or* • Directly enables other activities to make a substantial contribution to pollution control, while not leading to a lock-in of assets that undermine long-term environmental goals	• **Energy sector**: <100g CO2e/kWh average emissions over whole project lifecycle and supply chain • **Manufacturing**: low carbon emission either through use of at least 90% green electricity and/or offsetting of at least 90% emissions • **Transport**: Zero direct emissions or total emissions from interurban passenger rail<50 CO2e/passenger-km until 2025 • **Agriculture:** reduction in GHG emissions over a period	Neutral criteria + improvement of biodiversity
Neutral	**For all sectors:** • No negative impact on water quality • No negative impact on soil quality • No negative impact on air quality • No significant negative noise impact in air, on ground, or in water	• **Energy sector**: 100-300g CO2e/kWh average emissions over whole project lifecycle and supply chain • **Manufacturing**: use of electricity similar to neutral category • **Transport**: Zero direct emissions or total emissions from interurban passenger rail<50 CO2e/passenger-km until 2025 • **Agriculture**: no significant reduction or increase of CO2 emissions	**For all sectors:** • Not within 10 km of key biodiversity (KBA) and its supply chain not affecting KBA • Not affecting ecosystem service, livelihoods of hunters, gatherers, fishers • Impact limited to within <500 m of site • No affect on routes of migratory species • All biodiversity impacts reversible within 24 months after project disassembly
Significant harm	For all projects at risk of not meeting either of the neutral criteria	• **Energy sector**: >300g CO2e/kWh average emissions over whole project lifecycle and supply chain • At risk of not meeting either of the neutral criteria **for transport and manufacturing** • **Agriculture**: significant Increase in CO2e production through inappropriate management	For all projects at risk of not meeting either of the neutral criteria

Source: *Adapted from Green Development Guidance for BRI projects Baseline Study Report, BRIGC (2020)*

These screening criteria are reportedly based on best practices from China, the EU and international standards (e.g., CBI Taxonomy), to accommodate different approaches. The positive contribution criteria on climate change mitigation is in line with the EU taxonomy for energy and transport sectors. Meanwhile, it does not specify the thresholds of GHG emissions reduction in agriculture as China's Green Bond Endorsed Project Catalogue. It is worth mentioning that all projects encroach on key biodiversity areas are labelled red. In current stage, only macro-sectors screening criteria are available.

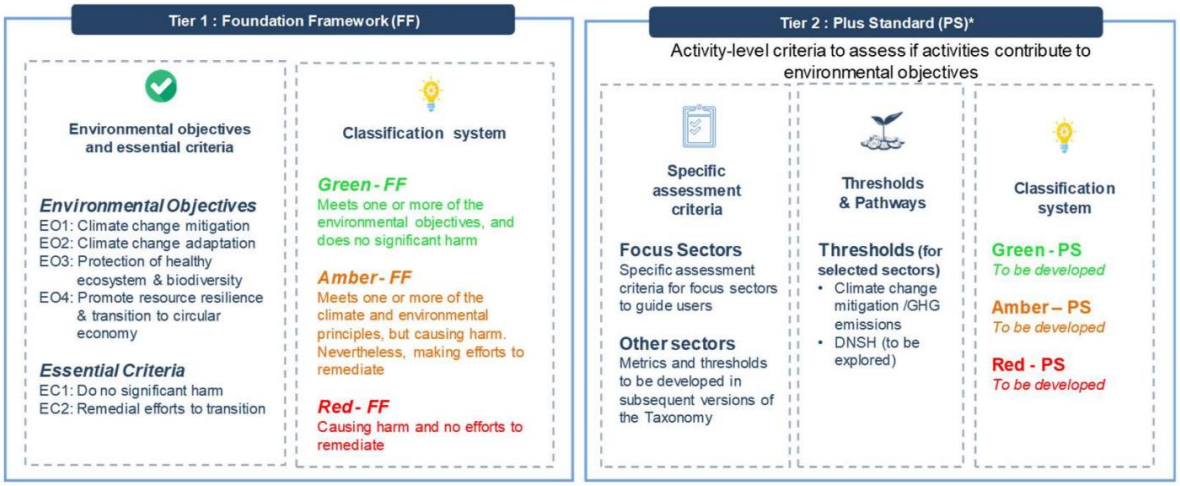
Case study, ASEAN Taxonomy (1/3)
An example of a regional classification

- The ASEAN Taxonomy Board (ATB) was established by the ASEAN Finance Ministers and Central Bank Governors Meeting in March 2021.
- On the sidelines of the COP26, the ATB unveiled the "**ASEAN Taxonomy for Sustainable Finance Version 1".**
- It aimed to be an **overarching and inclusive guide** for ASEAN Member States (AMS).
- The ASEAN Taxonomy is **developed based on a multi-tiered approach** with two main elements: **a principles-based Foundation Framework** which provides a qualitative assessment of activities, and a **Plus Standard** with metrics and thresholds to further qualify and benchmark eligible green activities and investments (in version 1, only methodology is included, detailed criteria and thresholds will be developed in the future).
- ASEAN Taxonomy's recipients are Policy makers, market participants and international investors interested in ASEAN market



Available here

Chart | ASEAN's multi-tiered Taxonomy



Sector coverage

Sector selection methodology

- Based on the International Standard **Industrial Classification of All Economic Activities (ISIC), same as the Common Ground Taxonomy (CGT).**
- The ATB identifies priority sectors based on **GHG emission** and **gross value added (GVA)***

Six most material sectors selected
• agriculture, forestry and fishing • manufacturing • electricity, gas, steam and air conditioning supply • transportation and storage • construction and real estate • water supply, sewerage and waste management
Enabling sectors
• Information and communication (ICT) • Professional, scientific, and technical activities • Carbon capture, utilization, and storage (CCUS)

** Included sectors account for over **85% of the GHG emissions and 55% of the GVA in ASEAN**, and also aligns with the coverage of other major international taxonomies, which will serve as a good base for comparability and interoperability among taxonomies.*

Source: ABT, ASEAN Taxonomy for Sustainable Finance Version 1, November 2021

Case study, ASEAN Taxonomy (2/3)

Foundation Framework

- The Foundation Framework is applicable to all AMS, stakeholders in the financial sector and business enterprises. Foundation Framework is climate change mitigation as the main objective
- The screening criteria is **qualitative based sector-agnostic screening criteria** and decision flow (shown on the right side) and is based on climate change mitigation as the main objective

It categorizes projects into 3 types, similar to **BRI "traffic light" mechanism**

- **Green FF**: clearly contributes to or enables climate change mitigation
- **Amber FF**: activities contributing to decarbonization where mitigation of other harm to environmental objectives is necessary
- **Red FF**: does not contribute to or enable climate change mitigation and/or fails to meet other safeguards

Plus Standard

- The Plus Standard will include **activity-level technical screening criteria** for activities within the material sectors identified (will be developed in the next phase)
- The Plus Standard will serve as a complementary part of the Foundation Framework with activity-level criteria and thresholds to determine if an activity is under green, amber or red categories.

Methodology

- The Plus Standard intends to take **a stacked approach in developing activity-level thresholds**. There are three tiers of threshold for a single activity to reflect different starting points (shown on the right side)
  - Tier 3 (Entry): less stringent and determined by agreed metrics
  - Tier 2 (Intermediate): more stringent than Tier 3 but still higher than the most ambitious threshold
  - Tier 1 (Advanced): most ambitious threshold, and will be aligned with global net zero goal by 2050

Detailed Plus Standard Classification System is under development.

Chart | Sector Agnostics Decision Tree

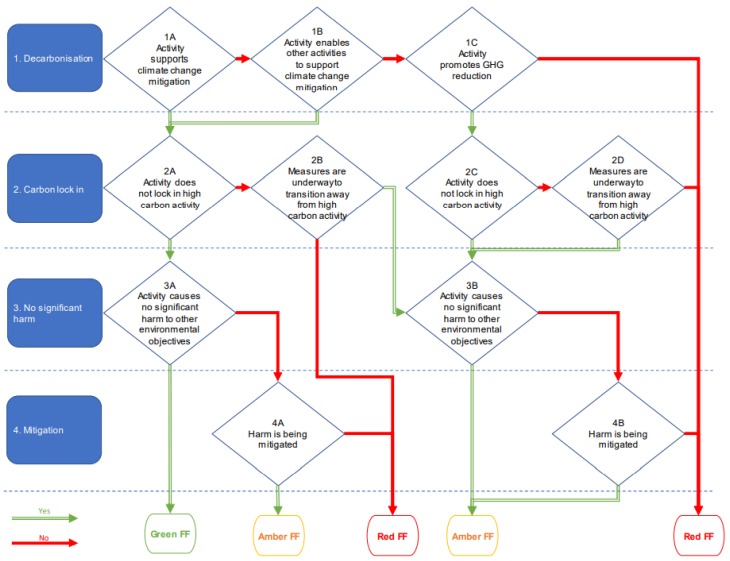
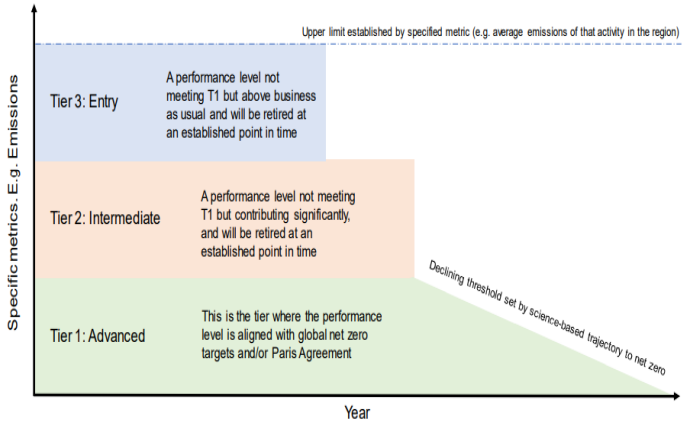


Chart | Illustration of the staked approach



 Source: ABT, ASEAN Taxonomy for Sustainable Finance Version 1, November 2021

Our Taxonomy analysis grid : Looking into the ASEAN Taxonomy (3/3)

The ASEAN Taxonomy for Sustainable Finance uses **2 documents** : the **Foundation Framework**, applicable to all AMS and allows for a qualitative assessment of activities and **the Plus standard**, with metrics and thresholds to further qualify and benchmark eligible green activities and assessments.

Criteria	Description
1. Progress status	• The ASEAN Taxonomy Board (ATB) has issued the Version 1 of the ASEAN Taxonomy for Sustainable Finance in November 2021. A targeted consultation process is now being undertaken with stakeholders, to further develop the ASEAN Taxonomy.
2. Stated goals & use-cases	• **Provide a common framework for the 10 ASEAN Member countries, promote and incentivize ASEAN's transition to a low carbon economy region with common guidance :** • **"**The ASEAN Taxonomy will be the overarching guide for all ASEAN Member States, providing a common language and complementing their respective national sustainability initiatives" • "*The ASEAN Taxonomy "has been developed to serve as a* ***common building block*** *that enables an orderly transition and* ***fosters sustainable finance adoption by ASEAN Member States*** *(AMS)*", "***across the different jurisdictions*** *to communicate and* ***coordinate on labelling for economic activities and financial instruments."*** • *"A regional Taxonomy can provide alignment on underlying principles and serve to inform AMS policy makers, AMS stakeholders in financial markets, and international investors."** **Source : Asean Taxonomy for Sustainable Finance Version 1, available here.*

3. Sustainable objectives addressed	• 4 Environmental Objectives :
	  • Climate Change Mitigation
	  • Climate Change Adaptation
	• Protection of healthy ecosystem and diversity
	• Promotion of resource resilience and transition to circular economy

4. Sectors covered	• The ASEAN Taxonomy **identified 6 focus sectors** (based on their GHG emissions and GVA) : agriculture and forestry, fishing (i), Manufacturing (ii), Electricity, gas, steam, and air conditioning supply (iii), water supply, sewerage, waste management and remediation activities (iv), construction & real estate activities (v), transportation and storage (vi). • The hierarchical classification ISIC, which englobes 21 sectors (with sub sectors) for the Plus Standard and identifies 3 "Enabling sectors" : Information and communication (i), Professional, scientific and technical activities (ii) and carbon capture, utilization and storage (iii). The Plus Standard "aims to eventually cover as wide a scope of sectors as relevant and possible."
5. Typology of criteria	**The Foundation Framework (**FF) classifies activities in one of 3 ways based on qualitative criteria: • **Green FF** (Clearly contributes or enables climate change mitigation), **Amber FF** (activities contributing to decarbonization where mitigation of other harm to environmental objectives is necessary), **Red FF** (does not contribute to or enable climate change mitigation and/or fails to meet other safeguards). **The Plus Standard (PS)** uses metrics and thresholds to further qualify and benchmark eligible green activities and investments : **Green PS, Amber PS, Red PS.** Includes DNSH and "Remedial Efforts to Transition".

Case Study: Mexico's Sustainable Taxonomy (1/3)

March 2023

The Mexican Taxonomy for Sustainable projects & activities relects the national priotieis in achieving climate and sustainable development commitments (e.g., the NDCs, SDGs and 2030 A)genda. Its development was led by the Ministry of Finance, and it aims to create a framework to mobilize capital towards sustainable activiities.

Developed by the Sustainable Taxonomy Working Group (GTT)

Sustainable taxonomy

Final document

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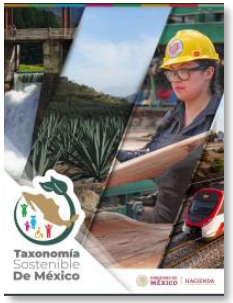


Click here to access document online

Specific purposes

The Mexican Sustainble Taxonomy objective is to create a framework that estalishes a credible and science-based classification for projects and activities to deemed as sustainable. It aims to:

- Faciliate financial flows and mobilize capital for sustainable activities
- Generabe reliable information to mitigate greenwashing
- Provide transparency
- Create a basis for the deelopment of public policies for susstainable finance in Mexico
- Address social gaps and vulnerabilities

Financial instruments for which the taxonomy is designed

The Mexican Taxonomy has been designed for different purposes.

- For companies, accesing investment via thematic bonds and loans.
- For credit insitutions portolio aligment to the taxonomy, as welll as product and service design for green, social and sustainabile projects and activities.
- For insitutional investors, demand sustaianble projects and assets, and taxonomy alignment reporting.
- For National Agencies, budget aligment and creation of frameworks to mobilize invesment.

Primary users identified in the Taxonomy

- Companies in the real sector
- Credit institutions
- Institutional Investors
- Government Agencies

*States alignment of environmental bojectives to the EU and Colombian Taxonomy for interopability and comparability.

Environmental goals (as written in the Taxonomy)

- Climate Change Mitigation
- Climate Change Adaptation
- Management of marine and water resources
- Conservation of ecosystems and biodiversity
- Promotion of the circular economy
- Pollution Prevention and Control

Categories of economic activity

- Agriculture, Livestock, Forestry
- Electricity & water supply
- Construction
- Manufacturing
- Transport
- Waste management & remediation services

Social goals (as written in the Taxonomy)

- Gender equality
- Access to basic services (sustainable cities)
- Health
- Education
- Financial Inclusion

*Source: Taxonomia Sostenible de Mexico. Gobierno de Mexico – Hacienda.

Our Case Study: Mexico's Sustainable Taxonomy (2/3)

Climate and Social Objectives, Parameters and Criteria

Framework and principles

The Taxonomy provides a description of each environmental and social objective, including details of the screening criteria (substantial contribution), evaluation of do no significant damage and minimal safeguards.

1. Mitigation. Technical screening for mitigation activities in the selected sectors includes:
a. Economic Activity NACIS Code
b. Description of activity, including eligible activities, products, as well as exclusions.
c. On substantial contribution to climate mitigation (gCO2e) and minimum requirements for activities to be considered sustainable.
d. Do no damage evaluation (water, adaptation, biodiversity, pollution prevention and control, and circular economy.

2. **Adaptation**. Technical screening is based on:
a) Substantial contribution to adaptation, including adapted activities or enabling activities.
b) Criteria for adaptive activities focus on reduction of physical risks, support for system wide adaptation, and monitoring results.
c) Criteria for enabling activities include the support given to other economic activities.
d) Description of climate risks, including projections for Mexico.
e) Specific adaptation measures for agriculture and livestock, in addition to mitigation criteria.
f) Do no significant damage for the six taxonomy sectors.

3. Gender equality. Gender Equality Index, with three pillars (decent work, well being, social inclusion):
a. Criteria for decent work (equal pay, equal access and labor development, care and co responsibility) – 66 points
b. Criteria for well-being (promotion of equal access to good and services, health with gender equality perspective, economic and social empowerment) – 54 points
c. Social inclusion (peace context, value chain inclusion, increase in social participation) – 54 points
d. Maximum score (174 points) and minimum score (72 points).
e. Do damage and minimum safeguard criteria.

Excerpts

Objetivos Específicos	I) Parámetro principal	Contribución sustancial		IV) No Daño Significativo	V) Salvaguardas mínimas
		II) Métricas	III) Umbral		
Mitigación del cambio climático	Mitigación de GEI	Cantidad de CO_2e Porcentaje de reducción de CO_2e Ahorro ene emisiones de CO_2e	Los umbrales fueron establecidos por los GTSyT para cada una de las actividades económicas de la Taxonomía	Agua Adaptación al cambio climático Biodiversidad Contaminación Economía Circular	1. Leyes y normas vigentes en México 2. Documentos internacionales como: - Líneas Directrices de la OCDE para empresas multinacionales. - Principios rectores para las Empresas y los Derechos Humanos de la ONU. - Declaración de la OIT relativa a los Principios y Derechos Fundamentales del Trabajo.
Adaptación al cambio climático	Adaptación al cambio climático (enfoque cuantitativo)	Actividades adaptadadas Actividades que habilitan la adaptación	Reducción de riesgos climáticos Apoyo a la adaptación de la actividad económica Apoyo a la adaptación de otras actividades económicas	Agua Mitigación del cambio climático Biodiversidad Contaminación Economía Circular	
Ciudades sostenibles	AAAQ (Disponibilidad, accesibilidad, aceptabilidad y calidad)	Enfoque AAAQ Beneficios sociales/ sector	Los umbrales fueron establecidos por los GTSyT para cada una de las actividades económicas de la Taxonomía	Agua Adaptación y mitigación del cambio climático Biodiversidad Contaminación Economía Circular	
Igualdad de género	Inclusión y disminución de brechas de género	Índice de género	Los umbrales fueron establecidos por los GTSyT para cada una de las actividades económicas de la Taxonomía	Agua Adaptación y mitigación del cambio climático Biodiversidad Contaminación Economía Circular	

*Source: Taxonomia Sostenible de Mexico. Gobierno de Mexico – Hacienda.

Our Taxonomy analysis grid: Looking into Mexico's Taxonomy (3/3)

Mexico's Taxonomy builds on social objectives, building on the country's focus on sustainable development

Criteria	Description
1. Progress status	• The Mexican Ministry of Finance (*Secretaría de Hacienda y Crédito Público*) launched the Mexican Taxonomy in March 2023. In this first phase, the Taxonomy will focus on three main objectives: climate change, gender equality and access to basic services related to sustainable cities. The taxonomy initially is voluntary, but Mexican authorities have indicated plans to evaluate regulatory efforts, parallel to the Taxonomy's rollout. A Taxonomy tool to support usability is expected to be launched in 2023.
2. Stated goals & use-cases	• The stated objective of the Mexican Taxonomy is to created a credible, unified, legitimate and science-based classification system to define economic activities as sustainable. • It also highlights is contribution to wider strategic objectives: i) mobilize and reorient public and private funding to activities with positive environmental and social impact, ii) improve information provided to the market, reducing the risk of greenwashing, iii) create information on sustainable finance flow, and iv) create the foundation for the development of sustainable finance policies in Mexico. • For the target users, the Taxonomy refers to credit institutions, which could use the Taxonomy for the development of product and services aligned with the set categories, and institutional investors, which could use the taxonomy to align their investment, and report taxonomy-aligned investments. For other agencies and government, the taxonomy could be used to report budget alignment and creation of frameworks to access sustainable investments that are taxonomy aligned.

3. Sustainable objectives addressed	• **6 Environmental Objectives** :
	  • Climate Change Mitigation
	  • Climate Change Adaptation
	  • Management of water and marine resources
	  • Conservation of ecosystems and biodiversity
	  • Promotion of circular economy
	  • Pollution Prevention and Control
	• **4 Social Objectives**:
	  • Gender equality
	  • Access to basic services related to sustainable cities
	  • Heallth
	  • Education
	  • Financial Incllusion

4. Sectors covered	• Overall, the taxonomy has 124 activities within six economic sector that aim in meeting its mitigation and adaptation objectives. NAICS codes are specified for each sector. • The Mexican taxonomy identified 5 focus sector under the mitigation objective: i) agriculture, livestock and forestry, ii) electricity generation, transmission, distribution and commercialization, and water supply, iii) construction, iv) manufacturing, v) transport, vi) waste management and remediation services. For adaptation, it does not set specific activities, but mentions these should substantially contribute to climate change (adaptive and enabling). • On gender equality, the Taxonomy sets a gender equality index, composed of three pillars: i) decent work, well-being, and social inclusion. Gender equality is measured by a 43-question questionnaire that results in a maximum score of 174 units, with a 72-unit minimum threshold for substantial contribution (24 units in each of the three pillars). The Taxonomy also sets and "No significant damage" and minimum safeguard criteria to ensure social objectives do not result in negative environmental effects.
5. Typology of criteria	Technical Screening Criteria is based metrics for substantial contribution, no significant damage and minimum safeguards. For mitigation activities, the NAICS code is used to determine eligibility of economic activities.

IV. STATED GOALS & USE-CASES

Stated goals & use-cases

Among our benchmark sample, we identified **three main goals** of Taxonomies:

1. To create a **common approach and language** that will help market participants identify economic activities, projects or sectors that are deemed sustainable.
2. To **increase sustainable finance flows** from international and private investors towards activities deemed sustainable.
3. To **create a tool** upon which it is possible to elaborate further environmental policies.

The first two goals are shared by all existing Taxonomies while only Malaysia, the CBI Taxonomy, and the Russian Taxonomy do not state the intention to guide policy makers.

To fulfill these goals, some jurisdictions identified use-cases and primary users.

Use-cases & goals	EU	China	Malaysia	CBI Taxonomy	Russia	Mongolia	Colombia	Indonesia	Bangladesh
To create a Green Bond Standard or a certification of green financial products	✓	✓	✓	✓	✓	✓	✓	✓	✓
Guiding policy makers and authorities	✓	✓	✗	✗	✗	✓	✓	✗	✓
Orient investments toward sustainable activities	✓	✓	✓	✓	✓	✓	✓	✓	✓

The Mongolian Taxonomy has 4 goals:
i. Provide financial institutions, businesses, policy makers, and other market players with **a common understanding and approach to identify green projects**
ii. Support investors' confidence and **mitigate the risk of "greenwashing"**
iii. Track private sector investments, and **measure their impact** on Mongolia's green development, climate change related policies and targets
iv. Inform and help **shape national policies and regulations** to boost the market development of green opportunities

*The Taxonomy is the foundation used by the Climate Bonds Initiative **to screen bonds** to determine **whether assets or projects underlying an investment are eligible** for green or climate finance. Where detailed analysis of a sector has been undertaken and specific eligibility Criteria have been developed, bonds in that sector can be Climate Bonds Certified.*

***According to the Bangladesh** taxonomy, a green taxonomy, aiming to reduce GHG emissions can:*

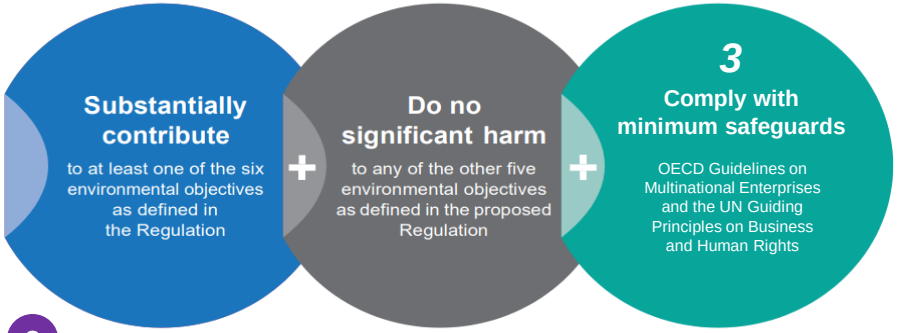
- *Encourage the greening of polluting sectors*
- *Focus on activities that contribute substantially to environmental objectives*
- *Help form environmental policies*
- *Help form a Green Bond Standard*

Source : EC Europa (Oct 2020), International Platform on Sustainable Finance
Natixis GSH (2020), Eu taxonomy for sustainable activities Skydiving Kit

EU Taxonomy Environmental Objectives

The European Union Taxonomy Regulation defines 6 environmental objectives for the European Union. To be considered Taxonomy-aligned, an activity should follow 3 principles:

"An economic activity that pursues the environmental objective of …"



1

"***Climate change mitigation*** *should contribute substantially to the* ***stabilization of greenhouse gas emissions (GHG)*** *by* ***avoiding or reducing*** *them or by enhancing GHG removals. The activity should be consistent with the* ***long-term temperature goal of the Paris Agreement****." (Art. 10)*

2

"***Climate change adaptation*** *should contribute substantially to* ***reducing or preventing the adverse impact of the current or expected future climate****, or the risks of such adverse impact, whether on that activity itself or on people, nature or assets." (Art. 11)*

3

*"****Sustainable use and protection of water and marine resources*** *where that activity either contributes substantially to achieving the* ***good status of bodies of water****, including bodies of* ***surface water and groundwater*** *or to* ***preventing the deterioration of bodies of water*** *that already have good status, or contributes substantially to achieving the good environmental status of marine waters or to preventing the deterioration of marine waters that are already in good environmental status" (Art. 12)*

4

*"****Transition to a circular economy****, including waste prevention, re-use and recycling, where that activity:*

a. uses natural resources, including sustainably sourced bio-based and other raw materials, in production more efficiently […]
b. increases the durability, reparability, upgradability or reusability of products […]
c. increases the recyclability of products […]

5

*"****Pollution prevention and control*** *[if it is]:*

a. preventing or […] reducing pollutant emissions into air, water or land, other than GHGs
b. improving levels of air, water or soil quality […]
c. preventing or minimizing any adverse impact on human health and the environment […]
d. cleaning up litter and other pollution
e. enabling any of the activities listed in points (a) to (d)

(Art. 14)

6

*"****Protection and restoration of biodiversity and ecosystems*** *where that activity contributes substantially to protecting, conserving or restoring biodiversity or to achieving the good condition of ecosystems, or to protecting ecosystems that are already in good condition*" (Art. 15)

Sources:
Technical Expert Group, "Taxonomy: Final report of the Technical Expert Group on Sustainable Finance" (March 2020) – available here.
EU Commission, EU Taxonomy Regulation (June 2020) – available here.

Benchmarking environmental objectives pursued

Each jurisdiction has its own environmental priorities. Some objectives are named with different terminologies. We benchmarked these objectives against the EU environmental objectives. Objectives of Taxonomies under development were including in comments.

Benchmarking the environmental objectives against the EU Taxonomy	CBI Taxonomy	ASEAN	Malaysia	Indonesia	China	Mongolia	Russia	South Africa	Mexico	Colombia
Climate change mitigation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Climate change adaptation	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
Sustainable use and protection of marine and water resources	✓	✗	✓	✗	✓	"Resource conservation"	✗	✓	"Core Environmental Objective"	✓
Circular economy, waste prevention and recycling	✓	"Transition to circular economy"	✓	✗	✓	✗	✗	✓	✓	✓
Pollution prevention and control	✓	✗	✓	✗	✓	✓	✓	✓	DNSH	✓
Protection of healthy ecosystems and biodiversity	✓	✓	✓	✗	✓	✓	✓	✓	DNSH	✓

Other specificities:

- For Malaysia and CBI, there is a focus on climate change objectives. Other objectives are seen through the "Do No Harm" lenses.
- For "Protection of ecosystems and biodiversity", the Russian taxonomy labels this objective "Improvement of the environment" while the Mongolian taxonomy labels it "Improvement of the livelihood"
- The Sustainable Taxonomy of Bangladesh (December 2020) uses the EU Taxonomy objectives, DNSH and social safeguards. Sectors, activities and criteria are simplified. The development of a Green Bond Standard linked with the Taxonomy is considered. The CBI Taxonomy and certification are referred to.

Among Taxonomies under development:

- Canada's objectives are not known yet. All the environmental objectives of the EU could potentially be targeted.
- The UK's taxonomy will focus on climate change mitigation according to the Green Technical Advisory Group.
- The Singaporean taxonomy will cover climate change mitigation, adaptation, resource resilience and protection of ecosystems.
- The Chilean Taxonomy is ongoing consultation since May 2021 but will probably be inspired by the EU Taxonomy.

Example on adaptation set of criteria: a context-based approach

Climate Change Adaptation examples per Taxonomy

CBI

- **Flood defenses:** Surge barriers, pumping stations, levees, gates
- **Fire prevention:** forest and fire management
- **Agriculture:** depending on external standards

China

- **Flood defenses:** construction of flood control and coastal erosion facilities
- **Fire prevention:** forest fire prevention
- **Agriculture:** structural adjustment of crop planting species for water-saving purposes, high-efficiency water-saving field irrigation

Mongolia

- **Flood defenses:** Surge barriers, pumping stations, levees, gates. Early warning systems for storms, droughts, floods
- **Fire prevention:** Not mentioned
- **Agriculture:** Efficient tillage (prevention from drought)

Malaysia

- **Flood defenses:** drainage to cope with increased frequency and severity of floods. Deployment of early warning system, building of sea walls in low-lying islands
- **Fire prevention:** Use of early warning systems or wildfire control measures
- **Agriculture:** R&D and commercialization of drought-resistant crop, development of technology for climate vulnerable farmers

Russia

- **Flood defenses:** Construction of the infrastructure facilities for flood prevention, protection of aquatic bio resources.
- **Fire prevention:** Reforestation resistant to fires, flooding of peat bogs
- **Agriculture:** No adaptative measures

Adaptation responses are proper to each country's geographical context and extreme weather events exposition. Here, Malaysia is more concerned about rising sea levels and floods than other countries. Some of the Taxonomies will list investable technologies/activities whereas others will promote measures or practices to prevent damages from extreme weather events or rising sea levels. Some have merely explored the adaptation potential of their Taxonomies. **An assumption on Taxonomies' advancement regarding adaptation could be that the countries which feel more vulnerable** (threatened by floods and rising sea levels) are eager to address the issue.
More than often, **adaptation is left behind and the priority remain mitigation when it comes to climate change**.

V. SECTORS COVERED & TYPOLOGY OF CRITERIA

Economic sectors coverage

The sectors covered by the environmental Taxonomies vary depending on their ambition as well as their environmental goals.

Benchmarking macro sectors covered in Taxonomies against those of the EU Taxonomy	CBI	ASEAN	China	Indonesia	Malaysia	Colombia	Mexico	South Africa
Number of sectors: 88 activities are covered in the climate change mitigation delegated act	Level 1: 8 Level 2: 48 Level 3: 190	9 (6 focus sectors, 3 enabling sectors)	Level 1: 6 Level 2: 48 Level 3: 203	Level 1: 6 and 7 (mitigation / adaptation) Level 2: 919	3 main sectors	10	6 Main economic categories & Env. and Soc. goals	9
Agriculture & forestry	✓	✓	✓	✓	✓	✓	✓	✓
Manufacturing	✓	✓	✓	✓	✓	✓	✓	✓
Energy	✓	✓	✓	✓	✓	✓	✓	✓
Water supply, sewerage, waste management & remediation	✓	✓	✓	✓	✓	✓	✓	✓
Transport	✓	✓	✓	✓	✓	✓	✓	✓
Construction & real estate activities	✓	✓	✓	✓	✓	✓	✓	✓
Information & communication	✓	✓	✓	✓	×	✓	×	✓
Professional, scientific & technical activities	×	✓	✓	×	×	×	×	×
Financial & insurance activities	×	×	×	×	×	×	×	×

Limits of this benchmark:

- Sectors of the Chinese Taxonomy were difficult to classify against the sectors of the EU Taxonomy.
- In the EU Taxonomy, criteria to assess a Substantial Contribution (SC) to the ***Climate Change Mitigation*** objective is laid out for 88 economic activities and for 95 economic activities for ***Climate Change Adaptation*** (with overlap). As the draft delegated acts for the 4 remaining objectives suggest, criteria to assess Substantial Contribution on these objectives is generic, principle-based and can be applied to any sector. Priority sectors have been identified. As such, the EU Taxonomy defines precise criteria for climate change but not yet for other environmental objectives while other Taxonomies defined criteria that can relate to any of their environmental objectives.

Complementary observations:

- **The Malaysian Taxonomy** identifies 3 main activities for Climate Change Mitigation: *renewable energy* (i); *rehabilitation, retrofitting and/or replacement of energy-inefficient technology and/or production of energy-efficient technologies* (ii); *maintenance and strengthening of land-based carbon stock and sinks above and below ground* (iii). No specific sector is identified for Adaptation as well as for the **Do No Significant Harm to the environment principle** that covers (a) Prevention, reduction and control of pollution (air, water and land); (b) Protection of healthy ecosystems and biodiversity; and (c) Use energy, water and other natural resources in a sustainable and efficient manner. Prohibited activities are identified.

  ** The Chinese Taxonomy's sectors are Energy saving and environmental protection; Cleaner production industry; Clean power industry; Ecology and Environment-related sector; Green upgrade of infrastructure; Green Service.*

Technical screening criteria: Typology and Benchmark

Criteria are at the core of Taxonomies and help define what is considered sustainable. Activities and projects can be considered sustainable according to the fulfillment of three types of criteria: the very **nature of the product or technology,** the **relative or absolute performance** of the activity, product or process and the **respect of norms and standards.**

Typology of criteria	CBI Taxonomy	European Union	China	Indonesia	Mongolia	Colombia
Nature of product or technology	✓	✓	✓	✓	✓	✓
Examples	Zero direct emissions miscellaneous vehicles such as waste collection vehicles or construction vehicles	Construction or operation of electricity generation facilities that produce electricity from wind power	Construction and operation of rainwater collection, treatment and utilization facilities.	Mining	Heat pumps using soil, water, and air gradients	Solar photovoltaic power generation
Relative or absolute performance	✓	✓	×	×	✓	✓
Examples	Electricity generation facilities with less than 100gCO_2/kWh of direct emissions	Life-cycle GHG emissions from the generation of electricity using renewable gaseous and liquid fuels are lower than 100gCO_2e/kWh.	The Taxonomy specifies it relies on the Chinese green bond Catalogue	Air pollution control (documents / installments)	Low pollution energy to minimum 80% pollution (PM2.5) reduction compared to coal baseline	Subject to periodic review with the threshold: 100 gCO_2e/year/year
Norms or standards	×	✓	✓	✓	✓	✓
Examples		**Buildings**: light sources rated in the highest two classes of energy efficiency in accordance with Regulation (EU) 2017/1369	**Agriculture**: the product itself and its production process must comply with the national standard Organic Products	**Agriculture:** have understood Good Agricultural Practices (GAP)	**Construction of new green buildings** compliant to [with] certifications, such as LEED, EDGE, BREEAM	**Water**: risk assessments with WWF Water Risk Filter, WRI Aquaculture, WRI Aqueduct…

NB: The Malaysian Taxonomy is a principles-based Taxonomy serving as a guide for financial institutions but there is no criteria assessing eligibility to the Taxonomy or contribution to sustainability objectives.

Sectorial or asset exclusions across Taxonomies

Some Taxonomies provide exclusion lists or lists of prohibited and/or harmful activities (i.e., unconditionally deemed so)

Sectoral Activities	EU Taxonomy	CBI Taxonomy	Malaysia	Mongolia	Belt & Road Initiative
Coal	Solid fossil fuels (and any related activities, dedicated transport or building)	• Coal without CCS, coal powered heat and power plants • Coal mining		• Use of unprocessed coal anywhere except for thermal power plants in Ulaanbaatar	• Construction, operation, retrofitting of coal fired plants • Coal mining
Other fossil fuels	All types of fossil fuels, gas will be provided with criteria	• Oil without CCS, oil powered heat and power plants • Oil extractions • fossil fuel filling stations, oil tankers			
Transport	Internal combustion engines with a threshold or transportation of fossil fuels	• New roads, road bridges, road upgrades, parking facilities, • Biofuel vehicles • All other types of lorries or trucks (e.g., biofuel-powered or hybrid trucks) • Ships solely transporting coal or oil			• Ports and adjoining facilities with services dedicated for fossil fuel transport, storage
Forestry and agriculture		• Agricultural production on peatland • Timber production on peatland	• Illegal deforestation use for fire for land clearance or agriculture • Forestry in protected areas		
Waste		• Landfill without gas capture	• Illegal waste management • Release of untreated toxic, hazardous industrial waste and substances		
Activities infringing social minimum safeguards*	Activities must comply with ILO conventions & UN Guiding Principles on Business				

* OECD Guidelines UN Guiding Principles on Business and Human Rights

Typology of criteria: screening criteria & Taxonomy scope

Scope and/or features	EU	CBI	China	Malaysia	Mongolia	Russia	Colombia
Does the taxonomy focus on *pure* green activities?	✗ Transitioning activities included	✓	✗	✗ Transitioning activities included	✓	✗	✗
Are brown activities covered and how?	✓ Thresholds are for instance provided on cement, steel and aluminum manufacturing	✗ A traffic light system: red for activities, yellow for activities that can be consistent with a 2°C world, green: sustainable activities	✓ Low-carbon assets used in brown industries' transition are eligible	✗ Transitioning willingness is to be assessed by financial institutions	✗	✓ Through efficiency	✓ Through data-driven solutions for GHG reduction
Are there social considerations or criteria in the taxonomy?	✓ Social minimum safeguards included (e.g., compliance with ILO standards)	✗	✗ China's SDG Finance taxonomy adopts a "leaving no one behind approach" and standards on human rights	✗	✗	✗	✓ The eligible asset must ensure that it does not generate a negative social impact. (social risks, working conditions…)

Scope and/or features	Singapore	Chile	Indonesia	Canada	South Africa
Does the taxonomy focus on *pure* green activities?	✗	✗	✗	✗	✗
Are brown activities covered and how?	A Traffic light system is discussed: red for excluded activities, yellow for activities that can be consistent with a 2°C world, green: sustainable activities	Chile intends to develop criteria for the mining industry	Yes (categorized as yellow), mining for instance can be yellow if it has an air pollution control (technical approval for Emissions Quality Standard, conduct emission monitoring…)	Canada develops a transition taxonomy draft with a focus on criteria assessing the transition pathways of companies operating mainly in brown industries (forestry, fossil fuels, mining)	Sub-categories involve mining and quarrying, for which TSC will be developed in a second version. Criteria assessing transition pathways will be developed in the future.
Are there social considerations or criteria in the taxonomy?	The draft taxonomy proposes to develop criteria for minimum social safeguards like the EU Taxonomy	The roadmap focuses on green Taxonomies, but it is recommended to "include minimum social safeguards and then to develop social metrics over time"	No	Unknown yet	Yes, there's a social category, but no TSC for the moment for it

VI. CASE STUDIES

Chinese Green Industry Guiding Catalogue (1/2)

Note that the Green Industry Guiding Catalogue is a document different from the Green Bond Endorsed Projects Catalogue (released in April 2021). The use-cases are different. There are a few discrepancies between both, notably a looser stance on fossil fuels in the Industry Guiding Catalogue.

Progress status and description of the Chinese Taxonomy

March 2019

In the case of China, no legislative definition falls into the strict category of a "Taxonomy" comparable to that of the EU. Though not a Taxonomy *per se*, is usually referred to as "a taxonomy". The green credit regulations in China provide some metrics but no thresholds, and the green bond regulations do not contain metrics or thresholds. It is worth noting that the Green Industry Guiding Catalogue (2021 Edition) that has been released by the People's Bank of China (PBoC). This document is not available in English online, and our analysis is based on a version translated by CBI.

Click here to access document online

Led by the National Development Reform Commission and PBOC

Green taxonomy

Final document

Stated goals and use-cases of the taxonomy

Primary users of the taxonomy

- Policy makers (National and provincial levels)
- Chinese businesses (State-owned and private enterprises)
- Chinese financial institutions

Financial instruments for which the taxonomy is designed

The Chinese Green Industry Guiding catalogue was not designed to guide financial practices. It was rather built as overarching principles to orient decision-making processes for departments and localities.

Specific objectives of the taxonomy

This document of reference was used to design the **Catalogue of Green Bond Endorsed Projects**. Which aims at:

"Giving full play to the role of green finance in promoting structural adjustment and transformation, accelerating the ecological civilization construction, facilitating the sustainable development of the economy"

Environmental goals of the Taxonomy

China set 3 environmental objectives in the Guidelines for Establishing the Green financial System in 2016:

- Climate Change response
- Environmental improvement (pollution control and ecological conservation)
- More efficient resource utilization (circular economy, waste recycling and pollution prevention)

However, China did not specify thoroughly how each listed activities contribute to the environmental objectives.

Categories of economic activity

1. Energy saving and environmental protection
2. Cleaner production industry
3. Clean power industry
4. Ecological environment Sector
5. Green upgrade of infrastructure
6. Green Service

Chinese Green Industry Guiding Catalogue (2/2)

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Framework and principles of the Taxonomy

The Catalogue is a Word document with no illustration. For each economic activity, requirements / definitions are given which can take the form of reference to national regulations or norms, to environmental performance or to the nature of products. There are 3 layers to economic activities (e.g., 1. 1.1, 1.1.1.).

Many activities traditionally considered **brown** are included in the Green Industry Guiding Catalogue. Here are some extracts:

- *"Use clean energy sources such […] and **natural gas** to replace loose coal & decentralized coal-fired boilers"*
- *"**Blast furnace gas**, biomass briquette, solid combustible waste and other fuel power plant boilers"*
- *"Construction & operation of emission reduction projects that **capture, utilize or store carbon dioxide emitted from fossil energy combustion** and industrial processes."*
- *"Distributed cooling, heating and power energy systems […] driven by **natural gas or other fossil energy** should comply with the [Chinese norms]"*

"***All regions, departments and relevant institutions should act based on the Green Bond Catalogue** (2021) **with the combination of their own green development goals** and tasks in respective fields and the construction stages of the green financial system, **develop and implement relevant supporting policies**, devote efforts to publicity and guidance, give full play to the supporting role of green bonds on environmental improvement, action to climate change and efficiency improvements, and **promote sustainable economic and social development** and industrial green transformation and upgrades. If new issues occur, please report to the relevant higher-level department in time.*"

Excerpts

The Green Bond Endorsed Projects Catalogue

Sector		Program	Description/Condition
1. Energy Saving and Environmental Protection Industry			
1.1 Energy Efficiency Improvement	1.1.1The Manufacture of Energy Efficient Equipment	1.1.1.1 Energy-saving Boilers	Manufacturing and trading of fuel power plant boilers, industrial boilers, marine boilers and other relevant equipment of blast furnace gas, biomass molding fuel and solid combustible waste. Among them, the energy efficiency of industrial boilers should meet or exceed level 2 of "Energy Efficiency Limitation Value and Energy Efficiency Grade for Industrial Boilers " (GB 24500) or above. The energy efficiency of other boilers meets or exceeds the target requirement of the thermal efficiency index of the relevant equipment technical specifications. All boiler equipment should meet the requirements of "Boiler Air Pollution Emission Standard" (GB 13271) and local requirements for boiler emission.
		1.1.1.2 Energy-saving Furnace	Manufacturing and trading of metallurgical heating furnaces, non-electric metal treatment furnaces, industrial electric furnaces, industrial furnaces and other energy-saving furnaces using high-temperature air combustion, oxygen-fuel combustion, and waste heat utilization technologies. Also the manufacturing and trading activities of energy-saving furnace burners.

3. Clean Energy Industry			
3.1 Energy Efficiency Improvement	3.1.1 Energy Efficiency in Electrical Facilities	3.1.1.1 Manufacture of Intelligent Power Grid Products and Facilities	Manufacturing of intelligent power grid facilities including smart transformers, rectifiers and inductors, advanced power electronic devices, smart power transmission and distribution and control equipment, UHV power transmission equipment, pumped storage equipment, new energy storage equipment, charging facilities; and manufacturing of the controlling products related to smart grid and new energy.
		3.1.1.2 The Construction and Operation of Smart Grids	Construction and operation of smart grid facilities with information integration, controlling, energy storage technologies and intelligent power equipment, in order to reduce curailment of wind and PV power, improve the consumption efficiency of clean energy, and achieve digital management, smart decision-making and interactive trading of electricity during the process of power generation, transmission, distribution and storage.

Russian National Taxonomy for Green Projects (1/2)

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Progress status and description of the Russian Taxonomy

July 2020

The Russian National Taxonomy for Green Projects is a national framework and set of guidelines that take into account many Russian strategies related to ecology, recycling and disposal of consumer waste, energy, forestry and climate change. It has been prepared by an **ESG Finance taskforce of the Central Bank and VEB.RF, a Russian development bank**.

Stated goals and use-cases

Primary users of the taxonomy

- Issuers of green financial instruments
- The Guidelines do not cover government financial instruments support measures which are governed by respective guidelines and are within the remit of the executive authorities.

Financial instruments for which the taxonomy is designed

- Bonds, loans, guarantees, securities, leasing used to finance green projects and (or) a portfolio of green projects

Specific objectives of the taxonomy

The Guidelines do not specify underlying objectives of the Taxonomy on financial markets as directly as other Taxonomies.
The goal of the Taxonomy is to achieve priority objectives of the Russian Taxonomy and as such, the Taxonomy is a tool to achieve the Paris Agreement Goals and the SDGs. As such, a project is considered a "green project" when it simultaneously complies with the **Taxonomy** AND **focuses on achieving the Paris Climate Goals** or **one of the following UN SDGs:**

Developed by the ESG taskforce of Russia's development bank

Green taxonomy

Final document

RUSSIA

Environmental goals of the Taxonomy (as written in it)

- **Pollution reduction**
- **GHG reduction**
- **Energy efficiency enhancement**
- **Adaptation to climate change**
- **Environmental improvement**

Categories of economic activity

1. Waste Management & Recycling
2. Energy: renewables, & GHG reduction in Thermic Power Plants
3. Construction
4. Industrial production
5. Transport
6. Water supply and wastewater disposal
7. Forestry
8. Conservation of natural landscapes & biodiversity
9. ICT

Russian National Taxonomy for Green Projects (2/2)

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Framework and principles

The Taxonomy acts as a Green Bond Standard because guidelines regarding the obtention of a "green certification", become an approved verifier and defines green financial instruments in the following manner:

2.1. A financial instrument is deemed compliant with the requirements of the Guidelines once the following conditions are observed simultaneously:

a. Funding is raised for the purpose of undertaking a green project(s).
b. Use of proceeds (raised or provided by the Initiator) complies with the objectives, as set out in paragraph 2.2 hereof.
c. The Initiator's approach to the use and management of proceeds complies with the requirements, as set out in paragraph 2.3 hereof.
d. The Initiator's policy towards eligible green projects selection should ensure investment of funds into green projects, as well as sustainable (responsible) business practices at project implementation, if applicable.

2.2. The proceeds (as raised or provided by the Initiator) shall be used to finance the following:

a) CAPEX, necessary to implement a green project, including but not limited to fixed assets purchase.
b) OPEX, directly linked to the green project support and implementation, with SG&A costs not exceeding 15% of the total amount of funds raised or provided.
c) Issuance of financial instruments backed by green projects portfolio, purchase of financial instruments, issued by legal entities and Guidelines-compliant.
d) Refinancing of existing green financial instruments, issued to finance green projects.

2.3. Requirements to the use and management of proceeds (as raised or provided by the Initiator):

a. Use of proceeds – the funds raised or provided by the Initiator for the green project implementation should be directly invested into green projects within 36 months, except as otherwise stipulated by the terms and conditions of the financial instrument.
b. Management of proceeds – separate accounting with regular public reporting or submission of the funds statement to the VEB.RF ESG Center.

Excerpts

3. Construction

Item No.	Area	Criteria	
3.1	Construction of green buildings and facilities	Compliant with the Taxonomy only if criteria are met	Compliance with one or more green standards prepared in accordance with Federal Law No. 162-FZ of 29 June 2015 "On Standardisation in the Russian Federation" (as amended and supplemented)
3.2	Implementation of projects aimed at improving energy efficiency and heat efficiency for existing facilities to significantly contribute to their increased efficiency in the following areas:		
3.2.1	Efficient electricity supply	Compliant with the Taxonomy only if criteria are met	Energy consumption reduced by >20% (kWh/m2)
3.2.2	Efficient heat supply and air conditioning	Compliant with the Taxonomy only if criteria are met	Energy consumption reduced by >20% (kWh/m2)
3.2.3	Construction of green and operated roofs of buildings and facilities	Compliant with the Taxonomy only if criteria are met	Compliance with GOST R 58875-2020 Green Standards. Green and Operated Roofs of Buildings and Facilities. Technical and Environmental Requirements
3.2.4	Decorating buildings and facilities with ornamental plants	Compliant with the Taxonomy only if criteria are met	Compliance with GOST R 59370-2021 Green Standards. Ornamental Plants for Planting
3.2.5	Efficient lighting systems (including street lighting systems)	Compliant with the Taxonomy only if criteria are met	Energy consumption reduced by >20% (kWh/m2)

Mongolian Green Taxonomy (1/2)

Click here to access document online

Progress status and description of the Mongolian Taxonomy

Published in December 2019

The Mongolian Green Taxonomy has been approved by the **Financial Stability Commission of Mongolia** in December 2019 after having been developed by the **Mongolian Sustainable Finance Association**, the Tsinghua's University Center of Finance & Development and the **IFC**. The **Ministry of Environment and Tourism** participated in this document's implementation. The Mongolian taxonomy is one of the few existing and finalized taxonomy. Its criteria are set to evolve every 3 to 5 years.

Stated goals and use-cases of the taxonomy

Specific objectives – identified in the taxonomy

- Provide market players with a **common understanding and approach to identify, develop and finance green projects**.
- **Support investors' confidence to finance green projects** and mitigate the risk of "greenwashing".
- **Boost green finance flows** from various sources including the private sector, international financial institutions, and foreign investors.
- Track private sector investments in green projects and **measure the impact contribution to Mongolia's green developm**ent and climate change related policies and targets.
- Inform and help **shape national policies** and regulations on green finance that will boost the market development of green opportunities

Primary users – identified in the taxonomy

- Financial institutions: banks, Non-bank financial institutions(NBFIs), mortgage corporations, institutional investors, credit guarantee funds, insurance companies
- Bond issuers: corporate, municipal, government
- Industry: corporate, SMEs, start-ups, and other types of project developers
- Verification and standard setting companies
- Policy makers

Financial instruments – identified in the taxonomy

- Corporate lending, consumer lending, project finance, SME finance, green bonds, equity investment, insurance, credit guarantee, grants, financial advisory and technical assistance

Developed by a Professional association

Green taxonomy

Final document

Environmental goals of the Taxonomy

- Climate change mitigation and adaptation
- Pollution
- Resource conservation
- Livelihood improvement

Categories of economic activity covered

1. Renewable energy
2. Energy Efficiency
3. Green Building
4. Low pollution energy, pollution prevention & control
5. Sustainable water & water use
6. Sustainable agriculture, land use, forestry, biodiversity conservation & ecotourism
7. Clean transport

Mongolian Green Taxonomy (2/2)

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Framework & principles

Principle 1: Contribute to national policies and targets
The taxonomy refers to key reference policy targets with quantitative objectives for every category / sector it covers in a separate page (see extract on the right).

Principle 2: Environmental challenges Mongolia's key environmental challenges should be addressed
i) climate change mitigation and adaptation; ii) pollution; iii) resource conservation iv) livelihood improvement.

Principle 3: Cover high-emitting, key economic sectors
The taxonomy should cover the highest emitting sectors in the economy as well as contribute to the transition of key economic sectors into sustainable ones.

Principle 4: Align with international standards and good practices. In the absence of commonly agreed local standards, the taxonomy should reference international standards and best practices. (See threshold on the extract)

Principle 5: Comply with ESG standards & Minimum environmental and social risk management regulations and standards
The Taxonomy does not refer to social minimum safeguards.

Principle 6: Continues review and development.
The taxonomy will require continues review and update based on policy shifts, scientific developments, technological changes, and new industry needs.

Sub-category	Technologies	Example
8.1 Low carbon vehicles	8.1.1 Low carbon vehicles purchase	Low carbon vehicles purchase, including electric vehicles, hydrogen vehicles, hybrid vehicles
	8.1.2 Low carbon vehicles manufacturing supply chain facilities	Dedicated manufacturing facilities for vehicles and key components; batteries being used in eligible vehicles

Excerpts

No	Categories	Key reference policy targets
1	Renewable energy	• Reduce greenhouse gas emissions in the energy sector by 32% by 2030 • Increase renewable electricity capacity from 7.62% in 2014 to 20% by 2020 and to 30% by 2030 as a share of total electricity generation capacity • Reduce internal energy use of Combined Heat and Power plants (improved plant efficiency) from 14.4% in 2014 to 11.2% by 2020 and 9.14% by 2030
2	Energy efficiency	

4 Green buildings

Sub-category	Technologies	Example	Threshold
4.1 Green buildings	4.1.1 Construction of new green buildings (commercial, public, industrial and residential)	"ENERGY: Use of highly efficient architectural designs, energy efficiency appliances and equipment, and building techniques that reduce building energy consumption, exceeding available standards and complying with high energy efficiency certification or rating schemes, such as green building rating standards of Mongolia or equivalent international standards WATER: Use of water efficient fixtures and equipment, and building techniques that reduce building water consumption, exceeding available standards and complying with high water efficiency certification or rating schemes, such as green building rating standards of Mongolia or equivalent international standards MATERIALS: Use of construction material which minimizes conents that require high amount of energy to manufacture, such as steel or cement, and uses materials with low manufacturing energy or reused/ recycled materials"	Compliance to local building norms &/ Mongolian Energy Passport; or To have internationally and nationally recognized green building certification such as LEED, EDGE, BREEAM, Energy certifications such as US Energy Star and energy labeling schemes such as Energy Performance Certifications in the EU

2 Low pollution energy

Sub-category	Technologies	Example	Threshold
2.4 Fuel switch	2.4.1 Fuel switch in energy generation	Switch to electricity heating or LPG heating	Minimum 80% pollution (PM2.5) reduction compared to coal baseline
	2.4.2 Dedicated charging for transportation and alternative fuel infrastructure	(when separate from fossil fuel filling stations and garages)	

Climate Bonds Initiative Taxonomy (1/2)

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Progress status & description

January 2021

Climate Bonds Initiative is an international, investor-focused not-for-profit attributing. In January 2021, the Climate Bonds Taxonomy has been released which is a 16-page, easy-to-use document for investors. It focuses on climate change mitigation and adaptation objectives. The classification is used to attribute the Climate Bonds Certificate or to assess projects' sustainability.

Stated goals and use-cases of the taxonomy

As it is difficult to navigate between different environmental criteria and Taxonomies for investors, the CBI Taxonomy provides a common ground and could prove quite useful to simplify and clarify eligible projects.

Specific objectives of the taxonomy

To identify assets and projects that deliver and allow for a low carbon economy consistent with a 2°degree scenario based on the latest research and based on the results of the IPCC and the IEA. It serves as a "Climate Bonds certificate".

The Taxonomy is a working document: for some sectors, some criteria has been approved while it is still in development for some others including:

- Direct heat application such as Geothermal Heat Pump (GHP)
- Blending facilities
- Gas power without carbon capture & storage (CCS)
- Uranium mining
- Cargo and passenger aircraft: the screening indicator is for now the "use of low GHG fuel (e.g., solar, electric, high % of biofuel), delivering substantial reduction in gCO2 e/passenger Cargo aircraft ger or tonne/km"

Primary users of the taxonomy

- Institutional investors
- International business corporations
- Stock exchanges

Financial instruments for which the taxonomy is designed

- Mainly debt instruments: use-of-proceeds instruments like green bonds

Developed by Not-for-profit organization

Green taxonomy

Final document

Climate Initiative Bonds

Environmental goals of the Taxonomy

Climate Change Mitigation
Climate Change Adaptation

Categories of economic activity

- Electricity & heat production
- Transmission, distribution and storage of energy
- Passenger, freight & supporting infrastructure
- Supply management & wastewater treatment
- Commercial, residential & energy efficiency
- Urban development
- Agriculture, husbandry, aquaculture & seafood
- Industrial & energy intensive processes
- Recycling, re-use & other waste managements
- Networks, management & communication tools

Climate Bonds Initiative Taxonomy (2/2)

Click here to access document online

Framework & principles

The CBI Taxonomy uses a traffic light system to indicate whether projects are:

- Automatically compatible with a 2°C decarbonization trajectory
- Potentially compatible depending on more specific criteria
- Incompatible
- If further work is required

The CBI Taxonomy also details which projects are certifiable.

There are no social minimum safeguards included.

Excerpts

Automatically compatible	●
Compatible if compliant with screening indicator	●
Not compatible	●
More work required	●

Certification Criteria Approved	●
Criteria under development	●

	Asset type	Asset specifics	2 degree compliant	Screening indicator	Certifiable
SOLAR	Generation facilities (power & heat)	Photovoltaic generation facilities (onshore)	●	Facilities shall have no more than 15% of electricity generated from non-renewable sources	●
		Concentrated solar power facilities (onshore)	●		●
GEOTHERMAL	Generation facilities (power & heat)	Electricity generation facilities	●	Direct emissions less than 100gCO2/kWh	●
		Direct heat application such as Geothermal Heat Pump (GHP)	●		
	Supply chain facilities	Manufacturing facilities wholly dedicated to geothermal energy developments such as geothermal turbines	●		●
FOSSIL FUELS	Generation facilities	Coal or oil power without carbon capture and storage (CCS)	●		
		Coal or oil with carbon capture & storage (CCS)	●	CCS must capture 100% of GHG emissions	
		Coal or oil powered combine heat and power (CHP)	●		
		Waste heat recovery from coal or oil fuelled power generation	●		
		Gas power without carbon capture & storage (CCS)	●		

FREIGHT RAIL	Trains	Rolling stock for electrified freight rail	●	Fossil fuel freight must not be more than 25% of the freight transported (in tonne/km)	●
		Rolling stock for non-electrified freight rail	●	(i) Fossil fuel freight must not be more than 25% of the freight transported (in tonne/km) (ii) Transport meets universal gCO2/t-km (tonne-kilometre) threshold	●
	Infrastructure	All infrastructure for electrified freight rail	●		●

	Asset type	Asset specifics	2 degree compliant	Screening indicator	Certifiable
BUILDINGS	Commercial buildings	Including offices, hotels, retail buildings, public buildings, educational buildings, healthcare buildings etc.	●	An emissions footprint in the top 15% of emissions performance in the local market	●
	Residential buildings	Private dwellings	●	OR	●

WASTE TO ENERGY	Waste to energy plants (e.g. incineration, gasification, pyrolysis and plasma)	Facilities for solid waste treatment with production of electricity or heat as a by-product	●	Only facilities outside the EU are potentially eligible. Plant efficiency >= 25%; AND Bottom ash recovery; AND >= 90% recovery of metal from ash; AND Average carbon intensity of electricity and/ or heat over the life of the plant <= waste management allowance; AND capacity of the plant does not exceed the calculated residual waste at any time in the plant's life	●

VII. FOCUS ON SOCIAL TAXONOMIES

Introduction on Social Taxonomies

"Sustainability" is not limited to environmental sustainability. Social safeguards and considerations will increasingly be included in green Taxonomies. Some jurisdictions are also considering the development of *ad hoc* social Taxonomies.

Social cohesion, local economic development, reduction of poverty and inequalities, health, education, human rights and labor are examples of topics where social Taxonomies could help provide market clarity and boost investment flows towards SDG completion and/or socio-economic development.

Definition

- Just like green or environmental Taxonomies, the concept of a social taxonomy is that of a classification system unequivocally stating which activities can be considered to "*make a substantial contribution to social objectives*".
- These social objectives could be ***ad hoc ones*** or for instance correspond to **social UN Sustainable Development Goals** (almost of them include social objectives or aspects, even the environmentally focused-ones)
- Although not a taxonomy *per se*, the aforementioned **UN SDGs** as well as the **ICMA Social Bond Principles** (available here) include basic infrastructure (water, sanitation, transport, energy), basic services (health, education, financial services), affordable housing, food security related activities and socio-economic empowerment.
- Targets populations are identified like those living under the poverty line, marginalized communities, disabled, displaced, migrant or undereducated people, as well as religious, sexual/gender minorities, aging people or vulnerable people more generally.

Social Taxonomies development initiatives

What is the stage of classification methods related to social activities?

5 jurisdictions already have or consider to have classification systems around social objectives (South Africa, China, the EU, Georgia and Kazakhstan)

In South Africa, the briefing report over a national green finance taxonomy highlights that the first taxonomy will indeed cover an initial core set of green and climate-focused categories. The report recognizes the need to include other environmental categories, as well as **incorporating the social dimension and consideration of transitional activities with time**. Over time, a **social taxonomy** (which will likely have some overlap with social considerations of the green taxonomy) will propose a non-exhaustive **positive list** focused on social activities, which may in turn have environmental co-benefits to.

In June 2020, the UNDP China and the Ministry of Commerce of China proposed a "***Technical Report on SDG Finance Taxonomy"*** (available here), which offers a classification system of projects contributing to the 2030 Agenda. It is reportedly aligned with existing sustainability and impact principles. The report has been developed after consultations with Chinese and international experts and could be used by business, financial institutions and policy makers. It has been developed for the same reason green Taxonomies are developed. It contains **60 economic activities**, structured around **6 sectors** that mimick the **ICMA SBP's eligible activities** (basic infrastructure - affordable housing – health – education technology and culture – food security – financial services) and classified within 3 levels (e.g., 1 Basic Infrastructure – 1.3 Water – 1.3.1 Construction & operation of water supply activities). For each activity, specific eligible projects are defined, linked with Chinese national policies and strategies, associated with possible industry codes and **SDG sub targets** and target populations. **Impact indicators** are also proposed. These KPIs could be used for **impact reporting purposes**.

In September 2020, the Technical Expert Group (TEG) has been replaced by the **EU Sustainable Finance Platform**, which has been given a mandate to look for **synergies between transition activities and the actual Taxonomy regulation** (request here).

The Platform is tasked with the mission to work on the **technical screening criteria and their usability**, as well as advise on **further developments**, such as including **social objectives** and ''activities that significantly harm the environment'' (i.e., brown taxonomy). The subgroup (out of 6) on **social taxonomy of the Platform** presented a draft report on social objectives in June 2021. The platform published in March 2022 its final report on a social taxonomy (available here). Moreover, in the Taxonomy Regulation (available here), it is clearly mentioned that ''*compliance with minimum [social] safeguards should be a condition for economic activities to qualify as environmentally sustainable*.''. These activities should be carried out in alignment with the 1. **OECD Guidelines for MNEs; 2. the UN Guiding Principles on Business and Human Rights** as well as **3. the ILO eight fundamental conventions**.

In June 2022, a session was held during the Green Growth Forum on a "Transition to a Social Taxonomy in Kazakhstan". The proposed draft for a Taxonomy of Social Projects for ESG Finance Markets was discussed and presented by the AIFC Green Finance Center. This document will be further developed with the Ministry of National Economy of the Republic of Kazakhstan for submission to the Government for approval, following the green taxonomy.

Georgia's sustainable finance taxonomy includes both green and social categories (Affordable basic infrastructure, healthcare and related social services, financing and financial services, food security and education, technology, culture fitness.)

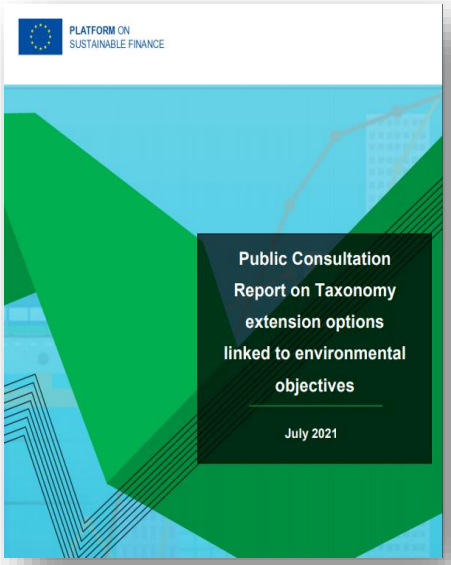
Draft report on a Social Taxonomy by the European Union (1/5)

Who are the authors of the Taxonomy draft?

The Subgroup 4 of the Platform on Sustainable Finance wrote this report. Its role is to:

1. **Explore extending the taxonomy regulation to social topics** (elaborate social objectives, work out a structure of a social taxonomy, identify approaches to substantial contribution and do no significant harm, reflect on governance, business ethics, anti-bribery and tax compliance, consider harmful activities, suggest a relationship between a green and a social taxonomy)

2. **Advise** the European Commission **on the functioning of the Article 18 of the Taxonomy Regulation,** which requires the respect of international labour standards and human rights



Public consultation and draft available here.

Features of the EU social taxonomy

Inspiration from environmental taxonomy

This taxonomy **follows the steps of the green taxonomy** by first defining social objectives, then substantial contributions to achieving these objectives and finally do no significant harm criteria, so that contributing to achieving one objective is not detrimental to the others

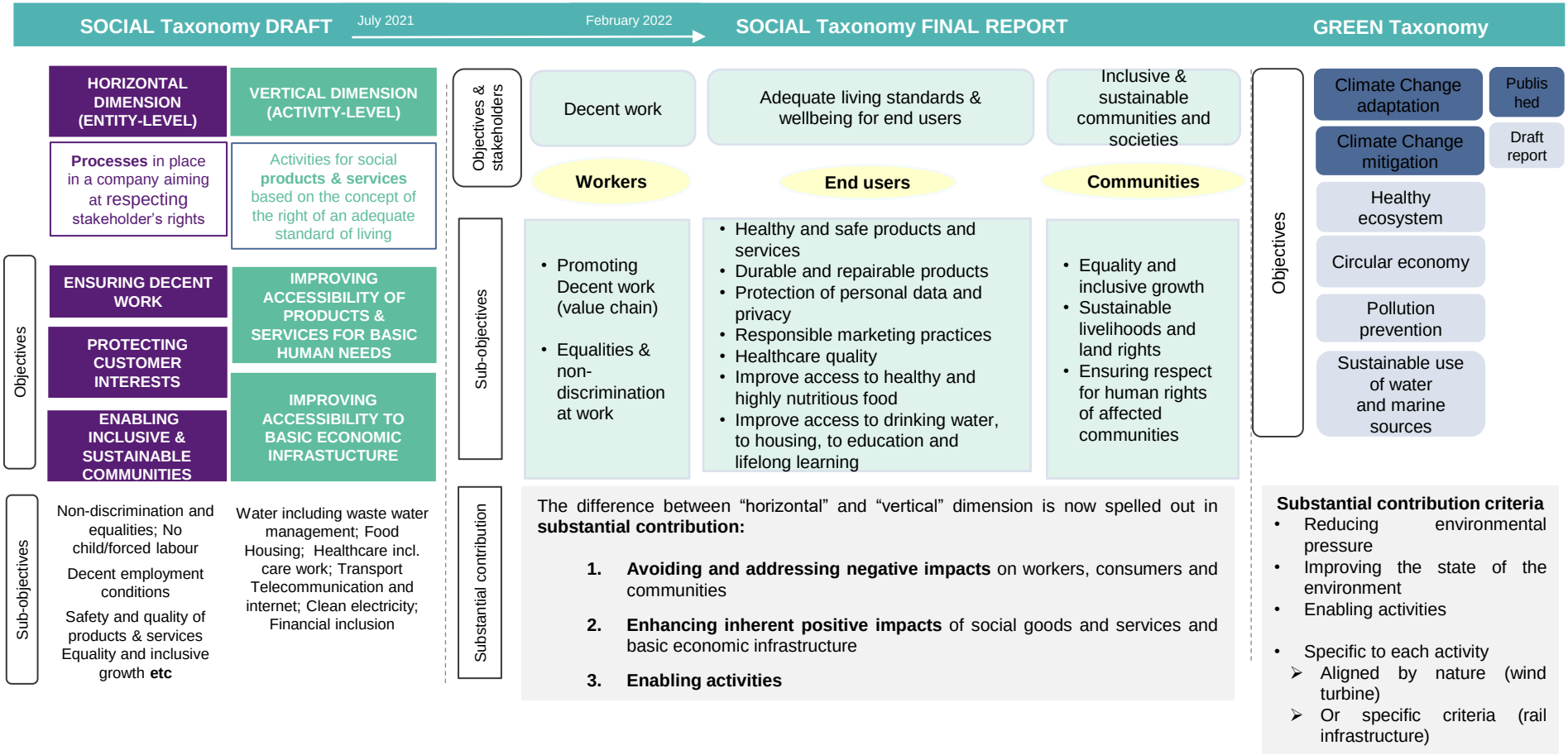
Not science-based

The foundation of this Taxonomy consists of **internationally agreed authoritative norms and principles*** that take the place of “science”

Draft report on a Social Taxonomy by the European Union (2/5)

A simplified layout

Following the Social Taxonomy draft consultation released in July 2021, and to respond to concerns on administrative burdens, efforts have been made to align the Social Taxonomy structure to the environmental one with the **collapse** of **horizontal and vertical dimension** to a structure with **3 objectives.**



Draft report on a Social Taxonomy by the European Union (3/5)

Objective	Decent Work	Adequate living standards and well-being	Inclusive and sustainable communities and societies
Sub-objectives	**#1 Promoting decent work** • **Strengthening social dialogue, freedom of association** and **collective bargaining** for setting wages and working conditions • **Predictable and transparent pay levels,** guarantee of decent lives • **Ensuring that formal working relationships** avoid precarious working conditions • **Excellent health and safety** for workers • Running **extensive programs for skills and life-long learning**, job transition and employment generation • Provide **for social protection** • Measures to **end forced labor**, against **child labor and exploitation of work** **#2 Promoting equality and non-discrimination at work** • **Equal** employment opportunities for women • Ensuring **pay gap** between executives and the average worker is **not excessive** • Ensuring a **living income for farmers** **#3** Ensuring **respect for the human** and **workers' rights** of affected workers in the value chain by carrying out **risk-based due diligence**	• Ensuring **healthy and safe products and services** • **Durable and repairable products design** and **smooth multimodal experience services** (e.g., transport) • Cybersecurity and **data privacy protection** • Responsible **marketing practices** • **Quality healthcare** products and services • **Healthy and highly nutritious food** for children access improvement • Good quality drinking **water access improvement** • Good **quality housing access improvement** • Education and **lifelong learning access improvement**	**#1 Promoting equally and inclusive growth** • **Access improvement** for target populations and/or areas to basic economic infrastructure (e.g., transport, telecommunications financial services, electricity) • **Childcare** and support to children • **Inclusion of people with disabilities** • **Creation and preservation of decent jobs**, particularly as part of a just, green and digital transition • **Preservation of employment levels**, recruitment of local workers and support local suppliers in targeted areas • **Promotion of equality** **#2 Supporting sustainable livelihoods and land rights** • **Promotion** of **community-driven development** • **Avoidance of negative impact on communities** affected by business operations (including land and livelihoods, health, safety and security, culturally and spiritually sacred sites, access to basic services) • Meaningful **consultations with affected communities**, priorities on development to engage with indigenous people **#3 Ensuring respect for human rights of affected communities** • **Implementation of the "free, prior and informed consent"** process when indigenous peoples are affected • Support freedom of assembly and expression

Draft report on a Social Taxonomy by the European Union (4/5)

The Platform suggests a three-fold substantial contribution (SC)

Step 1: Setting social objectives

The Platform advises to develop Substantial Contribution (SC) and DNSH at the sub-objectives level – offering granularity

Step 2: Setting out the substantial contribution that can achieve these objectives

Type of contribution	Explanations / Illustrations	Sectors of relevance
#1 Maximizing positive impacts	Enhancing the inherent social benefits of activities, products or services (additional benefits) contributing to adequate living condition	Goods & services related to basic human needs or economic infrastructures: - Food and water - Education - Access to housing, healthcare - Transport and telecommunications
#2 Minimizing negative ones	Avoiding and addressing adverse impacts on workers, consumers and communities: - Ensuring a decent life for the worker and his/her family - Paying wages agreed in collective agreements - Training workers for a just transition - Occupational health & safety	High-risk sectors with documented human-rights and labor-rights abuses track-record
#3 Enabling other activities to provide social benefits	Social auditing services which help guaranteeing decent working conditions for value-chain workers Carrying out tests to discover harmful substances in consumer products	Economic activities have the potential to enable substantial risk reductions in other sectors

Step 3: Drawing up criteria that apply the principle of DNSH, so that contributing to achieving one objective is not detrimental to the others

DNSH may play a **greater role** when neither turnover nor expenditures can meaningfully be linked to sub-objectives (e.g., freedom of association and taxation and other topics closely related to measures at the entity level)

Draft report on a Social Taxonomy by the European Union (5/5)

"AAAQ" concept for developing substantial contribution and DNSH criteria

The Availability, Accessibility, Acceptability and Quality (AAAQ) is an approach designed to address all possible obstacles to the fulfilment of social, economic and cultural rights. It can be applied to public and private products and services likewise.

Illustration of the AAAQ concept with the example of an energy / utility company
The referring ***objective is "Improving accessibility to basic economic infrastructure (B)", and the sub-objective is clean electricity (B3)***

Availability: A certain good or service is available in sufficient quantity and is functioning

Providing low-carbon energy from renewable resources to cover the needs of target populations

Accessibility: A product or service is economically affordable and physically accessible without any discrimination

Pricing adaptation to customers' social situation

AAAQ Framework

SUBSTANTIAL CONTRIBUTION

Acceptability: A product or service is ethically and culturally appropriate respecting the sensitivity of vulnerable groups and minorities

Creation of a comprehensive range of dialogue and consultation mechanisms

The more difficult to define (compare to the other three criteria) since it is depending on culturally sensitive norms and preferences

Quality: A product or service is safe and meets internationally recognised quality standards which are scientifically approved

Compliance with the strictest dam/nuclear safety standards

DO NO SIGNIFICANT HARM

Comparing Environmental and Social Criteria

Key differences between environmental and social criteria

- **Environmental criteria** consider a company's stewardship of nature. It particularly looks at the impact of a company's activities on natural resources (air, soil, water quality) or GHG emissions. Criteria can include a firm's carbon footprint, its impact on biodiversity, and recycling pledges.
- **Social criteria** examine how firms manage their relationships with employees, suppliers, customers, and the communities where they operate. It specifically takes into account human rights in the supply chain, consumer protection, and living standards.

Environmental

1. **Quantitative Nature:** As indicators are generally technical and tangible, quantifying indicators is easier (level of CO2 emissions, resources depletion expressed in tons, cubic meter).
2. **A minimum of consensus:** environmental KPIs are generally clearer than social ones. Overall, there is agreement regarding a common framework, a green taxonomy, consisting of environmental criteria.
3. **Clearer identification of positive impact on assets or projects:** capital flows can be more easily allocated to particular projects or applications with examinable evidence of environmental benefits.
4. **Macro-approach:** in the green taxonomy it is entirely plausible for a part of a production site to be manufacturing taxonomy-aligned products while another part is not. Indicators can be measured at sector and entity level and tend to be linked to specific economic activities or technologies rather than specific companies.
   The need for in-depth and context-based analysis is real (e.g., full life cycle analysis) but less significant than for social criteria.
5. **Offsetting:** the practice of offsetting is increasingly used in the combat against climate change and in efforts to conserve biodiversity; although with limitations and fair criticism (it is always preferable to avoid and reduce rather than offsetting negative impacts). High-emitting companies claim to offset some of their emission by purchasing carbon certificates and/or planting trees or engaging in carbon capture and storage activities (analytical and accounting compensation).

Social

1. **Qualitative Nature:** Social indicators are hard to quantify, like psychological issues or damage.
2. **Lack of consensus:** Due to challenges in terms of quantifying and lack of agreement on social preferences (e.g., there is no scientific consensus on the appropriate level of state interventionism), the regulatory framework regarding social criteria is nascent, rendering it hard to create a clear-cut social taxonomy like its environmental homologue.
3. **Harder to identify positive impacts of allocated funds:** Allocating capital flows towards projects or applications with a specific social goal is harder due to the difficult-to-assess nature of social indicators. Assessing the benefits of capital flows directed to projects requires more of an *in-situ* approach.
4. **A more profound need for assessment (micro and macro):** because social criteria involve a human dimension, the assessment of such indicators require a more profound approach. The human element invokes the critical need for proper implementation and measurability. It is recommended that for social criteria the assessment of compliance with minimum safeguards in practice be tied not to economic activity but to sites, business areas or subsidiaries.
5. **No Offsetting**: compensatory or offsetting practices are not feasible within the human rights realm, inasmuch as human rights are universal and, apply to each and every human being across the globe in an equal manner. Therefore, violating human rights in a specific company cannot be compensated for by respecting human rights or improving them in another facility. (UN Human Rights 2012: 15).

The UN Guiding Principles on Business and Human Rights

Three international sets of principles from the UN and the OECD are commonly used to define social issues at an international, national or corporate level: **The UN Guiding Principles on Business and Human Rights (UNGP), the OECD Guidelines for Multinational Enterprises and the UN Sustainable Development Goals (SDGs)**

1. UN Guiding Principles on Business and Human Rights (UNGP)

The UNGP is based on the Universal Declaration of Human Rights, UN documents on the protection of civil, political, economic, social and cultural human rights and the **eight core conventions of the International Labour Organization (ILO)**. The UNGP are a set of guidelines for states and companies to prevent, address, and remedy human rights abuses committed in business operations. It comprises all companies, of all sizes, in every sector, in any country.

Five operational principles to be compliant with the UNGP

Policy commitment	As the basis for embedding their responsibility to respect human rights, business enterprises should express commitment to meet this responsibility through a statement of policy that: (a) Is approved at the most senior level of the business enterprise; (b) Is informed by relevant internal and/or external expertise; (c) Stipulates the enterprise's human rights expectations of personnel, business partners and other parties directly linked to its operations, products or services; (d) Is publicly available and communicated internally and externally to all personnel, business partners and other relevant parties; (e) Is reflected in operational policies and procedures necessary to embed it throughout the business enterprise.
Human Rights Due diligence	Human rights due diligence is an ongoing risk management process that a reasonable and prudent company needs to follow in order to identify, prevent, mitigate and account for how it addresses its negative human rights impacts. It includes **four key steps: assessing actual and potential human rights impacts, integrating and acting on the findings, tracking responses, and communicating how impacts are addressed.**
Business Relationships	Business relationships refer to those relationships a company has with business partners, entities in its value chain and any other non-State or State entity directly linked to its business operations, products or services. They include business relationships in its value chain, beyond the first tier, and minority as well as majority shareholding positions in joint ventures.
Leverage	Leverage is an advantage that gives power to influence. In the context of the UNGPs, it refers to the ability of a company to effect change in the wrongful practices of another party that is causing or contributing to a negative human rights impact.
Communication	Communication is a regular sharing of information through – for example – public corporate sustainability reports including dedicated human rights reporting sections.
Remedy	Where a company identifies that it has caused or contributed to adverse impacts, it should engage in remediation, by itself or in cooperation with other actors. Remediation is the process of providing remedy. Remedies can take various forms including apologies, provisions to ensure the harm cannot recur, restitution or rehabilitation etc.

Human rights due diligence is not a one-off event but should instead be an ongoing process. Due diligence is intended to be risk-based. For the 10-year anniversary of the adoption of the UNGP in 2021, an UN Working Group has been launched to further drive and scale up implementation of the UNGP more widely over the next 10 years.

- Source: UNHR (2011), Implementing the United Nations "Protect, Respect and Remedy" Framework
Swiss Government & Institute for Human Rights and Business (IHRB) (2018) Guidance on Implementing the UN Guiding Principles on Business and Human Rights

The OECD Guidelines for Multinational Enterprises

2. OECD Guidelines for Multinational Enterprises

In 2000, the Organization for Economic Co-operation and Development (OECD) published the Guidelines for Multinational Enterprises. These Guidelines express the expectations of the 36 member countries towards the multinational enterprises located or operating in their territories. In 2011, the OECD published an updated edition, **which was incorporated into the UN Guiding Principles on Business and Human Rights**. The Guidelines are based on the principle of voluntariness. 50 countries from across the world, including 25 EU member states, have adhered to the Guidelines or started the adherence process.

The nine OECD Guidelines name the following additional aspects that are not already covered by the green taxonomy or the UN Guiding Principles:

Corruption	Enterprises should not bribe public officials or the employees of business partners, they should publish adequate guidelines against bribery, establish control measures and due diligence processes, and promote employee awareness and conduct training on the issue.
Consumer interests	Business enterprises should provide consumers with fair information and refrain from making unfair and misleading representations or from engaging in deceptive marketing practices.
Science and technology	Businesses should, where practicable, contribute to the rapid transfer of new knowledge and technologies. Development divisions should also be established in host countries and should be encouraged to collaborate with local universities.
Competition	Businesses should avoid entering into anti-competitive agreements on prices, production quotas or regional division of markets.
Taxation	Businesses should comply with the letter and spirit of tax laws. Compliance with this principle is the responsibility of the company's supervisory board. The issue of transfer pricing is covered in detail. In multinational enterprises, different entities "sell" different goods and services in different jurisdictions within one enterprise. Here, the corporate group derives benefits if, through internal pricing, the highest added value is achieved in those jurisdictions with very low taxes. This practice is prohibited according to the OECD Guidelines. Instead, businesses should set their internal pricing according to the arm's length principle. Internal prices should thus be calculated as though the goods were being bought from an external provider.

The final report of the Technical Expert Group makes it clear that the OECD Guidelines on consumer protection, science and technology, competition and taxation should not be prioritized when it comes to verifying compliance with the taxonomy because these issues are difficult to trace back to a specific economic activity (EU Taxonomy 2020: 17).

The taxonomy therefore prioritizes four of the nine OECD Guidelines as minimum safeguards in the green taxonomy. What remains entirely unclear, however, is whether the remaining five do not apply at all or are simply considered to be of lesser importance.

- Source: Antje Schneeweiß (2020), A Proposal for a Social Taxonomy for Sustainable Investment

UNHR (2011), Implementing the United Nations "Protect, Respect and Remedy" Framework

The UN Sustainable Development Goals

3. UN Sustainable Development Goals (SDGs)

Set in 2015, the UN SDGs serve as a “blueprint to achieve a better and more sustainable future for all”. The SDGs were developed within the UN’s 2030 Agenda for Sustainable development, which seeks to achieve peace and prosperity by eradicating poverty and ensuring sustainable development.

The SDGs provide rich guidance on activities fulfilling essential needs and achieving social outcomes involving nutrition, education & training, training, health, housing, and mobility. It can serve as a good starting point to draft the European social taxonomy for example.

The Goals are a synthesis of 169 targets of which the progress is tracked by 231 unique indicators that provide granularity on the overall level of achievement of each SDG.

Especially suited SDG For the definition of social objectives

Especially suited SDG For the definition of ecological objectives

Source: https://www.bundesregierung.de/breg-de/themen/nachhaltigkeitspolitik/die-un-nachhaltigkeitsziele-1553514

Example

- **Goal:** 1. End Poverty in all its forms everywhere
- **Target:** By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
- **Indicator:** Direct economic loss attributed to disasters in relation to global gross domestic product (GDP)

- Source: Antje Schneeweiß (2020), A Proposal for a Social Taxonomy for Sustainable Investment
UNHR (2011), Implementing the United Nations “Protect, Respect and Remedy” Framework

SDG Finance Taxonomy initiated by Chinese entities (1/3)

Click here to access document online

Progress status and description

June 2020

The "SDG Finance Taxonomy" **was authored by the UNDP in cooperation with the Center of Economic and Technical Exchanges (CICETE), from the Chinese Ministry of Commerce in 2020**. To this day, it has no legal power and remain **a voluntary standard**.

Stated goals and use-cases of the taxonomy

Primary users of the taxonomy

It builds a common ground for Policy makers, Financial institutions, Businesses, Industry bodies and communities, Analysts, advisers, research houses and media. It is meant to be used by companies for fundraising, lawmakers and investors both as a reference document and a reporting tool.

Financial instruments for which the taxonomy is designed

Loan, Credit, Bond, Equity, Funds and Crypto-based investments

Specific objectives of the taxonomy

The Chinese SDG taxonomy adopts a "Leaving No One behind" (LNOB) perspective on impact such that it "urges investments flowing into those projects which will benefit groups left furthest behind". It recognizes the necessity to measure and report on impact and mentions several compatible tools in order to bridge SDG gaps.

Authored by the UNDP in cooperation with the CICETE

SDG taxonomy

Final document

CHINA

Sustainable goals of the Taxonomy

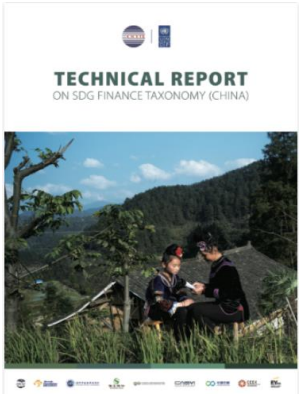
"Closing the gap of access to socioeconomic empowerment and advancement for vulnerable groups, beyond climate change adaptation, mitigation and environmental protection.

In the first phase, the goal is for voluntary adaptation of the Taxonomy (in China) and its international adaptation with increasing regulatory support for standardized reporting and national statistical systems."

Categories of economic activity

1. Basic infrastructure
2. Affordable housing
3. Health
4. Education technology and culture
5. Food security
6. Financial services

SDG Finance Taxonomy initiated by Chinese entities (2/3)



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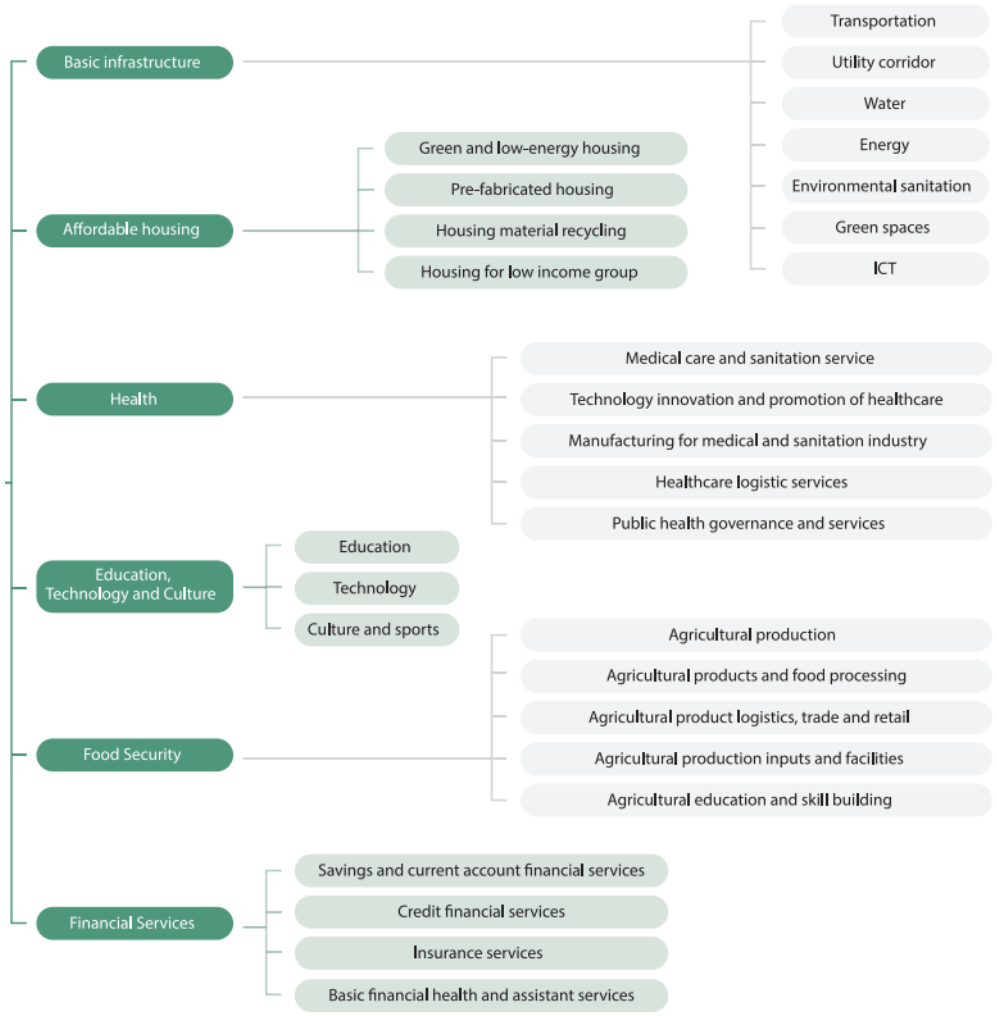
There are three levels of classification in the SDG Finance Taxonomy.

- Level I is based on the **ICMA Social Bond Principles**, distinguishing 6 thematic areas (1.Basic Infrastructure, 2.Affordable Housing, 3.Health, 4.Education, Technology and Culture, 5. Food security and 6. Financial services).
- Level II are based on national guidelines or international best practices. Basic infrastructure is declined under 7 subcategories designed by the **Chinese Ministry of Housing and Urban Development**.
- Level III corresponds to specific projects chosen and detailed according to their specific relevance for national development priorities (e.g., Chinese Five-Year Plans, line ministries regulation).

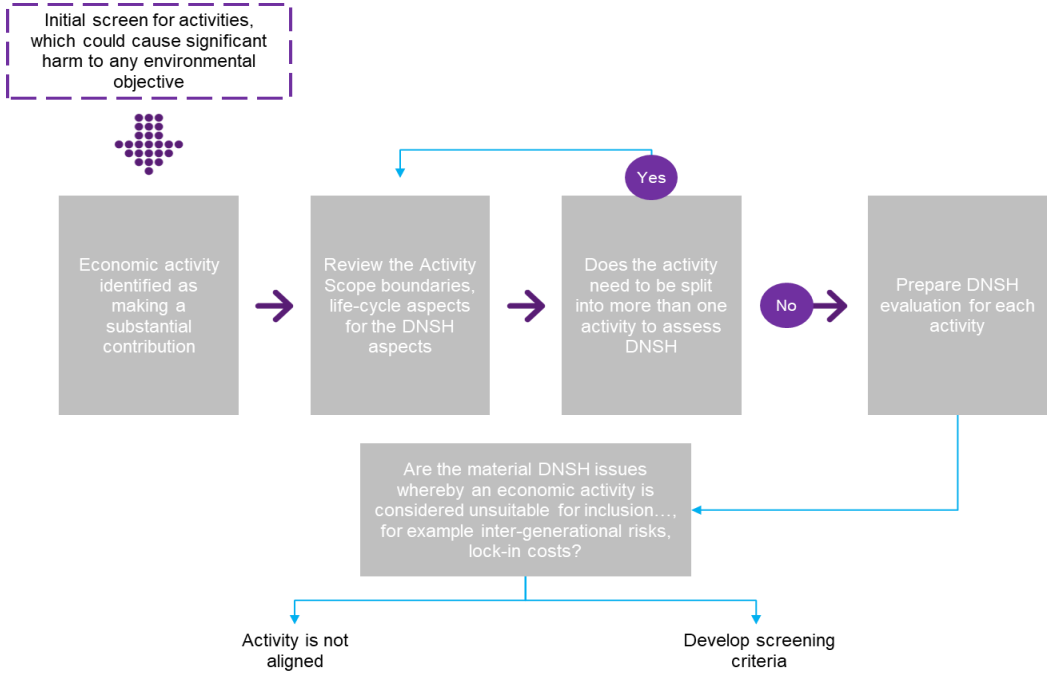
Sectors and sub-sectors covered

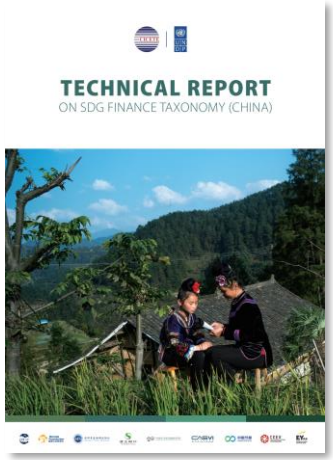


SDG Finance Taxonomy initiated by Chinese entities (3/3)

The Taxonomy adopts a "**Leaving No One behind (LNOB)"** perspective as it **"urges investments flowing into those projects which will benefit groups left furthest behind**". It recognizes the necessity to measure and report on impact and mentions several compatible tools. It reportedly builds on the EU taxonomy Do no Significant Harm (DNSH) criteria

DNSH decision tree





Impact measuring tools:

IRIS+ IMPACT MANAGEMENT PROJECT GRI

Exclusion list:

Projects that risk doing significant harm to the SDGs are excluded from the Taxonomy:

- gambling, weapons, adult entertainment, tobacco and projects violating human rights, among others.
- Exclude projects where **alternatives with fewer negative impacts exist**

Our Taxonomy analysis grid: Looking into Georgia's Sustainable Finance Taxonomy

Click here to access document online

Criteria	Description
1. Progress status	• The Establishment of a Sustainable Finance (SF) Taxonomy is part of the actions listed under Pillar 2 in the Roadmap of Sustainable Finance in Georgia.
2. Stated goals & use-cases	• "The need for developing a taxonomy for Georgia instead of adopting already established one, such as EU Taxonomy, stems from various reasons. The most distinctive ones include the need for taking into account specifics of the Georgian financial system, development stage of sustainable finance, and sustainability issues relevant to Georgia" • "The SF Taxonomy is designed to be applicable by various actors for a variety of financial products. However, it is tailored to the needs of major local users that are commercial banks and microfinance institutions." As such, the document may be used for developing eligibility criteria for projects for capital market entities, disclose ESG related information in a consistent matter, enhance ESG risk management practices, decrease uncertainty and reputational risks, provide a consistent reference for standard setters and product developers.* *The full application list may be found here in the SF Taxonomy for Georgia, p.16
3. Sustainable objectives addressed	• "Environmental objectives include climate change adaptation and mitigation, biodiversity conservation, natural resource conservation, pollution prevention and control, sustainable use and protection of water and marine resources, transition to a circular economy, waste prevention and recycling and others." • "While poverty reduction, food security, education, healthcare, and financial inclusion fall under social objectives."
4. Sectors covered	• **11 sectors under the Green Taxonomy** : Renewable Energy, Energy Efficiency, Waste Management, Sustainable Water Management, Pollution Prevention & Control, Green Transport, Sustainability Agriculture, Farming & Aquaculture, Biodiversity Conservation, Sustainable Buildings & Construction, Sustainable Buildings & Construction, Sustainable Production & Trade, Green Services • **5 sectors under the Social Taxonomy** : Affordable Basic Infrastructure, Healthcare and Related Social Services, Financing and Financial Services, Food security, Education, Technology, Culture, Fitness
5. Typology of criteria	• Technical standards per sub-category, related to EU directives and international certificates for the Green taxonomy. • Social impacts are expected and listed for the Social Taxonomy.

VIII. FOCUS ON TRANSITION TAXONOMIES

One must differentiate the different ways to include “transition” in taxonomies, either through ad hoc categories, tiering of economic activities, adapted or “intermediary” thresholds or levels of performance (“shades”), and/or by factoring trends and improvement over time (with so-called traffic-light systems)

Traffic light system taxonomy mechanisms

- Shaded taxonomies not only include "**transition activities**" but classify activities **along a color scheme (red, yellow, green).**
- These form of taxonomies thereby enable a clear and distinct assessment of activities' **transition potential,** with **amber or middle categories** representing activities that do not cross the red "**significant harm**" boundary and yet do not meet the requirements sets for substantial contribution (green), and should be assessed "dynamically", in regard to their transition potential.
- This color scheme therefore enables its users to see more clearly which activities are following transition paths.

Chart | BRI Project Classification methodology

A 3-color method is proposed (Traffic light system) based on environmental impacts of the projects:

- **Green** (encouraged projects, positive list)
- **Yellow** (neutral projects)
- **Red** (require stricter supervision and regulation, negative list)

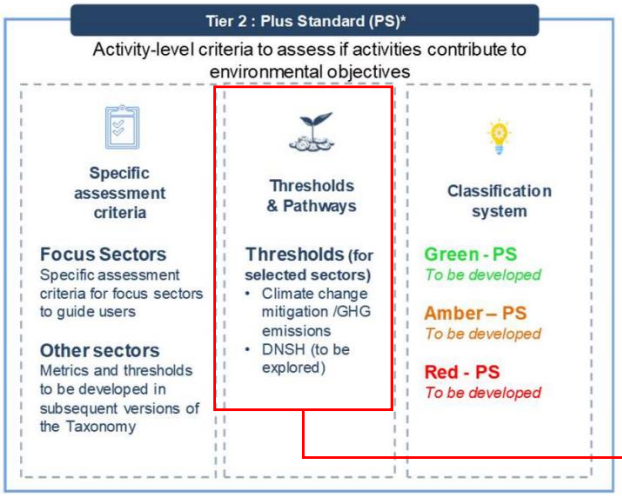
Chart | Green Finance Industry Taskforce's Traffic Light System Proposal (Singapore's Taxonomy)

- **Green** (clearly aligned)
- **yellow** (activities / companies with quantifiable and time-bound **pathways towards either green or significant de-carbonization**)
- **red** (activities /companies that are carbon intensive and where viable alternatives exist and that fail to meet the criterial of 'do no significant harm)

"An activity can be assessed as **amber FF** if it fulfils the conditions laid down in the decision tree (Chapter 5.4.1). For the purposes of the Plus Standard, an activity will need to **undergo further assessment on whether** it is making a **substantial contribution to transition**, in line with the **decarbonisation trajectory** required by the Paris Agreement. 42
Activities which to be assessed as amber PS will typically belong to one of three types of activities listed below:

- Activities not currently zero or near zero emissions following a decarbonization pathway (aligned with the Paris Agreements)
- Activities facilitating barriers to decarbonization
- Interim solutions (which generate less to an an alternative and need to be carried out for a limited period of time while alternative low carbon technologies are developed."

Chart | ASEAN's multi-tiered Taxonomy



The ASEAN taxonomy adopts a "stacked approach", with activity-level thresholds. "This means that for each activity, there are multiple decarbonization pathways".

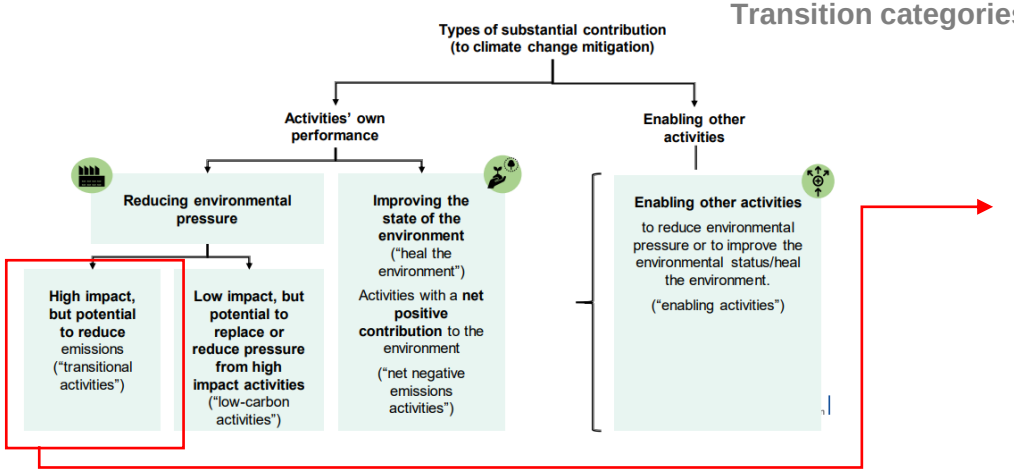
The ASEAN delineates 3 tiers of thresholds established for a single activity, to reflect its starting points and decarbonization pathways.

Source : ASEAN Taxonomy for sustainable finance, Version 1

Distinguishing “transition activities” from “traffic light systems”

- Most taxonomies already include **elements and a narrative** on transition (especially through listed environmental objectives)
- Yet, the way that transition categories are classified or listed / or transition plans considered varies across taxonomies, as some :
  - **(i) categorize “transition activities”** (EU, South Africa, Vietnam, South Korea, Malaysia, Indonesia) whilst others
  - **(ii) use a traffic light system** (green, amber, **red**), with an amber categories usually being used for activities on path to (Singapore, ASEAN, CBI, EU).

Transition categories in the EU Taxonomy (i)



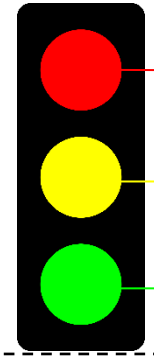
Art.10.2:
“An economic activity for which ***there is no technologically, and economically feasible low carbon alternative*** shall be considered to contribute substantially **to** climate change mitigation as it supports **the transition to a climate neutral economy** (…):
where that activity:
(i) has greenhouse gas emission levels that correspond to the best performance in the sector or industry;
(ii) does not hamper the development and deployment of low-carbon alternatives; and
(iii) does not lead to a lock-in in carbon-intensive assets considering the economic lifetime of those asset

Traffic light system in the EU Extended Taxonomy Proposal (not adopted, published in March 2022) (ii)

Unsustainable – (Significant Harm)

Sustainable if performance keeps improving

Green & sustainable (Substantial contribution)



Activities labelled “Significant harm”, (SH) urgent transition needed away from SH

Activities labelled amber, “intermediate performance”, in the process of transitioning to a more climate compatible performance (transitioning to “green”)

Substantial contribution to the environmental objectives

The European Extended Taxonomy proposal (1/3)

A case study of a sophisticated proposal for a traffic light adoption system in the EU

- **The current Taxonomy framework already technically defines three levels of performance** for each objective: green and sustainable, significantly harmful and the subsequent intermediate level (by default).
- However, the current Regulation is **not intended to define any category of activity other than "environmentally sustainable"**, what the Extended Taxonomy is designed for with intermediate performing activities, significantly harmful activities and always significantly harmful activities.
- The Commission still has to **identify further economic activities with no technological possibility of improving** their environmental performance.

Always Significantly harmful (SH) economic activities in need of urgent decommissioning or exit

An economic activity shall qualify as requiring urgent decommissioning or exit action where that economic activity:

a) **cannot be improved** to avoid significant harm and will therefore **remain always significantly harmful (ASH)**

Significantly harmful (SH) economic activities in need of urgent transition

An economic activity shall qualify as requiring urgent action to transition away from the level of performance that is significantly harmful to environmental objectives when that economic activity:

a) does **significant harm** to any of the environmental objectives;

b) does **not comply with technical screening criteria** that have been established by the Commission.

Intermediate performing (IP) economic activities

An economic activity shall qualify as having an intermediate environmental performance level where that economic activity:

a) does **not significantly harm** any of the environmental objectives;

b) does **comply with technical screening criteria** that have been established by the Commission;

c) does **comply with social minimum safeguards**.

➔ The Platform set examples of activities such as renewable or other power generation, heavy industry or transport sector activities with environmental performance between the substantial contribution and DNSH criteria.

➔ **No concrete example** of intermediate performance activity.

The European Extended Taxonomy proposal (2/3)

A case study of a sophisticated proposal for a traffic light adoption system in the EU

Figure 1 - Existing Green Taxonomy

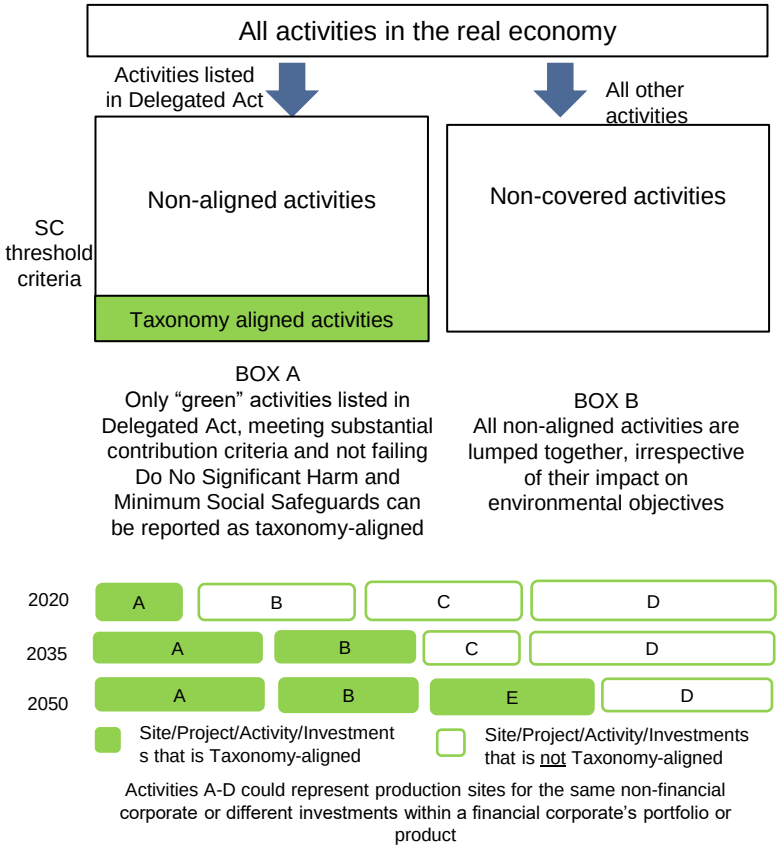
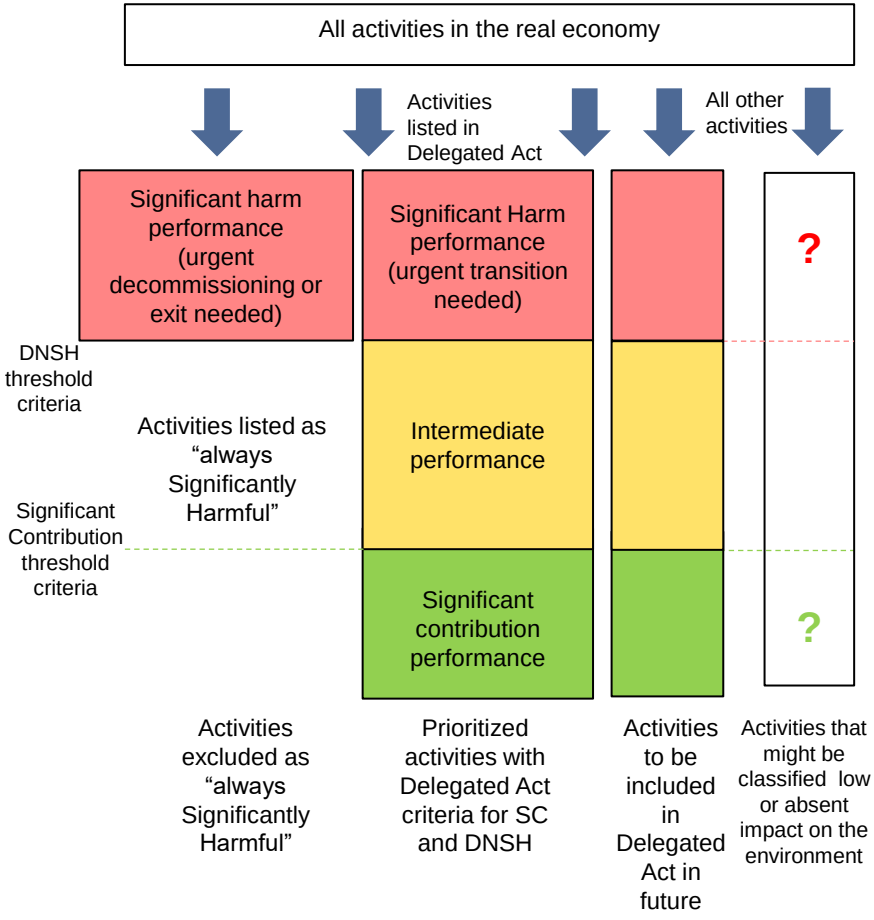


Figure 2 - Extension categories for economic activities and their performance levels



The European Extended Taxonomy proposal (2/3)

Transition & Intermediate Performance levels : a dynamic tracking of shifts

Figure 3 – Distinction between levels

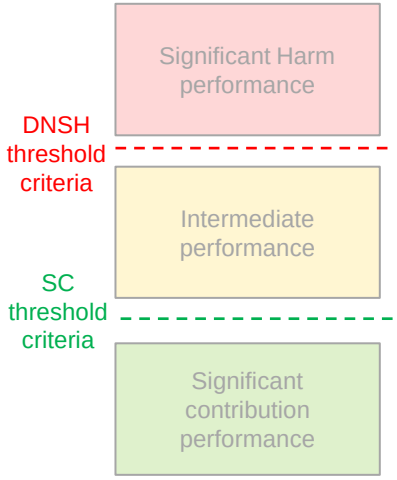
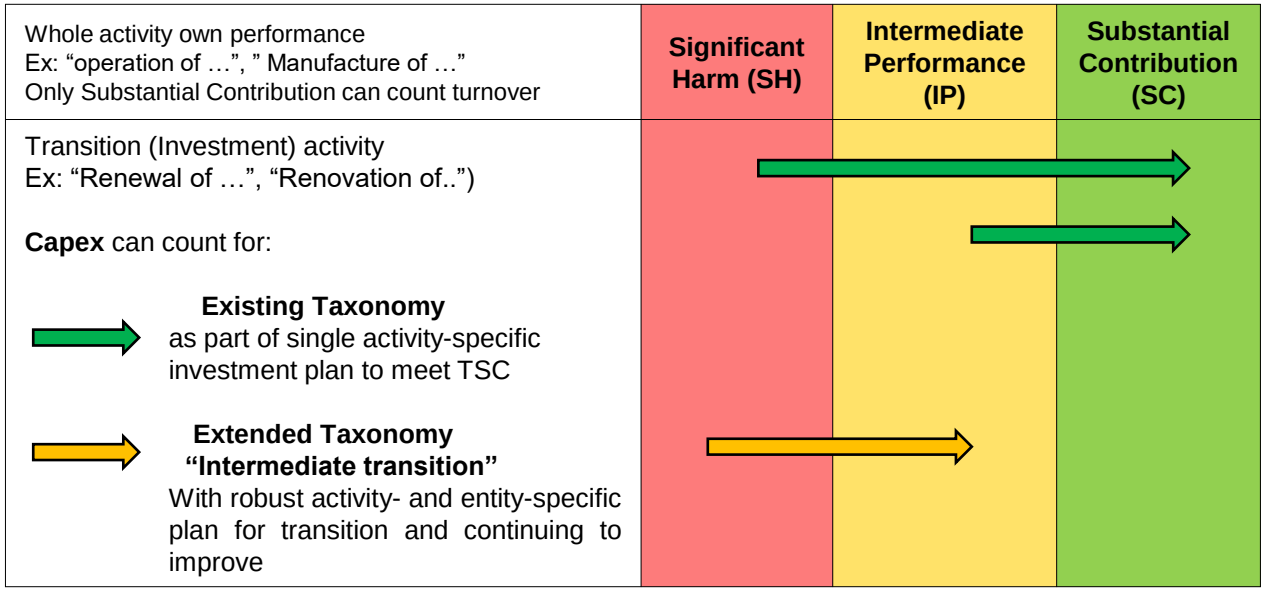


Figure 4 - Examples of changes across different performance levels



- By suggesting to **formalize a multi-level system** the Platform acknowledges **changes from a performance level to another** and allow a **dynamic tracking**.
- However, the existing implicit three performance levels were **not set to work in a dynamic space** and most of DNSH criteria are not designed to be dynamic but rather positive or negative. Therefore, they will have to be reshaped.
- The **red zone boundaries are tightening** over time which will require issuers to **maintain improvement over time ("falling curves**" according to the Platform).

The growing development of “traffic-light” taxonomies in the Asia Pacific

Sustainable bond issuance rose in Asia over the last years, and following suit, the development of taxonomies is under way in the region.
If the EU taxonomy is influencing regulatory developments by **setting the bar** against which all **other taxonomies are designed** and measured, Asian taxonomies – especially the regional ASEAN one – has made traffic light taxonomy systems more popular.

FOCUS ON THE TRAFFIC LIGHT SYSTEM TAXONOMIES

- **The CBI Taxonomy** uses a traffic light system to indicate eligible assets and projects, **green** for assets compatible with a low carbon economy**, amber for projects that could be compatible if it complied with set screening requirements**, **red** for incompatible and **grey** if the activity is not yet covered by the taxonomy.

- The **ASEAN taxonomy** classifies **all activities under “green”, “amber” or “red”.** For an activity to be classified as amber, it must prove that it is **trying to improve** its performance relative to environmental objectives.

- **Singapore** published a **Second Version of a Green Taxonomy** for Financial Institutions in May 2022 and included in it a traffic light system. Each color translates a different level of **contribution to climate change mitigation** :
  - **Green** (environmentally sustainable) : substantially contribute to climate change mitigation by operating at net zero / pathway for net zero by 2050
  - **Amber** (transition) : activities either transitioning towards green (under a time frame) or facilitating significant emissions reductions in the short term.
  - **Red** (harmful) : activities which a re not compatible with a net zero trajectory.

- The Indonesian taxonomy differs in the approach towards defining the categories.
  - **Green** activities must: do no significant harm, apply minimum safeguards, provide a positive impact on the environment and align with the environmental objective of the taxonomy,
  - **yellow**: do no significant harm,
  - and **red** entails harmful activities.
    - In this context, activities labelled yellow were designed to ensure that they **comply with regulations** and best practices rather than with a set **transition objective.**

The taxonomies consider further rapid urbanization and industrialization, whose result will likely lead to continued **dependency on fossil fuels**, at least over the medium term. Hence, the inclusion of some activities that are not yet undertaking a transition **enables the region to holistically** consider a smooth transition pathway, while handling **their energy needs over the near and medium-term.**

*Ishihara, Yu; Carr, Miranda, APAC ESG Regulations for Institutional Investors, Research Insights MSCI ESG Research LLC, September 2022, available here.

Australia's Sustainable Finance Taxonomy

Traffic-light Taxonomy to address hard transition activities

Led by the **Australian Sustainable Finance Institute**

Green and Transition Finance Taxonomy

Report on Taxonomy Design

Australian Sustainable Finance Institute

Core Design Principles:

- **Credibility:** science & evidence-based approach to develop robust criteria.
- **Usability**: simplify the implementation of the taxonomy to make it understandable to all stakeholders.
- **Interoperability**: align the taxonomy to international standards and taxonomies (particularly EU, UK, Japan and the US) to allow capital flows.
- **Prioritisation:** prioritize objectives to promote just and orderly transition, particularly the for the selection of sectors and criteria.
- **Impact:** consider the taxonomy's contribution towards achieving sustainability objectives and a net-zero transition.

Objectives	**Climate change mitigation; Climate change adaptation**; Protection and restoration of healthy ecosystems & biodiversity; Promotion of resource resilience and/or transition to circular economy; Pollution prevention; Sustainable use and protection of water & marine resources.
Purpose	Direct capital flows into economic activities that substantially contribute to sustainability objectives; Help guide an orderly and **just transition** to a sustainable economy; and **address greenwashing**
Sectors	**Electricity supply, mining** (including coal mining, oil and gas extraction and other mining), agriculture and manufacturing. Sectors to align with ANZSIC where possible but may seek to align with ISIC and NACE.
Alignment & Eligibility	Use of internationally recognized, **credible, science-based technical screening criteria**, which may be complemented where necessary by principles-based criteria. Alignment to include **entity and activity level criteria**.
Transition	**Traffic-light colour system** should be adopted to distinguish between green activities (aligned with taxonomy objectives), **transition activities** (on a pathway to alignment with taxonomy objectives), and excluded activities (unsustainable, do significant harm or no credible alignment pathway to the taxonomy objectives.
Other Criteria	Should consider **do no signficant harm**, considering Australia's needs, and mininum safeguards.

June 2022
ASFI Taxonomy Project is initiated as industry led-initiative close dialogue with Government

1 Phase Scope

October 2022
Publication of "Scoping of International Taxonomies" Paper

December 2022
Publication of draft recommendations for the design of Australia's Taxonomy and start of public consultation

February 2023
End of public consultation on the Design Recommendations

March 2023
publication of finalized paper on recommendations for Australia's Taxonomy

2 Phase Develop

June 2023
Analysis and case studies to inform integration of transition activities

July 2023
Creation of Technical Working Group to begin Taxonomy Development

2025 Final Taxonomy

GREEN & SUSTAINABLE HUB

NATIXIS CORPORATE & INVESTMENT BANKING

Transition criteria and taxonomies

Transition pathways are defined along a set of criteria in different taxonomies. For now, taxonomies mainly use sector specific area metrics (CBI), pathways aligned with the Paris agreement, TSC, thresholds, feasibility and alternative technologies (Singapore). Yet these criteria could be gain in granularity in the following years.

For instance, only 2 taxonomies explicitly claim that carbon credits are not suitable for transition or mitigation (right figure).

Others classify “transition” activities without using thresholds but DNSH.

Taxonomies in ASEAN countries show different approaches for classification while they all cover transition activities

✓ Applicable ✗ Not applicable

		ASEAN taxonomy	Singapore taxonomy	Indonesia taxonomy	Malaysia taxonomy[2]
Publication		November 2021 (Version 1)	May 2022 (2nd draft)	January 2022 (Published)	Apr. 2021 (Published)
Scope	**Green**	✓	✓	✓	✓
	Transition	✓	✓	✓	✓
Guiding principles	**Environmental objectives**	✓	✓	✓	✓
	DNSH[1]	✓	✓	✓	✓
Classification	**Pre-determined list of activities**	TBD	✓	✓	✗
	Thresholds	✓	✓	✗	✗

1. Do No Significant Harm principle
2. The Securities Commission Malaysia is currently developing the principles-based SRI Taxonomy for the capital market, which is targeted to be released by end of 2022. The SRI Taxonomy will provide more clarity and guidance for the market in identifying sustainable investment assets or activities.

Source: ASEAN Taxonomy Board, ASEAN Taxonomy for Sustainable Finance, November 2021, https://asean.org/wp-content/uploads/2021/11/ASEAN-Taxonomy.pdf
Green Finance Industry Taskforce, Identifying a Green Taxonomy and Relevant Standards for Singapore and ASEAN, May 2022, https://abs.org.sg/docs/library/second-gfit-taxonomy-consultation-paper
Sustainable Finance Indonesia, Indonesia Green Taxonomy, January 2022, https://www.ojk.go.id/keuanganberkelanjutan/Uploads/Content/Regulasi/Regulasi_22012011321251.pdf
Central Bank of Malaysia, Climate Change and Principle-based Taxonomy, April 2021, https://www.bnm.gov.my/documents/20124/938039/Climate+Change+and+Principle-based+Taxonomy.pdf

Global standards for climate finance and taxonomies mostly either do not support carbon credits or do not mention them

Carbon credits in global standard and other taxonomies

	Non-supportive for carbon credits	Not mentioned	Under development
Global standard	Climate Bonds Initiatives “Credible transition goals and pathways **don’t count offsets” (carbon credits)**	ICMA Climate Transition Finance Handbook	
Taxonomy	EU taxonomy “Not considered suitable for climate mitigation, separate and distinct from impacting activities, **last step of the mitigation hierarchy**, after harm has taken place, not guaranteed to remediate the harm[1]”	China taxonomy Indonesia taxonomy Malaysia taxonomy	ASEAN taxonomy Singapore taxonomy

1. EU position on carbon credits is increasingly unfavorable (Certified Emission Reductions are no longer swappable with EU Allowances since 2020)

Source: ATF Study Group, press release,
Climate Bond Initiative, Financing Credible Transitions: Summary note, 2020, https://www.climatebonds.net/files/reports/transition-summary-note-092020-report-page.pdf
Platform on Sustainable Finance, Part A Methodological Report, March 2022,
https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/220330-sustainable-finance-platform-finance-report-remaining-environmental-objectives-taxonomy_en.pdf

Source : Asia Transition Finance Guidelines, 1st edition, September 2022, available here

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