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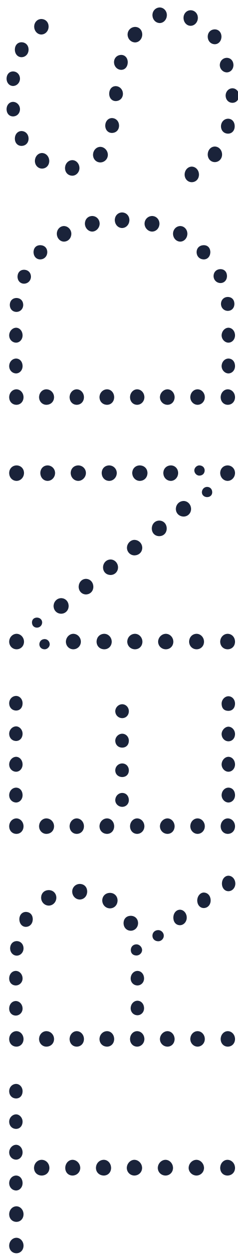


TREND
REGULATION

From China to Europe, taxonomies are increasing the transparency of financial markets

To guide investment decisions and capital allocation towards decarbonised or low greenhouse gas (GHG) emission activities, the world's major economic powers are strengthening their extra-financial regulations. In particular, recent years have witnessed a trend towards increased regulation associated with so-called 'green taxonomies', and more generally of the transparency of financial entities as regards their ESG practices. The new classifications of economic activities according to their environmental impact, whose aim is to prevent greenwashing and ensure better information about sustainable business for investors, have implications for both financial and extra-financial organisations.

DATA OVERVIEW

Green investments seek transparency in the midst of a booming market

From the sphere of economics to market finance, 'green' investments are riding high. Climate finance flows alone increased 10% between 2017-2018 and 2019-2020.[1] While the growth in climate finance slowed considerably during Covid-19 as compared to previous years (10%, versus 24% in previous bi-annual periods), the trend still leans towards an increase in these investments.

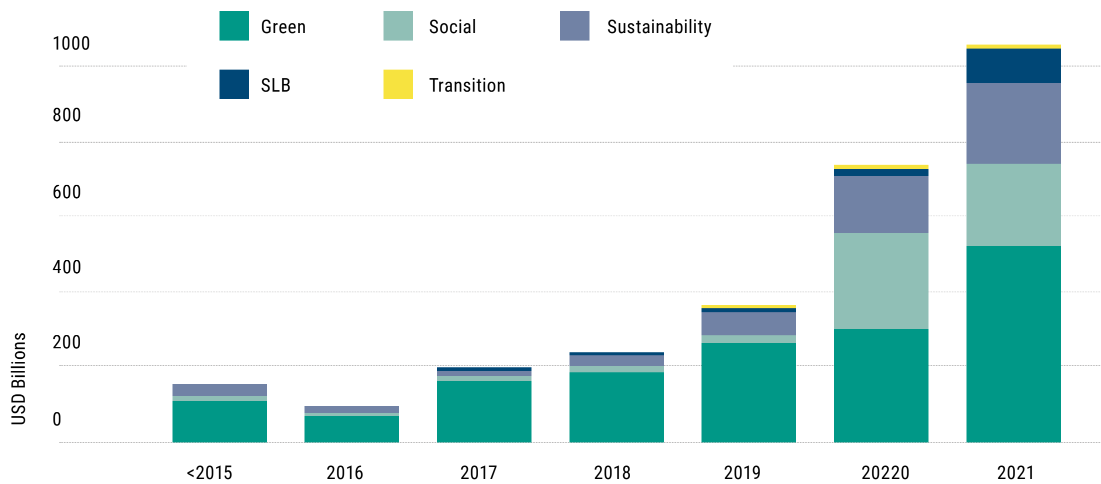
In this landscape, debt remains by far the most important climate investment vehicle (61%), far ahead of equity (33%) and non-repayable investment (6%). Indeed, more than $1.1 trillion in new green, social and sustainability (GSS+) bonds[a] were issued in 2021 (**Figure 1**). This represents a 46% jump in one year, bringing the total market volume to a cumulative $2.8 trillion, including $1.6 trillion of 'green' bonds. For 2021 alone, Climate Bonds has identified 2,089 new green bond instruments (+19% compared to 2020) from 839 issuers (+32%), for a total of $522.7 billion, up 75% year-on-year.[2] However, in a context of public suspicion regarding greenwashing, corroborated in some cases by scandals such as the

a Per the Climate Bonds methodology, debt instruments grouped under the GSS+ umbrella include a wide range of 'social', 'environmental', 'sustainability' (combining social and environmental benefits), 'sustainability-linked' and 'transition' bonds.

FIGURE 1

SOCIAL, ENVIRONMENTAL AND SUSTAINABLE DEBT VOLUMES TO EXCEED $1 TRILLION BY 2021

Source: Climate Bonds Initiative, 2022



abuses of German asset manager DWS (**see Signals**), what objective criteria can investors base their investment choices on, when their goal is supporting businesses with a positive environmental impact? How can the environmental properties of a financial asset be verified?

To orient investment decisions and capital allocations towards decarbonised or low greenhouse gas (GHG) emission activities, there has been a trend over the past two years towards strengthening the regulations governing so-called 'green' activities. For one thing, by adopting 'taxonomies', States are choosing to establish objective criteria for assessing the contribution of economic activities to their climate, environmental or social objectives. And for another, the transparency required of companies regarding their extra-financial activities is increasing, in part to facilitate investors' access to information on environmental, social and governance (ESG) performance.

Around the world, taxonomies are springing up to orient capital

China, an early adopter of green taxonomy

While the world's current leading contributor to global warming, with emissions exceeding 12.4 $GtCO_2e$ in 2021,[3] China is nonetheless a pioneer of green finance. Indeed, China is one of the first global players to have introduced regulation governing activities considered green. Work began in 2012, crafting key principles and performance indicators for green loans, and continued with the development of a catalogue of green bonds known as 'The Chinese Green Bond Taxonomy' in 2015. In 2016, guidelines for establishing a green financial system were published by the People's Bank of China (PBoC) in collaboration with seven ministries and commissions convened for this purpose.[4]

Standardisation of the country's green financial system was included in the PRC's 13th Five-Year Plan, covering 2016 to 2020. In 2018 and 2019, a working group developed a normative framework for green finance, the 'Guiding catalogue for the green industry' now used as a reference base for bond issues, green credits and the orientation of investment flows. The framework is organised into six main categories:

1. Energy efficiency and environmental protection
2. Clean production industry
3. Clean energy industry
4. Industry of ecology and environment
5. Green upgrade of infrastructure
6. Green services

In 2020, a new version was released for comment by the PBoC, the National Development and Reform Commission (NDRC) and the China Securities Regulatory Commission (CSRC), modifying the list of industries covered by green bonds. Among the changes made to meet the new 2060 carbon neutrality target and to comply with new international

standards are the elimination of clean uses of coal or fuel. In the coming years, CSRC Vice Chairman Fang Xinhai aims to introduce mandatory reporting for companies.[5]

The grand ambitions of the European taxonomy

In Europe, implementation of the Green Taxonomy adopted in 2020[6] started in early 2022. The EU Green Taxonomy is part of the 'Green Deal', the roadmap presented by the European Commission in 2019 to establish a green growth strategy for Europe covering the period 2021-2027. As of 1 January, 2022, more than 11,000 companies, financial institutions and EU Member States are subject to the European taxonomy. Currently, the companies concerned are those with more than 500 employees *and* a balance sheet exceeding €20 million or turnover over €40 million. These companies must indicate the proportion of their turnover, investments and expenditures that corresponds to sustainable activities. For 2024, along with the publication of a report on the year 2023, the threshold will be lowered to 250 employees while maintaining the same financial criteria.[7] This will increase the number of eligible companies to almost 50,000. The European taxonomy is currently the only legally binding taxonomy in the international arena.[8, 9]

From a global point of view, the European taxonomy covers more than 90 economic activities conducted in the European Union, classified according to three levels. The first level consists of 'sustainable' activities that are considered low-carbon and compatible with the Paris Agreement, such as renewable energy. The second level concerns so-called 'transitional' activities. These are businesses that contribute to transition towards a net-zero emissions economy in 2050. The third and final category covers the so-called 'enabling' activities, which make it possible to reduce emissions from other activities.[10,11]

To be regarded as 'sustainable', an activity must contribute substantially to at least one of the following six objectives, without significantly hindering any of the others:

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

In addition, 'sustainable' activities must respect a number of principles related to human rights and labour law as established by the OECD, the International Labour Organisation, the United Nations' Guiding Principles on Business and Human Rights, and the Universal Declaration of Human Rights.

An activity is considered 'transitional' if there are no economically or technologically viable low-carbon alternatives. Such businesses may also be judged to contribute substantially to climate change mitigation if and when they meet the following criteria:

- Exhibit greenhouse gas emission levels in line with the best performances of the sector or industry
- Do not impede the development or deployment of low-carbon alternatives
- Do not to lead to a lock-in of carbon-intensive assets given the economic life of these assets

Thus, it is complicated to precisely quantify the number of activities that can be categorised as 'sustainable'. To take an example, the impact of an economic activity on biodiversity can vary significantly depending on where it takes place. To address this, thresholds have been set to better guide the classification of activities. For instance, a hydroelectric power plant cannot be considered 'sustainable' if its emissions exceed 100 gCO_2e/kWh over its lifecycle.

- And lastly, 'enabling' activities may be deemed to have a substantial contribution when the business in question:
- Does not result in lock-in to an asset type that would compromise long-term environmental objectives
- Generates a significant positive environmental impact over its full lifecycle

For example, wind turbine or solar panel factories can be considered 'enabling' activities, as they make possible the development of an activity classified as 'sustainable', i.e., the production of renewable electricity. In total, there are 21 activities classified as 'transitional' and 24 classified as 'enabling'.

The categorisation of certain activities is far from unanimous among member States and observers. In particular, each of the six objectives listed above has been further specified by 'technical screening criteria', the negotiation of which was the subject of fierce opposition and intense lobbying campaigns.

These criteria, established by a special body of the European Commission, define the particular conditions under which an economic activity can be considered 'sustainable' by the taxonomy. The most contentious debates have revolved around the categorisation of nuclear and gas. In February 2022, after years of tough negotiations, the European Commission finally adopted a complementary Delegated Act on the climate component (CCDA) of the European taxonomy, which complemented the first Delegated Act adopted in June 2021.[12] The CCDA clarifies the technical review criteria for gas and nuclear.

For gas-fired power generation, high-efficiency cogeneration of heat/cold and electricity from gas, and gas-fired heat/cold generation in an efficient district heating and cooling system, lifecycle emissions must not exceed 100 gCO_2e/kWh. In practice, this means that operators will have to use complementary measures, such as CO_2 capture and storage (CCS). According to UNECE, a gas-fired combined cycle power plant normally produces between 403 and 513 gCO_2e/kWh, compared to between 92 and 220 gCO_2e/kWh when CCS is used.[13] Additional criteria are set to ensure that gas plant can only replace more emissions-intensive installations (e.g., coal-fired plants). As regards nuclear activities, the Commission has included in the taxonomy the research and development of 4th generation plants, the construction and operation of 3rd generation plants until 2045, and extensions to the life of existing plants (until 2040). Safety and security criteria are added, as well as a ban on the export of radioactive waste outside the EU.[14]

In July 2022, the European Parliament finally voted not oppose the inclusion of nuclear and gas activities in the list of 'sustainable' activities. If the European Council does not veto, the delegated act on taxonomy will enter into force on 1 January 2023, and will classify these two activities as 'transitional', under certain conditions and with a time limit.[15]

The multiplication of taxonomies and the challenge of harmonisation

Other global financial centres are also developing location-specific financial regulations. The Association of Southeast Asian Nations (ASEAN), the world's fifth largest economy, published an initial version of its taxonomy at the end of 2021.[16] The objective of this text is to establish a common vision on sustainable finance, taking into account the specificities of the ten member countries.[17] For example, during the negotiations, it was necessary to accommodate the nature of their economies: Singapore depends heavily on services, whereas Vietnam relies mainly on agriculture or industry. The aim of the text is to serve as a comprehensive guide and working basis for the member States, providing them with a common language. The text is currently not legally binding but aims to direct capital towards sustainable investments. This is to be achieved through the information provided to investors, by providing a sufficient level of confidence in low-emissions activities. The five principles promoted by this taxonomy are to:

1. Be an overarching guide for all ASEAN Member States, providing a common basis for efforts and complementing national initiatives

2. Take under consideration other international taxonomies and, where, appropriate, contextualise to facilitate an orderly transition to a sustainable ASEAN

3. Be inclusive and beneficial to all members

4. Provide a credible framing text and definitions

5. Be aligned with the sustainability initiatives of the capital markets, banking and insurance sectors

In keeping with the various principles as well as the objectives of this founding text, Singapore decided in January 2021 to produce its own taxonomy under the aegis of Singapore's Green Finance Industry Taskforce (GFIT). The second phase of public consultation has been underway since May 2022, with completion scheduled for June 2023. This taxonomy would be compatible with the EU and ASEAN taxonomies, as well as relying on them for inspiration. The second phase of consultation emphasises the use of a traffic light system to classify activities according to their contribution to climate change mitigation. The colour green designates an activity that contributes substantially to climate change mitigation, operating in a net-zero manner or on track to achieve net-zero by 2050. The amber light represents activities that are either transitioning to the green category by a given deadline, or help to facilitate drastic emission reductions in the short term. The final category, red, is used for hazardous activities that are currently not compatible with a net-zero trajectory. Eventually, this tricolour categorisation will be applied across the eight selected sectors (agriculture, land use & forestry, real estate, transport, energy, industry, communications, waste & circular economy, and carbon capture & sequestration). Singapore's goal

is to finalise its taxonomy so that it can be applied from Q4 of 2023. Currently, there is no information on whether the authorities will make it mandatory or optional for companies to report on activities aligned with the taxonomy.[18,19]

The year 2022 also saw the introduction of the first taxonomy on the African continent. Based on a National Treasury guidance note published in 2021, the South African taxonomy addresses a call for the development and adoption of a '*taxonomy for green, social and financially sustainable initiatives, consistent with international development, to create credibility, drive investment and enable effective monitoring and reporting of performance*'. In its current version, the document takes into account only the risks and opportunities of climate change, in view to deploying a just transition to a low-carbon, socially inclusive and resilient economy. Thus, as with the European document that inspired it, the South African taxonomy is defined as a living text to be updated on a regular basis. The first version, published in June 2021, has been tested by six financial institutions. Companies are encouraged to use the taxonomy while developments are still underway. This will allow investors access to information on climate change risks and help them make decisions.[20,21]

On a global scale, the objective is to intensify the mobilisation of private capital towards sustainable environmental investments. To this end, two organisations are spearheading efforts, the International Platform on Sustainable Finance (IPSF) and the Network for Greening the Financial System (NGFS). The IPSF, created in 2019 by the European Union together with several other members, including China, is a forum for dialogue among policymakers. With 18 members to date, the organisation represents more than half of the world's greenhouse gas emissions and half the world's population. Its aim is to compare sustainable finance tools and approaches in view to making them more comparable and interoperable.[22] The latest version of the Common Ground Taxonomy (CGT) Instruction Report, released in June 2022, identifies 72 activities that contribute to climate change mitigation. The report also presents areas of overlap between the EU and Chinese taxonomy to provide clarification for international investors.[23]

Established at the One Planet Summit in 2017, the NGFS is a group of central banks and supervisors who, on a voluntary basis, agree to share best practices to accelerate the implementation of green finance at scale. With more than 100 members and observers, the organisation is present on five continents and represents around 85% of global emissions. Its aim is to strengthen global response within and outside its membership to meet the goals of the Paris Agreement.[24]

Encouraging transparency of ESG practices by stakeholders

Beyond taxonomies, regulations relating to the transparency of financial actors on their ESG practices are also being strengthened.

Pending the entry into force of the European taxonomy, the EU Regulation 2019/2088 on Sustainability Disclosure in the Financial Services Sector (SFDR) saw the light in March 2021.[25] In contrast to the taxonomy, which applies to all European entities, the SFDR exclusively concerns the financial institutions (insurers, investment firms, pension institutions, fund managers) and financial advisors in the European Union. The main objective of the regulation is to provide greater transparency as to the environmental and social characteristics of financial products. This should make it easier for investors to distinguish and compare the management of financial products, and therefor choose those that best fit their investment strategy.

The SFDR regulation is gradually coming into force as legislation governing its application is published. Among other things, it requires financial institutions to integrate sustainability risks into their investment and compensation policies. Financial entities will also have to report on the negative impacts of investment decisions on sustainability factors. The regulation provides a list of 18 key negative impact indicators representative of the negative environmental or social effects investment decisions are likely to produce. New information regarding financial products must also be published.

The methodology adopted by the SFDR is 'comply or explain': financial companies or products that choose not to publish such information will be required to explain why they believe the negative impact principle does not apply to them.

To catalogue and demonstrate different levels of compliance with these criteria, the SFDR is divided into several categories. Each category has its own article: Article 6, Article 8 and Article 9. To be categorised as a sustainable investment product (Article 9), a financial product must make sustainable investment its main objective. Funds categorised as 'Article 8'—products promoting environmental and social issues—do not have sustainable investment as their primary purpose but promote social and environmental features. Finally, a product categorised

FIGURE 2

SOURCES, INCENTIVES, OBJECTIVES AND SECTORS IN SUSTAINABLE FINANCE DEFINITIONS AND TAXONOMIES

Source: OECD, 2020

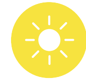
	CHINA TAXONOMY	EU TAXONOMY	FRANCE DEFINITIONS	NETHERLANDS DEFINITIONS	JAPAN DEFINITIONS
SOURCES					
SOVEREIGN GREEN BONDS			X	X	
GREEN LOANS DEFINITION IN LEGISLATION	X	X	X	X	
GREEN LOANS DEFINITION IN LEGISLATION	X	X	X	X	X
INCENTIVES					
INTEREST RATE INCENTIVES	X		X	X	
TAX INCENTIVES OR SUBSIDIES	X		X	X	X
MONETARY POLICY/ COLLATERAL INCENTIVES	X				
OBJECTIVES					
SOCIAL OBJECTIVES INCLUDED	X	X	X		
CLIMATE CHANGE ADAPTATION		X	X	X	X
CLIMATE CHANGE MITIGATION	X	X	X	X	X
WATER AND MARINE PROTECTION	X	X	X	X	X
POLLUTION PREVENTION AND CONTROL	X	X	X	X	X
WASTE AND RECYCLING	X	X	X	X	X
ECOSYSTEMS/BIODIVERSITY	X	X	X	X	X

as 'Article 6' is considered to have no sustainability objective. Products that do not fall under either Article 8 or Article 9 are, by default, classified as 'Article 6'.[26, 27]

Since the implementation of this regulation, changes have been observed in the investment choices of both managers and asset owners. By the end of 2021, according to Morningstar figures, around 42% of funds marketed in Europe were Article 8 or 9 funds and more than 200 new funds meeting the same standards were launched in the last quarter of 2021, accounting for more than half of all fund launches. Some institutional investors have decided to invest exclusively or mostly in new Article 8 or 9 funds. The new regulation is putting pressure on asset managers to change their portfolio management policies. Even if the full text is not yet in place, it is conceivable that it will be very difficult in the future for large financial entities to endorse financial products classified as Article 6.[28]

On the other side of the Atlantic, progress is less striking. The US is still in the early stages of introducing its own version of similar regulation. Indeed, in March 2022, the commissioners of the Securities and Exchange Commission (SEC), the US federal financial markets regulator and supervisor, announced that they would take up the issue by issuing proposed rules to improve and standardise climate-related information for investments.[29] These rules were published in the Federal Register in March 2022, and open to public comment.[30] Under the new rules, a foreign or domestic company would be required to disclose its greenhouse gas emissions (Scopes 1 and 2), and have them verified by a third party. Otherwise, this disclosure would primarily consist of qualitative and governance disclosures, as well as annual financial reports. The rules proposed by the SEC are based on existing international texts and methodologies, such as the Task Force on Climate Related Financial Disclosures (TCFD) and the Greenhouse Gas Protocol.

Response to this announcement has varied widely, depending on the political orientation of business leaders. The Republican Party wants to sue the regulator, arguing that the SEC has no authority on the matter. Moreover, Republicans accuse financial institutions, and especially the regulator, of seeking to ruin the fossil fuel sector, which accounts for more than 80% of the energy used in the country.[31] Conversely, financial regulation experts supported by Democratic representatives believe that the US financial regulator, as well as financial institutions, must shoulder their responsibilities in light of the urgency of climate change. Further progress on this text is expected in the coming months as comments and questions are considered following the release of the SEC's announcement.



KEY TAKEAWAYS

Since the introduction of the taxonomy in Europe and in several countries, it is difficult to believe that a return to the past is possible. The new regulation provides a framework for and fosters sustainable investment. Most of all, it limits greenwashing activities. The obligation to publish environmental information in a regulated and identical manner makes it possible to standardise and clarify the data collected. With a European SFDR regulation focused on the environmental impact of financial products, Europe is a global leader. The coming years will be critical for establishing the US regulation, for aligning existing regulations and for extending existing taxonomies to other environmental objectives as well as to 'brown' and 'transitional' activities.

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