SEI Stockholm Environment Institute

Climate risk reporting initiatives and requirements for Swedish real estate investors: a brief overview

SEI brief
September 2023

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1. About the brief

The brief is based on a desktop review with input from semi-structured interviews and discussions with the MAVERIC consortium partners, representing banks, real estate companies and real estate service companies. The work was carried out mainly during the first half of 2023. MAVERIC, Material Assets Valuation: Estimating Risks and Impacts of Climate Change, is a Vinnova-funded project (under grant agreement 2022-01417), aimed at understanding how climate risk will impact the financial sector. The semi-structured interviews aimed at getting a basic understanding of the consortium partners' real estate portfolios and evaluation practices. Additional discussions were held in the MAVERIC advisory meeting in March 2023.

2. Introduction

In an assessment by the European Central Bank (ECB) of banks' disclosures for 2020, it became apparent that less than 50% of banks describe the potential strategic impact of physical or transition risk (European Central Bank, 2022). For real estate portfolios specifically, ECB found that less than 20% disclose information about energy performance certificates. As this poses a substantial liability, the ECB included climate-related risks in their supervisory priorities for 2022-2024 (Mercure, J.-F., et al., 2018).

There is an increasing amount of reporting initiatives and requirements related to disclosure, both specific to climate risk and covering sustainability more broadly, with some regulated and some voluntary. In this brief we aim to provide an overview of the different reporting frameworks that are applicable to financial actors and corporates, especially in the EU, to increase understanding of the climate risk disclosure landscape. We recognize it is a snapshot in time, providing a taste of the current climate risk disclosure landscape.

3. What is climate risk and why should it be disclosed?

With increased awareness about climate change, experiences of impacts related to rising global temperature, and new regulations and incentives in support of climate mitigation and adaptation, a greater understanding of the climate risks for businesses and investors is materializing. Climate risks can be of different types and, in the investment and finance community, are often divided into physical risks and transition risks (TCFD, 2017; Reisinger et al., 2020):

IMAGE (ABOVE): Stockholm, Sweden
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- **Physical risks** arise from climate change impacts and climate-related hazards, including risk to facilities and infrastructure, impact on operations and resource availability. They can be acute short-term events or chronic long-term changes.

- **Transition risks** are related to the transition to a low-carbon economy and include policy and legal risks, liability risk, technology risk, market risk and reputation risk. Policy and legal risks include the effects of policy action to mitigate climate change and action to promote adaptation to climate change. Policy risks also include, for example increased taxation or costs related to energy performance or adaptation requirements. Legal risks encompass climate-related litigation claims, due to failure to mitigate or adapt to climate change and to insufficient disclosure of risks. Technology risk covers the improvements and innovations needed for the transition, which can lead to increased costs and changes in competitiveness. Market risk covers changes in supply and demand for certain products and services as climate-related aspects are considered. Reputation risk relates to the perceptions of customers and community.

In addition to these, **systemic risks** are part of the framework suggested by the Taskforce for Nature-Related Financial Disclosures (TNFD), but notably not in the earlier framework proposed by the Taskforce for Climate-Related Financial Disclosures (TCFD). The TNFD defines systemic risks as "risks arising from the breakdown of the entire system, rather than the failure of individual parts. Nature-related systemic risks are characterized by modest tipping points combining indirectly to produce large failures and cascading interactions of physical and transition risks, one loss triggers a chain of others and stops systems from recovering their equilibrium after a shock" (TNFD, n.d.).

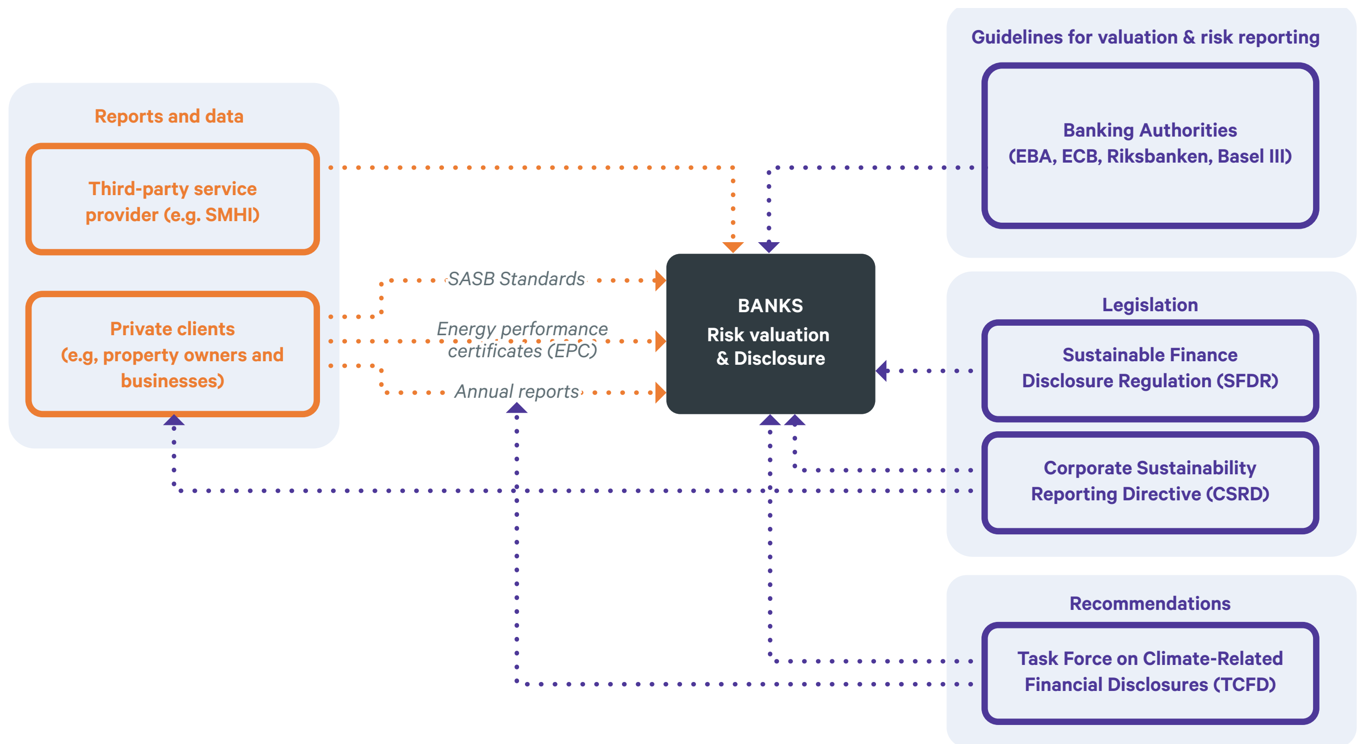
Disclosing climate risks can lead to better risk management and more informed decisionmaking and strategic planning, as well as more constructive dialogue between companies, investors and shareholders (European Commission, 2019). Disclosure and reporting is said to be crucial to show that you are serious about your business and business model (MAVERIC partner organizations, personal communication, spring 2023). In some cases, disclosing climate risk is also a legal requirement (e.g. Sustainable Finance Disclosure Regulation (SFDR); Corporate Sustainability Reporting Directive (CSRD); and Pillar 3 ESG Risk reporting).

4. Outlining the landscape of climate risk reporting initiatives and requirements

Below, we first provide an introduction to the materiality of risk before covering TCFD and other international initiatives, followed by initiatives set up by the EU. The overview is a selection, not aiming to be comprehensive, and a summary is made in Table 1. An illustration of how different initiatives and information are connected, in this case for a bank, is given in Figure 1.

In this example, the bank gets guidelines and requirements from banking authorities on disclosure, and the SFDR and CSRD set regulatory demands on the bank's disclosure reporting. The bank may also choose to adhere to the TCFD recommendations. Information related to physical and transitional risks is gathered from third-party service providers and from clients, such as property owners. The latter can be done via annual reports, SASB standards reporting and energy performance certificates. The clients, being corporate entities, in their turn need to adhere to CSRD if in the EU, and may choose to adhere to the TCFD recommendations.

Figure 1 – An example of climate risk disclosure demands and information flows for a bank in the EU.



The understanding of the materiality of risk is taking new shape, notably within EU regulation (Baumüller & Sopp, 2021). In the more established single materiality approach, the focus of risk is either on the impact of nature-related issues on the financial performance of company (financial materiality), or on the company's impacts on the environment, society or economy. A so-called double materiality approach is being introduced in newer initiatives, meaning that risks to both financial performance as well as the potential impacts of a business on the environment and society should be regarded as material. Which approach is taken by the different frameworks presented here is shown in Table 1. The risks covered are likely to differ when using different approaches, but as noted by Baumüller and Sopp (2021), some argue that most sustainability matters will also have financial implications when introducing a long enough time perspective.

3.1 International initiatives for climate risk reporting

TCFD Taskforce for Climate-Related Financial Disclosures

Recent regulations and initiatives on disclosure and reporting on climate, or broader sustainability, risks are to a large extent using **TCFD** as basis or inspiration. The taskforce was created in 2015 by the Financial Stability Board to improve and increase reporting of climate-related financial information. As of March 2023, it consists of 31 members from across the G20. The first disclosure recommendations were published in 2017 and are structured into four areas: governance, strategy, risk management, and metrics and targets(TCFD, 2017). Physical and transition risks are covered and a single materiality approach is used.

The TCFD recommendations are referred to in many later initiatives. In the EU 2018 Action plan it is suggested to "...provide further guidance to companies on how to disclose climate-related information, in line with the Financial Stability Board's Task

Table 1. Reporting Climate Risks - Some Standards, Recommendations and Legislation

	Geographical scope	Target group	Requirement level	Time	GHG emission scope	Materiality approach
TCFD Recommendations	International	Companies and financial market actors	Voluntary	First version published December 2017	Scope 1 and 2 Scope 3 "if appropriate"	Single materiality – impact on financial performance
BCBS Principles for the effective management and supervision of climate-related financial risks	International	Banks and prudential supervisors	Mandatory	Issued June 2022	Not specified.	Single materiality – impact on financial performance
SASB Standards	International	Companies and Investors	Voluntary	Will be integrated into IFRS Sustainability Disclosure Standards	Depending on "evidence of financial impact and evidence of investor interest"	Single materiality – impact on financial performance
IFRS Sustainability Disclosure Standards	International	Companies and Investors	Voluntary	Issued June 2023	Including "the value chain"	Single materiality – impact on financial performance
GRI Global reporting initiative	International	Organizations	Voluntary	2000 (GRI Guidelines)	Scope 1, 2 and 3	Single materiality – impact on the economy, environment, and people
EBA standards for Pillar 3 disclosures on ESG	EU	Banks	Mandatory	First disclosures in 2023	Scope 1, 2 and 3	Double materiality
Taxonomy	EU	Financial market actors; companies subject to CSRD	Legislation	A first delegated act applicable since January 2022	Life cycle perspective for GHG emissions	Double materiality
Sustainable Finance Disclosure Regulation (SFDR)	EU	Financial market actors	Legislation	March 2021 (Delegated Act from January 2023)	Scope 1, 2 and 3 for GHG emissions[1]	Double materiality
Corporate Sustainability Reporting Directive (CSRD)	EU	Companies	Legislation	First companies to apply for fiscal year 2024 in reports published in 2025	Information to cover the value chain - scope 1, 2 and 3	Double materiality
Non-Financial Reporting Directive (NFRD)	EU	Companies	Legislation (Supplement on reporting climate-related information not legally binding)	Remain in force until companies apply to CSRD	Scope 1, 2, 3 in the supplement	Double materiality

Force on Climate-related Financial Disclosure (TCFD)…" (European Commission, 2018, p. 11), and Swedish Finansinspektionen states that "With regard to climate aspects, the TCFD's recommendations are a good starting point since they are already integrated into NFRD [Non-Financial Reporting Directive] through non-binding guidelines from the European Commission."

Basel Framework, Pillar 3

The Basel Committee on Banking Supervision (BCBS) was formed to improve financial stability by enhanced banking supervision worldwide. The Basel Framework covers three pillars, where pillar 3 "aims to promote market discipline through regulatory disclosure

1 Suppliers are mentioned also in relation to disclosure on child labor and forced labor.

requirements. These requirements enable market participants to access key information relating to a bank's regulatory capital and risk exposures in order to increase transparency and confidence about a bank's exposure to risk and the overall adequacy of its regulatory capital" (Basel Committee on Banking Supervision, 2023, p. 5). In 2020 BCBS established a task force to address climate-related financial risks, and in 2022 it presented 18 principles for the effective management and supervision of climate-related financial risks (Basel Committee on Banking Supervision, 2022). These are general, global recommendations that will be acted on by the European Commission, the European Banking Association (EBA) and ECB for implementation in regulation.

ISSB The International Sustainability Standards Board

In November 2021, the International Sustainability Standards Board (ISSB) was announced by The International Financial Reporting Standards (IFRS) Foundation. In June 2023, ISSB issued standards on climate-related disclosures and on general sustainability-related disclosures. The standards are aiming to set a global baseline of sustainability-related disclosures designed to meet the information needs of investors in assessing enterprise value. They also aim to enable companies to provide comprehensive sustainability information to capital markets and facilitate interoperability with other disclosures. Both standards include the recommendations of the TCFD and incorporate industry-based disclosure requirements derived from the Sustainability Accounting Standards Board (SASB) Standards (IFRS, 2022).

SASB Sustainability Accounting Standards Board

The Sustainability Accounting Standards Board (SASB) was founded in 2011 and the SASB standards aim to support companies in disclosing financially material sustainability information to investors. The standards are industry-specific and there are topics and metrics defined for Real Estate covering Energy Management, Water Management, Management of Tenant Sustainability Impacts and Climate Change Adaptation (SASB, 2022). Since August 2022, the SASB standards have been under the oversight of ISSB; eventually, the SASB standards will become the IFRS Sustainability Disclosure Standards.

GRI Global Reporting Initiative

The Global Reporting Initiative (GRI) provides sustainability reporting standards that are modular and can be used by any organization. Their first standard was launched in 2000 and covers various sustainability impacts, including climate. Material topics, as defined in GRI reporting, are "topics that represent an organization's most significant impacts on the economy, environment, and people, including impacts on their human rights" (GRI, 2023, p. 100). There is a voluntary disclosure on "Financial implications and other risks and opportunities due to climate change" (GRI, 2023), and sector standards for financial services (banking, insurance and capital markets) are under development.

3.2 EU initiatives for climate risk reporting

Sustainable finance is key for the EU Green Deal, and based on a first action plan from 2018, the **EU** has constructed three building blocks for a sustainable financial framework (European Commission, 2018, 2021c). The blocks are:

1. The EU **Taxonomy** for sustainable activities, a **classification tool** presenting performance thresholds to help investors and companies to contribute to the transition (The European Parliament and the Council of the European Union, 2020). Climate change mitigation and climate change adaptation are two of the six environmental objectives covered in the taxonomy.

2. A **mandatory disclosure regime**, for both non-financial and financial companies. Notably, the disclosure requirements take a so-called double materiality approach, including the risks faced by the company due to sustainability exposures, but also the impacts of the company's activities on environment and society.
3. **Investment tools**, such as benchmarks, standards and labels.

There are three main instruments regulating disclosure:

The EU **Sustainable Finance Disclosure Regulation (SFDR)** has been active since March 2021 and mandates the integration of sustainability risks in communication of financial products and advice to enhance comparability and transparency (The European Parliament and the Council of the European Union, 2019). In this regulation "'sustainability risk' means an environmental, social or governance event or condition that, if it occurs, could cause an actual or a potential material negative impact on the value of the investment" (The European Parliament and the Council of the European Union, 2019, p. 9). There is a Delegated Regulation which specifies the information to be disclosed, and specific indicators for investments in real estate assets are presented. The SFDR takes a double materiality approach, meaning that both the impacts on people and environment (adverse sustainability impacts) of investment decisions and advice, as well as how sustainability matters affect the financial products (i.e. the risks), should be considered.

The EU **CSRD - Corporate Sustainability Reporting Directive** entered into force in January 2023 (The European Parliament and the Council of the European Union, 2021). The first companies will apply it in the 2024 financial year, and the first reports will be published in 2025. CSRD is replacing the Non-Financial Reporting Directive (NFRD). The CSRD will be part of the companies' annual reports and be third-party audited. EU Sustainability Reporting Standards (ESRS) are being developed by the European Financial Reporting Advisory Group (EFRAG) to specify disclosure requirements. The CSRD takes a double materiality approach and climate is only one of the sustainability aspects to cover.

The EU **Taxonomy Regulation** specifies the information to be disclosed concerning environmental performance and covers turnover, capital and operating expenditures from products or activities associated with the Taxonomy. The Taxonomy Regulation entered into force in July 2020. Simplified reporting under the Climate Delegated Act (climate change mitigation and adaptation) was applicable for financial year 2021, and full reporting in relation to the climate act was applicable for financial year 2022 (European Commission, 2021b).

"Construction and real estate activities" is a category within the taxonomy (European Commission, 2021a). For climate mitigation, energy in the use phase is technical screening criteria for all new construction. The threshold for Primary Energy Demand (PED) is set at 10% lower than that set for nearly zero-energy building requirements nationally, relating to that specific directive. Testing is demanded for buildings larger than 5 000 m^2 upon completion. Additionally, for buildings larger than 5 000 m^2, energy calculation of life cycle greenhouse gas emissions is demanded but no threshold level set in current version of the taxonomy. For renovation of existing buildings, the criteria relate to compliance with applicable requirements for major renovations, or alternatively that at least 30% of reduction of PED is achieved. There are a number of qualitative criteria to define substantial contribution to climate change adaptation, such as having implemented "adaptation solutions" that substantially reduce the most important physical climate risks material to the activity.

An activity complying with criteria regarding substantial contribution to climate change mitigation or adaptation also need to ensure doing no significant harm to the other five environmental objectives, as detailed in the delegated act, to be defined as environmentally sustainable according to the taxonomy. There are also criteria for activities related to installation, maintenance and repair of different equipment/ technologies and for acquisition and ownership of buildings.

The **Non-Financial Reporting Directive (NFRD)**, adopted in 2014, will be replaced by the CSRD over time. As a supplement to NFRD, guidelines on reporting climate-related information were published June 2019 (European Commission, 2019). These guidelines integrated the recommendations of TCFD but used a double materiality approach. They were not legally binding.

In October 2021 the European Commission adopted a **Banking Package** where the Capital Requirements Regulation (CRR) and the Capital Requirements Directive (CRD) have been reviewed to ensure increased resilience in EU banks (European Commission, 2021d). The package also ensures that banks take sustainability considerations into account and provide for stronger supervision. EU is implementing the Basel III Framework (see above) through the CRR and CRD.

The European Central Bank (ECB) in November 2020 presented guidelines on supervisory expectations relating to how it expects institutions to consider climate-related and environmental risks in their business strategy and governance and risk management frameworks and enhance disclosure (European Central Bank, 2020). The guidelines are not binding, but rather serve as a basis for supervisory dialogue. It can be noted that institutions are expected to consider climate-related and environmental risks in the short, medium and long term.

The **European Banking Association (EBA)** provides binding standards for Pillar 3 disclosures on ESG. The standards are specifying requirements to disclose prudential information on environmental, social and governance (ESG) risks, including transition and physical climate risks and mitigating actions (European Commission, 2022a). It is noted that “disclosures by institutions should cover, on the one hand, the financial impact of ESG factors on the institutions’ economic and financial activities (outside-in perspective), and, on the other hand, the ESG factors that may be triggered by the institutions’ own activities, which in turn become financially material when they affect institutions’ stakeholders (inside-out perspective)” (European Commission, 2022a, p. 1).

In addition to the above, more are in preparation such as the **Corporate Sustainability Due Diligence Directive (CSDDD)** to ensure companies address adverse impacts of their actions, with a value chain perspective.

For real estate companies, it was noted in the interviews that the **certifications for green buildings** are increasingly focusing on climate and climate risk in their requirements. According to our interviewees, customers are still focusing more directly on energy use than specifically on climate risks.

Energy Performance Certificates (EPCs) contain information on, for example, energy consumption for heating, comfort cooling, hot tap water and property electricity in the building, energy performance, and energy requirement for a building. In discussions with MAVERIC partner organizations, uncertainties connected to different assumptions and calculations behind the energy classifications in the EPCs was flagged, but still EPCs are one of the main tools banks use to understand the exposure to transitional climate risks.

5. Trends and reflections

Much is happening related to sustainable finance and corporate sustainability reporting, in general and related to climate risks. From our interviews and analysis, some trends and reflections emerged:

- **Reporting of climate risks is increasing**: The recommendations from TCFD are more and more used in reporting; for European companies the average level of disclosure across the 11 recommended disclosures of TCFD was 60% for fiscal year 2021, growing 23 percentage points since fiscal year 2019 (TCFD, 2022).

- **More and stricter reporting requirements:** One interviewee foresees that if voluntary recommendations, "nice-to-haves" (e.g ECB guidelines), will not lead to the changes needed, there will be a change to "must-haves" and harder regulation. Another interviewee anticipated that regulations would become stricter, and that the organization would prepare for that. Requirements could also come from other actors than the government, such as from insurance companies.

- A need for **more data and standardization**: Several interviewees noted a need for more data and standardization. On the wish list of one interviewee is a Swedish database or register that every bank could use to check risks, as well as a standard view on risk levels and which scenarios to use.

- **Transitional risk as driver**: One interviewee foresees transitional risk to be a driver in the future, as the regulations/policy measures will become stricter.

- **Continued discussions on materiality approaches**: The question of whether double materiality will be considered when it comes to climate risk reporting is open, with TCFD having a single materiality approach and CSRD a scope covering double materiality. It can be noted that the ongoing development of the TNFD in their Beta 0.4 version (TNFD, 2023, p. 58) states that the disclosure indicators and metrics are intended to "align with global policy goals, including the Global Biodiversity Framework, while providing flexibility for the different materiality approaches of report preparers, capital providers and market regulators globally". This flexibility could be challenging, and the materiality approach would need to be considered when interpreting the reported information.

- **Respecting human rights when responding to climate change:** There is increased pressure on companies (including banks) to respect human rights when responding to climate change, through Human Rights Due Diligence and the coming Corporate Sustainability Due Diligence Directive (European Commission, 2022b). This can mean examining impacts of physical climate effects on vulnerable groups, addressing human rights impacts of transition risk responses, understanding how "business as usual" could exacerbate vulnerabilities to climate risk for people, and more. A MAVERIC stakeholder representative foresees that this will be an important component in investment strategies and in credits. There is already the connection between climate and social sustainability in the EU taxonomy minimum safeguards (e.g. Platform on Sustainable Finance, 2022) and UNEP-FI are, together with ILO, developing guidelines for just transition finance for banking and insurance industries to be launched at COP28 (UNEP, 2023).

- **Value chain perspective**: Even if data is not easily available, a value chain or life cycle perspective needs to be regarded to avoid missing key risks. This is highlighted in the proposal for a directive on Corporate Sustainability Due Diligence (European Commission, 2022b) and in the directive on Corporate Sustainability Reporting (The European Parliament and the Council of the European Union, 2021).

As awareness and demand is growing, new methods to support the assessment of climate risks for real estate and how they affect property value are proposed. In the MAVERIC project (2022-2025), the aim is to provide financial actors with a climate risk valuation method for material assets (buildings, land, and land installations) in order to better understand climate related risks, predict revenue and capital appreciation, and also to adhere to disclosure regulations.

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Published by
Stockholm Environment Institute
Linnégatan 87D, Box 24218
104 51 Stockholm, Sweden
Tel: +46 8 30 80 44

DOI:
https://doi.org/10.51414/sei203.045

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Editor: Trevor Grizzell
Layout: Richard Clay

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