

Fostering Sustainable Finance and Corporate Sustainability by Means of Well Operating Informational Infrastructures

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Abstract

In the evolving landscape of sustainable finance legislation, businesses are challenged to navigate through regulatory compliance while at the same time being profitable. The role of cohesive informational infrastructures—encompassing sustainability terminology, ESG data, frameworks, standards, tools, and information-sharing mechanisms—becomes imperative for facilitating a transparent and operable market. This Policy Brief explores the intricacies, challenges, and prospects in sustainable finance, corporate sustainability and compliance requirements, underlining Regulatory Technology (RegTech) and Supervisory Technology (SupTech) as central elements of informational infrastructures. The challenges and recommendations in this Policy Brief are derived from the results of IN2MISSION research project funded by Business Finland.

Challenges and recommendations

Challenges

Challenge 1. Lack of agreement on central terms undermines confidence in sustainable finance

Challenge 2. The scarcity of genuinely sustainable companies

Challenge 3. The ESG data needs of sustainable finance are not met, a situation compounded by the lack of consistent metrics

Challenge 4. The sustainability legal paradox - too much regulation, yet not enough

Policy recommendations

Recommendation 1. Harmonising terminology and accelerating proactive measures

Recommendation 2. Enhanced corporate sustainability through support and incentives

Recommendation 3. EU-wide information infrastructure standards, rules, and tools for ESG data management need to be built

Recommendation 4. Guiding and incentivising an EU-wide harmonious development of sustainable business ecosystems and markets

Key words: IN2MISSION, sustainable finance, EU Missions, Regulatory Technology, Supervisory Technology, sustainability, ESG data, sustainable company

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Introduction

Sustainable development is a core principle in Article 3 of the Treaty on European Union (TEU) and a priority objective for the union's policies, both internal and external.¹ In the ESG-context², nor should Article 21 TEU be overlooked. Furthermore, the union is committed to several pertinent international treaties, suffice to mention the Convention on Biological Diversity (CBD) and the Aarhus Convention. Similarly, not only are EU member states bound by the Paris Agreement, the union itself is separately party to the climate change treaty which explicitly addresses sustainable finance in its Article 2(1)(c): "Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development."³

Nor should the EU's instrumental role in developing the United Nations' Sustainable Development Goals (SDGs), adopted by the UN General Assembly in 2015, be overlooked.⁴ Furthermore, since then, the union has emphasised the SDGs in several contexts. Additionally, Eurostat monitors how progress is made to achieve the SDGs and to this end also publishes reports annually.⁵

As 2030 approaches, the European Union stands at a pivotal juncture, underlined by twin imperatives: tackling the pressing challenges of climate change and holistically integrating sustainability into the economy. To this end, it has also outlined five Missions responding to these challenges. Two of the Missions, 'Adaptation to Climate Change' and 'Climate-Neutral and Smart Cities', specifically address climate-related goals.⁶

To translate its goals into actionable frameworks especially for companies both within and beyond sustainable finance, the EU has championed sustainability-centric legislation, for example, Directive 2022/2464 with its implementing and delegated acts; Regulations 2020/852, 2019/2089, and 2019/2088. Furthermore, the union's regulatory fervour shows no signs of abating; if anything, it appears to be gaining momentum. Recent legislative introductions include the Proposal for a Regulation on the transparency and integrity of Environmental, Social and Governance (ESG) ratings, (COM/2023/314) and the draft law on the so-called 'Greenwashing Directive', (COM/2023/166). Add to this mix the proposed Directive aimed at empowering consumers for the green transition, (COM/2022/143) and the Proposal for a Regulation on European green bonds, (COM/2021/391).

Evidently, the EU is seeking to steer with determination towards a sustainable horizon. While sustainable finance is increasingly acknowledged as a market necessity, nevertheless, bridging the disparity between aspirations and the current state remains challenging, underscoring the need for innovative solutions.

Material and methods

IN2MISSION, funded by Business Finland, is a research project of Aalto University and VTT that seeks to improve the understanding of innovation policy tools that enable advancements and innovations in data and platform economy for the acceleration of mission-oriented activities and system-level transformations.⁷

On 4 May 2023, IN2MISSION arranged an expert workshop. Together with its legal as well as RegTech and SupTech solutions reviews, the challenges and recommendations of this Policy Brief are based on the workshop discussions. The participants of the workshop consisted of leading experts in sustainable finance from banks, supervisory authorities, and companies.

Results

Challenge 1. Lack of agreement on central terms undermines confidence in sustainable finance

While there has been no shortage of definitions for sustainability by researchers⁸ and intergovernmental organisations, the precise parameters remain varied. Already in 1987, the Brundtland Commission of the United Nations characterised sustainability as: “meeting the needs of the present without compromising the ability of future generations to meet their own needs”.⁹ This sentiment was reinforced in 2015 when the UN introduced the 2030 Agenda for Sustainable Development alongside the SDGs.¹⁰ The European Union has also advanced definitions. For example, according to the European Environment Agency: “Sustainability is about meeting the world’s needs of today and tomorrow by creating systems that allow us to live well and within the limits of our planet.”¹¹

However, so far the advanced definitions provide partial clarity at best. This also applies to EU legislation in force that is relevant for sustainable finance.

The ambiguity extends to defining what constitutes a ‘sustainable company’ or ‘sustainable business’. In 1993 the European Commission established the Eco-Management and Audit Scheme, a voluntary environmental management instrument to support organisations in their environmental performance.¹² Similarly, the ISO 14000 family serves as a practical toolset for companies and organisations striving to manage their environmental duties in a responsible manner.¹³

Despite the increasing regulatory parameters and the evident market appetite for sustainable finance, the field grapples with the ambiguity of the term ‘sustainability’ itself. There is a lack of uniform and consistent definitions. This vagueness spills over, leading to uncertainty in distinguishing what truly qualifies as a sustainable investment and a sustainable company.

- **No unified, comprehensive definition of ‘sustainability’ exists.** There is no globally accepted definition of ‘sustainability.’ For instance, while nuclear energy is seen as sustainable in Finland and Sweden, it is not perceived the same way in Germany.

- **The lack of a definition of a ‘sustainable company’ is confusing.** A company can be good in one area of sustainability, for example, climate change mitigation, but not in other areas, such as the social aspects of sustainable finance, which may lead to befuddlement and varied interpretations of its overall sustainability profile.
- **Subjective interpretations challenge uniformity in sustainable investments.** The current ambiguity around defining a ‘sustainable company’ has notable practical implications. Often, the characterization is left to subjective interpretations, particularly by professionals such as asset managers. This reliance on individual criteria can lead to inconsistencies and varied perspectives on what constitutes sustainability in the investment realm.
- **Potential for greenwashing.** The prevailing ambiguity can inadvertently encourage greenwashing practices, posing risks to market integrity and potentially eroding public trust in sustainable finance.

Recommendation 1. Harmonising terminology and accelerating proactive measures

Converging on a unified, comprehensive understanding of sustainability and its various components is imperative. Such clarity will be instrumental in ensuring that the public and private sectors can effectively navigate and commit to sustainable practices, thereby driving meaningful change for future generations. The detailed recommendations include:

- **EU actions for a union-wide uniform, clear, and comprehensive definition of ‘sustainability’ and a ‘sustainable company’.** A standardised terminology will facilitate a more coherent approach toward sustainable finance by all stakeholders, including investors, companies, national lawmakers, policymakers, and regulators. Moreover, while developing this taxonomy, specific attention should also be devoted to the non-climate aspects of sustainability.
- **Urgency in sustainable action despite definition gaps.** The precarious state of our planet’s boundaries demands swift and decisive sustainable measures. The immediacy of this issue requires action even before establishing clear definitions. The absence of these definitions should never be used as a reason to stall or avoid taking sustainable steps.
- **Widespread dissemination of sustainability terminology.** After the EU establishes the necessary definitions, a concerted effort should be made to promote and circulate them extensively. This terminology ought to become familiar to multinational corporations, SMEs, micro-enterprises, banks, regulators, and other relevant parties alike.

Challenge 2. The scarcity of genuinely sustainable companies

The demand for genuinely sustainable companies which align their operations and strategies with global ecological, social and governance needs outweighs the current supply in the market, highlighting a tangible disparity. Although there has been a significant uptick in sustainability reporting requirements, these obligations have yet to translate into substantial, on-the-ground implementations of sustainable practices uniformly.

- **Required: sustainable companies.** The existence of genuinely sustainable companies remains noticeably limited, creating a discernible gap in the market. Defining what constitutes a genuinely sustainable company can be a complex task, as different sectors and industries may have varied benchmarks and standards, affecting the perception and reality of the scarcity of sustainable companies.
- **Deficit of knowledge, tools, and solutions for becoming more sustainable.** Presently, businesses face a notable shortage of accessible, actionable knowledge and tools to navigate the complex pathway toward sustainability. This scarcity extends not only to vital data, such as carbon footprint information, but also to domain-specific expertise needed to enact tangible, effective changes. Moreover, despite the emergence and growth of green tech solutions, there remains a pressing need for further innovations and advancements to adequately support existing companies towards more sustainable practices and operations.
- **Disparity between company reporting and actions.** A noticeable discrepancy exists between the surge in regulatory requirements, primarily those focusing on reporting obligations, and the tangible actions undertaken by companies in the realm of sustainability. It has become evident that while reporting requirements, either directly or indirectly, put pressure on companies to pay more attention to sustainability, they are not sufficient as a driver for sustainability.
- **Negative externalities are not accounted for in sustainable finance.** A clearer comprehension of negative externalities - the adverse effects of company activities, services, and products - is needed. Elevating sustainable finance necessitates a framework that prices in these negative externalities in costs and consequences arising from them. Within this approach are expected returns derived from the reduction or management of externalities, with legal penalties set to hold entities accountable if they fail to realise or implement the proposed measures. There is a need to devote more attention to systematic strategies to effectively monitor and mitigate negative externalities, ensuring they are adequately addressed within financial and operational planning.

Recommendation 2. Enhanced corporate sustainability through support and incentives

- **Consorted informational efforts to foster corporate sustainable practices.** To further enhance the pace of change in sustainability, companies need to be supported in their path, from mitigating their negative impacts to developing sustainable activities. It is worth noting that, with innovations, even companies in, for example, the plastics industry, which cannot become completely sustainable, can make substantial improvements. To this end, universities, research institutions, and national and EU bodies are recommended to collaborate to provide expertise, skills, and best practices and support new creative solutions. Informational infrastructures that enable consorted efforts to foster corporate sustainable practices should be developed.
- **Tools and frameworks to illuminate business-sustainability correlations.** The correlation between corporate sustainability and performance is opaque, with financial calculations undervaluing the long-term benefits of sustainability initiatives. Therefore, frameworks and tools that aid in interpreting the business performance implications of ESG data should be developed to empower managers and investors to make more informed decisions.
- **Effective incentives for a company's move to sustainability.** It is not likely that sustainable companies will be founded merely due to the availability of funding. Ensuring the progression of existing companies to greater sustainability requires not only tools but also rules – including the Proposal for a Directive on Corporate Sustainability Due Diligence, (COM/2022/71) (CSDDD) as well as the Proposal for a Regulation on Prohibiting Products Made with Forced Labour, (COM/2022/453) – to ensure such a transition. The progression will require a refocus of company strategies. Moreover, the legislation should contain motivation in the form of pricing the negative externalities. This entails an expectation of returns with effective legal consequences if not implemented. To this end, more robust negative externality counting and mechanisms should be advanced, for example, regarding carbon tax.

Challenge 3. The ESG data needs of sustainable finance are not met, a situation compounded by the lack of consistent metrics

Sustainable finance is intertwined in a cyclical relationship with data and regulation. Effective implementation of legislation and acting upon compliance reporting demands comprehensive data. As new laws are stipulated, they further intensify the data requirements. Adding to the equation the processing of personal data signifies that the requirements of Regulation 2016/679, better known as the General Data Protection Regulation (GDPR), further increase the compliance burden.

- **Lack of unified metrics and methodologies across industries.** There is an absence of unified metrics and methodologies in sustainable finance. This makes it cumbersome, even impossible to carry out holistic comparative analyses.
- **Obstacles to obtaining required ESG data.** Comprehensive, reliable, traceable, and up-to-date ESG data is difficult to find. Furthermore, companies grapple with heterogeneity in data that arises from variances in reporting standards and methodologies across different domains and geographies. Comprehensive, reliable data is also instrumental in substantiating and verifying the ESG assertions made by firms.
- **Challenge to perform accurate and insightful analyses of sustainability.** Companies encounter significant difficulties in effectively calculating sustainability indicators. The obstacles are rooted in more than just acquiring raw data, such as CO2 emissions. It is challenging to extrapolate meaningful analyses and insights from this data. Tasks such as evaluating net impacts and conducting comparative data studies require substantial data analytics capabilities. The veracity of such analyses heavily relies on the meticulous management and scrutiny of data quality and volume.
- **Difficulty of impact measurement across industries.** Companies struggle with the intricacies of measuring impacts across industries. For example, companies can do accurate life-cycle-assessments of greenhouse gas emissions which outsiders cannot calculate. However, when companies must assess broader aspects such as supply chains, the task of quantifying and analysing impacts becomes exponentially more complicated.
- **Lack of data hinders efficient calculation of risks.** The lack of requisite data obstructs the efficient calculation of various risks, which include market, operational, reputational, and litigation risks. Yet, data ranging from companies' electricity usage, geographical location, potential flood risk, etc. to overall financial stability is crucial in conducting thorough risk evaluations. Similarly, robust data is imperative for financial institutions to assess risks on both client-side and supervisory dimensions.

Recommendation 3. EU-wide information infrastructure standards, rules, and tools for ESG data management need to be built

Overcoming the data and metrics obstacles that are hampering the advancement of sustainable finance will require:

- **Defining binding comprehensive EU-wide ESG data rules.** Navigating through the complexities of ESG data necessitates the establishment of binding EU-wide rules that systematically address both the qualitative and quantitative aspects of ESG data. Ensuring that data is not only available in abundance but also is up-to-date, comprehensive, and traceable—beyond mere documents and PDFs—is imperative. Hence, an inclusive approach that encompasses all dimensions of ESG data is essential. Implementing such structured data rules could facilitate practical applications, such as quantifying principal adverse impacts.
- **Creating coherent, uniform, and comparable metrics as a part of ESG data rules.** A coherent, uniform, and comparable set of metrics needs to be integrated into ESG data rules, enhancing their sensibility, consistency, inclusiveness, and comprehensiveness. Accurate metrics would not only streamline companies' reporting processes but also augment the usability of the data by financial institutions, ensuring that it effectively informs sustainable finance decisions.
- **Providing practical support for companies' ESG data management.** The proposed ESG data rules should be complemented with practical guidelines and support, providing clear directives regarding data acquisition, storage formats, sharing protocols, and how to use different metrics together. Such guidance will equip companies with the necessary tools and knowledge to adhere to regulatory requirements.
- **Promoting RegTech solutions for personal data processing.** Development and use of RegTech solutions, particularly those pertaining to personal data processing, i.e. Privacy Enhancing Technologies (PETs)—like synthetic data, differential privacy, homomorphic encryption, federated learning, secure multi-party computation and zero-knowledge proofs—can ease the burden of GDPR compliance.
- **Creating ESG data ecosystems for companies and stakeholders.** Establishing ESG data ecosystems should be advocated for companies. An ESG data ecosystem refers to an interconnected, supportive network comprising various entities, tools, and platforms, all focused on advancing ESG data management and utilisation. The ecosystem would involve various stakeholders – from companies themselves to data analysts, regulatory bodies, and technology providers – to ensure that ESG data is not only robustly managed but also effectively leveraged in decision-making processes. Tools within this ecosystem might include technologies for data collection, analysis, and reporting, while platforms might facilitate data sharing, collaboration, and benchmarking among entities.

Challenge 4. The sustainability legal paradox - too much regulation, yet not enough. Due to the avalanche of new legislation especially increasing the reporting obligations, there is a wish for a pause in new regulation. Nevertheless, despite the growing regulatory burden, at the same time there are gaps in legislation that need to be addressed for the advancement of sustainable business in general and sustainable finance in particular.

- **Companies, but also regulators struggle under the increasing regulatory burden.** The flood of new legislation has already strained and could potentially overstretch the resources of the companies and regulators. A dire situation may compel companies to choose which legislation to comply with and which to ignore.
- **Unknown interactions of legislation.** The obligations imposed by the relevant legislation are formidable. Grasping and managing the interactions, potential trade-offs, and cumulative compliance obligations of all pertinent laws in the financial sector pose substantive difficulties, exacerbated by a lack of a holistic perspective on how the multiple pieces of legislation governing sustainable finance interrelate and impact each other.
- **The quantity of legislation does not equal quality of legislation.** The flood of regulation, surging first and foremost the reporting duties, has not led to sufficient real-world action for sustainability. The challenge here lies in ensuring that the prolificacy of regulation does not merely culminate in enhanced reporting but also fosters and translates into substantial, on-the-ground sustainability actions and impacts. This necessitates carefully evaluating whether the quantum of legislation is genuinely propelling the qualitative advancement of sustainability objectives.
- **Lack of coordinated supervisory collaboration.** Currently, there is a lack of European-level supervisory coordination. The lack of synchronised oversight and coordinated regulatory approaches across member states and regulatory bodies risks spawning disparities in regulatory adherence and enforcement.

Recommendation 4. Guiding and incentivising an EU-wide harmonious development of sustainable business ecosystems and markets

- **Assessment and improvement of the regulation for a coherent and harmonious legal architecture in the EU.** There is a need for a holistic evaluation of the relevant laws: how they are working, their impacts – both strengths and weaknesses – and also whether they cooperate, or not, with each other. This assessment should be carried out in cooperation with EU and national regulators while not omitting listening to the various actors operating in the field. Based on a thorough and inclusive evaluation, the legislation should be streamlined and made leaner and consistent to create a harmonious and effective legal architecture.
- **Advancing development of RegTech and SupTech tools beyond PETs.** There exist several RegTech and SupTech solutions: from the more traditional to the latest, including those that, for example, apply machine learning or blockchain. Nevertheless, only some solutions have matured, and several still need to be developed further. Also, generative AI entails opportunities, but also risks (due to hallucination, etc.) Moreover, entirely new tools should be advanced. Solutions are especially required to assist in the analysis of the business models of companies and their environmental impacts. The tools could also be used to analyse how the various relevant laws interact as well as how to distinguish between declarations and concrete action in order to boost legal compliance.
- **Bolstering EU-wide supervisory collaboration.** Initiating cohesive, EU-wide supervisory coordination is critical in synchronising regulatory interpretations, compliance, and enforcement across member states. This is needed to ensure an equitable operational field, mitigate regulatory arbitrage, and establish a framework where disparate systems can engage in dialogue, achieving this unity in a cost-effective manner.
- **Amplifying agency in sustainable finance.** Clarity and amplification of the roles of agents operating within sustainable finance are a requisite. This involves elucidating agents' responsibilities and authority and fortifying their capacity to act effectively within the sustainable finance domain.
- **Improving a sustainable business environment.** Advancing legislation, including forthcoming regulations like the CSDDD, is essential in order to progressively and efficiently steer companies toward sustainability while critically evaluating and refining their core business models. Concurrently, policy initiatives must ensure that the investment and operational environments remain appealing by maintaining a favourable general atmosphere and expediting processes like environmental permit approvals.
- **Support the development of dominant designs.** Aid for developing dominant designs, involving standards and similar frameworks, should be promoted. This involves collaborative advancement by regulators, companies, researchers, investors, and startups, ensuring that developed standards are informed, applicable, and support the overarching aims of sustainable finance and business development.

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