





Sustainable Finance Regulation - Corporates: Comparative Analysis for Switzerland



Corporates: Comparative Analysis for Switzerland

White Paper 2 - E4S Series on Sustainable Finance Regulation

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TABLE OF CONTENTS

1		Intro	oduc	tion	5	
2		European Union: setting up far-reaching sustainability disclosure obligations				
	2.	1	The	CSRD and ESRS, regulatory endorsement of comprehensive double material	lity 8	
	2.	2	Yet	the path to double materiality remains burdensome	12	
	2.	3	The	CSDDD, a complement to CSRD supply chain transparency	13	
3		Unit	ed S	tates, a proponent of financial materiality	15	
	3.	1	SEC	Proposal embracing binding climate-related disclosures	16	
	3.	2	Lim	itations and pushbacks	18	
	3.	3	Disc	closures resulting from sector-specific due diligence obligations	18	
4		Swi	tzerla	and's principle-based approach	19	
	4.	1	Disc	closure obligations on "non-financial matters" applicable to large firms	19	
		4.1.	1	Certain economic actors ahead of Swiss government regulation	19	
		4.1.2		Art. 964a-c CO: sustainable reporting based on comply-or-explain	20	
		4.1.3		Ordinance on Climate recommending a framework for disclosures	23	
		4.1.4		Non-climate-related sustainability reporting: absence of a framework	23	
		4.1.5		European disclosure requirements and implications for Swiss actors	24	
	4.	2	Disc	closure resulting from due diligence obligations for specific companies	26	
		4.2.	1	Future developments of due diligence and reporting obligations	28	
5		Rec	omn	nendations for Swiss corporate disclosures	29	
	5.	5.1 Enha		ance the framework for effectiveness of sustainability-related disclosures	31	
	5.	5.2 Enhance the comparat		ance the comparability of non-climate-related matters	31	
	5.3 Acknowledge international regulations and their		Ack	nowledge international regulations and their impact on Swiss firms	32	
	5.	4	Con	sider the evolution of sustainable reporting towards double materiality	33	
	5.	5	Exte	end the scope of reporting to SMEs and provide support	34	
6		Out	look		36	
7		App	endi	ces	37	
8		Abb	revia	ations	41	
9		Glos	ssary	<i>'</i>	43	
1	0	Refe	erend	ces	45	

EXECUTIVE SUMMARY

Financial market participants depend on accurate data from corporations for assessing sustainable investment opportunities. They are a primary target of sustainable finance regulation, as financiers of the transition, but largely depend on the information disclosed by investee firms. Firms' disclosures on sustainability thus improve the data available to financial market actors, and thus helps them make informed investment decisions and fulfil their own disclosure obligations.

Regulations on corporate transparency for sustainability matters are being developed across jurisdictions to foster data availability. In the European Union, the regulator enhanced existing disclosure requirements through the Corporate Sustainable Reporting Directive (CSRD). The CSRD requires large and public companies to report information on environmental risks to the firm and the impact of the firm on society and the environment, all along the value chain. In the United States, the Securities and Exchange Commission, which regulates companies with a focus on investor needs, recently proposed disclosure obligations for registrants on climate-related issues, only if they are financially relevant. Both the existing European and suggested American regulations are still being adjusted or developed but the market already underlined some lack of clarity and high related costs. Regulations on due diligence in supply chains complement these transparency requirements through related reporting.

Switzerland is also establishing transparency requirements for sustainability matters. Following modifications in the Swiss Code of Obligations and the introduction of the Ordinance on Climate Disclosures, certain Swiss large companies will have to disclose sustainability-related information for the first time for the accounting year 2023. These obligations are complemented by specific due diligence and reporting obligations for the supply chain of companies active in sensitive industries. Some Swiss industry actors, such as the Swiss Financial Market Supervisory Authority and the Swiss Infrastructure and Exchange, have already put in place sustainability-related disclosures for their registrants.

There is room for enhancing the effectiveness of the Swiss framework, given the current foreign developments, the dependence of the Swiss market and the Federal Council's objective of making Switzerland a global leader in sustainable finance. Recommendations include (1) enhancing the effectiveness of the corporate disclosure framework through mandatory auditing, binding mechanisms and dissuasive sanctions, (2) enhancing the comparability of disclosed information on sustainability-related information, (3) acknowledging international regulations and their impact on Swiss firms, (4) considering sustainability-related financial risks as well as the impact of firms on the environment and society in disclosure requirements and (5) considering the extension of reporting obligations to small and medium enterprises (SMEs) while providing them with specific assistance.

KEY TAKEAWAYS

- 1 Finance can function as a catalyst of investments that foster a sustainable economic development. Regulation should promote the necessary transparency on the sustainability of investee firms for informed investment decisions.
- 2 Regulations on corporate transparency for sustainability matters are being developed. The EU provides for comprehensive and far-reaching disclosure requirements ensuring detailed and comparable corporate information on their sustainability risks and impacts. In the US and in Switzerland, respective regulations more narrowly target specific actors and sustainability-related issues and focus on disclosure of mostly climate-linked risks.
- 3 There is room for enhancing the effectiveness of the Swiss disclosure framework. Regulators could 1) enhance its effectiveness, (2) enhance the comparability of non-climate information, (3) acknowledge international regulation, (4) consider the impact of firms on environment and society, and (5) consider the extension of reporting to SMEs while providing them with assistance

E4S SUSTAINABLE FINANCE REGULATION SERIES

This E4S Series on Sustainable Finance Regulation investigates regulatory developments in Europe and beyond and discusses the implications for Swiss corporate and financial market actors, regulators, and civil society. Swiss Subsidiary Tradition in Light of Foreign Approaches sets the stage in assessing regulatory objectives and comparing regulatory approaches for sustainable finance across jurisdictions. Corporates: Comparative Analysis for Switzerland compares sustainability-related reporting regulation targeting corporate actors across jurisdictions and provides recommendations for the Swiss context. In a third white paper, Financial Market Participants: Comparative Analysis for Switzerland, the series highlights the specificities and implications for financial market actors.

1 Introduction

Switzerland strives towards international goals for sustainable development, including climate change mitigation, climate change adaptation and biodiversity conservation, having adopted the United Nations 2030 Agenda for Sustainable Development,¹ and ratified the Paris Agreement² and the Kunming-Montreal Agreement.³ To achieve these international goals, the entire economy must be transformed, and the financial sector has a role to play in shifting capital accordingly [2, Art. 2.1 let c)], [4].

Consequently, the Federal Council envisages for Switzerland to become a global leader in sustainable finance [5], in line with international ambitions, such as the roadmap adopted by the G20 [6]. In order to achieve this objective and the transition of the economy, the Swiss strategy is founded on: the primacy of market-based solutions, subsidiarity of public action (the so-called

principle-based approach), transparency, and pricing that considers risks and long-term perspectives [7], [8, p.4].

However, there is a long road ahead to achieve the transition of the economy: although sustainable investments Switzerland have increased significantly over the last decade (from CHF 71.1 billion to CHF 1610.0 billion between 2014 and 2022 [9]), Switzerland is currently not on track to meet its climate targets,4 and a significant portion of Swiss financial flows is not aligned with a just transition to a lowcarbon economy.5 Barriers such as greenwashing risk and lack of transparency prevent scaling up [13], [14]. Regulatory incentives could reduce these barriers, helping to establish alignment of financial flows with sustainability goals [3, Ch.3], [15].

¹ In the context of the United Nations 2030 Agenda for Sustainable Development, Switzerland has committed itself to implement 17 environmental and social goals by 2030, socalled Sustainable Development Goals (SDGs) [1].

² By adopting the Paris Agreement on climate change in 2015, Switzerland also promised to combat climate change according to international and national targets, such as the self-set and continuously tightened Nationally Determined Contributions. These targets aim to strengthen the global response to the threat of climate change as well as to contain global warming well below 2°C [2].

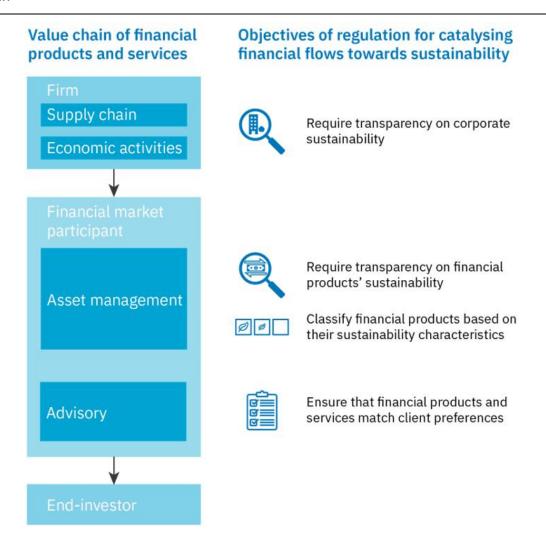
³ At the end of 2022, Switzerland also committed to achieving four long-term goals for 2050, related to biodiversity conservation through the Kunming-Montreal Agreement.

This consists in the implementation of 23 global targets to be urgently addressed by 2030. Accordingly, 30% of global landmass has to be protected or restored until 2030 [3].

⁴ "Switzerland missed its 2020 emissions reduction target of 20% below 1990 levels." [10]

⁵ In 2021, sustainable investments in Switzerland spiked at CHF 1.98 trillion, compared to CHF 3.30 trillion total fund volume under management in Switzerland [11], making up 53% of the entire Swiss funds market [12]. Sustainable investments referred to here implement at least one of the following strategies: negative or best-in-class exclusion, ESG integration, shareholder engagement, impact investment or a sustainable thematic investment strategy.

Figure 1: The objectives and approaches of sustainable finance regulation along the value chain



Source: Authors

Switzerland pursues reactive – rather than interventionist – regulation on sustainability matters but it should ensure its access to the foreign market and national sustainability ambitions. A previous E4S analysis provided an overview of objectives and approaches of sustainable finance regulation, involving actors along the value chain and across jurisdictions (Figure 1) [16]. As it stands, sustainable finance regulation to a larger extent aims at informing investors, as well as public and private stakeholders, on the sustainability impact of investments in order to reallocate capital flows towards

sustainable alternatives. While this goal is similar across jurisdictions, regulators take different approaches when elaborating and implementing sustainable finance regulation. In Switzerland, the regulator focuses on specific actors, with rules on disclosure and due diligence requirements for firms and financial firms, and on transparency of financial products, the latter of which will be discussed in a forthcoming analysis [17]. Furthermore, Swiss actors will be largely affected by the regulatory developments in the European Union (EU).

Firms' reporting obligations on sustainability can improve data availability and thus help investors make informed decision as well as fulfil their own disclosure obligations. The current lack of disclosure is partly due to unresolved difficulties in the gathering of information on firms along the supply chain [18]. Regulations can help in improving this type of reporting, in particular in harmonising the sustainability topics reported across jurisdictions. Disclosure requirements around sustainability⁶ mainly target public and financial companies, across all sectors. Firms active in sensitive industries might be targeted through specific due diligence and related reporting obligations.

One of the main challenges is the requirement of double materiality for reporting in some jurisdictions, such as the EU and Switzerland. Materiality refers to information considered important to disclose. Beyond information on financial risks relevant to traditional investors (single materiality), new regulations require companies to disclose relevant information on the risk of climate change or other sustainability-related issues on the company, as well as a company's business's impact on environment (impact materiality), whether it has financial consequences for the company (financial materiality) or not (double materiality).

This paper explores the current international and national regulatory landscape on sustainability-related disclosures for corporations, and suggests regulatory and practical improvements for Switzerland in that regard. Considering foreign jurisdictions, the EU regulator is especially ambitious in setting up far-reaching corpodisclosure obligations environmental, social and governance issues (Section 2). In the United States (US), sustainability reporting is mostly addressed as climate matters, applying a narrow interpretation of financial materiality (Section 3). In Switzerland, in addition to self-regulations developed by the Swiss financial industry and organisations, a recent amendment of the Code of Obligations (CO) introduced new corporate sustainability reporting obligations (Section 4).

To contribute to the current debate, this paper focuses on regulation relating to corporate sustainable finance activities⁷ in force or in consideration as of June 2023, and applied in Switzerland, the EU and other regions relevant for the Swiss context. The paper includes primarily climate matters and, to a lesser extent, social, governance and other environmental aspects, such as biodiversity,8 reflecting the limited scope of already existing law and regulatory developments for harmonisation. Also, corporate disclosure obligations as well as due diligence and related reporting obligations are assessed insofar as they improve the information available to companies and, consequently, to financial intermediaries and regulators. A comprehensive analysis of sustainable corporate governance tools is out of the scope of this study and is the subject of a parallel E4S project.

⁶ The terms "extra-financial" or "non-financial" disclosures are often used by regulators and literature to refer to sustainability disclosures. However, information around sustainability includes information that has an immediate impact on financial statement lines and on the society as a whole [19, p.48]. Sustainability information can thus be financially material. Therefore, in this paper, we will use the term "sustainability-related information" to refer to information relating to sustainability or "sustainability-related disclosures", unless we refer to the names of regulations.

⁷ Regulations relating to sustainable finance activities here refer mostly to regulations on corporations for sustainability disclosures relevant for financial market participants.

⁸ This does not contradict the fact that additional regulation is urgently needed to steer financial flows not only towards climate, but sustainability more broadly.

2 EUROPEAN UNION: SETTING UP FAR-REACHING SUSTAINA-BILITY DISCLOSURE OBLIGATIONS

The Corporate Sustainability Reporting Directive (CSRD) [20] and the European Sustainability Reporting Standards (ESRS)9 currently being developed, establish the first regulatory endorsement of comprehensive double materiality. They hence consider impacts beyond risks to business (Section 2.1); which can yet be burdensome (Section 2.2). These regulations replace the Non-Financial Reporting Directive (NFRD) [22] and might be complemented by the Directive on Corporate Sustainability Due Diligence (CSDDD), currently under inter-institutional negotiations. If adopted, these regulations would improve transparency on the supply chain (Section 2.3).

2.1 THE CSRD AND ESRS, REGU-LATORY ENDORSEMENT OF COMPREHENSIVE DOUBLE MATERIALITY

In the EU, the CSRD provides corporate sustainability disclosure requirements; in consistency with the Sustainable Finance Disclosure Regulation (SFDR) and the Taxonomy Regulation (TR), summarized in Appendix 1. The information to disclose under the CSRD aims to meet financial-market actors' information requirements under the SFDR, including transparency on firms' supply chains. The CSRD is also aligned with the TR: companies report the same environmental indicators under the

CSRD and the TR, thus avoiding double administrative burden. The CSRD requirements will be further developed through European Sustainability Reporting Standards (ESRS).

The CSRD requires disclosure of information relating to "sustainable matters", i.e. environmental, social and human rights as well as governance factors [20, Art. 2 Para 17]. It notably requires inforon companies' sustainability targets¹⁰, transition plans towards the Paris Agreement¹¹ and principal adverse impacts (PAI), hence the impacts a company has on sustainability factors. In particular, the PAI connected with the company's own operations and with its value chain, including its products and services, its business relationships and its supply chain, as well as actions taken to identify and monitor those impacts [20, Art. 19a para 2 (f) (ii)].

The necessary information to disclose relating to a firm's value chain (Glossary) will be specified in the ESRS. It must take account of the difficulties that firms may encounter in gathering information from their whole value chain, in particular from SME's and emerging countries-based firms. It must be proportionate and relevant to firms' characteristics and complexity of activities. In particular, the required information shall match the information that SMEs must themselves disclose so that firms are not required to obtain more

whether those targets are based on conclusive scientific evidence. Art. 19a para. 2(a)(b).

⁹ The ESRS are prepared by the EFRAG Project Task Force on European Sustainability Reporting Standards. Currently being developed, the draft version of the first set of ESRS is available online [21]

¹⁰ In particular, the company's time-bound targets related to sustainability matters (particularly Greenhouse Gas (GHG) emissions reduction targets for 2030 and 2050), the progress made towards achieving those targets and

¹¹ In particular, the actions of the company (in particular its investment plans) to ensure that its business model and strategy are compatible with the Paris Agreement objective and, where relevant, the company's exposure to high-emissions activities. [20, Art. 19a para. 2 (a) (iii)].

information. During the first three years of the CSRD's implementation, if the necessary information relating to a firm's value chain is not available, the firm must explain the efforts made to obtain the said-information, the reasons why it could not be obtained, and its plans to obtain it [20, Preamble § 53].

The CSRD will be implemented on a progressive basis between 2024 and 2028, according to the category of company it applies to.- first large companies as defined by the NFRD,¹² then large corporations under the CSRD's broader scope¹³, ultimately extending to SMEs.¹⁴ Figure 2 provides the timelines and criteria for the respective disclosures.¹⁵ Currently, companies which fall under the CSRD but did not have to comply with the old NFRD, can disclose sustainability-related information on a voluntary basis.

Considering the overlapping between CSRD and NFRD, financial market participants under the SFDR and the TR will encounter some degree of unclarity on corporate data gathering to comply with their own reporting obligations, at least until 2028. Ultimately, since CSRD is a directive, the speed of implementation and the exact

rules resulting from the implementation of the CSRD into national law depends on the EU Member States' authorities (Glossary).¹⁶

The CSRD provides for the principle of double materiality of information around sustainability as introduced already in the NFRD. Companies falling into the scope of the CSRD must disclose the relevant information on the risk of climate change or other sustainability-related issues on the company (financial materiality) as well as a business's impact on the environment (impact materiality) - whether it has financial consequences for the company or not (double materiality) [23, p.6].¹⁷

Scope 3 greenhouse gas (GHG) emissions are an exception as they must be disclosed only "where relevant". While Scope 1 emissions refer to the directly controllable emissions, such as emissions in the course of production, Scope 2 refers to emissions which are indirect, e.g. in form of emissions in the course of electricity generation, which is necessary to light the company's buildings. Scope 3 refers to emissions along the supply chain. The extent of Scope

years; (2) subsidiary within the EU or branch office with a turnover in the EU of EUR 40 mio or more. CSRD, Art. 40bis.

¹² Large corporations covered by the scope of the NFDR are public-interest companies employing more than 500 employees at the balance sheet date [22] art. 1 (1).

¹³ Large corporations covered by the scope of the CSRD are companies fulfilling at least two out of the three following criteria: (1). 250 employees, (2) EUR 40 mio revenue, (3) EUR 20 mio turnover. The European regulation does not define the term "employees" currently, hence whether partime or temporally contracted employees are counted under CSRD depends on national legislation.

¹⁴Listed SMEs are companies fulfilling two out of the three following criteria: (1) 10 to 250 employees, (2) EUR 700k to EUR 40 mio revenue, (3) EUR 350 k to EUR 20 mio turnover. They can delay their reporting obligations under the CSRD up to two years, i.e. until 2028.

¹⁵ According to the CSRD, non-European companies are established outside the EU and meet the following criteria: (1) turnover (at group level) of at least EUR 150 mio in the European area for each of the last two consecutive financial

¹⁶ Indeed, Member States are allowed to have stricter rules as long as they are consistent with the directive.

¹⁷As such, it clarifies the principle of double materiality, ambiguously provided by the NFRD. The principle of double materiality requires firms to disclose information on the risk of the environment and society on their activities (financial materiality) as well as the impact of their own activities on the environment and society (impact materiality). It is opposed to single materiality which considers financial materiality more narrowly. Opinions diverge on the extent to which these materiality definitions can be clearly separated.

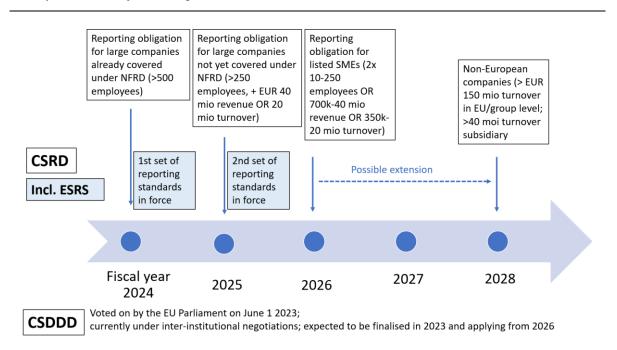
¹⁸ "Where relevant" grants the firm the final decision on what is considered important enough to disclose [20, Preamble § 47].

3 emissions to disclose will be specified in the ESRS [20, Preamble § 47].

For example, let us consider a French coffee producer (i) harvests the coffee beans in Brazil with its own employees, (ii) manufactures the beans into coffee powder and packages the product in Lyon in its own factory, (iii) sells coffee in Paris via own coffee shops. This coffee producer must report the financial consequence of environmental risks to the coffee production in Brazil, such as changing rainfall patterns

[24] (financial materiality). Reporting is required also for the direct and indirect GHG emissions of its production, manufacturing and selling points, such as the emissions produced by coffee roasting (Scope 1), or the emissions of the electricity used for the coffee grinders (Scope 2) and the impact of producing coffee on deforestation at the farms in Brazil¹⁹ (impact materiality). To what extent Scope 3 emission, hence for example those of a supplier for packaging material, need to be reported, remains to be defined by the final ESRS.

Figure 2: Timeline for European corporate disclosure and requirements under the CSRD, complemented by due diligence under the CSDDD



Source: Based on Directive (EU) 2022/2464 and EU 2019/1937 [20], [26].

The ESRS clarify the information to be disclosed for each sustainability issue and how this should be reported in order to **comply with the CSRD.**²⁰ They include three different types of standards: two cross-sectoral standards applicable to all

¹⁹ Especially industrial sun-grown coffee has led to major deforestation during the last decades [25].

 $^{^{20}}$ ESRS are developed by the European Financial Reporting Advisory Group (EFRAG).

companies and all sustainability issues; eleven sector-specific standards with additional disclosures on individual sustainability issues; and SME specific standards (Table 1). In their draft version, the ESRS are aligned with the Task Force on Climate-Related Financial Disclosures (TCFD) Recommendations,²¹ an internationally recognised framework for climate disclosures [27] (Box 1), but go even further.²² The ESRS reflect the CSRD's double materiality principle.²³

The finalised versions of ESRS will be adopted through Delegated Acts by the Eu-Commission and will constitute reporting requirements under the CSRD. The European Commission was aiming to adopt the first set of ESRS, i.e. the cross-cutting standards and standards on ESG matters, by 30 June 2023,24 but this has been delayed. After the publication of the Draft Delegated Act on the 9th June 2023 and a consultation period which ended on 7th of July 2023 [31], the first set of standards will be finalised and transposed into national law. The EU is also developing the second set of ESRS,

including sector-specific and listed SMEsspecific information (Table 1).²⁵

The information is included in the companies' annual report and therefore audited by a third party. The objective of the EU is to ultimately have a similar level of assurance, hence external verification, between financial reporting and sustainability reporting [20, Preamble §60]. By October 2026, the Commission will therefore adopt assurance standards²⁶ for so-called "limited assurance engagement", i.e. a negative form of expression stating that no matter has been identified by the third party auditor to conclude that the information subject to the audit is materially misstated [20, Preamble §60 and 69]. Until then, national standards can be applied [Preamble §69]. It aims to further extend to "reasonable assurance engagement", through which the control is significantly greater. Following an assessment to determine if reasonable assurance is feasible, the EU might adopt assurance standards for reasonable assurance by October 2028 [Preamble §60 and 69]. This would provide an opinion on the measurement of the information subject to the audit according to specific criteria

assessments and phase-in) are expected in the European Commission's draft [29]; [30].

²¹ For US parallel, Section 4 for CH parallel; see Table 3

 $^{^{22}}$ On the differences between the draft ESRS and TCFD, see $\cite{Minimum}$

²³ However, the precise extent of double materiality is still uncertain and might change again with the EU Commission's final proposal.

²⁴ The content of the final drafts of ESRS 1 has been significantly reduced compared to its initial version. In particular, the number of disclosure requirements have been reduced from 136 to 82. The requirements relating to materiality have been further lowered: initially, every sustainability topic had to be reported unless its materiality could be rebutted by the company. Instead, the final draft version provides for a list of disclosure requirements that are material and thus mandatory, while reporting on the remaining topics can be merely waived. This lowering of requirements is criticised by investors lobbying for upholding the ambitiousness of the ESRS. More changes to the double materiality definition (particularly in terms of materiality

²⁵ End of 2022, sector-specific ESRS and listed SMEs-specific ESRS were expected to be developed in summer 2024, with application in 2025. In March 2023, the European Commission asked EFRAG to prioritise the implementation of the first draft of ESRS. Therefore, EFRAG updated its development process for sector-specific standards. According to EFRAG, the development process for one standard may be up to 24 months. The decision on which standard is to be develop is still to be decided by the EFRAG Sustainability Reporting Board. More info at: [32]

²⁶ Assurance standards are minimal standards for assurance engagement. According to the International Auditing and Assurance Standards Board (IASSB), assurance engagement refers to what is obtained as a result of the audit procedures performed. It is « an engagement in which a practitioner expresses a conclusion designed to enhance the degree of confidence of the intended users other than the responsible party about the outcome of the evaluation or measurement of a subject matter against criteria ». See: [33].

Preamble §60]. The lack of common rules for sustainability-related reporting audit, with sanctions defined by Member States, justifies this progressive approach to enhancing the level of assurance [Preamble § 60].

It is up to the EU Member States to implement the CSRD by providing for "effective, proportionate and dissuasive sanctions" [22, art.51]. This leaves a margin of appreciation for each Member State and might create discrepancies in the implementation of the CSRD within the EU.

Table 1: ESRS standards

	Cross-cutting	Non-sector-specific standards				
	standards	Environmental	Social	Governance		
ESRS Set 1	ESRS1 and ESRS2: General requirements	ESRS E1: Climate change ESRS E2: Pollution ESRS E3: Water and marine resources ESRS E4: Biodiversity and ecosystems ESRS E5: Resource use and circular economy	ESRS S1: Own workforce ESRS S2: Workers in the value chain ESRS S3: Affected communities ESRS S4: Consumers and end-users	ESRS G1: Business conduct		
ESRS Set 2		Sector specific standards SME standards				

Source: EFRAG, 2023 [21].

2.2 YET THE PATH TO DOUBLE MATERIALITY REMAINS BURDENSOME

Provision of information leads to an increase in administrative burdens, both for information providers and for information recipients. If this is true for the implementation of all regulations on sustainability reporting, it is even more so for the European framework which adopts a double materiality approach and whose scope is particularly wide.²⁷ Information providers, i.e. companies, must collect, standardise

The EU framework requires firms to use a secure and scalable monitor to store information in an Extensible Hypertext Markup

and publish the required information. In order to use it, information recipients must also be able to process it. Both of these operations require appropriate IT resources and specialised employees, and therefore sufficient financial resources. Adaptation might be particularly complex and costly for firms that fall under the CSRD but were previously excluded from the NFRD's scope.

²⁷ On challenges for businesses with regard to the implementation of the CSRD and ESRS, see [34].

Language (XHTML) format and to tag this information according to a digital categorisation system in XBRL [20, Preamble §55][35].²⁸ This is an unusual format for companies used to Microsoft Excel [37].

Furthermore, information providers must cooperate with their supply chain to receive the necessary information, collect and process a large amount of data, submit this data to auditors and safely store this information in the required format. The compliance with the CSRD and ESRS requires the disclosure of information relating to the supply chain, e.g. Scope 3 emissions; PAI along the supply chain. Yet, SMEs, which generally constitute large firms' supply chains, are not themselves subject to sustainable reporting obligations, since they are out of the CSRD's scope of application, except for listed-SMEs from financial year 2026 (with option of a 2-year extension - Figure 2) [20, Preamble §21]. SMEs are therefore more and more contractually required to ensure data sharing, sometimes extending to their own supply chain, which can present a great challenge for them.

Yet, the EFRAG is developing voluntary sustainability reporting standards for non-listed SMEs that are outside the scope of CSRD, which would make it easier for SMEs to meet information demands from their firms' clients and banks. They may be adopted by the European commission as voluntary guidelines by June 2024 [38, p.1]. Moreover, the Commission must assess and report to the European Parliament and

to the Council by 30 April 2029 whether and how the scope of the reporting requirements should be further extended, in particular in relation to SMEs and to third-country firms operating directly in the EU without a subsidiary or a branch in the EU [20, Preamble §81]. Such an extension would enhance the data available on firms' supply chain, thus reducing firms' difficulties to obtain such information to comply with their own reporting obligations.

2.3 THE CSDDD, A COMPLEMENT TO CSRD SUPPLY CHAIN TRANSPARENCY

In February 2022, the EU Commission introduced a proposition of a Directive on Corporate Sustainability Due Diligence Directive (CSDDD), which, if adopted, would introduce a sustainability due diligence and reporting obligation [26]. It would require very large companies operating on the EU market²⁹ to implement a due diligence process with regard to human rights and environment issues all along their value chain i.e. the obligation to monitor these sustainability topics across subcontractors, as well as to prevent and mitigate PAI arising from their supply chain's activities. These companies would have to annually disclose information relating to the implementation of their due diligence obligation on their website. The information would cover integration of due diligence into company policies; identifica-PAI; prevention, mitigation, of minimisation of adverse impacts; a complaint procedure as well as monitoring for

²⁸ In parallel to the ESRS, EFRAG is developing a taxonomy for XBRL tagging, in line with the European Single Electronic Format (ESEF), meaning companies write their own "normal" XHTML reports in human language, but then the data points are tagged and easily extractable for machines, hence easier comparable and shareable via the European Single Access Point (ESAP) portal. The US, EU, and Switzerland now all require XBRL, however, most companies still work with excel. For further details on the EU CSRD XBRL Taxonomy, see [36].

²⁹ Companies subject to the CSDDD are companies fulfilling one of the following criteria: (1) more than 500 employees and a turnover of EUR 150 mio or (2) more than 250 employees and a turnover of EUR 40 mio provided that 50 % of this turnover was generated by an activity relating to a sensitive sector (CSDDD Proposal, art. 2.1 (a) and (b)).

effectiveness of due diligence policies and measures [26, art. 5 to 11].³⁰

If adopted, the CSDDD would complement the CSRD. First, the disclosure of the information prescribed under the CSRD requires firms to put in place due diligence processes, which would be required by the CSDDD. In particular, where the CSRD mandates to disclose how a company ensures that its business model and strategy are aligned with the Paris Agreement's objectives, the CSDDD would require a company to identify the adverse impacts as part of the due diligence process. Second, the CSDDD would require corporate strategies to align economic actions with the limiting of global warming to 1.5°C in line with the Paris Agreement while the CSRD requires reporting on it. Thus, the CSDDD Proposal will lead to companies' reporting being more detailed and effective [26, p.2].

On 1 June 2023, the EU Parliament adopted a common negotiating position on the CSDDD [39], which opens the way for negotiations with the EU Commission and Member States [40]. The EU Parliament's position sets aside the directors' responsibility for setting up and overseeing due diligence obligations provided by the Commission's Proposal [40]. In December 2022, the EU Member States already agreed on a common negotiating position, less far-reaching than the Commission's Proposal [41]. The disputed elements relate to the covered entities (in particular the inclusion of the financial sector), the extent of the value chain covered, the conditions for civil liability as well as the introduction of a directors' duty of care and its consequences remain to be negotiated.

For example, under the CSDDD, a coffee producer would have to enhance control

20

and take responsibility for the environmental and human rights consequences of coffee production in Brazil along the value chain, hence from production to consumption of the coffee. Based on the example of the French coffee producer mentioned above, let us consider the firm does not own all farms, but buys the coffee beans in Brazil from local, independent farmers, hence has a complex supply chain. Beans are manufactured into coffee powder and the product is packaged in the company's facilities in Lyon, and sold in Paris via own coffee shops. This coffee producer must also report the financial consequences of environmental risk to the coffee production in Brazil, plus report on financial and impact materiality, as well as Scope 1, 2 and 3 emissions where relevant (Section 2.1). However, since in this case the farms are not directly owned, but form part of the value chain, information especially on Scope 3 emissions and impact materiality might be more difficult to gather. In this case, the company discloses as much as possible and, during the three first years of the CSRD's implementation, communicates the efforts for information gathering under the CSRD. In addition, the CSDDD requires the company to not only report and seek information on these issues, but to monitor that the Brazilian farmers refrain from causing potential adverse human rights or environmental impacts (e.g. by cutting trees) and could be made responsible for violations. However, of particular interest for the scope of the due diligence obligations, (1) the kind of business relationships they apply to; and (2) the scope of the covered entities, are currently negotiated (Appendix 2).

 $^{^{30}}$ If the proposal were to be adopted, a future delegated act would establish the exact information to be published (preamble § 66 and art. 11).

3 United States, a proponent of financial materiality

The US federal legislator is attempting to address corporate disclosure around sustainability but faces opposition. This is due to political and institutional reasons, as well as to the US non-interventionist, liberalist, and free-trade tradition. In 2021, the House of Representatives passed the Corporate Governance Improvement and Investor Protection Act by a vote of 215 to 214. This Act would notably require listed companies to disclose environmental, social and governance (ESG) metrics and processes as well as other climate-related information.31 However, in view of the oppositions expressed to regulations on ESG disclosures and the ESG backlash occurring especially in Republican-governed states, it is unlikely that this law will be adopted.

Currently, corporate disclosure around sustainability is mainly tackled by the Securities Exchange Commission (SEC). The SEC plays an important role in regulating corporate disclosure and puts financial materiality at the forefront of its strategy. As the federal capital market regulator, it is in particular responsible for protecting investors. To do so, SEC requires listed

companies, fund and asset managers, investment professionals, and other market participants to disclose the necessary information³² so that investors can make informed investment decisions.

In terms of sustainability, the SEC Climate Guidance [43] clarified in 2010 the climate-related disclosure obligations existing under general federal law.33 The SEC Climate Guidance does not create new obligations but assists listed companies in meeting their transparency obligations existing under federal law [44]. Disclosure on these topics is only required if the information is financially "material", i.e. if there is a "substantial likelihood" that a reasonable investor would consider it important in deciding how to vote or make a decision impacting the value of an investment (financial materiality) [43, p.11].

Recently, the SEC introduced a Proposal on Climate-Related Disclosures which might introduce specific climate-related disclosures obligations for the first time (Section 3.1), but which is still in the making (Section 3.2). Moreover, due diligence and related reporting obligations introduce

owned or managed; effect of a legislation that would compel the company to meet the Paris Agreement objectives would have to be implemented by the SEC. See [42].

³¹ Title I, the ESG Disclosure Simplification Act, would require public companies to disclose:

⁽¹⁾ a clear description of the views of the issuer about the link between ESG metrics and the long-term business strategy of the issuer; and (2) a description of any process the issuer uses to determine the impact of ESG metrics on the long-term business strategy of the issuer. Title IV, the Climate Risk Disclosure Act, would require public companies that file an annual report under the Exchange Act to disclose specific climate-related information regarding: (1) the identification, evaluation and risk-management strategies relating to the physical and transitional risks posed by climate change; (2) governance processes and structures put in place to identify, assess and manage climate-related risks; (3) strategies and actions taken to mitigate those risks; (4) the resilience of any strategy the issuer has for addressing climate risks; and (5) a description of how climate risk is incorporated into the issuer's overall risk-management strategy. Other specific disclosures obligations related to a company's GHG emissions; fossil-fuel assets

³² SEC requires specific information at the time of the registration and on a periodic basis. The information relates notably to the financial statements, the company's properties and businesses, the securities to be offered for sale and the management of the company.

³³ The SEC Climate Guidance identifies four climate change-related topics that a company may be required to disclose: (1) The impact of legislation and regulation, such as a carbon taxation or environmental litigation; (2) the impact of international accords, such as the Kyoto Protocol; The indirect consequences of regulation and business trends, such as decrease in demand for single-use plastic goods; and (4) The physical impacts of climate change, such as severe weather events on a company's operations. See: " [43] p. 21 ff.

reporting obligations for firms active in specific industries (Section 3.3)

For example, an American coffee producer would only need to report what damages the business significantly in financial terms, hence only if increasing rainfall on its plantations destroys the coffee beans. Similarly, it would need to report deforestation and habitat loss for rare animal species only if there is a threat of litigation, unless it is active on the European market and falls under the CSRD – then the same disclosure rules as above apply.

3.1 SEC Proposal Embracing bin ding climate-related disclosures

The new SEC Proposal on Climate-Related Disclosures [45, p.17 ff.] aims to make reporting of certain climate-related information binding for domestic and foreign registrants [p.23]. The SEC's proposal is modelled in part on the TCFD Recommendations (Section 4.1.1, Box 1)³⁴ and draws upon the GHG Protocol (Glossary).

Contrary to the EU's CSRD, this SEC Proposal adopts a clear single materiality approach but introduces for the first time the obligation to disclose on GHG emissions. The information to disclose only concerns the direct or indirect risks of

climate change to the business in financial terms, i.e. financial materiality referring to financial statement lines as opposed to the EU definition – further developed in the next paragraph [23, p.34]. Registrants must disclose information related to Scope 1 and 2 GHG emissions and, if "material"35 or if the registrant has set targets or goals, Scope 3 emissions [45, p.162 ff.].36 The SEC acknowledges the current challenge of calculating and disclosing Scope 3 emissions and therefore proposes accommodations for their disclosures.37

Keeping the financial-materiality focus, the SEC Proposal suggests the introduction of the so-called 1 Percent Rule. This rule requires a registrant to disclose the potential financial impact of different climate events on any financial statements' line item, e.g. revenues or operational costs, if the resulting cumulative impact of all climate events represents more than 1% of the amount reported in this line item [45, p.120 ff.]. This rule aims to complement the disclosure on whether and how identified climate-related risks affect the registrant financial statement. A registrant would be required to determine the cost of the severe weather event, other natural conditions, transition activities and identified climaterelated risks to each consolidated financial statement line item.38 The absolute value of

goods; waste generated in operations; business travel by employees; downstream information, e.g.: transportation and distribution of sold products; processing by a third party of sold products; use by a third party of sold products; etc.; any other information significant to the registrant when calculating its Scope 3 emissions.

³⁴ The information a registrant would have to disclose based on the TCFD Recommendations would include: its governance of climate-related risks; any material climate-related impacts on its strategy, business model and outlook, climate-related risks; climate-related risk management; GHG emissions metrics; climate-related targets and goals, if any [45] p. 49.

³⁵ "Material" in the US means a substantial likelihood that a reasonable investor would consider them important when making investment or voting decisions. See note 38. *Material*" information could be, for example, information relating to the transition observed in the car industry regarding the shift from fuel cars to electric cars.

³⁶In case a registrant has set GHG emissions goal, e.g. through a net-zero alliance, it needs to disclose, in particular: upstream information, e.g.: purchased goods and services; transportation and distribution of purchased

³⁷ Namely: (1) a delayed compliance date; (2) an exemption for smaller reporting companies; (3) a safe harbour from certain forms of liability under the federal securities laws [p. 210].

³⁸ This is very clearly showing the difference between the EU and the US definition of what financial materiality means, if compared with the European Reporting Standard's definition as cited in [37, p.28]: "A sustainability topic is material from a financial perspective if it triggers financial effects on undertakings, i.e., generates risks or opportunities

the positive and negative impacts for each cost would have to be aggregated. This would reflect the significance of climate change on the financial performance but also better capture the variability resulting from transition activities and climate-related risks. An example of how this exercise is carried over is reported in Table 2, displaying an impact on cost of revenue of 4.6%, hence above 1%. This impact is therefore considered material and needs to be disclosed.

Certain climate-related information would have to be disclosed in registration statements, annual reports and as a note in the audited financial statements. The information disclosed in registration statements and annual reports will thus be subject to SEC's supervision. Certain

climate-related metrics – including the metrics resulting from the 1 Percent Rule – would be required in the financial statements, and therefore be subject to audit by an independent registered public accounting firm [45, p.144]. Additionally, certain issuers³⁹ would be required to include an attestation by a service provider meeting certain minimum qualifications,⁴⁰ relating to Scope 1 and Scope 2 emissions, at a limited assurance level until 2025 or 2026 and at a reasonable assurance level from 2026 or 2027 [45, p.44 and 216].⁴¹

The SEC Proposal requires registrants to disclose the required data in the Inline-Extensible Business Reporting (iXBRL) format which is both human and machine-readable, and required for financial statements from February 2023 [45, p.284f.].

Table 2: Example of climate-related analysis and disclosure under the 1 Percent Rule

Analysis to perform at the financial statement level

Line-item	Consoli- dated balance	Impact of Event A & B	Impact of Event C	Impact of Transition Activity D	Absolute value of impacts	Percentage impact
Cost of revenue	\$ 10'000'000	-\$300'000	+\$70'000	+\$90'000	\$460'000	4.6%

Metrics to disclose

Line-item	Total negative impact of events	•	Total negative impact of transition activities	Total positive impact of transition activities and opportunities
Cost of revenue	-\$300'000	+\$70'000	-	+\$90'000

Source: SEC, Rel. Nos. 33-11042; 34-94478; File No. S7-10-22 [45].

that influence or are likely to influence the future cash flows and, therefore, the enterprise value of the undertaking in the short, medium or long term but are not captured by financial reporting at the reporting date. These guidelines do not relate to financial reporting by undertakings, and therefore the definition of financial materiality used in Sustainability Reporting should not be mistaken for the concept of materiality used in the process of determining which information should be included in the undertaking's financial statements."

³⁹ More precisely, accelerated filers and large accelerated filers (see Appendix 3 for SEC definition).

⁴⁰ It would not be required that the service provider be a registered public accounting firm.

⁴¹ For a comparison to the EU timeline, see Section 2.1

3.2 LIMITATIONS AND PUSHBACKS

The SEC Proposal does not foresee sanctions for non-compliance with the reporting obligations. Such sanctions could be introduced at a later stage. The introduction of reporting obligations on climate might also affect companies' risk of liability for securities fraud [46, Rule 10b-5].

The SEC Proposal does not recognise reports prepared according to different standards, such as the European, so far. Public comment on this matter was expected during the public consultation [45, p.183]. This Proposal has been criticised by the business community, because of its lack of clarity and implied costs for reporting firms [19, p.50], [47]. In addition to the increased risk of liability for the company resulting from the obligation to file this information with the SEC (and not simply to publish), the very content of the information to be provided is considered too uncertain. The definition of "severe weather event" is said to be insufficiently clear and might impede comparability and materiality of disclosures. The 1 Percent Rule stirs up the criticism: the threshold is seen as too low and, reflecting only the status of assets, ignoring how companies track, verify, document, or report their expenses [47, p.6f.]. Criticisms of direct and indirect GHG emissions obligations relate primarily to disclosure of supply chain information (Scope 3). Finally, the costs of implementing these new obligations are criticised.

The SEC is reportedly considering dropping some elements of the project, including the 1 Percent Rule [48]. The comment period ended in June 2022. The SEC is currently making "adjustments" based on the received feedback [49]. The release of the final rule was planned before the end of April 2023 [50]. Now, a further delay until fall 2023 is expected [51].

3.3 DISCLOSURES RESULTING FROM SECTOR-SPECIFIC DUE DILIGENCE OBLIGATIONS

The United States has adopted several sector-specific due diligence and reporting obligations. In force since 2020, the Trade Facilitation and Trade Enforcement Act (TFTEA) requires importers of goods suspectedly produced by forced labour, to re-export the goods or show that the goods were not produced by forced labour [52]. It aims to incentivize importers to implement social due diligence all along the supply chain and be able to prove it. The due diligence obligations in the sector of forced labour were complemented by the Uyghur Forced Labour Prevention Act (UFLPA), which entered into force in 2021.42 Finally, currently pending in the US Senate, the Slave-Free Business Certification Act of 2022 [54] would require businesses with an annual revenue greater than USD 500 mio to conduct an annual audit of their supply chain on forced labour and report findings.43

California Transparency in Supply Chains Act. According to this act, companies with a turnover of over USD 100 mio must disclose their efforts to prevent and remedy human trafficking and slavery in their supply chains, and this in five areas: verification, audits, certification, internal accountability and training. See [55].

⁴² This Act introduces the rebuttable presumption that any products or goods produced entirely or in part in the province of Xinjiang are the result of forced labour and thus prohibited. The presumption can be rebutted if the importer can prove that the goods were made without recourse to forced labour. See: [53].

⁴³ In 2010, the State of California was the first American State to adopt a specific regulation on forced labour: the

4 SWITZERLAND'S PRINCIPLE-BASED APPROACH

The Swiss legislator recently adopted rules on sustainability-related disclosures for large companies (Section 4.1.2). Before that, Swiss economic actors, namely the Swiss Financial Market Supervisory Authority (FINMA) and the **Swiss** Infrastructure and Exchange (SIX), had altackled sustainability-related ready disclosures (Section 4.1.1). These obligations are complemented by specific due diligence and reporting obligations for companies active in sensitive industries (Box 2), which might be extended (Section 4.2).

4.1 DISCLOSURE OBLIGATIONS ON"NON-FINANCIAL MATTERS" APPLICABLE TO LARGE FIRMS

In 2021. Switzerland modified the Swiss Code of Obligations (CO)[56] to include new transparency obligations on "non-financial matters" through Art. 964a-cCO.44 The new articles provide for a broad duty of disclosure on sustainability-related matters (Section 4.1.2), in addition to existing sector specific ones (Section 4.1.1). The Ordinance on Climate Reporting implements Art. 964a-c CO (Section 4.1.3) specifically for climate reporting. In particular, it presumes that firms comply with Art. 964a-c CO reporting obligations by the application of the TCFD Recommendations (Box 1). The first sustainability reports by firms based on Art. 964a-c CO are expected

in 2024 and the first reports based on Art. 964*a-c* CO and the Ordinance on Climate in 2025. ⁴⁵ There are open questions concerning especially the non-climate sustainability matters (4.1.4) and the double compliance with EU requirements (4.1.5).

4.1.1 Certain economic actors ahead of Swiss government regulation

Since 2002, listed companies on the SIX are subject to the Directive on Information relating to Corporate Governance [59]. This Directive requires any issuer (including foreign companies) whose equity securities have their primary or main listing on the SIX to disclose information about its Board of Directors and management. The exact information to disclose is described in an Appendix and is subject to the principle of comply or explain. This Directive has been frequently updated. The most recent update entered into force in 2023 and is aligned with the new federal sustainability-related disclosures.

Since 1st July 2017, companies listed on the SIX also have the option (*opt-in*) to prepare a sustainability report in accordance with a recognized international standard. The sustainability report is published within eight months after the closing date of the annual accounts and made available in electronic form on the issuer's website for five years.⁴⁶

Climate will come into force on 1 January 2024, for the first application in the financial year 2024. The first reports under the Ordinance will be published in 2025 with machine-readability in 2026 [58].

⁴⁴ Art. 964*a*-*c* CO entered into force as the indirect counterproposal to the Responsible Business Initiative, a legislative proposal with public referendum which was meant to introduce broad mandatory due diligence for environmental standards and international human rights for companies (*For responsible businesses - protecting human rights and the environment*). The Responsible Business Initiative was rejected at the ballot box in 2020, although it had received 50.7% of popular votes [57].

⁴⁵ Art. 964*a-c* CO entered into force in 2022 and are applicable as of the accounting year 2023. The Ordinance on

⁴⁶ Out of the 48 Swiss firms that *opted-in* and published a 2021 sustainability report, 47 firms reported according to the GRI Standards and 1 firm reported according to the SASB Standard [60].

Since 2022, Swiss banks of supervisory categories 1 and 2⁴⁷ and insurances under FINMA⁴⁸ authority are obliged to disclose climate-related information according to the TCFD Recommendations [61], [62]⁴⁹ which is subject to an ex-post evaluation in 2023 and could lead to adjustments to disclosure practice, in line with national and international developments on climate risk [62]. Thus, systemically important banks and insurances have to report already on climate issues before the updated articles of the CO on specific disclosures concerning the environment and more specifically climate enter into force in 2024.

4.1.2 Art. 964*a-c* CO: sustainable reporting based on comply-or-explain

Art. 964*a-c* CO require large Swiss companies to report on sustainability matters. This regulation is strongly inspired by the EU's NFRD (Section 2.1), and applies to companies of public interest, i.e. listed companies and companies subject to the FINMA supervision [63, Art.2c)] with more than 500 full-time positions and a balance sheet of CHF 20 mio or a sales revenue of CHF 40 mio [Art. 964*a* para. 1 CO].⁵⁰

Sustainability matters include environmental matters, in particular decarbonization, social issues, employee-related issues, respect for human rights and combating corruption. The report must include: (1) a description of the business model; (2) a description of the policies adopted in relation to the sustainability matters, including the due diligence applied; (3) a presentation of the measures

taken to implement these policies and an assessment of the effectiveness of these measures; (4) a description of the main risks related to the sustainable matters and how the firm is dealing with these risks; (5) the main performance indicators for the firm's activities in relation to the sustainability matters. For the distinction in information to report under Art. 964 a-c CO and CSRD respectively, please refer to Appendix 4 [Art. 964b para. 2 CO.].

Art. 964b para. 1 CO introduces the principle of double materiality, meaning that companies must not only report on the risk of the sustainability matters to their activities but also the impact of their own activities on the said matters. It is however unclear whether and how the double materiality principle must be applied to nonclimate-related matters, such as biodiverthis principle since is implemented by the Climate Ordinance which applies to financially material climate reporting only. Even for climate reporting, unclarity remains in the implementation of the double-materiality principle (Section 4.1.3).

Companies must disclose risks arising from their own business operation, and, where "relevant and proportionate, [risks] that arise from its business relationships, products or services." [Art. 964b para. 2 CO.] "Business relationships" is not further defined in the law, nor is further defined what is relevant or proportionate. Therefore, this requirement leaves a large margin of appreciation to firms to determine what

⁴⁷ i.e. internationally active systemically relevant and non-internationally active systemically relevant banks.

⁴⁸ FINMA's role as financial market authority is to supervise banks, insurance companies and intermediaries, financial institutions, collective investment schemes, and their asset managers. The Swiss government has mandated FINMA to execute its market authority, namely via *Ordinances* which contain binding rules for the supervised entities, *Circulars* which interpret *Ordinances*, and *Guidances* which clarify how FINMA exercises its supervision.

⁴⁹ Other Swiss large, listed companies will only have to do so under the Climate Ordinance, which is explained above, from financial year 2024 onwards.

⁵⁰ The question whether the Swiss National Bank (SNB) is subject to Art. 964a ff. CO remains open. According to the authors, the SNB should be considered subject to Art. 964 a-c ff. CO. Indeed, the SNB falls into the scope or Art. 964a para. 1.CO which is effectively applicable to the SNB since the SNB does not provide for any contrary provision (see art. 2 SNB [64]).

information relating to what business relationships should be disclosed.

Companies falling into the scope of Art. 964a CO can - but are not obliged to - report according to an international or European standard. If they do, they must explicitly mention the standard used in the report. Art. 964b para. 3 CO refers to the OECD Guidelines for Multinational Enterprises. According to the Federal Office of Justice (FOJ), the GRI Principles,51 the UN PRI, the ISO 26000 and the SASB Standard can also be used [65 § 5.1.13]. Other regulations, in particular the ESRS or IFRS could also be applied. Whether firms apply a foreign regulation or not, each element listed in Art. 964b para. 2 CO must be disclosed to comply with Art. 964a-c CO.

The comply-or-explain approach currently permits firms to waive their reporting obligation by explaining why they do not comply with it. Indeed, firms may not report on an element required by Art. 964b CO as long as they provide in the sustainability report a "clear and motivated explanation" why they do not. According to the Federal Office of Justice (FOJ), this could be the case e.g. if a company "has a very low or no risk in view of its activities [on sustainability matters]". 52 This approach differs from the updated EU Directive which served as inspiration, i.e. the CSRD or former NFRD (Section 2.1).

The sustainability report is not subject to a third-party audit. The sustainability report is distinct from the financial report and is therefore not subject to the audit required by Art. 727 ff. CO. It herein differs from the CSRD and SEC Proposal. It is nonetheless subject to a specific and separate vote by the general meeting as well as the approval of the board of directors [Art. 964c para. 1 CO.]

Companies can be subject to fines. 53 The failure of an explanation for non-complidisclosure of wrong ance or the information can lead to a fine of 100'000 CHF. However, no sanction is provided for the company itself [66, Art. 325 para 1 a)].54 Indeed, Art. 102 Swiss Criminal Code (SCC), which provides that a punishable act must be attributed to the company when no responsible individual can be identified, is not applicable to acts that are punishable by a fine (so-called "contraventions") [67, p.698].

For example, imagine the already mentioned French coffee producer was a subsidiary of a large Swiss coffee producer with 500 employees, CHF 20 mio sales or CHF 40 mio revenue. The Swiss mother company would fall under Swiss sustainability-related reporting obligations from 2023 onwards, with a report being published in 2024. The report would need to cover topics such as climate and biodiversity, unless the company justifies why it has a very low risk of financial or non-financial impacts in respective sustainabilityrelated matters. This could be the case if the coffee production does not impact or depend on maritime factors. However, since there is no audit requirement and sanctions are hard to apply, a report might be preferrable to explaining the low risk.

⁵¹ GRI is considered a co-creator of the ESRS.

⁵² Translation by the authors. FOJ gives the example of a real estate company without construction activities operating exclusively in Switzerland. See [65 § 5.1.15].

⁵³ Sanctions provided for under financial market law and competition law might also be applied in certain cases.

 $^{^{54}}$ In case of negligence, the fine is limited to CHF 50'000: art. 325 $^{\rm ter}$ para. 2 StGB Swiss Criminal Code.

BOX 1: INTERNATIONAL REFERENCE FRAMEWORKS AND STANDARDS

TCFD Recommendations⁵⁵ aim to provide a foundation for climate-related financial disclosures focused on climate-related risk and opportunities. Eleven recommendations are grouped around four thematic areas: governance, strategy, risk management, metrics and targets. They are not considered an official standard and do not provide specific metrics to disclose. They rather set a global industry "best-practice" tool available to any company, in the aim to mainstream and harmonise climate disclosures and inspire state regulation. It mainly adopts a financial-materiality approach which has nonetheless evolved over time [27].

OECD Guidelines for Multinational Enterprises are non-binding principles for responsible business conduct for multinational enterprises. They cover key areas of business responsibility, including human rights, environment, bribery, consumer interests and disclosures and aim to harmonise multinationals' activities with public policies and boost the contribution of multinational enterprises to sustainable development [69]. The 2023 updated version includes recommendations (1) for enterprises to align with internationally agreed goals on climate change and biodiversity, (2) on how enterprises are expected to conduct due diligence and (3) updated recommendations on disclosure of responsible business conduct.⁵⁶

The Global Reporting Initiative (GRI) standards are sector-overarching sustainability reporting standards that aim to inform all stakeholders and address a range of ESG topics that are deemed to be the most relevant to the organisation. They are divided into three main categories: universal standards, sectoral standards and topic-specific standards and apply to companies depending on their industry and impact.

The SASB Standards are industry-based standards that aim to help companies identify, measure, and manage the subset of ESG topics that most directly impact long-term enterprise value creation. It is based on single materiality. In 2022, the SASB Standards' ownership transitioned to the International Sustainability Standards Board (ISSB) of the IFRS Foundation [71].

IFRS Sustainability Disclosure Standards are international standards for sustainability reports being developed by the ISSB, supported by the US and the Swiss governments among others, and provide clarity on reporting requirements, similar to the ESRS under CSRD in the EU. Based on the SASB Standards and incorporating TCFD Recommendations, they intend to provide interoperability of sustainability-related disclosures and to ensure consistency with national reporting requirements. In March 2022 the ISSB published Exposure Draft IFRS S1 (General Requirements for Disclosure of Sustainability-related Financial Information) and Exposure Draft IFRS S2 (Climate-related Disclosures). The former refers to sustainability-related financial information, whereas the latter targets climate-related risks and opportunities, in particular. Thus, the standards require only such information which has an impact on the company's

⁵⁵ In its 2021 version, the TCFD Guidance to Implementing TCFD Recommendations [68], considers Scope 1 and 2 metrics as de facto material. Scope 3 is subject to a case-by-case materiality assessment [19], p. 47.

⁵⁶ The 2023 version of the OECD Guidelines is available at: [70].

monetary value (financial materiality). The final version was published in June 2023 [72], and will apply to annual reports from 2024 onwards.⁵⁷

4.1.3 Ordinance on Climate recommending a framework for disclosures

The Ordinance on Climate Reporting [74] implements the CO reporting requirements relating to *climate* matters. In Art. 964a-c CO, there is no express delegation to the Federal Council, which means that it (1) can only implement the articles' provisions through a so-called implementing ordinance⁵⁸ and (2) cannot supplement or replace what Art. 964a-c CO provide. For this reason, the Ordinance only clarifies for Swiss companies that fall under Art. 964ac CO how they can comply with their obligations on climate reporting, namely by following the TCFD Recommendations in their 2017 version and related Appendix 1 in its 2021 version ("static reference")⁵⁹, as opposed to making the TCFD explicitly binding. However, the TCFD Recommendations adopt an approach mainly based on financial materiality, contrary to the general double materiality requirement in Art. 964b para. 1 CO (Section 4.1.2), meaning that companies disclose the climate risks and opportunities for their activities and not necessarily their activities' impacts on climate when relying on the TCFD framework. This implies that Scope 1 and 2 emissions must be disclosed in any case and that disclosure of Scope 3 emissions are subject to a materiality assessment⁶⁰ although they make up the largest part of firms' total direct and indirect emissions today and therefore represent relevant information.⁶¹ 62

The report on climate-related matters must be published in a machine-readable format (XBRL) in addition to a written format [74, Art. 4 para 2 ("Climate Ordinance")]. The implementation of this requirement might be particularly burdensome, in view of the widespread reliance on Microsoft Excel and firms' presumably limited resources and IT skills (Section 2.1.1).

4.1.4 Non-climate-related sustainability reporting: absence of a framework

So far, the Swiss government has not issued any ordinance to clarify the double-materiality obligations for non-climate related matters. As previously mentioned, however, firms can, but are not obliged to, use national, European or international

⁵⁷ During the first year of application, a company may use the transition relief which permits the disclosure of its climate-related risks and opportunities only (IFRS S2), i.e. not all sustainability-related risks and opportunities [73].

⁵⁸ The Ordinance on Climate Reporting is based on art. 182 para. 2 of the Federal Constitution [75].

⁵⁹ A "static reference" means that reference is made to a specific version and date of the regulation. See [19, p.49 and references].

⁶⁰ Scope 3 emissions must be disclosed only where they represent a "significant part" of the company's overall GHG emissions. The TCFD Annex 1 refers to the 40 % threshold of the SBTi Criteria and Recommendations. See [68, p.21 and note 33].

⁶¹ See for example [76]. It identifies Scope 1, 2 and 3 emissions for each CDP high-impact sector (as defined by the CDP Activity Classification System) based on a literature review of frameworks and resources relevant to the examined sectors and a questionnaire submitted to respondents active in each examined sector. It highlights that across all the examined sectors, Scope 3 emissions account on average for 75 % of total Scope 1+2+3 emissions.

⁶² The quality of the reporting on emissions might improve with the Climate and Innovation Act [77], passed on June 18, 2023, according to which all firms must reduce their emissions – at least Scope 1 and Scope 2 emissions – to net zero by 2050 the latest (art. 5 para. 1). To that end, firms and branches can issue roadmaps and the Confederation must support them by providing standards and professional advises before 2029 (art. 5 para. 2 et 3).

regulation to report on these sustainability matters, as long as they comply with the Swiss requirements.

Yet, efforts are underway. Some Swiss companies, namely SwissRe, Nestlé and UBS, are members of the Swiss Task Force on Nature-related Financial Disclosure (TNFD) Consultation Group,63 whose final recommendations will be published in September 2023 [79]. The Swiss government is advocating for the TNFD as basis for future ISSB disclosure standards with regard to biodiversity. Since the launch of the TNFD, Switzerland has supported it and sits on its Stewardship Council along with Australia, France, the Netherlands and the United Kingdom [80]. The Swiss Secretariat for Economic Affairs (SECO) has also developed a freely accessible tool together with MAVA foundation and the Natural Capital Finance Alliance, to foster clarity on nature-related impacts and dependencies across sectors: ENCORE [81].

For example, the French coffee producer's mother company, a large Swiss coffee producer with 500 employees, CHF 20 mio sales or CHF 40 mio revenue would have to follow the TCFD Recommendations for the climate aspects of the above-described sustainability-related report. While in 2024, the company could report according to a standard or guideline of choice, from 2025, the reporting requirement counts as fulfilled when complying with the TCFD recommendations. The company would hence focus on disclosing climate-related governance, strategy, risk management, metrics, and targets, and publish the report in human and machine-readable format, ultimately. In theory, Art. 964 a-c CO requires the company to report on risks and impacts

4.1.5 European disclosure requirements and implications for Swiss actors

Swiss companies falling into foreign corporate sustainability reporting obligations might be obliged to report several times according to different requirements. The risk of double reporting obligation is particularly important in the case of the European framework in view of the close connections between Swiss companies and the EU market. Swiss companies falling into CSRD's scope of application (Section 2.1) might be conflicted in facing a double reporting obligation, and even more so from financial year 2028, i.e. when CSRD will apply to non-EU entities.

Exemption under EU law. Under the CSRD, non-EU companies might be exempted from preparing a report, if the standards they use to comply with their domestic reporting obligation are considered as "equivalent" [20, Art. 40a para 2]. In view of their major differences, Art. 964a ff CO are not likely to be considered as "equivalent" to CSRD and ESRS by the EU, and Swiss firms might therefore not be exempted under EU law [83, Art.40a para 2].

Exemption under Swiss law. A similar exemption when standards are considered

of climate, biodiversity and other sustainability topics, similar to the EU (Section 2.1). However, in practice, even for climate, where the Ordinance clarifies the requirements, how a company should report on Scope 3 emissions, thus the far-reaching impact of supply chains beyond core business decisions, remains unspecified. The same counts for biodiversity reporting so far – clarification is lacking.

⁶³ The Task Force for Nature-Related Financial Disclosures' (TNFD) recommendations are the TCFD equivalent for biodiversity. The publication of the final version and the integration into regulation is outstanding [78].

⁶⁴ Indeed, the EU is Switzerland's largest trading partner in terms of exports and imports. See [82].

⁶⁵ According to the CSRD, non-European companies are established outside the EU and meet the following criteria: (1) turnover (at group level) of at least EUR 150 mio in the European area for each of the last two consecutive financial years; (2) subsidiary within the EU or branch office with a turnover in the EU of EUR 40 mio or more [20], Art. 40bis.

"equivalent" is provided [Art. 964a para. 2 no. 2 CO]. The question whether EU requirements would be considered as "equivalent", even if they are more ambitious, remains open.

Swiss companies may voluntarily go beyond the Swiss requirements and comply with more stringent EU or international standards and thus avoid risks of double reporting [19, p.49 and references]. In any case, in 2029, Swiss entities falling into the scope of the CSRD will be required to disclose according to these more thorough requirements, unless the Swiss regulation is amended so it can be considered "equivalent" by the EU.

While few Swiss SMEs should be directly subject to the CSRD, they will be nonetheless indirectly impacted [83, p.19]. As subcontractors of European companies subject to the CSRD - and thus obliged to disclose information on their entire supply chain - they will be contractually asked for this information. They might be incentivized to comply with the EU standards as far as possible, even if they are not obliged to by regulators [84]. This could lead to difficulties for Swiss SMEs, which rarely have the necessary financial means, human resources and expertise. Swiss SMEs which cannot keep up with European SMEs on the sustainability-related of provision

information, risk to become less attractive as supply chain partners for large corporations.

For example, imagine the above-mentioned French coffee producer has more than EUR 40 mio turnover, or is a subsidiary of a large Swiss coffee producer with a total turnover above EUR 150 mio in the European Union. In this case, The Swiss mother company would be required to report on sustainability issues, according to CSRD from financial year 2028 onwards (Figure 2 & 3), or the French subsidiary fulfils the reporting obligations. However, even a small Swiss packaging company might be better off following CSRD, although not obliged too. As soon as the large Swiss coffee producer realises that the CSRD reporting covers information along the supply chain, the company might choose a partner with sustainable prodsuch as biodegradable plastic alternatives, or at least a firm which has already improved awareness and data collection on climate and environmental matters. In this regard, small corporations in Switzerland risk being left behind, in competition with advanced European partners which the large coffee producer might favour as like-minded supply chain partners.

Art. 964*a-c* and Climate Ordinance Public interest company with AND Balance sheet of CHF 20 mio OR **CSDDD CSRD** d and in the EU Comr Proposal version) 500+ employees AND turnover higher Swiss Turnover higher than EUR 150 mio for firms AND 50+ employees AND turnover higher Subsidiary in the EU with a turnover higher than EUR 40 mio than EUR 40 mio **AND** 50% of this turnover is generated in <u>sensitive</u> EU Switzerland

Figure 3: Conditions for a Swiss firm to fall under Swiss and European regulations

Source: Authors.

4.2 DISCLOSURE RESULTING FROM DUE DILIGENCE OBLIGATIONS FOR SPECIFIC COMPANIES

The transparency around sustainability required for firms is complemented by specific due diligence and reporting obligations through Art. 964*j-l* CO⁶⁶ (Figure 4; Box 2). Despite multiple initiatives, Swiss regulation does not provide for general due diligence obligations and related disclosure obligations yet. Some market actors are leading the way (4.2.1).

They came into force on January 1, 2022 and are applicable as of the accounting year 2023.

 $^{^{66}}$ Art. 964j-l CO were adopted in the context of the indirect counter-proposal to the Responsible Business Initiative.

BOX 2: A FIRST STEP TOWARDS DUE DILIGENCE THROUGH THE MINING INDUSTRY

Art. 964*j*-/CO provide due diligence and reporting obligations in relation to minerals and metals from conflict-affected areas and child labour obligations⁶⁷ The Federal Council has specified the content of these obligations in the Ordinance on Due Diligence and Transparency in relation to Minerals and Metals from Conflict-Affected Areas and Child Labour (DDTrO) [87].^{68,69}

The application of these obligations depends on the fulfilment of two cumulative conditions.

First, these obligations apply to companies whose head office, central administration or principal place of business is in Switzerland. Secondly, they apply to companies that market certain minerals or metals from conflict-zones areas or offer products or services suspected that have been made using child labour. The minerals and metals concerned [89, Annex 1] as well as the definition of conflict-affected areas are based on the European Conflict Minerals Regulation.

Due diligence obligations consist of three main duties and must be published in form of an annual report: (1) the implementation of a management system, including the definition of the supply chain policy and a system enabling to trace the supply chain; (2) the identification of the risks of harmful impacts in the supply chain and the development of a risk management plan; (3) in relation to the minerals or metals from conflict-zones only, the audit of their due diligence obligations by an independent specialist. Companies that are subject to the obligation of sustainability reporting can report on these due diligence obligations in the same report. Analogous to the report on sustainability - so called "non-financial matters" [Art. 964a-c CO], companies that intentionally disclose wrongful pieces of information in the report on due diligence might face a fine of up to 100'000 CHF [66, Art.325 para 1a)]. (Section 4.1.2). This annual audit is led by an approved auditing firm, which must provide negative assurance.

DDTrO provides for exemptions to the due diligence and reporting obligations. With regard to minerals and metals, the duty of due diligence and the obligation to report are waived for companies whose volume of imports and processing for these goods does not exceed the thresholds set out in Appendix 1 [Art.3 and 4]. With regard to child labour, companies are exempt if, based on a verification, they establish that there is no reasonable grounds to suspect child labour [Art.5]. The exempted companies must nonetheless document these findings

⁶⁷ Based on the European Conflict Minerals Regulation Regulation (EU) 2017/821 [85], and the Dutch Child Labour Due Diligence Act [86].

⁶⁸ DDTrO entered into force on 1 January 2022.

⁶⁹ In the US, a partially similar obligation is provided by Section 1502 of the Dodd Frank Act implemented by the SEC Disclosure Rule on Conflict Minerals. Adopted in 2010, Section 1502 of U.S. Dodd Frank Act requires the SEC to issue rules requiring certain companies to disclose whether they use "conflict minerals" (tin, tungsten, tantalum and gold) [88]. SEC Disclosure Rule on Conflict Minerals therefore requires listed companies for which conflict minerals are « necessary to the functionality or production » to conduct a « country of origin » inquiry to determine whether any of its minerals originated in the covered countries.

⁷⁰ Contrary to the European Conflict Minerals Regulation, importing companies based abroad are excluded from the scope of Art. 964j-I CO. Art. 964j para. 1 CO.

⁷¹ In case of negligence, the fine is limited to CHF 50'000; art. 325ter para. 2 SCC.

⁷² It only verifies the adequacy of the measures taken by the company to comply with its duties of diligence and checks whether there are any facts to suggest that the company has not complied with its duties of diligence set in Art. 964k CO. The report is not subject to verification. No such verification is required in the case of child labour [87, Art.16]& [90] p. 43.

[Art.5 para.2 and Art. 3 para.2]. SMEs,⁷³ companies complying with internationally recognized substituting regulation,⁷⁴ or those with a low risk of child labour⁷⁵ are exempt from carrying out this verification, and therefore exempt from the due diligence and reporting requirements [Art. 6 and 7].

4.2.1 Future developments of due diligence and reporting obligations

Despite multiple initiatives, Swiss regulation does not provide for general due diligence obligations and related disclosure obligations yet, but only for companies in the mineral industry (Box 2). These were aspired by the aforementioned popular Responsible Business Initiative, which was rejected in 2020. The debate on the introduction of a due diligence obligation for corporate actors is nonetheless ongoing amongst financial market actors. For example, on March 23, 2023, 21 Swiss and international institutional investors representing CHF 459 bn assets under management (AuM) sent a letter to the FC, requesting stricter due diligence rules for the environment and human rights more broadly [91].

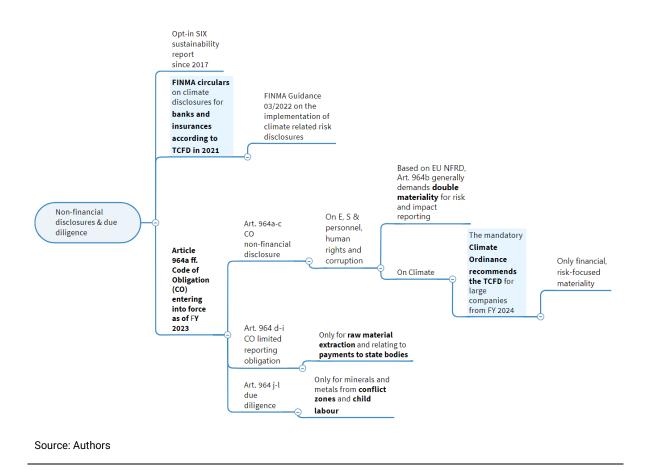
Foreign developments on due diligence will nonetheless impact Switzerland. In particular, the proposed CSDDD will, if adopted, have a direct impact on Swiss companies operating within the EU (provided they meet the relevant criteria) and have an indirect impact on subsidiaries and supply chains (Section 2.3). Companies subject to its scope will be required to identify, prevent, mitigate, remediate, and report on the negative impacts of their activities on human rights and the environment. The Boards of Directors will also be required to put in place processes to ensure that this duty of care is fulfilled, to monitor its effectiveness and to integrate it into the strategy [83, p.8].

⁷³ SMEs are companies which, for two consecutive financial years, together with one or more Swiss or foreign companies under their control, do not achieve two of the following values: a balance sheet total of CHF 20 mio, sales of CHF 40 mio and a workforce of 250 full-time employees [Art. 6 para. 2].

⁷⁴ Such regulations are the European Conflict Minerals Regulation and the OECD Conflict Minerals Guidance. Such exempted companies must however prepare a report which explicitly states the name of the international regulation it is based on [DDTrO, Annex 2]

⁷⁵ Low-risk companies are companies operating in countries whose due diligence response is rated as "basic" by UNICEF Children's Rights in the Workplace Index and (1) purchases or manufactures products in accordance with the indication of origin or (2) primarily procures or provides services [Art. 7 para. 2 DDTr0].

Figure 4: Sustainability disclosure and due diligence in Switzerland



5 RECOMMENDATIONS FOR SWISS CORPORATE DISCLOSURES

compared to the developments in the EU and the US, there is room for enhancing the effectiveness of the Swiss framework on corporate information around sustainability (Table 3). This concerns in particular the effectiveness of the general corporate disclosure framework around sustainability (Section 5.1), the comparability and materiality of sustainability-related information, especially on climate-related matters (Section 5.2), the acknowledgment of

international regulations and their impact on Swiss firms (Section 5.3), the evolution of sustainable reporting towards double materiality (Section 5.4), as well as the extension of reporting obligations to SMEs while providing specific assistance to SMEs (Section 5.5). In a forthcoming analysis, we will complement the recommendations and approaches proposed below with the position of leading industry and governmental actors.

Table 3: Exemplary and comparative elements of corporate disclosure requirements in the EU, the US and Switzerland

	European Union	United States	Switze	rland
	CSRD and ESRS	SEC Proposal on Climate Disclosure	Art. 964 <i>a</i> ff. CO	Climate Ordinance
Status	Implemented	In progress	Implemented	Implemented
Concept of materiality	Double materiality	Single materiality	Double materiality	Financial materiality
Audit	✓	Only for certain cli- mate metrics	-	-
Sanctions	Defined by Member States	-	-	Up to CHF 100'000
Assistance to SMEs	✓	✓	-	-
Recognition of foreign reports	√ if "equivalent"	through substituted compliance	Swiss report to draft if Swiss requirements are met	-
Disclosure format	XHTML and XBRL tagging	iXBRL	XHTML and XBRL	XHTML and XBRL
Specific non-climate-related information framework	✓	-	*	-

Note: XHTML is human-readable and XBRL machine-readable. Source: Authors.

5.1 ENHANCING THE FRAMEWORK FOR EFFECTIVENESS OF SUSTAINABILITY-RELATED DISCLOSURES

Introducing mandatory auditing of sustainability reports. The EU and the US are proposing or implementing mandatory audits of sustainable reporting. The EU aims to ultimately provide the same level of audit for sustainable reporting and financial reporting (Section 2.1). The US and the Securities and Exchange Commission (SEC) propose to include certain climate-reinformation into the financial statements (Section 3.2). In contrast, the Swiss regulation currently treats sustainability-related information strictly separate from financial information and consequently excludes it from the third-party audit required for financial reports (Section 4.1.2). Yet, the lack of mandatory audit creates a risk of greenwashing and does not guarantee that the information disclosed is material and comparable across firms. Audit of sustainability reports can be introduced separately or by integrating the sustainability report into the financial report. In the authors' opinion, the second option is the most coherent and will prevail in the long term, as the convergence between sustainability-related information and financial risks keeps increasing.76

Abrogating the comply-or-explain mechanism and introduce binding disclosure obligations under Art. 964aff CO. With the adoption of the Corporate Sustainability Reporting Directive ou CSRD, the EU abolished the concept of comply-or-explain (Section 2.1). The SEC Proposal on Climate-Related Disclosures does not provide for this concept either (Section 3.2). In

Switzerland, the comply-or-explain approach currently allows firms to waive their reporting obligation by explaining why they do not comply with it (Section 4.1.2). Although posing an additional burden, the availability and credibility of such information is crucial. The effectiveness of the comply-or-explain mechanism is measured by the quality of the explanations: they are intended to act as a communication method between the company and the investors to make sure that investors have the necessary information to make their decisions [92, p.29 and references]. However, the mere requirement of a "clear and motivated explanation" (Section 4.1.2) is not sufficient to guarantee the given information's effectiveness. Finally, the complyor-explain mechanism is no longer compatible with EU and the SEC Proposal on Climate-Related Disclosures.

Enhancing the dissuasive character of penalties for violation of disclosure obligations.⁷⁷ The EU requires its Member States to provide for "effective, proportionate and dissuasive sanctions" for non-compliance with reporting obligations under the CSRD and the European Sustainability Reporting Standards (ESRS) (Section 2.1) [22, art.51]. In its Proposal on Climate-Related Disclosures, the SEC did not propose penalties for non-compliance (Section 3.2). In Switzerland, as of today, only companies that do not provide for a clear and motivated explanation of why they do not apply a required concept or that disclose wrongful pieces of information in the report face (limited) sanctions (Section 4.1.2). In the authors' opinion, the threat of this limited sanction is not sufficient to dissuade certain large firms from paying a fine rather than disclosing information that could affect the share price or the firm's reputation. In that regard,

⁷⁶ This suggestion is in particular addressed by Darbellay/Cuevas (2023) [19], passim, who propose the integration of sustainability-related information in the annual audited reports of companies at least when it has a financial impact on the company and environment or society. In particular, according to these authors, GHG

emissions of Scope 1, 2 and 3 should be included in the annual reports (Ibid, p. 53).

⁷⁷ Sanctions provided for under financial market law and competition law might also be applied in certain cases.

the introduction of fines based on a company's earning power would act as a greater deterrent.

5.2 ENHANCING THE COMPARABIL-ITY OF NON-CLIMATE-RELATED MATTERS

Providing clarity on disclosure frameworks specific to non-climate matters. In the EU, the CSRD and ESRS provide for a comprehensive and detailed sustainability reporting framework, not solely relating to climate, but also to other ESG matters (Section 2.1). In the US, the SEC initiatives solely relate to the enhancement of climate-redisclosures (Section 3.1). Switzerland, Art. 964a ff. CO provides for stringent requirements on climate and nonclimate-related disclosure (Section 4.1). However, these requirements are currently only implemented by the Climate Ordinance which refers to the 2017 TCFD Recommendations and its 2021 Appendix for complying with climate matters (Section 4.1.3). The extent to which information relating to a firm's value chain must be disclosed is also unclear (Section 4.1.2) and might contribute to a lack of material data disclosed. For the other sustainability-related topics, companies are free to implement their reporting obligations according to Art. 964a ff. CO as they see fit: they can, but do not have to, use other foreign standards. Therefore, the non-climate related information to disclose and how to disclose is not uniform and impedes the comparability of the information. In the

78 In the same way as for the Ordinance on Climate Reporting, the Federal Council could adopt an implementing ordinance on the basis of Art. 182 para. 2 of the Federal Constitution, thereby avoiding the lengthy and complex Swiss legislative process.

authors' opinion, the consistency and comparability of non-climate information provided to financial market participants should be improved by the recommendabinding implementation standards designed for the reporting of each non-climate sustainable matter whose disclosure is required by Art. 964a ff. CO. For example, an Ordinance on Biodiversity Reporting⁷⁸ could recommend the Task Force on Nature-related Financial Disclosures (TNFD) after publication in September 2023, and clear reporting templates, such as in form of the ESRS or the International Sustainability Standards Board (ISSB/IFRS) standards, would facilitate compliance.

5.3 ACKNOWLEDGING INTERNA-TIONAL REGULATIONS AND THEIR IMPACT ON SWISS FIRMS

Acknowledging the impact of foreign regulatory developments, in particular in the EU. Because of the interconnection between Swiss and foreign markets - the European market in particular, it is very likely that many large Swiss companies with economic activities abroad will fall into the scope of different corporate sustainability reporting frameworks (Section 4.1.5).⁷⁹ Depending on the number of firms that will have to comply with or indirectly apply the CSRD, the emergence of two significantly different frameworks should be avoided. In view of the consequences of the European framework on Switzerland, substituted compliance80 or equivalency81

⁷⁹ In particular, because of the extra-territorial application of the EU regulations (the CSRD and, if adopted, the CSDDD Proposal) and in view of the interconnection between the Swiss and the EU market, the EU framework on corporate disclosure already has and will continue to have a significant impact on Swiss firms.

⁸⁰ According to the substituted compliance principle, the reporting obligation under Swiss law would be deemed to be fulfilled if the reporting is carried out in accordance with EU law. Because the substituted compliance principle does not require equivalence between Swiss reporting and the EU's reporting requirements, differences between these two jurisdictions' legal cultures can be taken into account (See [93], passism).

⁸¹ According to the principle of equivalency, Swiss firms could be exempted to report under EU law on the grounds that they report according to standards considered as

with the European regulation should be considered. In the authors' opinion, substituted compliance should be preferred to take into account Swiss specificities. When regulating sustainability-related disclosures, the regulator should first consider the impact of other international regulations on Swiss firms and achieve substituted compliance where possible to reduce reporting burdens on firms.⁸²

5.4 Considering the evolution of sustainable reporting towards double materiality

Implementing the principle of double materiality of sustainability reporting. The EU adopts the double materiality approach by requiring in the CSRD and ESRS that companies disclose about direct and indirect sustainability risks to their activities as well as companies' activities' impact on environment and society at large (Section 2.1). By contrast, the US is a proponent of single materiality (Section 3.1). Reflecting profound market exposure to Europe in particular (Section 5.3), in Switzerland, the principle of double materiality is provided in Art. 964b para. 1 CO (Section 4.1.2). According to the Ordinance on Climate, the reporting obligations of Art. 964a ff CO are however presumed to be met if the company reports according to the TCFD Recommendations which adopt a financial materiality approach (Section 4.1.3; Box 1).

"equivalent" to the EU's ones. This demanding principle leaves very little room for taking into account the particular characteristics of the Swiss legal tradition and the preferences of the industry. However, it would urge Switzerland to adopt a thorough and comprehensive framework, which is more likely to make Switzerland a leading financial center for sustainable finance and to achieve its environmental objectives. Indeed, most of the previously developed recommendations are already provided in the EU framework. The CSRD and ESRS provide for binding obligations and the mandatory audit of sustainability reports. It ensures the reporting of comparable, standardised and consistent information beyond climate-matters. The EU regulations appear more ambitious than the Swiss framework regarding the availability of necessary corporate sustainability-related information for financial market participants, and have a more promising front-runner character concerning the For example, consider the French coffee producer, through which the Swiss mother company is exposed to the European market. According to EU and Swiss law, the firm's impact on the environment and society is very important information to assess and evaluate the risks posed by its activities, since financial and impact materiality are not mutually exclusive [19, p.48]. For example, climate change might increasingly lead to a change in rain patterns impacting the yield and quality of the coffee beans, hence ultimately impacting revenues. The Swiss mother company is exposed to the EU market regulation through the French subsidiary, which needs to thoroughly report on impact materiality. Thus, the mother company could gather data and report at least according to the same minimum criteria on risks and impacts.

In the authors' opinion, while the disclosure of firms' impact on climate is particularly important and urgent in view of Switzerland's engagements, double materiality should apply to all sustainability reporting, as explicitly defined in Art. 964 a-c ff., to provide for the most relevant and comparable information. However, as Swiss law stands, double materiality is not coherently implemented for climate-related matters. Currently, there is an inconsistency between the general requirement for double materiality in the CO, in contrast to the clarifying Climate Ordinance recommending the TCFD, which is focusing on climate risk and opportunity disclosures rather than

Swiss mission to become a sustainable finance leader. However, the EU framework is the result of a consensus between 27 Member States in which Switzerland did not take part and therefore it does not consider Swiss industry's specificities.

⁸² Since Art. 964 CO reports and the Climate Ordinance, just as the respective EU CSRD, require reporting according to a XHTML and XBRL format from 2024 and 2025 respectively (with one year delay after entrance into force), Swiss companies can already get familiar with the ESRS XBRL taxonomy (Sections 2.2 and 4.1.2).

holistic impact.⁸³ In the absence of a comprehensive and detailed non-climate reporting framework, whether and how the principle of double materiality should be implemented for **non-climate matters** remains unclear. In that regard, the TNFD recommendations provide guidance on the direction of future reporting for biodiversity matters and their development should be closely observed.

5.5 EXTENDING THE SCOPE OF RE-PORTING TO **SME**S WHILE PROVIDING SUPPORT

Extending the scope of the corporate reporting obligations around sustainability to publicly listed SMEs, with simplified requirements. In the EU, the CSRD and ESRS will apply from 2026 to listed SMEs (with a two-year transition period; Section 2.1). In the US, the Proposal on Climate-Related Disclosures, if adopted, would apply to any SEC registrant (Section 3.1). In Switzerland, Art. 964a ff. CO only apply to publicly important and large firms, thus excluding SMEs from their scope of application (Section 4.1.2).

Considering disclosure rules or guidelines for non-listed SMEs. SMEs represent more than 99 % of Switzerland's companies [94]. A very large part of the Swiss economy is so far not obliged to report, thus risking becoming less competitive as supply chain partners and undermining the completeness of the information in the hands of financial market participants. In comparison, the CSRD mandates the European Commission to prepare a report by 30 April 2029, stating the number of SMEs voluntarily applying the CSRD. It will also define whether and how the scope of application

of the CSRD should be further extended to non-listed SMEs and third-country firms operating directly in the EU without a subsidiary or a branch in the EU (Section 2.2). In the authors' opinion, the Swiss regulator should therefore progressively extend the scope of application of Art. 964a ff. CO to SMEs while assessing the impact of such an extension on SMEs to provide them with adequate assistance. By excluding SMEs from the scope of the sustainability-related disclosures obligation, the Swiss regulator pursued the objective to prevent companies from being subject to administrative and financial constraints. In practice, through contractual tools, SMEs are nonetheless subject to sustainability-related disclosure requirements and Swiss SMEs have a competitive disadvantage as supply chain partners in comparison with EU SMEs, which are more advanced in gathering and providing sustainability data for disclosure purposes. In this case, pecifically regulating SMEs would permit to draft SME-designed rules that take into account their specificities and the difficulties they are confronted with. A first step could be to introduce an optional legal framework. In May 2023, B-Lab Switzerland84 proposed the creation of a new category of sustainable enterprises in Swiss law. These "sustainable enterprises" would, among others, have to publish sustainability-related information publicly and annually on the basis of specific standards that shall be established as part of the ESRS and other Swiss and international standards [95].

Providing specific assistance to SMEs. In view of especially European developments on corporate sustainability-related disclosure all along a firm's supply chain, SMEs are essential. SMEs face and will continue

⁸³ However, the Ordinance is drafted in a way which might allow updates in order to reflect market advancements, for example as soon as better ways to measure Scope 3 emissions or biodiversity are available, they should serve as reference, going beyond the 2017 TCFD version.

⁸⁴ B-Lab Switzerland is the Swiss branch of a global non-profit which promotes business as a force for good.

facing difficulties in collecting, processing and disclosing the necessary data. Indeed, as subcontractors of large firms subject to Art. 964a ff. CO. the CSRD or other national framework on corporate sustainability reporting, SMEs will be contractually required to disclose the data their client firms need to comply with their reporting obligations. This implies in particular appropriate IT processes, qualified employees and increased administrative costs. While the EU encourages its Members States to assess the impact of reporting obligations on and to consider introducing SMEs measures to support them and avoid unnecessary administrative burden [20, Preamble §22], the Swiss regulator does not (yet) seem to plan concrete assistance to SMEs. In the authors' opinion, the implementation of such assistance should be considered along with assessing whether and how reporting obligations should be extended to SMEs in a simplified manner. This assistance could be materialised through financial assistance and IT support, for example by developing an openaccess tool which analyses sustainability-related data and draft reports according to international standards and Swiss requirements.

6 OUTLOOK

Sustainable finance regulation can help catalyse financial flows towards sustainability, thanks to increased transparency and trust building. This analysis provided an overview on sustainable finance regulation with a focus on implications for corporate actors. Large Swiss corporations will fall under the EU's CSRD and the related reporting standard ESRS from financial year 2028 onwards, requiring sustainability data beyond climate. Even small firms might risk competitive disadvantages or might struggle providing sustainability data as part of supply chains. Further European regulation on due diligence is upcoming and will thus increase the sustainability-related data to report. In the US, specific disclosure requirements on climate matters are in the making, but it remains to be seen whether the ambitious Proposal for Enhanced Disclosures comes into force in light of the current backlash against ESG. In Switzerland, Article 964a ff. of the Code of Obligations requires reporting on environmental risks to business and the impact of economic activities on environment and society. However, clarification on climate reporting via the Climate Ordinance leaves a lot of flexibility by referring to the internationally used TCFD. A clear framework for implementation of these requirements could improve compliance.

Although due diligence regulations are intrinsically linked to disclosure regulations for large corporations, this analysis covered such only to the extent to which it is already in place or in development and directly related to disclosure regulations. A parallel research project focuses on due diligence from a corporate law angle.

A subsequent analysis of the E4S Series on Sustainable Finance Regulation further discusses the Swiss and foreign developments for financial market participants and provides guidance to the Swiss regulators from a comparative perspective [17]. It will target the following regulatory aspects:

- Disclosure requirements for financial firms and products, in particular industry associations' disclosure guidelines, self-regulations and recommendations;
- Classification of financial products based on their sustainability characteristics, through the Federal Council's recent definition of sustainable products and services and green-bond issuance; and
- Requirements of financial products and services' matching with client preferences, namely through the Swiss Financial Services Act and self-regulation.

7 APPENDICES

APPENDIX 1: THE EU TAXONOMY - DEFINING ENVIRONMENTALLY SUSTAINABLE ECONOMIC ACTIVITIES

The design of a taxonomy depends on how sustainability is defined: the EU considered it essential to build on a common understanding of what constitutes an environmentally sustainable activity within the European market [96]. Therefore, it adopted the Taxonomy Regulation (TR) in 2020, which applies from the beginning of 2023.

In the EU, an environmentally sustainable activity must contribute to the achievement of one environmental objective, not cause any harm, adhere to minimum standards and follow technical criteria. These environmental objectives include climate change mitigation and adaptation. water and marine resources, circular economy, pollution prevention and control, and biodiversity and ecosystems [97, art. 3a) and 9ff.]. In addition, a sustainable economic activity shall not cause significant harm to one or more of these objectives (Do Not Significant Harm Principle or DNSH) [art.3 b) and 17.]. It must be carried out in compliance with the minimum guarantees in terms of labour standards and human rights [art.3c) and 18], and comply with the Technical Screening Criteria (TSC) established by the European Commission [art.3d] [98]. The TSC set the scientificbased conditions under which an economic activity qualifies as one of the environmental objectives (in particular maximum emission thresholds). Since January 2022, only two out of the six environmental objectives (i.e. climate change mitigation and climate change adaptation) are defined through specific TSC [98].85

Despite its international recognition, the TR is subject to critics for its definition of sustainable activities. By October 2022, the TR

serves as a benchmark for 23 other taxonomies, which indicates its appropriateness and relevance [101, p.18ff.]. However, it has been criticised for including natural gas and atomic energy in its definition of sustainable activities due to political reasons [102], while leaving out other non-green activities. Colour gradients for unsustainable activities and those which are improving, are under consideration for answering this issue [103, pp.7f.].

have been finally adopted in form of delegated acts on 27 June 2023 [99], and are based on the final report by the Platform on Sustainable Finance (PSF) from 2022[100].

⁸⁵ Although the remaining TSC were planned for January 2023, the final TSC for the non-climate-related objectives (water and marine resources, circular economy, pollution prevention and control, and biodiversity and ecosystems)

APPENDIX 2: SCOPE OF A FIRM'S OBLIGATION OF DUE DILIGENCE UNDER THE COMMISSION'S PROPOSAL, THE COUNCIL'S GENERAL APPROACH AND THE EUROPEAN PARLIAMENT'S POSITION (EXCLUDING COMPANIES PROVIDING FINANCIAL SERVICES)

	Commission's Proposal	Council's General Approach	Parliament's Position
Business relationships	Established business relationships (art. 3(f) CSDDD Proposal): direct and indirect business relationships which are or are expected to be lasting, in view of their intensity or duration, and which do not represent a negligible or merely ancillary part of the value chain	Business partners (art. 3 (e) and Council's General Approach, §17): companies which have a commercial agreement with or perform business operations for the covered entities	Business relationships (amendment 113): direct or indirect relationship of the company in their value chain with whom the company has a commercial agreement or to whom it provides financial services and that performs activities related to the products or services of the company
Covered entities	Value chain (art. 3(g) CSDDD Proposal): activities related to the production of goods or the provision of services by a company, including the development of the product or the service and the use and disposal of the product as well as the related activities of upstream and downstream established business relationships of the company.	Chain of activities (Council General Approach, §18): activities of a company's upstream and downstream business partners, where the downstream business partners carry out those activities for the company or on behalf of the company, excluding the disposal of the product by consumers	Value chain: activities related to, and entities involved in, the production, design, sourcing, extraction, manufacture, transport, storage and supply of raw materials, products or parts of a company's product and the development of a company's product or the development or provision of a service, as well as activities related to, and entities involved in, and activities related to, and entities involved in, the sale, distribution, transport, storage, and waste management of a company's products or the provision of services, and excluding the waste management of the product by individual consumers.

Sources: [26], [39], [104], [105].

APPENDIX 3: 2020 SEC DEFINITIONS FOR ISSUERS

Accelerated Filer Conditions	Large Accelerated Filer Conditions
The issuer has a public float of USD 75 mio or more, but less than USD 700 mio, as of the last business day of the issuer's most recently completed second fiscal quarter.	The issuer has a public float of USD 700 mio or more, as of the last business day of the issuer's most recently completed second fiscal quarter.
The issuer has filed at least one annual report pursuant to Exchange Act Section 13(a) or 15(d).	Same
The issuer is not eligible to use the requirements for smaller reporting companies under the revenue test in paragraph (2) or (3) (iii) B), as applicable, of the "smaller reporting company" definition in Rule 12b-2 or, in the case of BDC does not meet the requirements of the revenue test in those paragraphs using annual investment income as the measure of its annual revenue.	Same

Source: SEC 2023 [106].

APPENDIX 4: COMPARATIVE ANALYSIS OF SUSTAINABILITY-RELATED MATTERS TO DISCLOSE AND INFORMATION TO DISCLOSE UNDER ART. 964A-C CO AND CSRD

	Δrt 964a-c CO	CSRD
Matters subject to disclosure	Art. 964a-c CO « Environmental matters »: CO 2 goals; employee-related issues, respect for human rights and combating corruption	Environmental factors: Climate change mitigation; climate change adaptation; water and marine resources; resource use & circular economy; pollution; biodiversity Social and human rights factors: Equality; working conditions; respect of human rights Governance factors: role of administrative, management and supervisory bodies; internal control and risks management systems; business
Information	Business model	ethic and corporate culture; exercise of political influence; relationship with customers, suppliers and communities. Business model and strategy
to disclose	Policies adopted in relation of the sustainable matters and due diligence applied Measures taken to implement these policies and assessment of the effectiveness of these measures	Time-bound targets related to sustainability matters, including GHG emission reduction targets Description of the role of the administrative, management and supervisory bodies with regard to sustainability matters
	Main risks relating arising from the firm's own business operations	description of the group's policies in relation to sustainability matters
	Main risks arising from the firm's business relationships, products or services, "provided this is relevant and proportionate"	Information about the existence of incentive schemes linked to sustainability matters offered to administrative, management and supervisory bodies
		Description of due diligence process implemented with regard to sustainability matters; PAIs, including its products and services, business relationships and supply chain; actions taken to prevent, mitigate, remediate PAI.
		Principal risks related to sustainability matters Relevant indicators to the disclosures

Source: Art. 964a-c CO, art. 19a CSRD, art. 29a CSRD [20].

8 ABBREVIATIONS

AS - Official Compilation of Federal Legislation

ASEAN - Association of Southeast Asian Nations

AuM - Assets under management

CDP - Climate Disclosure Project

CHF - Swiss franc

Climate COP - UN Conference of Parties on Climate Change

CO - Swiss Code of Obligations

CSDDD - proposed Directive on Corporate Sustainability Due Diligence of the European Union

CSRD - Corporate Social Responsibility Directive of the European Union

DDTrO - Ordinance on Due Diligence and Transparency in relation to Minerals and Metals from Conflict-Affected Areas and Child Labour

DNSH – Do not significant harm principle of the EU taxonomy

ECB - European Central Bank

EFRAG – European Financial Reporting Advisory Group

ESAP – European Single Access Point

ESEF – European Single Electronic Format

ENCORE - Exploring Natural Capital Opportunities, Risks and Exposure

ESG - Environmental, Social and Governance factors for responsible business

ESRS – European Sustainability Reporting Standard

EU - European Union

EU CTB - Climate Transition Benchmark of the European Union

EU PAB - Paris Aligned Benchmark of the European Union

FC - Federal Council

FDF - Swiss Federal Department of Finance

FF - Foundation Framework of ASEAN sustainable taxonomy

FinSA - Swiss Financial Services Act

FINMA - Swiss Financial Market Supervisory Authority

FOEN - Swiss Federal Office for the Environment

FOJ - Federal Office of Justice

FSB - Financial Stability Board

GFANZ - Glasgow Financial Alliance for Net Zero

GHG - Greenhouse Gas Emissions

GRI - Global Reporting Initiative

IDD - Insurance Distribution Directive of the European Union (2016/97 EU)

IFRS S1 - General ISSB Requirements for Disclosure of Sustainability-related Financial Information

IFRS S2 - ISSB's Climate- related Disclosures

ISO - International Organisation for Standardisation

ISSB - International Sustainability Standards Board

MiFID II - Financial Instruments Directive of the European Union (2014/65/EU)

NFRD - Non-Financial Reporting Directive of the European Union

NGO - Non-governmental organisation

OECD - Organisation for Economic Cooperation and Development

PACTA - Paris Agreement Capital Transition Assessments administered by FOEN and SIF

PAI - Principle Adverse Impact for double materiality measurement and reporting

PCAF - Partnership for Carbon Accounting Financials

PRI – Principles for Responsible Investment

PS - Plus Standard of ASEAN sustainable taxonomy

PSF - EU Platform on Sustainable Finance

RTS – Regulatory Technical Standards of the European Union clarifying SFDR requirements

SASB - Sustainability Accounting Standards Board

SBTi - Science Based Targets initiative

SCC - Swiss Criminal Code

SDGs - Sustainable Development Goals of the United Nations

SEC - Securities and Exchange Commission of the United States

SECO - State Secretariat for Economic Affairs

SFDR - Sustainable Finance Disclosure Regulation of the European Union

SIF - Swiss State Secretariat for International Financial Matters

SIX - Swiss Infrastructure and Exchange - Swiss Stock Exchange, 3th largest in Europe

SME - Small and Medium Size Enterprise

SNB - Swiss Central Bank (Schweizer Nationalbank)

SR - Classified Compilation of Federal Legislation

TCFD - Task Force on Climate-related Financial Disclosures

TFTEA - Trade Facilitation and Trade Enforcement Act

TNFD - Task Force on Nature-related Financial Disclosures

TSFD - Task Force on Social-related Financial Disclosures

TR – Taxonomy Regulation of the European Union

TSC - Technical Screening Criteria

UFPLA - Uyghur Forced Labour Prevention Act

UN - United Nations

US - United States

USD - United States Dollars

XBRL/iXBRL – (Inline) Extensible Business Reporting Language

XHTML – Extensible Hypertext Markup Language

9 GLOSSARY

Double materiality usually means risks to a company and economic activities' impact on environment and society, but it might also be called dynamic materiality since the line between risk and impact is blurry with transition and physical risks. We consider the TCFD to cover mainly financial materiality by focusing on risks and opportunities, in contrast to a wider interpretation of impact materiality by the European Union.

End-investors are institutional investors or retail investors that invest in financial products.

European Directive: Legislative act that proclaims a goal for all EU countries. However, each Member State must adjust their own laws to reach these goals by transposition into national law.

European Regulation: Binding legislative act that must be applied in all EU jurisdictions. As soon as the regulation is adopted, it becomes automatically enforceable in each Member State.

Financial market participants sell financial products or services.

Firms are mentioned as parts of supply chains or issuing equity, bonds and/or loans that are being bought (on primary or secondary markets) by financial market participants when managing their financial products.

GHG Protocol - an international Protocol establishing a framework to measure, account and report on GHG emissions in particular for companies and, increasingly, the public sector. It provides for the reporting of Scope 1 and 2 emissions, yet lets the user decide whether or not to report on Scope 3 emissions.

Impact materiality refers to the impacts a business has on environment and society, may they be financially relevant or not.

Materiality - In the financial context, an information that if omitted, misstated or obscured could reasonably be expected to influence decisions that the primary users of the reported information make on the basis of this information (IFRS, 2010).

Regulatory Technical Standard (RTS): Technical delegated act, which develops, specifies and determines the conditions for consistent harmonisation of the rules included in the basic legislative act. If special expertise is necessary for implementation, the European Parliament and the Council of the European Union may delegate power to the European Commission to adopt regulatory technical standards (RTS), prepared by a European Supervisory Authority. Value chain refers to the financial market value chain from corporations to the end consumer of financial products, such as investors or private bank consumers.

While we generally refer to the financial "value chain" in this paper, covering firms, financial market actors and end investors, in the context of CSRD, "value chain" refers to the corporate meaning in covering a product's life cycle beyond sale, hence not only the supply chain, but also what a client does with a product.

Scope 1, 2 and 3 emissions - Scope 1 refers to direct emission within a company's facility, Scope 2 refers to the energy used indirectly, and Scope 3 covers the whole supply chain. In the course of recent regulatory developments and calls for double materiality, the impact on global GHG emissions via scope 3 is gaining attention but has also caused struggles due to a lack of data from supply chain partners and the problem of double counting.

Besides, metrics are not standardised. Swiss financial actors can follow the PCAF model for measuring their emissions, hence can focus on scope 3 "financed emissions" which are integral to investments, as the Climate Ordinance mandating the TCFD framework for corporate disclosures, does not demand to cover scope 3 emissions beyond that. Further efforts could include measuring so-called "facilitated emissions" for scope 3 emissions correctly. The US SEC Proposal also requires scope 3 disclosures for "financed emissions", however disclosure is only necessary if targets were set, and the government provides safe harbours to incentivize thorough analysis and reduce liability fear. Although in theory, there are differences in regulation concerning the scope 3 measurements required for disclosure, especially in comparison with the EU, metrics and data quality need to improve everywhere.

Supply chain refers to a corporate organisation from headquarters to suppliers.

Sustainable financial products are portfolios/funds promoted as having sustainability characteristics. They can be composed of sustainable investments as well as (sometimes) non-sustainable investments.

Sustainable financial services can be in the form of expertise on financial investment opportunities within planetary boundaries or analytic capacities for ESG performance measurement etc.

Sustainable investments - "Any investment approach integrating environmental, social and governance (ESG) factors into the selection and management of investments." (SSF, 2022) Such investments can adopt different investment approaches, including best-in-class exclusion, ESG engagement, ESG integration, sustainable investment themes, ESG voting and others.

Sustainable investments are equity, bonds or loans with sustainability characteristics. Either because they are issued by a firm that has relatively high sustainability standards or objectives or because they finance sustainable projects within a firm.

Single financial and financial materiality: While there is no universally accepted definition of financial or double materiality, we differentiate between clear single materiality in form of the US financial materiality definition, as opposed to the EU/CH financial materiality definition, which includes longer-term aspects rather than referring to financial statement lines.

10REFERENCES

- [1] United Nations, "#Envision2030: 17 goals to transform the world for persons with disabilities | United Nations Enable," 2015. https://www.un.org/development/desa/disabilities/envision2030. html (accessed Jul. 02, 2023).
- [2] United Nations, "The Paris Agreement," United Nations Framework Convention on Climate Change, 2015. https://unfccc.int/process-and-meetings/the-paris-agreement (accessed Jun. 07, 2023).
- [3] United Nations, "COP15: Final text of Kunming-Montreal Global Biodiversity Framework," Convention on Biological Diversity, Dec. 18, 2022. https://www.cbd.int/article/cop15-final-text-kunming-montreal-gbf-221222 (accessed Jun. 02, 2023).
- [4] Federal Council, "Federal Council defines measures for a sustainable financial centre," Dec. 16, 2022. https://www.ad-min.ch/gov/en/start/documentation/media-releases.msg-id-92274.html#downloads (accessed Jun. 02, 2023).
- [5] Federal Council, "Switzerland to become a leading location for sustainable financial services," Jun. 24, 2020. https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-79606.html#downloads (accessed Jun. 02, 2023).
- [6] Financial Stability Board, "FSB Roadmap for Addressing Financial Risks from Climate Change: 2022 progress report," Jul. 14, 2022. https://www.fsb.org/2022/07/fsb-roadmap-for-addressing-financial-risks-from-climate-change-2022-

- progress-report/ (accessed Jun. 02, 2023).
- [7] Federal Council, "Sustainability in Switzerland's financial sector Situation analysis and positioning with a focus on environmental aspects," Jun. 2020. [Online]. Available: https://www.sif.admin.ch/dam/sif/en/dokumente/dossi er/int_finanz-waehrungsfragen/int_waehrungszusammenarbeit/ bericht_sustainable_finance.pdf.download.pdf/24062020-Nachhaltigkeit%20Bericht%20Executive%20Summary-EN.pdf
- [8] Federal Council, "Federal Council strives to be international leader in sustainable finance with climate transparency," Nov. 17, 2021. https://www.sif.admin.ch/sif/en/home/documentation/press-releases/medienmitteilungen.msg-id-85925.html (accessed Jun. 02, 2023).
- [9] Swiss Sustainable Finance, "Swiss Sustainable Investment Market Study 2023," Jun. 2023. [Online]. Available: https://marketstudy2023.sustainablefinance.ch/wpcontent/uploads/2023/06/SSF_2023_Ma rketStudy.pdf
- [10] Climate Action Tracker, "Switzerland," Jun. 08, 2022. https://climateactiontracker.org/countries/switzerland/ (accessed Jun. 02, 2023).
- [11] Y. Runne, "Swiss asset management industry prepares for uncertain times," Finnews, Aug. 2022, [Online]. Available: https://www.finews.com/news/english-news/52975-assetmanagement-study-2023

- [12] Swiss Sustainable Finance, "Swiss Sustainable Investment Market Study 2022," Jun. 2022. [Online]. Available: https://www.sustainablefinance.ch/en/our-activities/ssf-publications.html
- [13] Federal Council, "The Federal Council's position on the prevention of greenwashing in the financial sector," Dec. 2022. [Online]. Available: https://www.newsd.admin.ch/newsd/message/attachments/74580.pdf
- [14] Federal Council, "Federal Council wants to prevent greenwashing in financial market," Dec. 16, 2022. https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-92279.html (accessed Jul. 02, 2023).
- [15] Energy Transition Commission, "Financing the Transition: How to Make the Money Flow for a Net-Zero Economy," Mar. 2023. [Online]. Available: https://www.energy-transitions.org/wp-content/uploads/2023/03/ETC-Financing-the-Transition_MainReport.pdf
- [16] J.-L. Chenaux, E. Chiarotti, J.-P. Danthine, A. Gessler, F. Hugard, and M. Schläpfer, "Swiss Subsidiary Tradition in Light of Foreign Approaches," Lausanne, Jul. 2023.
- [17] J.-L. Chenaux, E. Chiarotti, J.-P. Danthine, A. Gessler, F. Hugard, and M. Schläpfer, "Financial Market Participants: Comparative Analysis for Switzerland." Will be available online end of Jul. 2023.
- [18] M. Panescu, "Filling in the Data Gaps:
 The Current State of Reporting on
 Principal Adverse Impacts Disclosures for the SFDR,"
 sustainalytics.com, May 17, 2023.
 https://www.sustainalytics.com/esgresearch/resource/investors-esg-

- blog/filling-in-the-data-gaps-the-current-state-of-reporting-on-principaladverse-impacts-disclosures-for-thesfdr (accessed Jul. 11, 2023).
- [19] A. Darbellay and Y. Caballero Cuevas, "The Materiality of Sustainability Information under Capital Markets Law," *Schweiz. Z. Für Wirtsch.- Finanz.*, vol. 1, no. 2023, p. p.44-59, 2023.
- [20] European Union, Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (Text with EEA relevance), vol. 322. 2022. Accessed: Jun. 08, 2023. [Online]. Available: http://data.europa.eu/eli/dir/2022/2464/oj/eng
- [21] European Financial Reporting Advisory Group, "First Set of draft ESRS," 2023. https://www.efrag.org/lab6
- [22] European Union, Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups Text with EEA relevance, vol. 330. 2014. Accessed: Jun. 08, 2023. [Online]. Available: http://data.europa.eu/eli/dir/2014/95/oj/eng
- [23] M. Eggen and S. Hermidas, "Doppelte Wesentlichkeit und Sustainable Finance," Jusletter, no. 1110, 2022, doi: 10.38023/0248c4d0-9ac7-4603-91f8d3570e16d170.
- [24] S. Krishnan, "Sustainable Coffee Production," in Oxford Research Encyclopedia of Environmental Science, 2017. doi: 10.1093/acrefore/9780199389414.013.224.

- [25] C. A. Harvey et al., "Transformation of coffee-growing landscapes across Latin America. A review," Agron. Sustain. Dev., vol. 41, no. 5, p. 62, Aug. 2021, doi: 10.1007/s13593-021-00712-0.
- [26] European Union, Proposal for a directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937. 2022. Accessed: Jun. 08, 2023. [Online]. Available: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2022:71:FIN
- [27] Task Force on Climate-related Financial Disclosures, "Reporting Climate-Related Financial Information Critical Introductory Materials," *Task Force on Climate-Related Financial Disclosures*, 2023. https://www.fsb-tcfd.org/publications/ (accessed Jul. 14, 2023).
- [28] European Financial Reporting Advisory Group and Project Task Force on European Sustainability Reporting Standard, "Draft European Sustainability Reporting Standards, Appendix IV TCFD Recommendations and ESRS reconciliation table," Apr. 2022. [Online]. Available: https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FSiteAssets%2FED_ESRS_AP4.pdf
- [29] Carbon Disclosure Project, "60+ companies and investors worth \$651bn tell EU to agree ambitious sustainability reporting standards," Apr. 13, 2024. https://www.cdp.net/en/articles/companies/60-companies-and-investors-worth-651bn-tell-eu-to-agree-ambitious-sustainability-reporting-standards
- [30] N. Fernandez, "AMAS Webinar The evolution of sustainability disclosure," Mai 2023. [Online]. Available: https://www.am-

- switzerland.ch/en/eu-sustainable-finance-regulation-series-webinar--the-evolution-of-sustainability-disclosure
- [31] European Union, "European Sustainable Reporting Standard First Set Have your say," European Commission Have your say, Jul. 07, 2023. https://ec.europa.eu/info/law/betterregulation/have-your-say/initiatives/13765-European-sustainability-reporting-standards-first-set_en (accessed Jul. 11, 2023).
- [32] European Financial Reporting Advisory Group, "EFRAG Sector Specific ESRS EFRAG," 2023. https://www.efrag.org/lab5 (accessed Jul. 13, 2023).
- [33] D. McGibbon, "Assurance vs Audit: What is the Difference?," FPM An AAB Group Company, May 27, 2021. https://fpmaab.com/trending-top-ics/assurance-vs-audit/ (accessed Jul. 11, 2023).
- [34] Deloitte, "CSRD 9 topic-specific key challenges," Apr. 2023. [Online]. Available:
 https://www2.deloitte.com/content/dam/Deloitte/de/Documents/risk/Deloitte_Sustainability_CSRD_ESRS.pdf
- [35] Commission Delegated Regulation (EU) 2019/815 of 17 December 2018 supplementing Directive 2004/109/EC of the European Parliament and of the Council with regard to regulatory technical standards on the specification of a single electronic reporting format (Text with EEA relevance)Text with EEA relevance. 2019. Accessed: Jul. 13, 2023. [Online]. Available: http://data.europa.eu/eli/reg_del/2019/815/2019-05-29/eng
- [36] European Financial Reporting Advisory Group, "Draft ESRS XBRL Taxonomy: Architecture and Methodology," May 22, 2023. [Online].

- Available: https://www.xbrleurope.org/wpcontent/uploads/2023/02/22-05-23-XBRL-Europe-Draft-ESRS-XBRL-Taxonomy-Architecture-and-Methodology.pdf
- [37] Celcius Pro and Pelt 8, "Swiss Climate Reporting Forum: Launch of Blueprint on Climate Reporting," May 22, 23. https://www.celsiuspro.com/newsarchive/swiss-climate-reporting-forum-celsiuspro-pelt8 (accessed Jun. 08, 2023).
- [38] European Financial Reporting Advisory Group, "EFRAG workstreams on SMEs Cover Note." Nov. 17, 2022. [Online]. Available: https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FMeeting%20Documents%2F2211041503270617%2F03-01%20Cover%20Note%20EFRAG%20workstreams%20on%20SMEs%20-%20SR%20TEG%2017112022.pdf
- [39] European Parliament, "Corporate Sustainability Due Diligence Amendments." Jan. 06, 2023. [Online]. Available: https://www.europarl.europa.eu/doceo/document/TA-9-2023-0209_EN.pdf
- [40] European Parliament, "MEPs push companies to mitigate their negative social and environmental impact | News | European Parliament," News European Parliament, Jan. 06, 2023. https://www.europarl.europa.eu/news/en/pressroom/20230524IPR91907/mepspush-companies-to-mitigate-theirnegative-social-and-environmental-impact (accessed Jun. 08, 2023).
- [41] European Council, "Council adopts position on due diligence rules for large companies," European Council Press Releases, Jan. 12, 2022. https://www.consilium.europa.eu/en/press/press-

- releases/2022/12/01/council-adopts-position-on-due-diligence-rules-for-large-companies/ (accessed Jun. 08, 2023).
- [42] J. [D-C.-51 Rep. Vargas, "H.R.1187 117th Congress (2021-2022): Corporate Governance Improvement and Investor Protection Act," Jun. 17, 2021. http://www.congress.gov/bill/117th-congress/house-bill/1187 (accessed Jun. 08, 2023).
- [43] Securities and Exchange Commission, "Commission Guidance Regarding Disclosure Related to Climate Change Release Nos. 33-9106; 34-61469; FR-82." Feb. 08, 2010. [Online]. Available: https://www.sec.gov/rules/interp/2010/33-9106.pdf
- [44] Securities and Exchange Commission, "The Laws That Govern the Securities Industry," 2023 1933. https://www.sec.gov/about/aboutsecurities-laws (accessed Jun. 08, 2023).
- [45] Securities and Exchange Commission, "The Enhancement and Standardization of Climate-Related Disclosures for Investors." 2022. [Online]. Available: https://www.sec.gov/rules/proposed/2022/33-11042.pdf
- [46] United States, "Exchange Act Pub. L. 73-291," Jun. 05, 1934. https://uslaw.link/citation/us-law/public/73/291 (accessed Jun. 08, 2023).
- [47] Business Roundtable, "Proposed Rule: The Enhancement and Standardization of Climate-Related Disclosures," Washington, Jun. 2022. [Online]. Available: https://www.sec.gov/comments/s7-10-22/s71022-20132191-302705.pdf

- [48] J. Eaglesham and P. Kiernan, "SEC Considers Easing Climate-Disclosure Rules After Investor Pushback," Wall Street Journal, Feb. 03, 2023. Accessed: Jun. 08, 2023. [Online]. Available: https://www.wsj.com/articles/sec-considers-easing-climatedisclosure-rules-after-investorpushback-11675416111
- [49] C. Cox, "SEC weighs making 'adjust-ments' to controversial climate risk disclosure rule, Chairman Gensler says," CNBC, Feb. 10, 2023. https://www.cnbc.com/2023/02/10/sec-weighs-making-adjustments-to-controversial-climate-risk-disclosure-rule-chairman-gensler-says.html (accessed Jun. 08, 2023).
- [50] Securities and Exchange Commission, Climate Change Disclosure. 2022. Accessed: Jun. 08, 2023. [Online]. Available: https://www.reginfo.gov/public/do/eAgendaViewRule?publd=202210&RIN=3235-AM87
- [51] J. Hupart, "Proposed SEC Climate Disclosure Rule Potentially Delayed Until Fall 2023," *JD Supra*, May 10, 2023. https://www.jdsupra.com/legalnews/proposed-sec-climatedisclosure-rule-8305347/ (accessed Jun. 08, 2023).
- [52] T. Rep. Reed, "H.R.644 114th Congress (2015-2016): Trade Facilitation and Trade Enforcement Act of 2015," Feb. 24, 2016. http://www.congress.gov/bill/114th-congress/house-bill/644 (accessed Jun. 08, 2023).
- [53] J. P. Rep. McGovern, "H.R.1155 117th Congress (2021-2022): Uyghur Forced Labor Prevention Act," Dec. 22, 2022. http://www.congress.gov/bill/117th-congress/house-bill/1155 (accessed Jun. 08, 2023).
- [54] J. Sen. Hawley, "S.3578 117th Congress (2021-2022): Slave-Free

- Business Certification Act of 2022," Feb. 03, 2022. http://www.congress.gov/bill/117th-congress/senate-bill/3578 (accessed Jun. 08, 2023).
- [55] State of California, Senate Bill No. 657
 Chapter 556 An act to add Section
 1714.43 to the Civil Code, and to add
 Section 19547.5 to the Revenue and
 Taxation Code, relating to human trafficking. [Online]. Available:
 https://oag.ca.gov/sites/all/files/ag
 web/pdfs/cybersafety/sb_657_bill_ch556.pdf
- [56] Swiss Confederation, "SR 220 Bundesgesetz betreffend die Ergänzung des Schweizerischen Zivilgesetzbuches (Fünfter Teil: Obligationenrecht)," Mar. 30, 1911. https://www.fedlex.admin.ch/eli/cc/27/317_321_377/de (accessed Jun. 09, 2023).
- [57] M. Leutenegger, "Konzernverantwortungs-Initiative: gesiegt und doch gescheitert," SWI swissinfo.ch, Nov. 29, 2020. https://www.swissinfo.ch/ger/wirtschaft/konzernverantwortungsinitiative-es-wird-knapp/46191624 (accessed Jul. 12, 2023).
- [58] Federal Council, "Federal Council brings ordinance on mandatory climate disclosures for large companies into force as of 1 January 2024," Nov. 23, 2022. https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-91859.html (accessed Jul. 12, 2023).
- [59] Swiss Exchange, "Directive on Information relating to Corporate Governance," Jun. 2022. [Online]. Available: https://www.serag.com/dam/downloads/regulation/listing/directives/dcg-en.pdf
- [60] Swiss Exchange SIX, "Sustainability Reporting," SIX. https://www.six-group.com/en/products-

- services/the-swiss-stock-exchange/marketdata/shares/sustainability-reporting.html (accessed Jun. 09, 2023).
- [61] Financial Market Supervisory Authority, "Disclosure of climate related financial risks: partial revision of FINMA Circulars 2016/1 'Disclosure banks' and 2016/2 'Disclosure insurers," Nov. 2020. [Online]. Available: https://www.finma.ch/~/media/finma/dokumente/dokumentenc enter/anhoerungen/laufende-anhoerungen/20201110-klimabezogenefinanzrisiken/kp.pdf?sc_lang=en
- [62] Financial Market Supervisory Authority, "FINMA Guidance 03/2022 Implementation of climate-related risk disclosures by category 1-2 institutions." Nov. 29, 2022. [Online]. Available: https://www.finma.ch/en/~/media/finma/dokumente/dokumentencenter/myfinma/4dokumentation/finma-aufsichtsmitteilungen/20221129-finma-aufsichtsmitteilung-03-2022.pdf?sc_lang=en&hash=76D53FE0BCE81FEAC2C25077BD69D190
- [63] Swiss Confederation, SR 221.302 Federal Act of Licensing and Oversight of Auditors (Auditor Oversight Act, AOA). 2005. Accessed: Jun. 09, 2023. [Online]. Available: https://www.fedlex.admin.ch/eli/cc/2007/533/en
- [64] Federal Assembly, "SR 951.11 Federal Act on the Swiss National Bank (National Bank Act, NBA)," Oct. 03, 2003. https://www.fedlex.admin.ch/eli/cc/2004/221/en (accessed Jul. 12, 2023).
- [65] Bundesamt für Justiz, "Transparenz bezüglich nichtfinanzieller Belange und Sorgfaltspflichten und Transparenz bezüglich Mineralien und Metallen aus Konfliktgebieten und

- Kinderarbeit," Nov. 2019, [Online]. Available: https://www.parlament.ch/centers/documents/de/bericht-kinderarbeit-bj-2019-11-19-d.pdf
- [66] Bundesversammlung, Schweizerisches Strafgesetzbuch 311. 1937. [Online]. Available: https://fed-lex.data.admin.ch/filestore/fedlex.data.admin.ch/eli/cc/54/757_781_799/2023 0701/de/pdf-a/fedlex-data-admin-ch-eli-cc-54-757_781_799-20230701-de-pdf-a-3.pdf
- [67] Y. Atamer and F. Willi, "Konzernverant-wortungsinitiative: Was ändert sich bei einem JA? | SZW," Schweizerische Zeitschrift für Wirtschafts- und Finanzmarktrecht, vol. 4, no. 2020, pp. 435–448, 2020.
- [68] Taskforce on Climate-related Financial Disclosures, "TCFD Annex 1," Task Force on Climate-Related Financial Disclosures, 2017. https://www.fsb-tcfd.org/publications/ (accessed Jun. 09, 2023).
- [69] State Secretariat for Economic Affairs, "OECD Guidelines for Multinational Enterprises on Responsible Business Conduct," Jun. 08, 2023. https://www.seco.admin.ch/seco/en/home/Aussenwirtsc haftspolitik_Wirtschaftliche_Zusammenarbeit/Wirtschaftsbeziehungen/n achhaltigkeit_unternehmen/oecdguidelines.html (accessed Jun. 09, 2023).
- [70] Organisation for Economic Co-operation and Development, OECD Guidelines for Multinational Enterprises on Responsible Business Conduct. OECD, 2023. doi: 10.1787/81f92357-en.
- [71] Sustainability Accounting Standards Board, "What's the future of SASB Standards under the ISSB?," SASB, Mar. 02, 2022. https://sasb.org/blog/whats-the-

- future-of-sasb-standards-under-theissb/ (accessed Jun. 09, 2023).
- [72] International Financial Reporting Standards, "IFRS General Sustainability-related Disclosures," Jun. 2023. https://www.ifrs.org/projects/completed-projects/2023/general-sustainability-related-disclosures/(accessed Jul. 14, 2023).
- [73] International Financial Reporting Standards, "IFRS Climate-related Disclosures Current stage," Mar. 2023. https://www.ifrs.org/projects/work-plan/climate-related-disclosures/ (accessed Jun. 09, 2023).
- [74] Bundesrat, "AS 2022 747 Verordnung über die Berichterstattung über Klimabelange," Nov. 23, 2022. https://www.fedlex.admin.ch/eli/oc/2022/747/de (accessed Jul. 12, 2023).
- [75] Swiss Confederation, Federal Constitution of 18 April 1999 of the Swiss Confederation. 1999. Accessed: Jun. 09, 2023. [Online]. Available: https://www.fedlex.admin.ch/eli/cc/1999/404/en
- [76] Carbon Disclosure Project, "Carbon Disclosure Project Technical Note: Relevance of Scope 3 Categories by Sector." Apr. 11, 2022. [Online]. Available: https://cdn.cdp.net/cdp-production/cms/gui-dance_docs/pdfs/000/003/504/original/CDP-technical-note-scope-3-relevance-by-sector.pdf
- [77] Bundesversammlung, "BBI 2022 2403 Bundesgesetz über die Ziele im Klimaschutz, die Innovation und die Stärkung der Energiesicherheit (KIG)," Jun. 18, 2023. https://www.fedlex.admin.ch/eli/fga/2022/2403/de (accessed Jul. 12, 2023).
- [78] Task Force on Nature-related Financial Disclosures, "TNFD releases fourth and final beta framework,"

- TNFD, Mar. 28, 2023. https://tnfd.global/news/tnfd-re-leases-fourth-final-beta-framework-v0-4/ (accessed Jun. 09, 2023).
- [79] T. Goldner, "TNFD Overview Swiss Sustainable Finance Annual Conference," Jun. 29, 2022. [Online]. Available: https://www.sustainablefinance.ch/upload/cms/user/2022_06 _29_SlideDeck_TonyGoldner.pdf
- [80] Federal Council, "Sustainable finance in Switzerland Areas for action for a leading sustainable financial centre, 2022–2025," Bern, Dec. 2022. [Online]. Available: https://www.newsd.admin.ch/newsd/message/attachment s/74562.pdf
- [81] Natural Capital Finance Alliance, Mava Foundation, Swiss Confederation, United Nations, and Global Canopy, "Exploring Natural Capital Opportunities, Risks and Exposures (ENCORE)," ENCORE. https://encore.naturalcapital.finance/en (accessed Jun. 09, 2023).
- [82] Federal Office for Customs and Border, "Trading partners," 2023. https://www.bazg.ad-min.ch/bazg/en/home/topics/swiss-foreign-trade-statistics/daten/handel-spartner.html (accessed Jul. 13, 2023).
- [83] Eidgenössisches Justiz- und Polizeidepartment, "Prüfauftrag des EJPD vom 23. Februar 2022; Analyse Vorschläge **EU-Richtlinien** über Sorgfaltspflichten und Berichterstattung zur Nachhaltigkeit und möglicher Anpassungsbedarf im Schweizer Recht Bericht Entwürfe Nachhaltigkeitspflichten EU und geltendes Recht Schweiz." 11 2022. [Online]. Available: https://www.ejpd.admin.ch/ejpd/de/home/aktuell/mm.m sg-id-92009.html

- [84] Taival Advisory, "SMEs in the supply chains of large companies are indirectly affected by the CSRD," *Taival Advisory*, Mar. 07, 2023. https://www.taival.com/smes-in-thesupply-chains-of-large-companiesare-indirectly-affected-by-the-csrd/ (accessed Jul. 13, 2023).
- [85] European Union, Regulation (EU) 2017/821 of the European Parliament and of the Council of 17 May 2017 laying down supply chain due diligence obligations for Union importers of tin, tantalum and tungsten, their ores, and gold originating from conflict-affected and high-risk areas, vol. 130. 2017. Accessed: Jul. 12, 2023. [Online]. Available: http://data.europa.eu/eli/reg/2017/821/oj/eng
- [86] M. van B. Ministerie van Buitenlandse Zaken, "Wet van 24 oktober 2019 houdende de invoering van een zorgplicht ter voorkoming van de levering van goederen en diensten die met behulp van kinderarbeid tot stand zijn gekomen (Wet zorgplicht kinderarbeid)," Nov. 13. 2019. https://zoek.officielebekendmakingen.nl/stb-2019-401.html (accessed Jul. 12, 2023).
- [87] Swiss Confederation, Ordinance on Due Diligence and Transparency in relation to Minerals and Metals from Conflict-Affected Areas and Child Labour (DDTrO). 2021. Accessed: Jun. 09, 2023. [Online]. Available: https://www.fedlex.admin.ch/eli/cc/2021/847/en
- [88] Securities and Exchange Commission, "Fact Sheet Disclosing the Use of Conflict Minerals Dodd-Frank Act Section 1502," 2010. https://www.sec.gov/opa/Article/2012-2012-163htm---related-materials.html (accessed Jun. 09, 2023).
- [89] Bundesrat, "AS 2021 847 Verordnung vom 3. Dezember 2021 über

- Sorgfaltspflichten und Transparenz bezüglich Mineralien und Metallen aus Konfliktgebieten und Kinderarbeit (VSoTr)." Dezember 2021. [Online]. Available: https://www.fedlex.admin.ch/eli/oc/2021/847/de
- [90] Eidgenössisches Justiz- und Polizeidepartment, "Erläuternder Bericht zur Verordnung über Sorgfaltspflichten und Transparenz bezüglich Mineralien und Metallen aus Konfliktgebieten und Kinderarbeit (VSoTr)." Dezember 2021. [Online]. Available: https://www.bj.admin.ch/bj/de/home/aktuell/mm.msgid-86226.html
- [91] Ethos Fund, "Déclaration des investisseurs pour l'introduction d'une législation intégrale en matière de diligence raisonnable des droits humains et d'environnement en Suisse." 2023. [Online]. Available: https://www.ethosfund.ch/sites/default/files/D%C3%A9claration%20des %20investisseurs%20HREDD%20FR.pdf
- [92] W. Lu, "The Value of the 'Comply or Explain' Principle," presented at the 2021 International Conference on Social Science: Public Administration, Law and International Relations (SSPALIR 2021), Atlantis Press, Sep. 2021, pp. 26–36. doi: 10.2991/assehr.k.210916.005.
- [93] N. Tschopp and Y. Lenoir Gehl, "The Elephant in the Chalet | SZW," Schweiz. Z. Für Wirtsch.- Finanz., vol. 2016, no. 2, pp. 151–161, 2016.
- [94] Bundesamt für Statistik, "Kleine und mittlere Unternehmen." https://www.bfs.admin.ch/bfs/de/home/statistiken/indu strie-dienstleistungen/unternehmenbeschaeftigte/wirtschaftsstruktur-unternehmen/kmu.html (accessed Jul. 12, 2023).

- [95] B Lab Switzerland, "Sustainable entrepreneurship in Switzerland - The opportunity for a new legal framework," B Lab Switzerland, May 2023. https://www.blab-switzerland.ch/new-legal-framework (accessed Jul. 13, 2023).
- [96] European Union, "Renewed sustainable finance strategy and implementation of the action plan on financing sustainable growth," Aug. 03, 2018. https://finance.ec.europa.eu/publications/renewed-sustainable-finance-strategy-and-implementation-action-plan-financing-sustainable-growth_en (accessed Jun. 07, 2023).
- [97] European Union, Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088, vol. 198. 2020. Accessed: Jun. 27, 2023. [Online]. Available: http://data.europa.eu/eli/reg/2020/852/oj/eng
- [98] European Union, Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change and for adaptation determining whether that economic activity causes no significant harm to any of the other environmental objectives, vol. 442. 2021. Accessed: Jun. 07, 2023. [Online]. Available: http://data.europa.eu/eli/reg_del/2021/2139/oj/en
- [99] European Union, "Sustainable finance package 2023," Jun. 13, 2023.

- https://finance.ec.europa.eu/publications/sustainable-finance-package-2023_en (accessed Jul. 03, 2023).
- [100] European Union Platform on Sustainable Finance, "Platform on sustainable finance: Technical working group Supplementary: methodology and technical screening criteria," Oct. 2022. [Online]. Available: https://finance.ec.europa.eu/system/files/2022-11/221128-sustainable-finance-platform-technical-working-group_en.pdf
- [101] Green Technical Advisory Group, "GTAG: Advice on the development of a UK Green Taxonomy," Green Finance institute, London, Oct. 2022. [Online]. Available: https://www.greenfinanceinstitute.co.uk/wp-content/uploads/2022/10/GTAG-Advice-on-the-development-of-a-UK-Green-Taxonomy.pdf
- [102] European Union, Commission Delegated Regulation (EU) 2023/363 of 31 October 2022 amending and correcting the regulatory technical standards laid down in Delegated Regulation (EU) 2022/1288 as regards the content and presentation of information in relation to disclosures in pre-contractual documents and periodic reports for financial products investing in environmentally sustainable economic activities. 2022. Accessed: Jun. 07, 2023. [Online]. Available: http://data.europa.eu/eli/reg_del/2023/363/oj
- [103] European Union Platform on Sustainable Finance, "The Extended Environmental Taxonomy: Final Report on Taxonomy extension options supporting a sustainable transition," Brussels, Mar. 2022. [Online]. Available: https://finance.ec.europa.eu/system/files/2022.03/220220

tem/files/2022-03/220329sustainable-finance-platform-finance-

- report-environmental-transition-taxonomy_en.pdf
- [104] European Union, "Council General Approach Proposal for a directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937." Nov. 30, 2022.
- [105]European Parliament, "Texts adopted Corporate Sustainability Due Diligence Thursday, 1 June 2023," Jun. 01, 2023. https://www.europarl.europa.eu/doceo/document/TA-9-2023-0209_EN.html (accessed Jul. 12, 2023).
- [106] Securities and Exchange Commission, "Accelerated Filer and Large Accelerated Filer Definitions," 2020. https://www.sec.gov/corpfin/secgaccelerated-filer-and-large-accelerated-filer-definitions (accessed Jul. 12, 2023).