

# EMRC Report: Effects of European sustainability reporting regulation on Finnish companies

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# Effects of European sustainability reporting regulation on Finnish companies

## Executive Summary

This report studies the effects European sustainability regulation has on Finnish companies in general with a secondary focus on the logistics sector. The report is based on a review of literature, including academic literature and a series of discussions / interviews with Finnish stakeholders (public sector, industry, financial sector). The aim is to uncover mechanisms through which the regulation affects companies, the cost- and benefit effects and their size, and what if any problematic issues exist.

Stakeholder interviews revealed that there is **considerable uncertainty with regards to the extent and format of what is considered sufficient reporting** and that there has been “heavy marketing” by service-providers with regards to the reporting that has influenced the perception of the stakeholders and inflated the perception of the reporting requirements. While the authorities interviewed saw that the companies’ reporting can rather independently determine what and how they report and consider (only) non-reporting as a clear infraction, the industry representatives noted that the reporting auditors seem to take a stricter position on the reporting. There seems to be a **need to clarify** what is considered minimum required acceptable reporting.

**Reporting is seen as “heavy” and partially irrelevant.** This view is shared widely. Larger companies and financial sector actors can handle the requirements of the reporting; small companies do not have ready resources or know-how to directly cope. **A need to standardize reporting and to create simple working tools and templates** for SMEs was identified. The need for simplification and international **harmonization with pre-existing standards and sustainability goals** was considered highly relevant. According to the interviewed non-financial sector companies, investors or **customers are not perceived to emphasize sustainability in their decision making**. In the financial sector, benefits of reporting were identified in the form of direct sales of products that have an ESG label. Companies with reporting responsibilities are “rolling over” these responsibilities to their supply chains in the form of reporting requirements, financial sector companies are collecting information directly from their clients for their own reporting and to support decision-making (esp. lending decisions). As the reporting is not standardized, **direct comparability between companies is not in place**.

According to the interviews the costs of non-financial sector companies related to sustainability regulations typically take place with high probability and are rather large, while the benefits materialize with a low to medium probability and are low to medium size. **There is a clear mismatch between the size and incidence of costs and the benefits - the cost side is estimated to clearly outweigh the benefits.** Large companies’ costs are lower relative to their turnover, but higher in absolute € terms, while **smaller companies face higher relative costs**. The benefits are perceived to come from efficiency gains, if the information collected is used in making “better business” – financing-related benefits are not perceived to be considerable, while companies in the forefront of ESG reporting were supposed to benefit in terms of receiving slightly better terms for financing during the period of transition (until all required companies are reporting). In financial companies the costs are perceived high, but a considerable and clear revenue side is identified as well. The financial companies do not seem to require the smallest

firms to have excellence in ESG reporting. **There is a difference between the perceptions of financial and non-financial sector companies in terms of cost-benefits balance.**

**In the literature the estimated benefits from sustainability seem to outweigh the costs, while in the stakeholder interviews the industrial companies' sentiment is predominantly the opposite.** In the interviews identified benefits include competitive advantage towards the clientele that puts emphasis on sustainability and a better overall knowledge and transparency of operations, especially governance; in the literature the benefits can be grouped to competitive advantage, innovation, and financial benefits. Efficient waste minimizing companies that optimize their operations gain less from the requirements as there is no push to optimize due to it having been done already, benefits connected to better management of operations pushed by the regulation typically may occur with companies, where considerable inefficiencies exist. The interviewed authorities took a more neutral approach to the costs / benefits balance than the interview non-financial sector companies.

The fact that there is a **stop the clock** (due to Green Omnibus bill) in place on the regulation is effectively **causing increased uncertainty among stakeholders** and has created a situation where first movers may even be at a disadvantage vis-à-vis those who have decided to wait. One of the authorities called the situation **“shameful”** and a financial sector representative considered the planning and execution of the legislation a “great disappointment”. The re-iteration of the regulation will most likely **increase the perception of political risk** connected to future sustainability reporting and EU decision-making in general. **There is considerable discontent regarding the quality of the planning and the roll-out of the sustainability reporting regulation across the board.** Respondents feel that stakeholders were not adequately heard in the process.

Specifically for the logistics sector the reporting requirements “trickle down” from large clients and the costs associated with reporting are considered rather high and eat into the (already thin) operating margins, while **clients are at least not yet ready to pay substantial extra for sustainability.** Importantly there are also other “systems” of reporting / standards required by clients in the sector and the new EU regulation is adding to the burden without commensurate benefit. There are instances in the logistics sector where access to new financing and even insurance can be curbed if sustainability reporting is not in place, although reporting is not legally required. It may be that sustainability (good governance rather than “green”) reporting is becoming a forced requirement via financial sector actors demands for some industry sectors.

Caveat emptor: The population size in the interviews has been small and the results cannot be generalized.

Keywords: Sustainability, reporting, effects, costs, benefits, logistics, ESG, Green Omnibus, Finland

## **Eurooppalaisen kestävyysraportointisääntelyn vaikutukset suomalaisiin yrityksiin**

### **Tiivistelmä**

Tämä raportti tarkastelee eurooppalaisen kestävyysraportointisääntelyn vaikutuksia suomalaisiin yrityksiin yleisesti, erityistä painoa annetaan logistiikka-alalle. Raportti perustuu kirjallisuuskatsaukseen (ml. tieteellinen kirjallisuus) sekä sarjaan keskusteluja/haastatteluja suomalaisten sidosryhmien (julkinen sektori, teollisuus, rahoitussektori) kanssa. Tavoitteena oli selvittää mekanismeja, joiden kautta sääntely vaikuttaa yrityksiin, sääntelyn kustannus- ja hyötyvaikutuksia sekä niiden suuruutta, ja mahdollisia ongelmakohtia.

Sidosryhmähaastatteluissa ilmeni, että **riittävän raportoinnin muodosta ja laajuudesta vallitsee huomattavaa epävarmuutta**, ja että palveluntarjoajien “voimakas markkinointi” on vaikuttanut sidosryhmien käsityksiin sekä paisuttanut käsityksiä raportointivaatimusten laajuudesta. Viranomaisten mukaan yritykset voivat melko itsenäisesti päättää, mitä ja miten raportoivat ja vain raportoinnin puuttuminen nähdään selkeänä rikkomuksena siinä missä teollisuuden edustajien mukaan tilintarkastajat suhtautuvat raportointiin tiukemmin. **Tarve selkeyttää vähimmäisvaatimuksia** on ilmeinen.

**Raportointia pidetään “raskaana” ja osittain epäolennaisena.** Tämä näkemys on laajasti jaettu. Suuret yritykset ja rahoitussektorin toimijat selviävät raportoinnin vaatimuksista, mutta pienillä yrityksillä ei ole valmiita resursseja tai osaamista vaatimusten täyttämiseen. **Tarve standardisoida raportointia sekä luoda yksinkertaisia työkaluja ja malleja pk-yrityksille** tunnistettiin. Yksinkertaistamisen ja kansainvälisen **yhteensovittamisen olemassa olevien standardien ja kestävä kehityksen tavoitteiden kanssa** nähtiin olevan erittäin tärkeää. Haastatellut teollisuusyritykset eivät kokeneet, että sijoittajat tai asiakkaat painottaisivat kestävyysasioita päätöksenteossaan. Rahoitussektorilla raportoinnin hyötyinä nähtiin suoraan ESG-merkityillä tuotteista saatavat myyntituotot. Teollisuudessa raportointivastuita siirretään toimitusketjuissa myös alihankkijoille. Rahoitussektorin yritykset keräävät tietoa suoraan asiakkailtaan omaa raportointiaan ja päätöksentekoaan (erityisesti luotonantoa) varten. Koska raportointi ei ole standardoitua, **suora vertailtavuus yritysten välillä ei toteudu.**

Haastattelujen mukaan teollisuusyrityksille sääntelyn kustannukset toteutuvat suurella todennäköisyydellä ja ovat kooltaan melko suuria, kun taas hyödyt toteutuvat matalalla tai keskinkertaisella todennäköisyydellä ja ovat kooltaan pieniä tai keskisuuria. **Kustannusten ja hyötyjen välillä on selvä epäsuhde – kustannukset arvioidaan selvästi hyötyjä suuremmiksi.** Suurten yritysten kustannukset ovat liikevaihtoon suhteutettuna pienempiä, mutta euromääräisesti suurempia, kun taas **pienemmillä yrityksillä suhteelliset kustannukset ovat korkeammat.** Hyödyt liittyvät tehokkuuden paranemiseen, jos kerättyä tietoa hyödynnetään liiketoiminnan kehittämisessä – rahoitukseen liittyviä hyötyjä ei pidetä merkittävänä, vaikka ESG-raportoinnin edelläkävijöiden oletetaan saavan hieman parempia rahoitusehtoja siirtymäkaudella (kunnes kaikki raportointivelvolliset yritykset raportoivat). Rahoitusalan yrityksissä kustannukset koetaan korkeiksi, mutta myös selkeä ja merkittävä tulopuoli tunnistetaan. Rahoitusalan yritykset eivät vaikuta vaativan pienimmiltä laina-asiakasyrityksiltään huippuluokan ESG-raportointia. **Kustannus-hyötytasapainossa on selvä ero rahoitus- ja ei-rahoitussektorin yritysten välillä.**

**Kirjallisuudessa kestävydestä saatavien hyötyjen arvioidaan ylittävän kustannukset, kun taas haastatteluissa vallitseva teollisuusyritysten näkemys on päinvastainen.** Haastatteluissa tunnistettuja hyötyjä ovat kilpailuetu asiakaskunnassa, joka painottaa kestävyttä, sekä parempi kokonaiskuva ja läpinäkyvyys toiminnasta, erityisesti hallinnosta; kirjallisuudessa hyödyt ryhmitellään kilpailuetuun, innovaatio- ja taloudellisiin hyötyihin. Tehokkaasti jo aiemmin toimintaansa optimoineet yritykset hyötyvät vaatimuksista vähemmän, koska optimointi on jo tehty. Sääntelyn tuomat hyödyt liittyvät ilmeisesti yrityksiin, joissa on merkittäviä tehottomuuksia, joiden poistamisessa raportointi voi olla hyödyllistä. Viranomaiset suhtautuivat kustannus-hyötytasapainoon neutraalimmin kuin haastatellut teollisuusyritykset.

Sääntelyn **“stop the clock”** -tilanne (Green Omnibus) lisää epävarmuutta sidosryhmissä ja on luonut tilanteen, jossa ensimmäisten joukossa toimineet toimijat saattavat olla jopa epäedullisessa asemassa niihin nähden, jotka ovat päättäneet odottaa. Eräs viranomainen kuvasi tilannetta **“häpeälliseksi”**, ja eräs rahoitussektorin edustaja piti lainsäädännön suunnittelua ja toteutusta **“suurena pettymyksenä”**. Sääntelyn takaisin veto ja muutokset todennäköisesti kasvattavat näkemystä poliittisen riskin tasosta tulevaan kestävyysraportointiin sekä muuhun EU päätöksentekoon liittyen. **Tyytymättömyys sääntelyn suunnittelun ja käyttöönoton laatuun on laajaa.** Vastaajien mukaan sidosryhmiä ei kuultu tarpeeksi.

Logistiikka-alalla raportointivaatimukset **“valuvat”** suurilta asiakkailta pienemmille, ja raportoinnin kustannukset koetaan korkeiksi ja ne syövät (jo valmiiksi ohuita) katteita. **Asiakkaat eivät ainakaan vielä ole valmiita maksamaan merkittävästi ylimääräistä kestävydestä.** Alalla on lisäksi muita asiakasvaatimukseen perustuvia raportointi-/standardijärjestelmiä, ja uusi EU-sääntely lisää raportointitaakkaa ilman vastaavaa hyötyä. Joissain tapauksissa logistiikka-alalla uuden rahoituksen tai jopa vakuutusten saaminen on saattanut estyä, jos kestävyysraportointia ei ole ollut, vaikka raportointi ei olisi lain mukaan pakollista. On mahdollista, että kestävyysraportoinnista (liittyen hyvään hallintoon) olisi tulossa rahoitussektorin vaatimusten kautta lähes pakollinen vaatimus tietyille toimialoille, vaikka lainsäädäntö ei sitä suoraan edellyttäisi.

Caveat emptor: Haastateltujen tahojen määrä on pieni ja tuloksia ei voi käyttää yleispätevänä esityksenä vallitsevasta tilanteesta.

Avainsanat: Kestävyys, raportointi, vaikutukset, kustannukset, hyödyt, logistiikka, ESG, Green Omnibus, Suomi

## Table of contents

5	Acknowledgements
7	Executive Summary
9	Yhteenveto
11	Table of contents
13	Introduction
14	2. EU Sustainability reporting in the EU
16	2.1. Sustainable Finance Disclosure Regulation (SFDR)
17	2.2. Corporate Sustainability Reporting Directive (CSRD)
19	2.2.1. European Sustainability Reporting Standards (ESRS)
20	2.3. Other schemes requiring action and reporting
20	2.4. The Omnibus package
22	3. Competitiveness effects and costs of sustainability reporting
22	3.1. Effects of reporting to competitiveness
22	3.1.1. Effects of enhanced transparency and reputation
23	3.1.2. Effects of improved access to capital and financing opportunities
23	3.1.3. Effects on operational efficiency and risk management
24	3.1.4. Effects on innovation and market leadership
24	3.2. Reporting costs and potential problems
25	3.2.1. Data management and technology investment costs
25	3.2.2. Workforce capacity and expertise gaps
26	3.3. Impacts on SMEs and value chains
27	4. On impacts of sustainability reporting in Finland
28	4.1 Impacts on financing in Finland
29	4.2 impacts on the Finnish tire transport sector
31	5. Finnish stakeholder interviews
31	5.1. Enforcement of the reporting requirements
31	5.2. The costs arising from sustainability reporting
32	5.3. The benefits arising from sustainability reporting
33	5.4. Costs vs. benefits
34	5.5. Passing the reporting regulation and the Omnibus package
35	5.6. Issues specific to tire traffic
36	6. Conclusions
38	References / bibliography
49	Appendix A: Other green finance incentives and corporate sustainability related schemes
56	Appendix B: Estimated impacts on competitiveness & cost estimates of sustainability reporting in the EU, in Finland, to transport sector collected from Internet sources
59	Appendix C: Estimated costs of EU sustainability reporting from various sources
65	Appendix D: Potential avenues for further study (list of project ideas)



# 1. Introduction

This report discusses the effects of European sustainability reporting regulation on Finnish companies. The aim is to shed light on the costs that are connected to reporting and to understand the benefits that accrue to the companies from the regulation, to understand how different stakeholders view the reporting regulation and its effects, and how they receive the Green Omnibus package. The report discusses the mechanisms through which the regulation affects companies, the direct requirements, as well as the indirect requirements via financial sector regulation and regulation that touches small- and medium size companies through requirements set by their clients that are required to report. We look at the effects of sustainability reporting requirements on the Finnish transport sector (road transport) specifically. We have used written (Internet-based) and academic sources and conducted a series of interviews with Finnish stakeholders representing three broad groups: public authorities, industry including sector representative bodies, and the financial sector.

The motivation to study these issues comes from the need to understand the effects of reporting regulation better, the discussions regarding the competitiveness of the EU economies, the claim that sustainability reporting contributes positively to competitiveness, and from the recent Green Omnibus package that is aimed at simplifying the rules of sustainability reporting and EU investments. The Green Omnibus is essentially a draw-back of a substantial part of the required regulation and a rather dramatic turn of events as many Finnish (and EU) companies have already acted and invested to put in place reporting to act in accordance with what is mandated by the originally passed regulation.

First, we go shortly present what elements underlie sustainability reporting, the EU sustainability reporting, and present in bit more detail two vehicles that govern the reporting of the financial sector and other European companies, namely the Sustainable Finance Disclosure Regulation (SFDR) and the Corporate Sustainability Reporting Directive (CSRD). We show how they directly and indirectly affect companies operating in Europe.

Second, we look at the economic (cost and benefit) effects and shortly discuss the competitiveness effects that the EU sustainability reporting has on the Finnish industry. We also discuss the economic effects of the same on the Finnish financial sector. The European effects are shortly discussed in light of information gathered from multiple written / internet sources.

Third, we shortly discuss the effects of the sustainability reporting requirements on the Finnish tire traffic industry specifically.

Fourth, we summarize what we have learned from discussions / interviews with stakeholders representing the Finnish authorities, the Finnish industry including representatives of the Finnish tire traffic sector, and the Finnish financial sector.

The report is closed with some observations and conclusions. Ideas for further research within this topical area are suggested.

## 2. Sustainability reporting in the EU

The European Union's commitment to achieving climate neutrality by 2050, a central tenet of the European Green Deal and the 8th Environment Action Programme, underpins a fundamental shift in corporate accountability, sustainability reporting requirements and financial flows.<sup>1</sup> This ambitious vision has been accompanied by the creation of a regulatory framework designed to steer economic activity towards (more) sustainable practices with the goal of enhancing overall competitiveness in the process. This commitment and the following regulation are the underlying drivers of the reporting requirements studied here. Sustainability related regulation composes of multiple vehicles or pieces of regulation that govern how the financial sector is incentivized to promote sustainability (environmentalism, greenness) and pushes companies to act responsibly in vein with environmental, societal and governance (ESG) goals.

Sustainability reporting is a (big) part of the sustainability drive and here we focus on two, perhaps the two most important, sustainability related regulatory vehicles that include a strong reporting element. These are the Sustainable Finance Disclosure Regulation (SFDR) that focuses on financial institutions' sustainability reporting and Corporate Sustainability Reporting Directive (CSRD) designed for large European companies operating outside the financial industry. Within the CSRD, and to be used by all companies subject to CSRD, the European Commission has adopted the European Sustainability Reporting Standards (ESRS).

<p>Industry standards relevant to sustainability (ISO standards and e.g. GRI, FSC, SASB, CDP, LEED)</p>	<p>IFRS Sustainability Disclosure Standards (ISSB)</p>	<p>EU Standards and sustainability reporting</p>	<p>National and international sustainability related regulation (laws and conventions)</p>	<p>Risk management and governance regulation for companies and the financial sector (national and ECB)</p>
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Figure 1. The sustainability regulation and reporting stack – EU regulation is only a part of the regulation and reporting that the industry and the financial sector face

It is worth noting that the EU sustainability standards and the connected sustainability reporting (and ESRS) is not the only sustainability- and ESG-related reporting that the financial sector and companies are doing or effectively required to do. In fact, there are multiple other reasons for why the financial sector and companies have in place similar reporting, which include international standards that companies strive to adhere to (that may vary industry to industry) and there are national and supra-national regulations in place that require reporting on the same topical matter. A large portion of the standards in existence are voluntary, and companies are adopting to follow them due to their clients' requirements and/or wishes – they maybe seen to

enhance the competitiveness of the firms adopting them.

This is to say and to note that the regulation and reporting requirements set by the EU are not taking place in a void, rather they come on top of the already existing national and supra-national regulation and in addition to the most often voluntary international standards (see Figure 1).

The EU states that the ESRS have “very high degree of alignment” with the IFRS Sustainability Disclosure Standards (ISSB) and the Global Reporting Initiative (GRI) with the aim to prevent that companies required to report in accordance with ESRS and that wish to also comply with ISSB standards, would have to report separately under ISSB standards.

There are at least ten ISO standards that touch sustainability issues clearly in one form or another (e.g., ISO 14001 & 50001 environmental management systems, 26000 guidance for social responsibility, 14064 and 14067 greenhouse gases, 14040 and 14044 lifecycle assessment, 45001 occupational health and safety management, 20121 event sustainability management, 20400 sustainable procurement), which all require reporting to a certifying body in order for the standard to be met. These standards are widely adopted. There are many other standards in various industries that partially touch sustainability issues. In addition, there are many organizations that keep track of sustainable issues and companies operating in a sustainable way, some of these issue certificates and other forms of acknowledgements, typically based on reporting to organizations adhering to their standards.

Companies, industrial and financial, must adhere to national laws regulating their operations and specifying the reporting needed. These vary from country to country and while some standards exist it cannot be said that there would be an EU wide standard in place with regards to legislation pertaining to sustainability issues or their reporting. Here the EU standards may be a way to create a standard or go towards a standard, but to reach a situation, where there is no overlap with national systems, time is needed, and a lot of legislative development is required. European harmonization of laws is a process that may take several decades to reach any remarkable results – this is a reality that has been encountered already regarding also other types of legislation.

Financial institutions are (already) scrutinized for their management and especially their risk management by national regulators and by supra-national EU entities, namely and importantly the European Central Bank (ECB). In the realm of risk management the ECB requires, e.g., banks to report on their sustainability risks, at least in terms of their exposure to companies with environmental risks and to keep track on how well governance issues are considered within their clientele. Banks are also responsible for taking extensively care of issues pertaining to security, also a part of sustainability and good governance.

On this background of multiple pre-existing regulatory regimes and reporting regimes the EU sustainability reporting regime can be said to only partially cover “new sustainability issues”, while it provides a geographical cover over the EU jurisdiction directly in the form of SFDR and by clearly outlining the reporting requirements by way of CSRD.

Next, we shortly present the SFDR and the CSRD that are the two main regulations requiring sustainability related reporting in the EU framework.

## 2.1. Sustainable Finance Disclosure Regulation (SFDR)

The Sustainable Finance Disclosure Regulation (SFDR), effective from March 10, 2021, is a part of the EU's sustainable finance agenda, primarily targeting financial market participants and financial advisers.<sup>27</sup> The regulation aims to increase transparency regarding sustainability risks and impacts within investment processes and financial products, thereby combating "greenwashing" and promoting sustainable investments.<sup>28</sup>

The SFDR mandates prescriptive and standardized disclosures on how ESG factors are integrated at both entity and product levels.<sup>27</sup> SFDR is an important driver of sustainability reporting for the financial sector in the European Union. The regulation applies broadly to all asset managers, including Alternative Investment Fund Managers (AIFMs) and Undertakings for Collective Investment in Transferable Securities (UCITS) managers, regardless of whether they have an explicit ESG or sustainability focus.<sup>27</sup> Disclosures are required on websites, in prospectuses, and in periodic reports.<sup>27</sup> The implementation of SFDR was phased:

- *Level 1 Disclosures (Effective March 10, 2021):* These are entity-level disclosures requiring information on FMP policies for identifying and prioritizing principal adverse sustainability impacts (PAIs). FMPs must describe these impacts and any actions taken or planned, along with a summary of engagement policies, on a "comply or explain" basis.<sup>27</sup>
- *Level 2 Disclosures (Effective January 1, 2022):* These involve more detailed disclosure requirements, particularly for ESG-focused products in periodic reports, including the 'principal adverse sustainability impacts statement'.<sup>27</sup>

The SFDR defines different disclosure requirements based on how a fund labels itself, categorizing financial products into three main types:

- **Article 6 Funds:** These funds have no sustainability focus but must disclose how sustainability risks are integrated into their investment strategies.<sup>28</sup>
- **Article 8 Funds ("light green"):** These promote environmental or social characteristics alongside other investment objectives. They require disclosures on how these characteristics are met, information on reference benchmarks, and alignment with environmental and social attributes.<sup>28</sup>
- **Article 9 Funds ("dark green"):** These have sustainable investment as their primary objective, aiming to contribute positively to society or the environment. They require detailed disclosures on methodologies, data sources, due diligence, and engagement policies to assess and monitor sustainable investment goals.<sup>28</sup>

The SFDR is distinct from, but closely interrelated with, the EU Taxonomy Regulation. The Taxonomy provides the criteria for determining environmentally sustainable economic activities, serving as the EU Commission's primary mechanism to address greenwashing.<sup>27</sup> The Taxonomy

Regulation, effective from January 1, 2022, requires additional disclosures that complement those under the SFDR.<sup>27</sup> The data required for SFDR disclosures often relies on information provided under the CSRD, underscoring the interconnectedness of the EU's sustainable finance framework.<sup>31</sup> This interconnectedness aims to create a coherent system where financial institutions can effectively channel investments towards sustainable projects by leveraging transparent and comparable corporate sustainability data.<sup>7</sup> Seemingly the goal may have been to create a system, where CSRD information and disclosures by companies could be used as “material” for SFDR reporting by the financial sector. In Finland the financial sector “reports” to the Finnish Finance Supervisory Authority (FIVA, Finanssivalvonta). SFDR is a regulation, meaning that it is directly affecting EU member countries as is and that there is no significant national leeway in putting the regulation into practice in each member country. At the time of writing no explicit information about what constitutes acceptable SFDR reporting or what is the minimum reporting requirement was not found.

In addition to the SFDR the EU Taxonomy Regulation functions as basis for the EU's sustainable finance framework, functioning as a classification system that defines criteria for economic activities considered environmentally sustainable.<sup>30</sup> The primary objective is to help direct investments towards the economic activities most needed for the transition to a low-carbon, resilient, and resource-efficient economy, in line with the European Green Deal objectives and the 2050 net-zero trajectory.<sup>30</sup> The interested reader is invited to read more about the EU Taxonomy regulation in Appendix A.

## **2.2. Corporate Sustainability Reporting Directive (CSRD)**

The Corporate Sustainability Reporting Directive (CSRD), effective from January 5, 2023, is a main piece of EU legislation designed to enhance corporate transparency on environmental and social impacts.<sup>3</sup> CSRD is a major driver of sustainability reporting in the European Union. It significantly broadens the scope of its predecessor, the Non-Financial Reporting Directive (NFRD), to include approximately 50,000 companies across the EU, encompassing large EU companies, listed SMEs, and qualifying EU subsidiaries of non-EU companies.<sup>3</sup> NFRD has been said to be “too flexible” and to result in low-quality and incomparable sustainability reporting, hindering investors' ability to make informed sustainable choices.<sup>4</sup> The expansion is a deliberate policy choice to re-orient capital flows towards sustainable investments, fostering a credible market for green finance.<sup>4</sup>

This expansion means that many major international companies with a significant presence in the EU, such as a U.S. tech company with an office in Germany and substantial European revenue, will also need to comply.<sup>4</sup> The CSRD is a directive, which means that each EU member country will put the directive into action within its jurisdiction, i.e., the actual operationalization and enforcement of the directive is in the hands of each member country separately.

A core requirement of the CSRD is the concept of “double materiality,” obliging companies to report on two key perspectives: how their business activities affect the planet and its people (impact materiality) and how sustainability matters affect their financial health (financial

materiality).<sup>3</sup> For example, a company must disclose not only its carbon emissions (impact) but also how climate change risks (e.g., extreme weather events, carbon taxes) could affect its cash flows, financial position, and access to funding (financial materiality).<sup>3</sup> This dual perspective is designed for ensuring a comprehensive assessment of ESG risks and opportunities, moving beyond mere financial reporting to encompass broader societal and environmental contributions.<sup>9</sup>

CSRD reporting mandates adherence to the European Sustainability Reporting Standards (ESRS), which detail specific disclosures and metrics across environmental, social, and governance (ESG) matters.<sup>3</sup> These standards, published as legally binding in December 2023, cover areas such as climate change, pollution, water and marine resources, biodiversity and ecosystems, resource use and circular economy, own workforce, workers in the value chain, affected communities, consumers and users, and business conduct.<sup>3</sup> While cross-cutting reporting is universally required, specific ESG reporting is mandatory only for those aspects deemed material by the company.<sup>3</sup>

All CSRD disclosures must be publicly available, submitted in a standardized electronic format (ESEF) to allow for easier comparison and checking in the European single access point database, and subject to third-party auditing for accuracy and completeness.<sup>3</sup> Initially, limited assurance is required, which primarily relies on the organization's statements, with a transition to reasonable assurance expected by October 2028, involving more rigorous procedures and substantive testing.<sup>3</sup>

The CSRD, effective from January 5, 2023, is being phased in from 2024 through 2029, with the first reports for the financial year 2024 due in 2025.<sup>3</sup> This phased approach allows companies time to adapt to the detailed requirements of the European Sustainability Reporting Standards (ESRS), which were published as legally binding in December 2023.<sup>3</sup> These standards specify a wide array of disclosures across environmental, social, and governance (ESG) matters, mandating third-party auditing and a standardized electronic format for public availability.<sup>3</sup>

Compliance is being phased in based on company size and NFRD legacy:

- FY2024 (reporting in 2025): Companies already subject to NFRD (public-interest entities with over 500 employees).<sup>3</sup>
- FY2025 (reporting in 2026): Other large companies not previously covered by NFRD (meeting two of three criteria: >250 employees, >€50M net turnover, >€25M total assets).<sup>3</sup>
- FY2026 (reporting in 2027): Listed SMEs.<sup>3</sup>
- FY2028 (reporting in 2029): Certain non-EU companies.<sup>3</sup>

The CSRD, through its detailed ESRS requirements and mandatory assurance, implicitly demands a fundamental overhaul and significant investment in companies' data infrastructure.<sup>21</sup> The directive's emphasis on comprehensive, auditable data means that traditional, manual data collection methods are (typically) insufficient, necessitating the

adoption of digital solutions for tracking and analysing ESG metrics.<sup>21</sup> In essence this means that corporate information systems must be adopted to the task and reporting made automated, based on information contained within the said systems. This shift from non-financial disclosures to robust sustainability reporting places financial and sustainability information on an equal footing, requiring companies to integrate sustainability reporting measures and actions into their core business practices and strategic planning.<sup>5</sup> This is not merely a compliance exercise, but is seen by the EU as an opportunity for companies to gain a clearer overview of their entire value chain, identify inefficiencies, and enhance their brand reputation and competitive advantage in a market increasingly valuing sustainability.<sup>25</sup>

In Finland the Finnish Patent and Registration Office (PRH – Patentti ja rekisterihallitus) is (technically) in charge of receiving the CSRD reporting from the companies.

### 2.2.1. European Sustainability Reporting Standards (ESRS)

European Sustainability Reporting Standards (ESRS) are a set of (mandatory) reporting requirements developed under the EU’s Corporate Sustainability Reporting Directive (CSRD). The ESRS standards define what sustainability information companies must disclose, how it should be structured, and the level of assurance required. ESRS are developed by the European Financial Reporting Advisory Group (EFRAG).

ESRS defines what sustainability information companies must disclose, covering environmental, social, and governance (ESG) topics. The stated goal is to ensure transparency, comparability, and consistency in sustainability reporting across the EU. The ESRS are stated to align with global frameworks like the Global Reporting Initiative (GRI) and International Sustainability Standards Board (ISSB). There are 12 ESRS, covering a range of sustainability issues (Table 1).

Group	Number	Subject
Cross-cutting	ESRS 1	General Requirements
Cross-cutting	ESRS 2	General Disclosures
Environment	ESRS E1	Climate
Environment	ESRS E2	Pollution
Environment	ESRS E3	Water and marine resources
Environment	ESRS E4	Biodiversity and ecosystems
Environment	ESRS E5	Resource use and circular economy
Social	ESRS S1	Own workforce
Social	ESRS S2	Workers in the value chain
Social	ESRS S3	Affected communities
Social	ESRS S4	Consumers and end users
Governance	ESRS G1	Business conduct

Table 1. ESRS listing.

Companies required to report must report on ESRS 1 (general requirements) and most of ESRS 2 (general disclosures). These cover general principles, governance, strategy and some other

(basic) disclosures. Reporting relative to all other topical standards is subject to a materiality assessment, in other words, a relevance assessment. Materiality means relevance to the business and value chain of the company. The assessment is made as a “double materiality” assessment, which means that relevance assessment is made on the *impact* the company’s activities have on people, the environment, and the society and on how much sustainability issues affect the company’s *financial* health.

Only the data points that are found to be material must be reported. If a topic or data point is not material, the company does not need to report it but must (be able to) document and explain the outcome of its materiality assessment. The ESRS includes in total over 1100 data points (if all standards and their data points are considered). For example, if a standard (or datapoints within a standard) is deemed not material the company must have an explanation for why this is the case. While the ESRS gives a guideline to how sustainability reporting should be made, the directive states that the determination of materiality is in the hands of the companies.

External assurance of ESRS reporting is mandatory for companies in the scope of CSRD. Limited assurance is required for reporting of the year 2024 and the requirements will tighten from 2025 onwards.

### **2.3. Other sustainability schemes requiring action and reporting**

In addition to the CSRD there are also other relevant sustainability driving regulatory schemes in the EU designed to guide companies’ actions:

The Corporate Sustainability Due Diligence Directive (CS3D) requires large companies to identify, prevent, and address human rights and environmental impacts throughout their value chains, with phased implementation by 2029.

The Carbon Border Adjustment Mechanism (CBAM) aims to prevent carbon leakage by imposing carbon costs on certain imports, with reporting starting in 2023 and full requirements from 2026.

The Net-Zero Industry Act (NZIA) boosts EU production of net-zero technologies through capacity targets, streamlined permitting, and innovation support, targeting 2030 and 2040 milestones.

The Renewable Energy Directive III (RED III) accelerates the shift to renewables, setting ambitious targets for renewable fuels and requiring national implementation by 2025, with a strong focus on hydrogen and sector integration.

The interested reader may find more about these schemes in Appendix A.

### **2.4. The Omnibus package**

The Omnibus simplification package is a set of legislative proposals introduced by the European Commission in February 2025. The aim of the package is to reduce administrative burdens and compliance complexities for EU companies, particularly in areas related to sustainability reporting, due diligence, and environmental regulations. The focus of the package is on streamlining requirements under key directives like CSRD, the EU Taxonomy, the Corporate Sustainability Due Diligence Directive (CSDDD), and the Carbon Border Adjustment Mechanism (CBAM), while prioritizing impacts from larger companies. In layman’s terms the Omnibus

package is an attempt to draw back the overly complex and burdensome sustainability reporting required by the EU.

Main changes included in the Omnibus package is the removal of companies under 1000 employees from the scope of the CSRD regulation (previously 250) and to remarkably reduce the amount of information required to be reported by the regulation. The change is quite dramatic as the number of companies affected by the change is in the tens of thousands.

The European Commission has in the beginning of October 2025 decided to delay the adoption of pieces of previously decided legislation in what is called “de-prioritisation”. De-prioritization includes delaying the adoption of European Sustainability Reporting Standards (ESRS) for companies outside of the EU under the CSRD. Originally the idea was to have non-EU companies adopt ESRS from June 2024, later delayed to the end of June 2026. Now it seems the delay is until October 2027. The competition effects of these changes remain to be seen.

In essence the Omnibus package is an admission of a failed legislative process regarding sustainability reporting. Unfortunately, the investments that first-movers have already made may have been mostly unnecessary, if they were made only to comply with the law by companies that now have been removed from the scope of the CSRD regulation. The unnecessary costs incurred throughout the EU may be in the billions of euros.

### **3. Competitiveness effects and costs of sustainability reporting**

The reasoning behind sustainable reporting requirements in the EU are manyfold and one of the main reasons given by the EU is to boost risk management and competitiveness in the EU by encouraging innovation in companies by way of helping them identify and mitigate financial, operational, and reputational risks. In essence, the idea is that by way of reporting on their operations, European companies will learn more about their operations and be able to make them better. Key issue is risk management (of sustainability related risks) and reputational risks. Reporting is also said to encourage long-term (sustainable) value creation by supporting the integration of environmental and social metrics into core business operations of companies.

Information collected and reported of value chains and market demands with regards to sustainability is considered to increase the efficiency and competitiveness of European companies. *Sustainability regulation and reporting are seen as ways to increase competitiveness of European companies.* In the following we present estimated / envisioned effects of reporting to firm competitiveness based on written sources – in the studied sources we find the benefits are expected to accrue in forms of in terms of enhanced transparency and reputation, improved access to capital, improved operational efficiency and better risk management, and as more (green) innovation. In addition to what is presented below, Appendix B includes a listing of estimated impacts to competitiveness with references from written / Internet sources. Estimates for benefits are found in what is listed in Appendix C.

Reporting requirements come at a cost to the companies. The costs typically have to do with setting up the reporting and with data collection; these translate into investments into updating information systems and reporting systems. Companies may not have experience in sustainability and resort to buying expert help. Time used for reporting is also a cost, especially if new personnel must be hired for it. Many and differing estimates about costs of organizing reporting could be found from studied sources, these are listed in Appendix C.

#### **3.1. Effects of reporting to competitiveness**

Sources studied show that there is an expectation of benefits emanating from reporting to the competitiveness of European firms. This is, as discussed above, also the stated position of the EU. The types of benefits can be divided into transparency and reputation benefits, benefits related to improved access to (green) capital, benefits related to gains in operational efficiency and risk management, and on benefits that have to do with (green) innovation. When the application of CSRD was planned in Finland the plan presented to the Parliament did not include any estimates in monetary terms of the benefits that the reporting brings.

##### **3.1.1. Effects of enhanced transparency and reputation**

Mandatory and standardized sustainability reporting under CSRD is thought to promote greater transparency and accountability, allowing stakeholders (investors, employees, customers, civil

society) to gain a clearer insight into a company's sustainability efforts.<sup>26</sup> This increased transparency can significantly enhance a brand reputation and foster trust among stakeholders.<sup>25</sup> Consumers are increasingly favouring brands that demonstrate environmental and social stewardship, making public ESG reporting a tool for boosting brand perception and market share.<sup>25</sup> High-quality, assured sustainability reports can also dispel concerns about greenwashing, further solidifying trust.<sup>43</sup> It is also expected that more transparent companies with higher reputation have smaller problems retaining their workforce, which leads to savings. How the enhanced transparency and reputation convert to euros is typically not often estimated.

### **3.1.2. Effects of improved access to capital and financial opportunities**

A strong ESG proposition and transparent sustainability reporting can significantly improve a company's access to capital and unlock new financial opportunities. Investors are increasingly integrating ESG factors into their decision-making processes, with a substantial majority considering a company's management of sustainability risks and opportunities as an important factor.<sup>25</sup> Companies with strong sustainability credentials are more attractive to ESG-focused investors and can access "green finance" instruments such as green bonds and sustainability-linked loans.<sup>25</sup>

The EU Taxonomy, by providing a common language and clear definitions of "sustainable" activities, is said to help direct investments towards sustainable projects, creating security for investors and facilitating green capital flows.<sup>30</sup> Sustainability here may mean a better level of corporate governance (G in ESG). This framework, along with the SFDR, is designed to channel private investment into the transition to a climate-neutral economy, complementing public funding efforts.<sup>8</sup> For instance, the European Investment Bank (EIB) actively finances green transition projects in Finland, leveraging EU funding to support sustainable investments and provide financing not always available from commercial sources.<sup>58</sup> Companies with "green" projects have been able to apply and to receive financing for these investments with a possibly discounted cost of capital (interest). In these cases, the accompanying reporting has had direct positive effects on the company bottom line. Financial institutions have made ESG-based products for their customers and have been able to sell these products successfully. The success is not based on reporting, but on the overall increased demand for sustainability focused funds and investment products. It seems, however that the trend is reversing and the growth of the demand for these products has ended.

### **3.1.3. Effects on operational efficiency and risk management**

The process of preparing for CSRD reporting, particularly conducting a double materiality assessment, forces companies to gain a clearer overview of their entire value chain and identify areas for improvement.<sup>25</sup> This can lead to greater operational efficiencies through resource optimization (e.g., lower energy consumption, reduced water intake, waste reduction) and the uncovering of new markets for sustainable products and services.<sup>25</sup> It is envisioned that when companies are forced to report on their sustainability they will learn about their operations and thus be able to make them more efficient.

Moreover, robust sustainability reporting enhances risk management by enabling companies to better identify, assess, and mitigate environmental, social, and governance risks across their operations and supply chains.<sup>10</sup> This proactive approach helps avoid costly incidents, fines, and reputational damage, contributing to long-term business resilience.<sup>54</sup> For example, by analysing climate-related risks within the supply chain, companies can develop proactive mitigation strategies against resource scarcity or regulatory changes.<sup>60</sup> The process of collecting and analysing sustainability data also supports improved decision-making and cooperation throughout the value chain, leading to financial benefits.<sup>26</sup>

### **3.1.4. Effects on innovation and market leadership**

Compliance with EU sustainability requirements can serve as a catalyst for innovation. The need to meet stringent reporting standards and reduce environmental impacts is meant to encourage companies to develop new products, services, and business models that are more sustainable.<sup>25</sup> Early adaptation positions organizations favourably, allowing them to strengthen operational efficiency, attract talent, and pivot to new markets, thereby gaining a competitive edge.<sup>25</sup> Finland, with its strong innovation system and commitment to a carbon-neutral circular economy, is well-positioned to leverage these opportunities.<sup>62</sup> The expectation is that the markets attach added value to sustainability reporting and purchasing decisions in B2B and B2C businesses are made considering the sustainability of the firm offering goods and services.

The mandatory nature and stricter requirements of CSRD are expected to accelerate the change towards more sustainable business-as-usual activities, especially if companies view reporting as an opportunity rather than merely a liability.<sup>6</sup> This regulatory push can drive the development of advanced frameworks for recognizing environmental assets, emissions reduction, storage, and trading, further realizing the potential of the green industrial transition.<sup>64</sup>

## **3.2. Reporting costs and potential problems**

Companies subject to CSRD face significant initial and recurring costs associated with creating a reporting apparatus and maintaining compliance. Estimates indicate that the total administrative costs for the first reporting cycle for large companies in the EU could be approximately €1.7 billion in initial costs, with recurring annual costs of €1.9 billion.<sup>26</sup> Auditing requirements alone are estimated to add up to €4 billion in additional annual costs across the EU.<sup>26</sup> For large publicly listed companies, average initial setup costs for systems to capture and report expanded ESG data can reach around €287,000, with ongoing assurance costs averaging €320,000 annually.<sup>42</sup> These costs scale with company size, complexity, and sector, with financial institutions and large manufacturers facing the highest expenses.<sup>42</sup> To be cost neutral, the direct benefits from reporting should match the costs. Appendix C lists costs (and benefits) found from written / Internet sources.

The complexity of the European Sustainability Reporting Standards (ESRS), which specify 82 disclosures and 1,144 data points, contributes significantly to these costs.<sup>43</sup> Companies must determine which of these data points are material to their operations and provide qualitative

reporting on their assessment of impacts, risks, and opportunities (IROs).<sup>21</sup> This necessitates a thorough double materiality assessment, which itself is a complex and resource-intensive process.<sup>9</sup>

### **3.2.1. Data management and technology investment costs**

A significant operational challenge for many firms is the need for robust data management and significant technology investments related to sustainability reporting. As there are up to over thousand data points to be reported on (ESRS) and backed by reliable data from the company operations, the data collection is a key issue in having CSRD compliant reporting in place. The CSRD mandates a digital approach to reporting, requiring companies to collect, verify, and consolidate vast amounts of new types of data from across their entire value chain.<sup>4</sup> Many companies currently rely on manual or self-made solutions, with only a minority having implemented dedicated ESG reporting software.<sup>46</sup> This fragmented data landscape makes compilation difficult and increases the risk of errors.<sup>47</sup>

The mandatory inclusion of Scope 3 emissions, which cover all indirect greenhouse gas emissions in a company and its value chain (e.g., from supply chains, transport, use of sold products), poses a particularly demanding task.<sup>4</sup> Scope 3 emissions can account for up to 90% of a company's total emissions, and collecting this data requires extensive transparency and cooperation from business partners throughout the value chain.<sup>49</sup> The lack of common standards and suppliers' unwillingness or inability to share data further complicate this process.<sup>48</sup>

The transition to CSRD-compliant reporting necessitates investment in digital tools and platforms capable of real-time data collection, automated reporting, and predictive analytics.<sup>19</sup> These solutions are critical for streamlining reporting processes, ensuring data accuracy, and enabling audit readiness.<sup>23</sup> Without such investments, companies face increased operational pressure and higher reliance on costly external consultants.<sup>42</sup>

### **3.2.2. Workforce capacity and expertise gaps**

Insufficient workforce capacity and expertise within companies create an obstacle for the management of the new reporting requirements.<sup>21</sup> Implementing human rights and environmental due diligence, conducting double materiality assessments, and preparing detailed sustainability reports require specialized skills that are often lacking internally.<sup>47</sup> This was estimated to lead to a strong demand for external partners' services, with a significant proportion of companies seeking outside help for sustainability reporting.<sup>53</sup> With the Omnibus package the pressure with regards to sufficient supply of know-how is seriously affected and it seems that auditing / consulting services are not a bottleneck for sustainability reporting after all. The need for executive briefings and leadership training is also highlighted as a fixed cost, requiring management time and potentially external advisory support.<sup>22</sup>

The ongoing regulatory back-and-forth, characterized by proposals to simplify and narrow the scope of directives like CSRD and CSDDD, creates uncertainty for businesses.<sup>17</sup> This

unpredictability can undermine companies' willingness to invest in long-term sustainability initiatives, as they grapple with evolving requirements and potential changes to implementation timelines.<sup>17</sup> The omnibus package has shown that the uncertainty has materialized – it remains to be seen what effect this draw-back of already enacted legislation will have (long term) on the credibility of EU legislation generally.

### **3.3. Impacts on SMEs and value chains**

While the CSRD applies directly (only) to large companies and listed SMEs (changed with Omnibus package), its impact extends significantly to small and medium-sized enterprises (SMEs) through value chain reporting requirements.<sup>35</sup> Companies obliged to report under CSRD must disclose sustainability information across their entire value chain, including Scope 3 emissions, which necessitates data collection from their SME suppliers and partners.<sup>4</sup> This creates a "multiplier effect," indirectly bringing a large number of SMEs into the scope of sustainability reporting.<sup>53</sup> The SMEs operating in the value chains of companies required to report will also need to make investments into sustainability reporting to serve their customers.

The European Financial Reporting Advisory Group (EFRAG) has been mandated to develop a voluntary reporting standard for SMEs (VSME) that are not directly within the CSRD's scope.<sup>66</sup> The VSME aims to provide a simplified, proportionate framework consistent with CSRD principles, helping SMEs enhance their sustainability practices and provide necessary information to their larger business partners.<sup>66</sup> Whether the "large" companies running the value chains are content with less complete information remains to be seen. SMEs face the same kind of challenges in adopting sustainability reporting as the larger directly affected companies, but they typically do not have similar human resources<sup>47</sup> or know-how to cope with sustainability reporting. The costs for smaller companies may be relatively higher than for large companies, if they report extensively. The availability of online platforms and tools (e.g., GHG calculators) is considered essential to facilitate reporting and comparability for SMEs.<sup>68</sup>

## 4. On impacts of sustainability reporting in Finland

Sustainability reporting requirements reach industrial companies by two main ways, once directly through the CSRD related reporting requirements and another time indirectly through the regulation that first touches the financial sector (SFDR) and via the financial sector the industry. The financial sector is directly impacted by the regulation. As discussed above, the regulation and reporting requirements are a part of the overall reporting that both financial institutions and industrial companies engage in. Figure 2 is a high-level mapping of how EU directives and regulations on sustainability (and sustainability reporting) affect Finnish companies. On the top the EU strategy that drives towards a more sustainable future is put in action via legislation (in Figure 2 specifically the SFDR and CSRD) that is enforced by national authorities (in Finland the Finance Supervisory Authority and the Patent & Registration Office). The reporting is done according to what is specified in the legislation and the process has been (in the case of CSRD) driven also by the service providing companies. The companies that are directly touched by SFDR and CSRD report on their sustainability and the sustainability of their value chains and engage in data collection from their own operations and from their value chains.

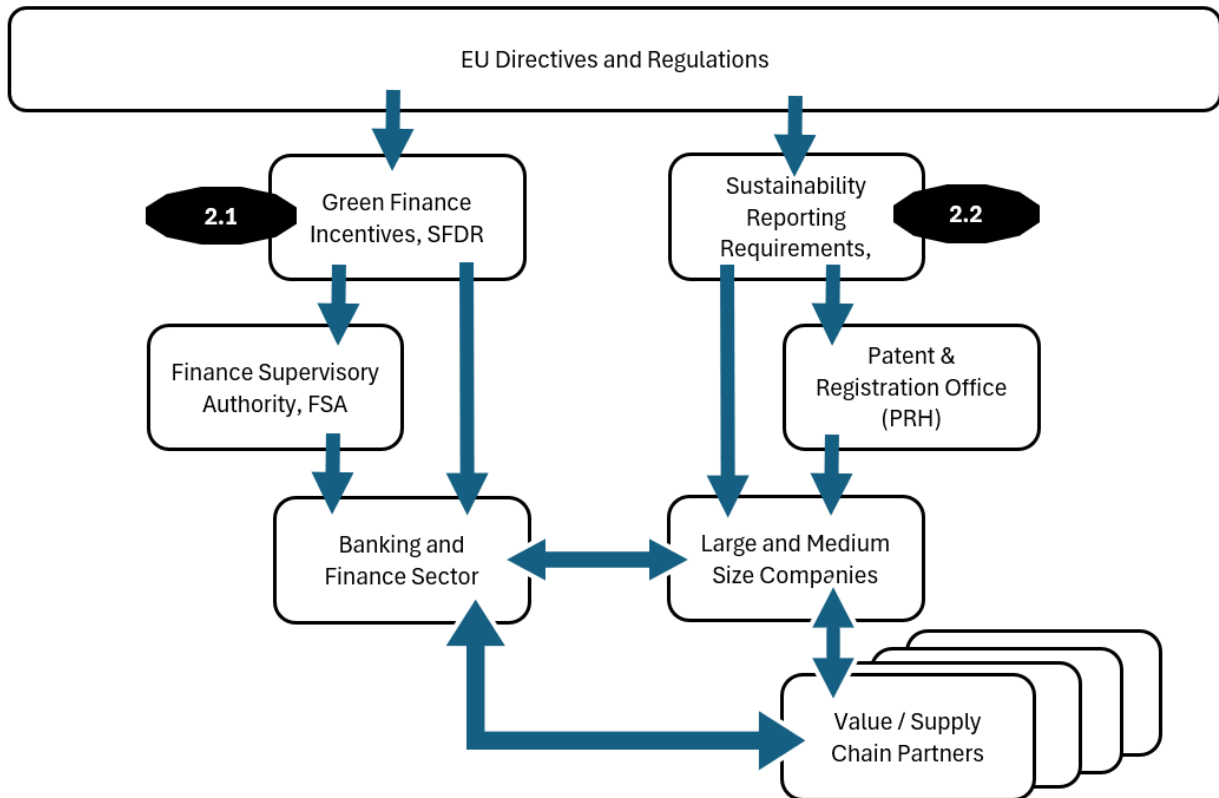


Figure 2. How sustainability reporting affects (Finnish) companies (through SFDR and CSRD)

while the EU states that “The Accounting Directive, as amended by the CSRD, imposes no new reporting requirements on SMEs, except listed SMEs.” and while it is true in the sense that no direct reporting onus has been put on small- and medium size companies they are most certainly affected. As most SMEs make a part of the value chains of larger companies that are required to report, they also must provide information to the larger companies and thus must have the ability to produce reporting to fulfil the requests from the large companies. The large companies and the SMEs interact with the financial sector and report also to the financial sector actors on their sustainability, as the financial sector must report on their sustainability related issues and ESG related risks forward in the reporting chain. This means that companies, big and small face double reporting requirements on their sustainability in the present regulation landscape. As

discussed, on top of the internal and external sustainability related reporting that they are doing for “other” third parties via the various standards and regulation that they are following in addition to the EU legislation.

In the following two sections we look at the impacts of the EU sustainability drive and sustainability reporting requirements on financing in Finland and on the Finnish tire traffic sector.

## 4.1. Impacts on financing in Finland

In Finland, the demand for green finance has grown, driven by both environmental goals and financial factors. For example, MuniFin, a public sector lender in Finland, reported record-high demand for its green finance in 2023, granting green finance to approximately 170 projects.<sup>83</sup> MuniFin's goal is to increase the proportion of its green finance to 25% of its long-term customer financing by 2030, having reached 19% in 2024.<sup>84</sup> This indicates a clear trend towards increased green lending volumes.

Finnish banks, while having a relatively modest proportion of corporate loans to businesses with high greenhouse gas emissions compared to other euro area countries, still face transition risks, particularly in the primary production, transport, construction, and manufacturing sectors (based on Scope 3 emissions).<sup>85</sup> However, a significant share of Finnish bank finance is directed towards companies producing energy from renewable and zero-emission sources.<sup>85</sup> The Bank of Finland has actively promoted transparency in financial markets through new data collection projects and strengthened its knowledge base for assessing financial and climate risks.<sup>86</sup>

The uptake of green financial products is also evident in the bond market. Green bonds reached 6.9% of all bonds issued by corporations and governments across the EU in 2024, a notable increase from 5.3% in 2023.<sup>57</sup> Corporate green bond issuance increased rapidly, reaching 12.8% of total corporate bonds issued in 2024.<sup>57</sup> The European green bond standard (EuGBs), effective December 2023, is expected to further strengthen this trend by enhancing transparency and ensuring alignment with the EU Taxonomy.<sup>57</sup> While Finland has not been among the top issuers of green bonds in the EU (e.g., Sweden, Denmark, France), some Finnish companies like Kesko have structured green finance frameworks to issue green bonds and loans for investments in green and energy-efficient buildings and wind power, aligning with ambitious science-based emission reduction targets.<sup>87</sup>

The Finnish government actively supports the green transition also in terms of financing schemes. In February 2025, the European Commission approved a €2.3 billion Finnish state aid scheme to accelerate the transition to a net-zero economy, reducing industrial emissions, and boosting clean energy investments. This scheme, aligned with EU State aid rules, provides tax credits and direct grants for large green industrial investments.<sup>59</sup> Finland has partnered with the International Finance Corporation (IFC) in a €114 million Blended Finance for Climate Program to catalyse innovative climate-smart investments in developing countries, strengthening collaboration opportunities with Finnish private sector actors.<sup>93</sup>

Finland has introduced a fixed-term tax credit for substantial green industrial investments exceeding €50 million, covering 20% of qualifying costs up to €150 million per company. This is deductible from corporate income taxes over 20 years, starting no earlier than 2028.<sup>59</sup> Business Finland has allocated €400 million for large-scale clean transition investments in 2025, targeting projects that decarbonize industrial production and improve energy efficiency, with grants covering up to 50% of eligible costs.<sup>59</sup> Public sector lenders like Municipality Financing corporation provide green finance with incentives like margin discounts, encouraging sustainable investments by municipalities and organizations providing affordable social housing.<sup>84</sup>

## 4.2. Impacts on the Finnish tire transport sector

The transport sector is a critical area for decarbonization efforts in the EU, as it remains the largest source of greenhouse gases, with emissions continuing to rise in many member states.<sup>69</sup> Road transport alone accounted for 73% of sectoral emissions in 2022.<sup>69</sup> Finland has ambitious national targets, aiming for carbon neutrality by 2035 and legally committing to reduce greenhouse gas emissions by 60% by 2030 from 2005 levels in the non-emissions trading sector, which includes transport.<sup>62</sup> EU directives, particularly CSRD, mandate comprehensive Scope 1, 2, and 3 (direct, indirect, value chain) emissions reporting for transport companies.<sup>49</sup>

Reporting Scope 3 emissions presents challenges for Finnish transport companies due to the complexity of global, multimodal supply chains and the involvement of numerous stakeholders.<sup>48</sup> Data collection is often manual, scattered across different sources, and hampered by a lack of common standards and suppliers' unwillingness or inability to share data.<sup>48</sup> This fragmentation weakens the reliability of measurements and hinders effective emissions management.<sup>48</sup> Despite these difficulties, about one-third of Finnish cargo owners have set Scope 3 emission targets, with a notable portion specifically for transportation, indicating a growing commitment to decarbonization.<sup>50</sup>

The EU's regulatory framework strongly incentivizes the transition to electric vehicles (EVs) in the transport sector. Under EU CO<sub>2</sub> standards, all new cars and vans must have zero CO<sub>2</sub> emissions from 2035.<sup>72</sup> The Alternative Fuel Infrastructure Regulation (AFIR) requires Member States to ensure minimum total power output from publicly accessible recharging stations and fast-charging pools along major European traffic corridors.<sup>72</sup> Finland is actively promoting EV adoption and infrastructure development. The Finnish government aims for 700,000 zero-emission passenger cars by 2030, equivalent to a quarter of the passenger car fleet.<sup>72</sup> Finland also targets increasing the share of renewable energy to at least 30% of final energy use in road transport by 2030.<sup>71</sup>

Finnish EV charging infrastructure incentives include a 30% subsidy for public charging stations (>11kW) and a 35% subsidy for fast-charging stations (>22kW).<sup>72</sup> The 2022 State budget allocated €13.2 million for funding charging infrastructure, renewable hydrogen, and biogas from 2022-2025.<sup>72</sup> In the big picture the allocated funds are not large. Zero-emission passenger cars retain exemption from registration tax, and subsidies for electric and hybrid vans and trucks were

allocated €2.5 million in the 2023 budget.<sup>72</sup> Despite incentives, the expansion rate of charging infrastructure is a bottleneck for EV investments, particularly for fast-charging stations and heavy commercial traffic solutions.<sup>73</sup> High purchase costs of EVs compared to conventional vehicles remain a barrier, although the total cost of ownership diminishes with driving distance.<sup>74</sup> The high average age of Finland's passenger vehicle fleet and a large number of older gasoline vehicles also slow down CO2 emission reductions, even with high EV adoption rates.<sup>74</sup>

The electrification of road transport is a profound transformation, driven by evolving customer needs, climate targets, technological advancements, and clean domestic electricity.<sup>75</sup> Companies like Plugit Finland are investing significantly (€100 million) in EV charging infrastructure, introducing "Charging as a Service" (CaaS) models to accelerate the transition by removing initial investment uncertainties for customers.<sup>73</sup> This aligns with the broader push towards sustainable transport solutions, including smart mobility networks and digital services.<sup>76</sup> There are available digital solutions for sustainability reporting (and data collection) for Finnish transport companies.

## 5. Finnish stakeholder interviews

Interviews of Finnish stakeholders were conducted to gather information about how they see reporting as a phenomenon, the costs and benefits related to reporting, and what they think about the way the CSRD legislation was passed and how the Omnibus package affects them and the markets. The stakeholders were also asked specifically about the effects of reporting on companies operating in the tire traffic sector.

Stakeholder representatives interviewed will remain anonymous. They represent the public sector authorities, the Finnish industry, the Finnish financial sector, and the tire traffic sector of the Finnish industry. The same interview plan (including talking points) was used with all stakeholders. Each interview took 45-60 minutes.

### 5.1. Enforcement of the reporting requirements

The interviewed authorities stated that the industrial companies have a right to determine how and what they report, in line with the EU regulations, and that it is not exactly clear what the minimum acceptable reporting requirement is. This means that there is *considerable uncertainty with regards to the extent and format of what is considered sufficient reporting*.

All respondents reported that there has been “heavy marketing” by reporting service-providers with regards to the reporting already for some time (some years) that has influenced the perception of the stakeholders and inflated the perception that companies have of the reporting requirements. In fact, considering what we have heard from the stakeholders, it is very likely that there is considerable “over reporting” taking place. Interestingly, the auditing of the reporting is often done by the same companies that operate in the reporting services space. It is not unlikely that there is a “consultancy takeover” of the reporting space. The industry representatives noted that the reporting auditors seem to take a stricter position on the reporting. There seems to be a *need to clarify what is considered minimum required acceptable reporting*. At this time the situation seems to be that the auditors (in essence the “big four”) set the standards for reporting.

Similar was reported by the interviewed financial sector respondents, they added that they also report on their risks to the ECB and that the ECB reporting includes also reporting on the governance risks of their clients that are mostly the same as the governance issues (risks) discussed in the ESG context. At the time of writing the Finnish Financial Supervisory Authority (FIVA) has not come out with explicit reporting standards for financial sector actors.

Industrial companies see sustainability overall as a beneficial issue for the industry, but the extra work from reporting is, as expected, not received positively. The different forms of sustainability (and ESG) are all understood to be important, and companies find it important to put efforts into promoting sustainability in their operations.

### 5.2. The costs arising from sustainability reporting

The respondents were asked to describe and approximately estimate the size of the costs involved and to estimate the likelihood of the occurrence of the costs. Industry respondents indicated that the costs depend on the size of the company and for large companies the costs are relatively smaller, but higher in terms of absolute Euros spent. All in all, the costs were estimated to be large and for large companies the costs go up to millions. The initial costs were

considered to be higher than the yearly “running costs”. It is important to note that while the reporting requirements are supposed to touch only “large” companies, the industry respondents clearly expected there to be costs also to smaller companies as they operate in the ecosystems of the large companies that require them to report to them. The costs coming to smaller companies were expected to be relatively (relative to profit / turnover) larger than the costs large companies face.

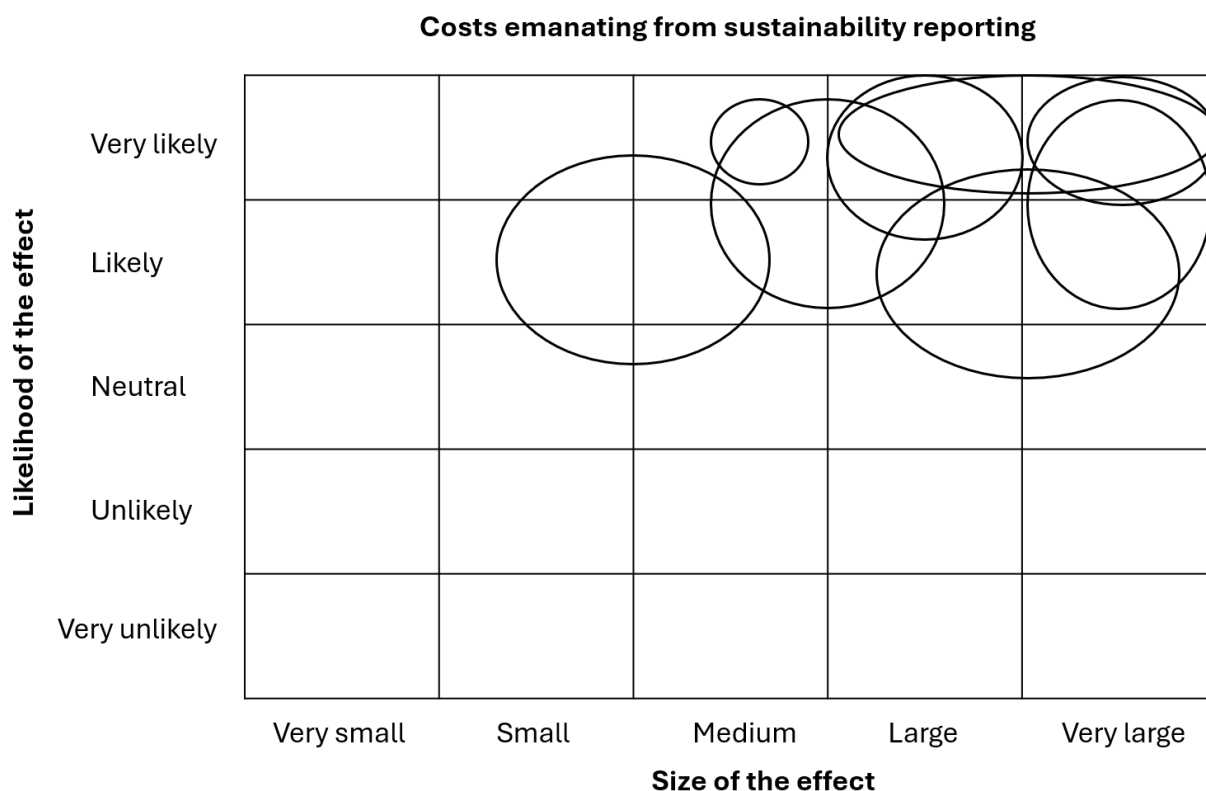


Figure 3. Approximate estimations by the stakeholders about the costs emanating from sustainability reporting and their likelihood.

The public sector authorities estimated the costs to take place likely and very likely and commented that any company reporting will incur costs certainly. The size of the costs was estimated to be large as the companies providing assistance, i.e., consulting firms are expensive.

Financial sector representatives noted that the costs are high and they have certainly (already) taken place. It was noted that there are teams responsible for reporting that dedicate a lot of their time to the EU designated reporting and that the costs attributed are high (in the millions of Euro annually). The financial sector respondents noted that they do not believe that the costs will go down after the initial period, but will remain quite stable.

### 5.3. The benefits arising from sustainability reporting

The industry representatives were not very optimistic about the benefits arising from the sustainability reporting requirements and evaluated them to be between very small and medium size and between very unlikely and neutral/likely. It was mentioned that companies may get competitive advantage during the “transition time” when some companies have their reporting in shape before others, but that with time the benefits would disappear. More than one comment stated that it seems that customers, even public procurement, do not seem to consider sustainability aspects as important in their purchase decision-making. Some respondents saw

this as disappointing after the work that they had done to increase their sustainability and considering the (large) investments made. There were also comments to the effect that public sector customers are starting to note sustainability issues in their procurement decisions.

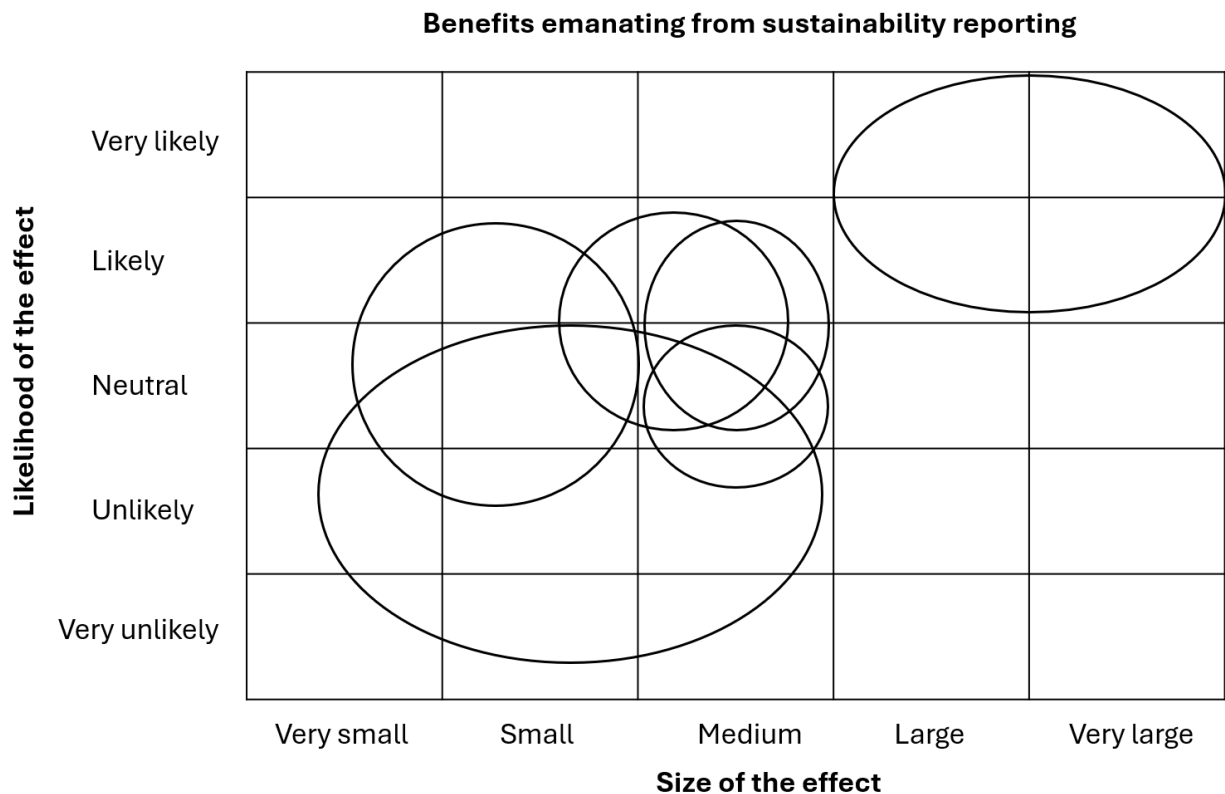


Figure 4. Approximate estimations by the stakeholders about the benefits emanating from sustainability reporting and their likelihood.

One respondent noted that companies that have emphasized operational excellence and efficiency cannot easily reap any extra benefits from the “new” EU regulation requirements as they are already doing things in an emission minimizing way, as the emissions typically come from use of energy, materials and inefficiencies.

The public sector authorities estimated the benefits to be small to medium size and likely to neutrally likely (not likely or unlikely) to be realized. There was a certain reluctance to make specific estimates.

The financial sector stakeholders reported that there are clear benefits from the ESG and sustainability legislation to the sector in the form of the various products that have grown from the phenomenon. Namely the specialized funds that are in essence new product lines for financial service providers that can be sold to (mostly) retail customers. They identified large monetary benefits in terms of new product revenue and observed that a large share of their revenue base is already connected to products that consider ESG issues. The point of view of financial sector actors about the benefits from the reporting (and what it has caused to their revenues) is very different from the industry representatives interviewed.

#### 5.4. Costs vs. benefits

The perception of the industry representatives is that the costs outweigh the benefits. This is an important finding, as it is contrary to what one finds in literature. The mismatch between the costs and the benefits is also large – the costs are perceived to be large and highly likely (even

certain) and the benefits very small to medium size and very uncertain to neutral (near likely).

The public sector authorities took a neutral approach with regard to their estimates and answered quite neutrally to the size of both costs and the benefits. The costs were estimated to occur with high likelihood and observed to occur with certainty for large companies, as they have already started to invest in the new reporting. The occurrence of the benefits to industrial companies was considered to be likely, which means that also the authorities considered there to be a mismatch between the costs and the benefits occurrence.

The financial company representatives noted that the costs are high and certain, however they also noted that the benefits have been high and even if they are not a fruit of the reporting per se, they have been able to capitalize on the ESG financial products that bring new revenue and customers. For the financial sector, it seems the ESG push has not been a negative thing overall.

There seems to be a difference between the perceptions of industrial and financial companies with regards to the costs vs. benefits balance. This is visible also in Figures 3 and 4 as the estimates the costs vs. the benefits and their likelihood “do not match”.

## **5.5. Passing the reporting regulation and the Omnibus package**

Respondents from all three interviewed groups took a critical stance on how the process of planning and designing the regulation was carried out, especially pointing out that the planning of the regulation has not been inclusive in the sense that stakeholders had not been extensively heard in the process. It was felt that many issues could have been considered better and the regulation made lighter in terms of costs to firms.

Although it is claimed by the EU that the CSRD reporting was planned to not include double reporting (alignment with IFRS Sustainability Disclosure Standards and Global Reporting Initiative) the industry respondents noted that there is extensive “double” reporting as there are many standards that do not align with the reporting requirements, including multiple ISO standards that they use, and their clients require information on. Furthermore, the financial sector respondents noted that the European Central Bank requires reporting on risk management that is separate from what is required by the SFDR requires. Financial sector respondents observed that in their financing decision-making they collect their own information from their clients as CSRD reporting is not standardized and there are very little possibilities to compare firms based on CSRD reporting. In the discussions it was pointed out that the ECB (European Central Bank) had made comments about the reporting regulation in the tune that they had not been properly consulted in drafting the legislation.

The Omnibus package and the “stop the clock” resulting from it were considered by the respondents to be a grave failure in general and specifically from the processual point of building new legislation specifically. One respondent representing the public sector authorities called the situation “shameful”.

Financial sector stakeholders brought up the fact that the “political risks” regarding new EU legislation may go up due to the grave failures connected to CSRD and the Omnibus package. There may be great reluctance to be a first mover in the industry, as being a first mover may be deemed risky due to the possibility of legislation remarkably changing after it has been enacted. If the political risk regarding EU legislation goes up it may mean that these risks are priced, which means higher cost of capital for companies that invest in following new legislation. In other words, the credibility of EU as a legislative body is questioned and it has a price.

## 5.6. Issues specific to tire traffic

CSRD and other international standards of reporting are parallel to each other and companies operating in the sector must have in place “multiple reporting” simultaneously. Serious money has been spent on reporting and developing systems. Direct benefits from reporting are seen as small as clients (including the public sector) are not ready to pay extra for low-emission transport. The costs of reporting are remarkable, but business benefits have been small. Especially for companies that are run efficiently and that have for a longer time put efforts into considering environmental issues benefits are small.

It was noted that while the reporting requirements do not touch small companies, they face reporting since they often operate in ecosystems run by companies that are required to report on sustainability. Also, financial sector actors require reporting from even the smallest companies. As an anecdote, it was mentioned that reporting and transparency with regards to company sustainability issues were required to get insurance for operations.

Reporting requirements arising from the regulation were seen to be a heavy burden, especially in the smaller companies, while the larger actors were expected to be able to answer to the requirements due to larger resources and the ability to utilize consulting. A need for standard reporting “tools” was mentioned, and such tools were seen as a way for the smallest companies to fulfil reporting requirements. It was suggested that the Finnish Transportation and Communication Agency (Traficom), a regulator, could provide guidance and standards. Sustainability reporting was seen to be an issue in public procurement, while otherwise it was still seen to be of lower importance. It was noted that the added value from auditors is suspect as the authorities accept “almost all reporting without any closer quality inspection”.

Changes in regulation were seen to be rather fast, and this influences investment decision-making. The uncertainty about regulation was seen as a driver for one-man companies to exit the marketplace sooner. Electricity powered fleets require remarkable investments and high levels of certainty about the future. Uncertainty about regulation does not help forecasting efforts. It was expected that company size in the sector will keep growing and that there will be more consolidation. Entry of foreign companies is possible, but in the eFleet segment the non-existence of charging infrastructure is a restriction to this. The Omnibus-package was seen to cause uncertainty and confusion.

## 6. Conclusions

European regulation that requires sustainability reporting from European firms and from the financial sector exists in a reality, where these stakeholders already report(ed) their sustainability issues extensively based on national and European regulation and on international standards and mechanisms. This is why the reporting is largely overlapping with the old and despite EU's aim for harmonization, companies often face "double reporting" due to misalignment between EU standards and other frameworks.

According to the written sources studied, the initial and recurring costs of reporting and compliance are significant, especially for large companies, but also for SMEs indirectly involved through value chains. Costs include investments in IT systems, data collection, consulting, and assurance/auditing. For large companies, the costs can reach millions of euros. The perceived direct business benefits of mandatory sustainability reporting are limited, especially for industrial companies. Benefits such as improved transparency, reputation, and access to green finance are recognized, but often seen as uncertain or not directly monetizable. The financial sector, however, reports clearer benefits through new ESG-related products and services.

Finnish industry stakeholders perceive that generally the costs as outweighing the benefits. There is skepticism about whether sustainability reporting influences customers or affects procurement decisions, especially in the transport sector. Financial sector actors see more tangible benefits, as ESG reporting has enabled new product lines and revenue streams. The costs of sustainability reporting for the financial sector are high. Public Authorities take a neutral stance but acknowledge the certainty of costs and the uncertainty of benefits.

While SMEs are not directly subject to CSRD (especially after the Omnibus package raised the threshold), they are still affected through value chain requirements. Large companies require sustainability data from their suppliers, pushing SMEs to invest in reporting capabilities, often without proportional resources or expertise. SMEs also face sustainability reporting through their interactions with the financial sector. The costs of sustainability reporting to SMEs may be relatively (e.g., relative to turnover) higher than to large companies.

The 2025 Omnibus package significantly reduced the scope and reporting burden of CSRD (e.g., raising the employee threshold from 250 to 1000), removing tens of thousands of companies from direct reporting obligations. This legislative reversal has created uncertainty, undermined trust in EU legislative processes, and potentially wasted investments made by early adopters. The "stop the clock" and delays in implementation (especially for non-EU companies) have increased perceived political risk, which may affect future investment decisions and the credibility of EU regulation.

Generally, there is there is a widespread perception of an "over-reporting"-hype driven by consulting and auditing firms, with unclear minimum sustainability reporting requirements by the authorities. The picture is blurred further by the Omnibus package. The regulatory process (enacting the sustainability reporting legislation) was criticized for lack of stakeholder engagement and insufficient consideration of practical implementation challenges. The

credibility of EU sustainability regulation has been damaged by rapid changes and lack of clarity, which may have long-term negative effects on compliance and investment. The costs and effects of the Omnibus package remain unclear at this time.

Appendix D lists some ideas for further research on the topic of sustainability reporting.

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## Appendices

- Appendix A - Other green finance incentives and corporate sustainability related schemes
- Appendix B - Estimated impacts on competitiveness & cost estimates of sustainability reporting in the EU, in Finland, to transport sector collected from Internet sources
- Appendix C - Estimated costs of EU sustainability reporting from various sources
- Appendix D - Potential avenues for further study (list of project ideas)



## APPENDIX A

### Other green finance incentives and corporate sustainability related schemes

#### EU Taxonomy Regulation

The EU Taxonomy Regulation is a cornerstone of the EU's sustainable finance framework, functioning as a classification system that defines criteria for economic activities considered environmentally sustainable.<sup>30</sup> Its primary objective is to help direct investments towards the economic activities most needed for the transition to a low-carbon, resilient, and resource-efficient economy, in line with the European Green Deal objectives and the 2050 net-zero trajectory.<sup>30</sup> This common definition of "sustainable" is crucial for scaling up sustainable investment, creating security for investors, protecting against greenwashing, and mitigating market fragmentation.<sup>30</sup>

The Taxonomy Regulation entered into force on July 12, 2020.<sup>30</sup> It establishes four overarching conditions an economic activity must meet to qualify as environmentally sustainable:

1. It must contribute substantially to one or more of the six environmental objectives.
2. It must "do no significant harm" (DNSH) to any of the other environmental objectives.
3. It must comply with minimum social safeguards.
4. It must comply with technical screening criteria.<sup>30</sup>

The six environmental objectives are:

- Climate change mitigation
- Climate change adaptation
- Sustainable use and protection of water and marine resources
- Transition to a circular economy
- Pollution prevention and control
- Protection and restoration of biodiversity and ecosystems.<sup>7</sup>

The European Commission is responsible for defining the detailed technical screening criteria for each objective through delegated and implementing acts, which form the actual list of environmentally sustainable activities.<sup>30</sup> For example, a Delegated Act on sustainable activities for climate change adaptation and mitigation objectives became applicable in January 2022, and a Complementary Climate Delegated Act, including specific nuclear and gas energy activities under strict conditions, applied from January 2023.<sup>30</sup> Further delegated acts for other environmental objectives became applicable in January 2024.<sup>30</sup>

The Taxonomy Regulation also mandates disclosures from both financial and non-financial companies regarding the proportion of their environmentally sustainable economic activities in their business, investments, or lending activities.<sup>7</sup> This disclosure requirement is closely linked to the CSRD and SFDR, as companies subject to CSRD must report how their activities align with the EU Taxonomy, and financial market participants use this information for their SFDR disclosures.<sup>7</sup>

The Taxonomy is designed to be a tool for transition, recognizing that few sectors are currently operating at a net-zero level.<sup>32</sup> It aims to help plan and report the transition to an economy consistent with the EU's environmental objectives, including decarbonizing high-carbon sectors and expanding low-carbon ones.<sup>32</sup> The EU Commission has also developed online tools, such as the EU Taxonomy Navigator, to assist users in understanding and implementing the Taxonomy, facilitating compliance and supporting companies in their reporting obligations.<sup>30</sup> This comprehensive framework is crucial for directing the significant investments needed to meet the EU's climate and energy targets for 2030 and beyond.<sup>8</sup>

## Corporate Sustainability Due Diligence Directive (CS3D)

The Corporate Sustainability Due Diligence Directive (CS3D, or earlier CSDDD), which entered into force on July 25, 2024, is an EU directive designed to foster sustainable and responsible corporate behavior across companies' global value chains.<sup>34</sup> Its primary aim is to ensure that companies identify, prevent, and address adverse human rights and environmental impacts stemming from their own operations, those of their subsidiaries, and, crucially, those of their business partners both upstream and downstream in their value chains.<sup>34</sup>

The CS3D mandates that companies implement a robust human rights and environmental due diligence process. This involves several key activities:

- ***Identifying Impacts:*** Proactively identifying actual and potential adverse human rights and environmental impacts.<sup>34</sup>
- ***Preventing and Mitigating Impacts:*** Developing and implementing prevention action plans, obtaining contractual assurances from direct business partners, and making necessary financial or non-financial investments to prevent negative impacts.<sup>34</sup>
- ***Addressing Impacts:*** Adapting business plans and strategies to address negative impacts, including those related to living wages and incomes for suppliers.<sup>34</sup> As a last resort, if measures do not resolve risks, companies may temporarily suspend or refrain from business relationships.<sup>34</sup>
- ***Meaningful Stakeholder Engagement:*** Requiring engagement with affected stakeholders throughout the due diligence process.<sup>34</sup>
- ***Climate Transition Plans:*** Large companies must adopt and implement a climate transition plan aligned with the Paris Agreement's 1.5°C global warming limit and the EU's 2050 climate neutrality objective. Companies are required to report progress and update these plans annually.<sup>34</sup>

The CS3D applies to:

- ***Large EU limited liability companies & partnerships:*** Generally, those with over 1,000 employees and a net turnover exceeding EUR 450 million worldwide (though recent proposals suggest a higher threshold of 5,000 employees and EUR 1.5 billion net worldwide turnover).<sup>13</sup>
- ***Large non-EU companies:*** Those with a net turnover exceeding EUR 450 million in the EU.<sup>13</sup>
- ***SMEs:*** Small and Medium-sized Enterprises are not directly covered but may be indirectly

affected as business partners in the value chains of larger companies.<sup>35</sup> The Directive includes provisions to facilitate compliance and limit the burden on SMEs.<sup>35</sup>

The implementation of the CSDDD is phased, with Member States required to transpose the Directive into national law by July 26, 2027.<sup>35</sup> The rules will then apply to companies in a staggered approach, with full application by July 26, 2029.<sup>35</sup>

The CS3D complements the CSRD; while CSRD focuses on the disclosure of due diligence processes, CSDDD obliges companies to take corrective actions in their supply chains.<sup>31</sup> This directive aims to create a harmonized legal framework in the EU, providing legal certainty and a level playing field, while enhancing human rights protection, environmental health, and increasing trust in businesses.<sup>35</sup> It is expected to improve risk management, increase competitiveness, and make companies more attractive to sustainability-oriented investors and public procurers.<sup>35</sup> The increasing complexity and global nature of value chains have made it challenging for companies to obtain reliable information, and the CS3D seeks to address this fragmentation of national rules.<sup>35</sup>

## Carbon Border Adjustment Mechanism (CBAM)

The Carbon Border Adjustment Mechanism (CBAM) is an EU instrument designed to prevent "carbon leakage," which occurs when companies move carbon-intensive production to non-EU countries with less stringent climate policies, or when EU products are replaced by more carbon-intensive imports.<sup>37</sup> CBAM aims to equalize the carbon price for certain goods imported into the EU with the carbon price paid for goods produced within the EU under the EU Emissions Trading System (EU ETS).<sup>37</sup> This mechanism is a key component of the European Green Deal, which targets a 55% reduction in emissions by 2030 compared to 1990 levels.<sup>37</sup>

The CBAM Regulation entered into force on May 17, 2023, with its initial implementation phase beginning on October 1, 2023.<sup>37</sup>

- ***Initial Scope:*** The mechanism initially covers imports of specific carbon-intensive goods from non-EU countries, including cement, electricity, fertilizers, aluminum, iron, steel, and hydrogen, as well as some upstream and downstream products.<sup>37</sup> Countries participating in or linked to the EU ETS (e.g., Iceland, Norway, Liechtenstein, Switzerland) are exempt.<sup>37</sup> The EU Commission plans to extend CBAM's scope to all sectors subject to EU ETS by 2030.<sup>37</sup>
- ***Transitional Phase (October 1, 2023 – December 31, 2025):*** During this period, affected companies are subject to a reporting obligation without financial penalties.<sup>37</sup> Importers must determine and document direct and indirect emissions embedded in their imported goods.<sup>37</sup> Quarterly CBAM reports are required, detailing imported quantities, embedded emissions (direct and indirect, though indirect reporting is initially limited to cement, electric power, and fertilizer), and any carbon taxes paid in the country of production.<sup>37</sup> This phase aims to gather data and allow businesses to adapt.<sup>37</sup>
- ***Mandatory Registration (As of January 1, 2026):*** From this date, only "authorized CBAM declarants" will be permitted to import CBAM goods. Importers can apply for authorization

from January 1, 2025.<sup>37</sup> EU customs authorities will monitor goods movement and deny imports by non-registered declarants.<sup>37</sup>

- Certificate Trading (From January 1, 2026): Importers will be obligated to purchase sufficient CBAM certificates corresponding to the embedded emissions of their imported goods. An annual CBAM declaration will compare imported emissions with acquired allowances, with financial sanctions imposed for insufficient certificates.<sup>37</sup>

The detailed requirements for CBAM include:

- Determination of CO2e Emissions: Businesses must accurately determine direct and indirect CO2e emissions in imported goods, using actual values or default values (for electricity).<sup>37</sup>
- Verification: If actual values are used, they must be verified by a certified testing body.<sup>37</sup>
- Acquisition of Certificates: Importers must acquire CBAM certificates from the relevant competent authority.<sup>37</sup>
- Annual Declaration: An annual CBAM declaration must be submitted by May 31 of the following year, reconciling imported emissions with acquired certificates.<sup>37</sup>

CBAM has significant implications for businesses, particularly regarding supply chain monitoring and potential cost increases.<sup>37</sup> Companies need to understand the geographical composition of their emissions to undertake supply chain reviews, make cost-versus-carbon trade-offs, and ensure the resilience of their pricing models.<sup>37</sup> The lack of necessary IT solutions for recording CO2e emissions poses a challenge during the transitional phase.<sup>37</sup>

## Net-Zero Industry Act (NZIA)

The Net-Zero Industry Act (NZIA), which entered into force on June 29, 2024, is a strategic EU regulation designed to bolster the Union's industrial base, strengthen economic security, and accelerate the clean energy transition.<sup>39</sup> The NZIA's primary goal is to ensure the EU's access to a secure and sustainable supply of net-zero technologies by expanding their production capacity and strengthening their supply chains.<sup>39</sup>

The NZIA applies specifically to a subset of 19 net-zero technologies, encompassing final products, and specific components or machinery primarily used for their production.<sup>39</sup> These technologies span a wide range of sectors, including solar, wind, battery and energy storage, heat pumps, hydrogen, sustainable biogas and biomethane, carbon capture and storage, electricity grid technologies, nuclear fission energy, sustainable alternative fuels, hydropower, and various other transformative industrial technologies for decarbonization.<sup>39</sup> Raw materials are explicitly excluded from the NZIA's scope, as they are covered under the Critical Raw Materials Act.<sup>39</sup>

The NZIA sets non-binding manufacturing capacity benchmarks for 2030, aiming for significant production targets across key technologies:

- 30 gigawatts (GW) for the photovoltaic sector
- 36 GW for wind energy
- 31 GW for heat pumps

- 550 gigawatt-hours (GWh) for batteries
- 100 GW hydrogen for electrolyser capacity.<sup>39</sup>

Additionally, the Act introduces two overall benchmarks: by 2030, at least 40% of the EU's annual deployment needs for net-zero technologies should be met by EU manufacturing capacity, and by 2040, this target rises to 15% of world production in value.<sup>39</sup>

To reduce administrative burdens and accelerate project development, the NZIA includes provisions to streamline permitting procedures.<sup>39</sup> Member States are required to designate single points of contact authorities responsible for facilitating and coordinating permit-granting processes, with fixed time limits: 12 months for projects under 1 GW and 18 months for projects 1 GW or more.<sup>39</sup> These time limits do not include environmental impact assessment (EIA) preparation.<sup>39</sup> "Net-zero strategic projects" receive additional benefits, such as even faster permitting (9-12 months) and priority in dispute resolution.<sup>39</sup>

The NZIA also addresses CO<sub>2</sub> injection capacity, setting an annual target of at least 50 million tonnes by 2030 in geological storage sites, with oil and gas companies expected to contribute proportionally.<sup>39</sup> Furthermore, it includes provisions on public procurement for clean technologies and auctions for renewable energy sources, introducing mandatory non-price criteria to promote sustainability and resilience.<sup>39</sup> The Act also emphasizes enhancing skills through the establishment of European net-zero industry academies and fostering innovation through regulatory sandboxes.<sup>39</sup>

The NZIA represents a significant legislative effort to enhance the EU's strategic autonomy in green technologies, addressing challenges such as supply chain dependencies, critical raw material access, and intense international competition.<sup>39</sup>

## Renewable Energy Directive III (RED III)

The Renewable Energy Directive III (RED III), formally Directive (EU) 2023/2413, was adopted by the EU to intensify efforts in cutting dependence on fossil fuels and accelerating the transition to renewable energy sources.<sup>41</sup> This directive sets new, ambitious targets for renewable fuels of non-biological origin (RFNBOs) across various sectors, particularly industry and transport.<sup>41</sup> A key deadline for RED III is May 21, 2025, by which Member States are required to transpose the directive into their national laws.<sup>41</sup> To facilitate this, the European Commission released crucial guidance on September 2, 2024, detailing how Member States can achieve the RFNBO targets in both the industrial and transport sectors.<sup>41</sup>

The guidance from the European Commission clarifies several important aspects of RED III:

- Scope of RFNBO Targets: Provides clarifications on the application scope for RFNBO targets, particularly in Article 22a.<sup>41</sup>
- Relationship with Broader EU Renewable Energy Goals: Offers insights into how RFNBO targets relate to the broader EU renewable energy objective outlined in Article 3.<sup>41</sup>
- Conditions for Target Reduction: Specifies the conditions under which Member States may reduce their RFNBO targets (Article 22a).<sup>41</sup>
- Binding Sub-target for Transport: Provides an overview of the binding sub-target for

RFNBOs in the transport sector (Article 25).<sup>41</sup> This includes clarification that the refinery route can contribute to the transport target and guidance on accounting for hydrogen consumption in refineries.<sup>41</sup>

Additionally, the European Commission has adopted guidance on other aspects of the Renewable Energy Directive, including heating and cooling (Articles 15a, 22a, 23, & 24) and Energy System Integration (Article 20a).<sup>41</sup> While the guidance for Article 20a aims to promote renewable electricity integration through provisions for data transparency, smart recharging, and market access for small storage, it has been noted that it lacks a clear focus on hydrogen's role in energy storage and system integration, potentially missing an opportunity to strengthen this sector's involvement.<sup>41</sup>

The directive emphasizes the vital role of hydrogen in the clean energy transition, and its ambitious goals are contingent on a predictable regulatory framework.<sup>41</sup> RED III is a critical component of the EU's broader strategy to achieve its climate objectives by promoting the widespread adoption of renewable energy technologies and fuels.

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## APPENDIX B

### Estimated impacts on competitiveness & cost estimates of sustainability reporting in the EU, in Finland, to transport sector collected from Internet sources

Category	1a. Qualitative	1b. Quantitative (costs/competitiveness)	Ref
A1) General (EU-wide): Direct impacts	Mandatory CSRD/ESRS with double materiality and phased assurance; Omnibus simplification creates scope / requirements uncertainty.	Typical per-company budgets: €100k–€250k for Year-1 prep (Novata); Large-cap set-up ≈ €287k; annual assurance ≈ €320k (Position Green/FinTech Global); Some estimates up to ~€1m/yr for listed firms (The Times); EC estimates admin-cost savings ≈ €6.3bn/yr if Omnibus adopted; ~80% fewer firms in scope (S&P/KPMG/EC).	[2][3] [4][5] [6][1] [7][23]
A2) General (EU-wide): Indirect impacts	Scope-3 data needs cascade to SMEs; stronger investor disclosure improves capital allocation; Potential data loss from Omnibus worries investors.	Green bonds = 6.9% of all EU bond issuance in 2024 (EEA); Investor access to data could shrink with ~80% scope cut (S&P/Reuters).	[7][3] [22]
B1) Transport & EV: Direct impacts	CountEmissionsEU anchors ISO 14083 for comparable logistics emissions; CBAM adds import compliance for covered materials / electricity.	Company-level CSRD cost ranges generally apply to transport operators too (€100k–€250k; set-up ≈ €287k; assurance ≈ €320k); AFIR requires ≥150 kW fast chargers every 60 km on TEN-T (from 2025), affecting network CAPEX planning.	[10][8] [11][4] [5][24] [19]
B2) Transport & EV: Indirect impacts	Digital MRV tools (e.g., LogEC; Telia’s Travel Emission Insights) reduce reporting burden and enable new services; Rapid charger rollout lowers operational frictions and range constraints.	Europe public charge points +35% YoY in 2024 (IEA); capacity +49% 2024 (GridX’25); Finland among Europe’s leaders: 3rd-highest share of ultra-fast chargers; 4th-highest DC increase (GridX’24).	[21][20] [18][25] [12]
FI-A) Finland: General economy & competitiveness	CEULA finds regulatory uncertainty and cumulative effects salient for large Finnish firms; BoF flags climate / biodiversity risks to financial stability; Deloitte shows varied CSRD readiness.	MuniFin outstanding green finance: €6.817bn, 576 projects (2024); annual CO <sub>2</sub> reductions ≈ 69,278 t (2024); EU green bonds context: 6.9% of issuance (EEA).	[13][14] [15][1] [7]
FI-B) Finland: Transport & EV sector	Finnish ecosystem leverages ISO-aligned logistics MRV and mobile-data services (LogEC, Telia); New ultra-fast networks (e.g., Faast Point / Kempower) support heavy-duty corridors.	Finland ranks high on ultra-fast charger share and DC growth (GridX’24); EU-wide charger stock +35% in 2024 sets competitive baseline; AFIR 150 kW/60 km rule drives Finnish TEN-T build-out.	[12][18] [19][21] [20][26]

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## APPENDIX C

### Estimated costs of EU sustainability reporting from various sources

Sub-category	Geo/ Segment	Min	Avg	Max	Unit	Source (year)
Share of total emissions	Transport value chains	70	85	95	%	GHG Protocol docs (2024 updates); T&E (2023)
HDV charging spacing core	TEN-T	60	60	60	km	AFIR (2023)
HDV charging minimum power	TEN-T	350	350	350	kW	AFIR (2023)
Mandatory/credible disclosure	Global/EU-relevant	27	38	50	bps	Matsumura et al. (2024); Truong (2024/2025)
After ESG disclosure	Global/EU-relevant	-25	-13	5	bps	Hao (2025 EFMA); mixed bank studies (2023–2024)
Sustainability info assured	Global	66	66	66	%	“OECD (2024)”
In-scope	Finland	130	715	1300	count	Stats Finland/MEM briefs (2023–2024)
Transitional reporters	Finland	2100	210	2100	count	Finnish Customs/Tulli (2024)
All connectors	Finland	1589	158	1589	count	Sähköinen Liikenne ry Q4 (2024)
Connectors	Finland	2808	353	4264	count	Sähköinen Liikenne ry Q4 (2024)
Tightened criteria (large firms)	Finland	90	90	90	% of firms	OP Suuryritystutkimus (2025)
Plan to switch suppliers	Finland	53	53	53	% of firms	OP Suuryritystutkimus (2024)
Already switched suppliers	Finland	56	56	56	% of firms	JAMK (2025); Valto (2024)
BEV share new sales	Finland	28	34	40	%	Traficom/Autoalan Tiedotuskeskus (2024–2025)
Core network length	Finland	2200	240	2600	km	EC TEN-T maps (2024)
YoY connectors growth	Finland	20	28	40	%	Sähköinen Liikenne ry (2023–2024)
Due to ESG criteria	Finland	10	18	30	%	OP (2024–2025); Valto (2024)
Pack price	EU/global	120	139	169	€/kWh	BloombergNEF (2023); 2024 update
EU total in-scope	EU	1000	300	5000	count	EFRAG CBA (2022); EC Omnibus notes (2024–2025)
Transitional reporters	EU	2000	200	2000	count	EC CBAM IA/FAQs (2023)
Admin penalty per unreported tCO <sub>2</sub> e	EU	10	30	50	€/tCO <sub>2</sub> e	Member-state CBAM guides (2023–2024)

Sub-category	Geo/ Segment	Min	Avg	Max	Unit	Source (year)
All points	EU	6324 23	632 423	6324 23	count	ACEA/EAFO (2024)
LDV charging power density	EU	1.3	1.3	1.3	kW per BEV	AFIR (2023)
All firms—model	EU	2060 00	845 750	1636 000	€/compan y/yr	EFRAG CBA (2022)
Market evidence	EU	1000 00	417 500	1000 000	€/compan y/yr	Novata (2024); Position Green (2024); The Times (2025)
All years combined	EU	3500 0	254 400	6820 00	€/compan y	EFRAG CBA (2022); Position Green (2024)
Limited assurance	EU	0.00 72	0.00 91	0.011	% of assets	EFRAG CBA (2022)
Reasonable assurance	EU	0.01 68	0.02 19	0.027	% of assets	EFRAG CBA (2022)
Listed NFRD (Large)	EU	0.00 8	0.01	0.012	% of turnover	EFRAG CBA (2022)
Non-listed NFRD (LSME-like)	EU	0.01 5	0.02	0.024	% of turnover	EFRAG CBA (2022)
Sustainability info assured	EU	38	38	38	%	“KPMG (2024)”
EUR IG primary	EU	1	5	10	bps	ECB WP (2022); Robeco (2024); Amundi/IFC (2025)
Typical step-up/down	EU	5	10	25	bps	LMA wraps (2022, 2023); Anderson (2024)
Net benefit	EU	0.87 4	0.87 4	0.874	€ bn NPV	EC IA (2023); CE Delft (2024)
Benefits (fuel/time)	EU	2.41 6	2.41 6	2.416	€ bn NPV	EC IA (2023); CE Delft (2024)
Costs (business/admin)	EU	1.54 2	1.54 2	1.542	€ bn NPV	EC IA (2023); CE Delft (2024)
BEV share new sales	EU	12	15	18	%	ACEA (2024–2025 releases)
FTEs for CSRD year-1	EU	1.5	2.5	4	FTE	Workiva (2024); Deloitte (2024) EU CSRD pulse
Initial ESRS build	EU	6	9	12	months	Deloitte (2024); EY (2023)
Scope-3 data share total effort	EU	40	55	70	% of CSRD effort	Position Green (2024); Workiva (2024)
Assurance as % of CSRD budget	EU	15	25	40	%	KPMG (2024); Position Green (2024)
ESG/CSRD software annual	EU	5000 0	110 000	2500 00	€/yr	Workiva (2024); Verdantix (2023/2024)
Staff training year-1	EU	5000	200 00	4500 0	€	“Deloitte (2024); EY (2023)”
Market observations	EU	1000 00	175 000	2500 00	€/compan y/yr	Novata (2024)
Market observations	EU	3200 00	660 000	1000 000	€/compan y/yr	Position Green (2024); The Times (2025)

Sub-category	Geo/ Segment	Min	Avg	Max	Unit	Source (year)
Reasonable vs limited—uplift	EU	1.5	2	2.5	x of limited	EFRAG CBA (2022); KPMG (2024)
AFIR LDV power per vehicle	EU	1.3	1.3	1.3	kW/BEV	AFIR (2023)
EV charging capex need	EU	4000 0	670 00	8600 0	€ m/yr	EIB (2023–2024); ENTSO-E (2024)
HDV e-truck vs diesel (use-case)	EU	-5	0	8	€/100 km delta	T&E (2023–2024) reports
Road freight	EU	25	29	33	%	IRU/Ti/Upplly (2024–2025)
Fuel saving	EU	2	5	10	%	Barla (2017); Xu (2021); Ujlacká (2025); ICCT (2021)
“Brown premium” vs “green discount”	EU	10	14	25	bps	ECB/FT (2024); OW (2024); LMA (2023)
Buy-side requests for ESRS comparability	EU	55	65	80	% of investors	ESMA/EFAMA surveys (2023–2024)
Uplift with audited ESG	EU	2	4	7	pp	BCG (2023); Capgemini (2024)
Share deferred under uncertainty	EU	10	18	30	%	McKinsey (2023) EU capex pulse
ISO 14083/CountEmissionsEU adoption	EU	15	28	45	% of logistics lanes	CLECAT (2024); GS1 (2024)
Primary vs secondary share	EU	10	25	50	% primary	CDP (2024); SBTi (2024)
Data request turnaround	EU	10	20	45	days	EcoVadis (2024) benchmarks
SME portal adoption	EU	20	35	60	% of suppliers	EcoVadis (2024); SAP/Ariba (2024)
First CSRD cycle	EU	3	6	12	% items needing correction	Audit/assurance firm snapshots 2024
WACC delta from disclosure	EU	-0.2	0.35	-0.6	pp	Academic meta-analyses 2023–2025
Share of new EUR issuance	EU	24	30	36	%	EEA/ECB (2024–2025) dashboards
AFIR sites per 60 km	EU	1	1	1	site/60 km	AFIR (2023)
Interest diff vs large	EU	60	95	130	bps	ECB SAFE (2024–2025)
API/IoT coverage of fleet	EU	25	45	70	% vehicles	Telematics vendors’ EU reports (2024–2025)

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## APPENDIX D

### Potential avenues for future study (list of project ideas)

#### 1. Overlap between EU and pre-existing sustainability reporting

Study of how much of the EU sustainability reporting required by the EU sustainability regulation is overlapping with existing (national and international) sustainability regulation and reporting, reporting based on international standards (e.g., ISO) and other voluntary sustainability related programmes / apparati.

Mapping of the various reporting schemes under the different regulations and standards, for selected industries.

Creation of a proposal for a less “overlapping” reporting structure with harmonization of reporting between various reporting schemes. The idea being: collect one set of information and report once with the same reporting to multiple reporting schemes.

Further specifics to study: Evaluation of possible cost savings connected to reducing overlapping reporting.

The contributions would yield a better understanding of the overall sustainability requirements companies face and about the reality of reporting in companies. An idea about how much of the work that goes into sustainability reporting is overlapping and how much the potential for cost savings would be if there was harmonization.

#### 2. Sustainability Reporting Requirements and Firm Competitiveness

Data-based study of how much the costs of setting up and “running” sustainability reporting affects firm competitiveness. In other words, is there a causal relationship between reporting and increased revenue (or some other indicator). The set up could be based on looking at companies with regulatory mandate to do sustainability reporting under the CSRD regime (companies with over 250 employees (>1000 after the Omnibus package) and companies just under the threshold and comparison of the performance of these two groups.

Furthermore, while prior research highlights cost, innovation, and market effects of sustainability strategies (Porter & Kramer, 2006; Bansal & Roth, 2000), less is known about how these regulatory frameworks affect competitiveness through network-level dynamics, particularly supply chains where actors may be subject to different regulatory regimes.

Research Objectives could include:

i) to identify firm-level impacts of sustainability reporting requirements (e.g., costs, financing, innovation, customer demands); ii) To explore network-level effects, focusing on supply chain transparency, regulatory heterogeneity, and competitive dynamics among suppliers; iii) To develop a conceptual framework linking regulatory requirements to firm competitiveness across multiple dimensions (cost, market, operational, innovative, strategic); iv) to assess how these effects play out specifically in the logistics and transportation sector, where electrification, efficiency, and global supply chains create unique challenges.

The methodology could be based on data (data-analysis), literature review, qualitative

interviews, and/or comparative case studies.

Expected Contributions would include a nuanced model explaining how sustainability reporting affects competitiveness not only at the firm level but also through network and supply chain effects and practical insights for policymakers and industry actors on how to mitigate negative cost burdens while leveraging reporting for innovation and market advantage.

### **3. Needs of Finnish SMEs with regards to sustainability reporting – information and tools**

Study of what the most pressing needs of Finnish SME´s are regarding sustainability reporting industry to industry. Information creation through interviews / surveys and in collaboration with stakeholder organizations.

Creation of tools and instructions for sustainability reporting for small SMEs with templates.

Contributions to academia via publishing results and to practice via publishing openly the templates and dissemination via stakeholder organizations.

### **4. Digital reporting landscape**

Sustainability reporting and data collection take place and should take place in the digital space, but there are many ways to do digital reporting and information collection. It makes sense to understand what kind of existing digital solutions there are and to identify data collection and integration challenges. Also, the cost-benefit analysis of investments into these digital solutions would bring added value to companies.

Focus on Finnish tire traffic and EV sector companies that may face significant challenges in meeting EU sustainability standards due to fragmented data collection and reporting processes, especially when SMEs are involved in their value chain. Digital solutions present substantial opportunities for streamlining data management, enhancing reporting accuracy, and improving operational efficiency. However, systematic analysis of the profitability and return on investment (ROI) and integration strategies for these technologies is lacking.

Objectives: i) Identify critical data bottlenecks and challenges in Finnish transport value chains under CSRD and Scope 3 reporting requirements; ii) Evaluate the effectiveness of existing digital technologies for emissions reporting and operational optimization in Finland; iii) Develop a robust Cost-Benefit Analysis (CBA) and ROI framework for digital sustainability investments specific to Finnish companies; iv) Create a practical Digital Playbook guiding Finnish companies, particularly SMEs, in deploying digital tools for enhanced sustainability reporting and value chain efficiency.

Methodologies used can include value chain analysis, technology evaluation, case studies and profitability analysis with a set of suitable methods.

The expected outcomes would be a report detailing the Finnish situation including information about the digital solutions in use, the challenges and lessons learned.



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