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Sustainability
Navigator

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Sustainability Navigator

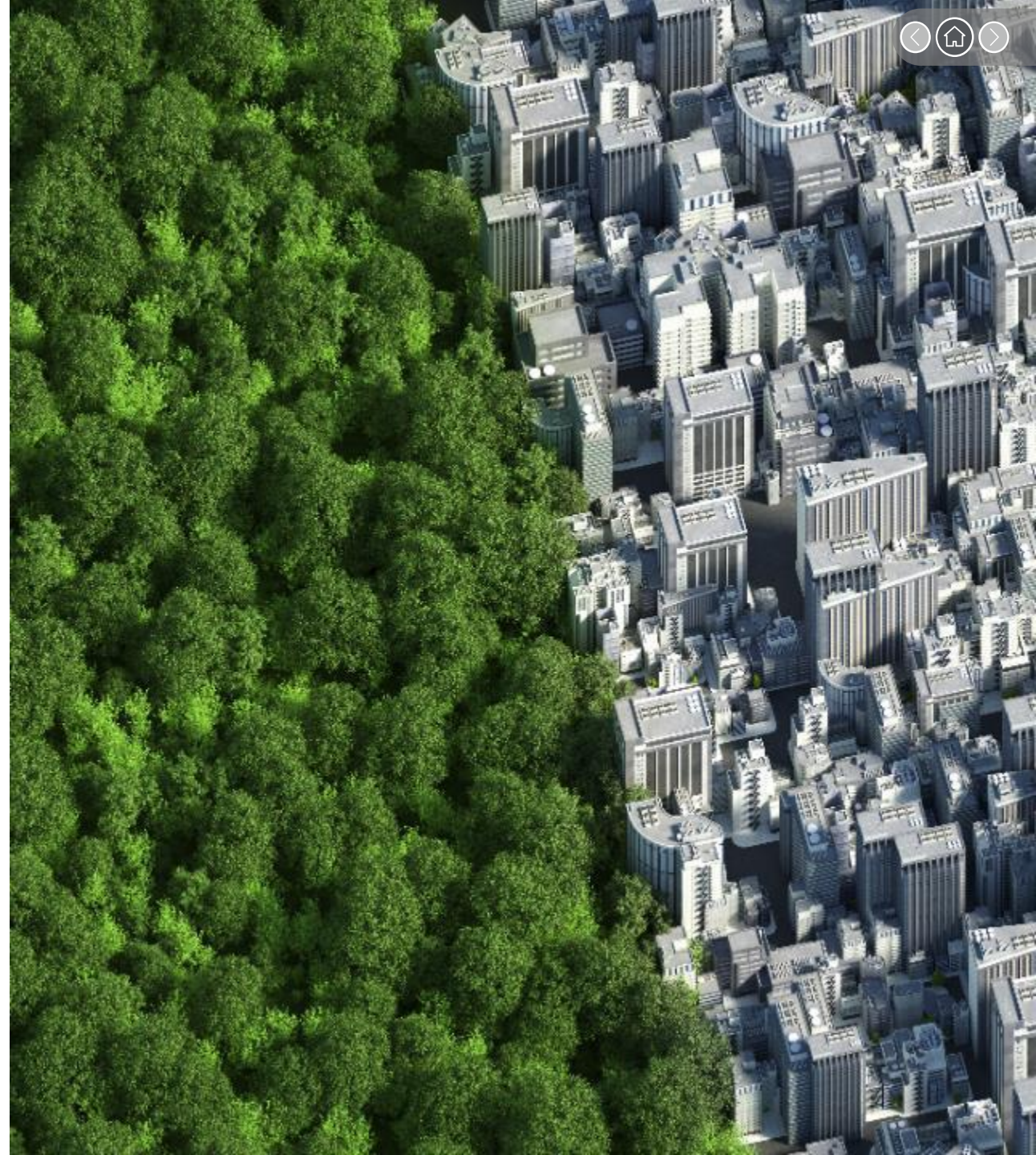
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The Sustainability Navigator



From GHG Emissions and Biodiversity to Diversity and Inclusion, ESG (Environmental, Social and Governance) encompasses a wide variety of subjects, which existentially impact the resilience of a company's business model. Regulatory developments are rapidly gaining momentum, and so do the expectations and requirements for companies and their sustainability performance.

New and existing regulations, including the extended reporting obligation of the Corporate Sustainability Reporting Directive (CSRD), the Supply Chain Due Diligence Act (LKSG) and the EU Taxonomy will shape tomorrow's business environment.

Achieving compliance and remaining up to speed in this fast evolving environment will pose major challenges to companies. So how can companies tackle those challenges in a cost-efficient manner and even leverage growth opportunities?

The Sustainability Navigator provides an overview of topics surrounding ESG while granting insight into the most important aspects on the path to sustainable transformation. With the corresponding laws and standards - from ESG strategies, governance and reporting to the sustainable value chain and topic-specific requirements for topics such as climate and biodiversity, **the Sustainability Navigator is your compass in the ESG Jungle.**

For an extensive overview of sustainable finance related regulations, agreements and guidelines you may consult the Deloitte Sustainable Finance Navigator.



Sustainability in Business

- 0 | What does Sustainability & ESG mean?
- 1 | Integrated Strategies
- 2 | ESG Management & Governance
- 3 | ESG Reporting
- 4 | ESG Ratings
- 5 | Sustainable Value Chain



0 | What does Sustainability & ESG mean?

Today's world is facing a variety of pressing, interlinked problems, reaching far beyond climate change. To account for this depth of issues, sustainability is further broken down in the dimensions of environment, social and governance (ESG).

Organisations, effecting and being effected by those challenges, possess the power to act as change agents. Yet, businesses cannot solve each of these issues at once. To make an impact that matters, it is essential to identify the most relevant sustainability topics for your organisation.

0 | What does Sustainability & ESG mean?

A company's sustainability performance and transparency have a direct influence on cost structures, sales volumes and access to capital - making it a key element of corporate strategy.



1 Risk for companies

- Climate change is the number 1 risk globally – in terms of likelihood (extreme weather events) and impact (climate action failure)¹
- Companies fear weakened or reduced production capacity, increased capital and operational costs and resource scarcity
- Unchanged climate change could cost the global economy \$178 trillion in net present value terms from 2021-2070²



New regulations

- The Paris Agreement sets the agenda: legally binding climate protection agreement of 197 states. The EU Green Deal with further tightened climate targets
- The LkSG and CSDDD require companies to implement due diligence practices
- National net zero targets and increasing carbon market mechanism
- Extended reporting obligations with the introduction of the CSRD
- Increasing ESG requirements in accounting standards of IASB, DRSC, IDW, SEC



Competitors taking action

- SBTi: 1573 companies already setting science-based emission reductions targets³
- 82% of FTSE companies set themselves targets related to climate change⁴
- Year-on-year increase in companies addressing their impacts on water by 51% and on forests by 36%⁵



Societal pressure

- Social movements and NGOs (e.g. Fridays for Future, Extinction Rebellion, Amnesty, etc.)
- Concerted demand for supply chain law (due diligence on human rights)
- Sustainability increasingly important for purchase decisions



ESG⁶ focus in investments decisions

- EU Action Plan for financing sustainable growth (incl. taxonomy)
- Investors urged companies to set 1.5°C aligned science-based targets⁴
- How a company manages climate risk and prepares for long-term value creation majorly impacts BlackRock's capital allocation⁷
- Taskforce on Climate-related Financial Disclosures (TCFD) increasing reporting demands

Cost reduction and risk minimization

Increase sales volume & brand equity

Ensuring attractiveness on the capital market

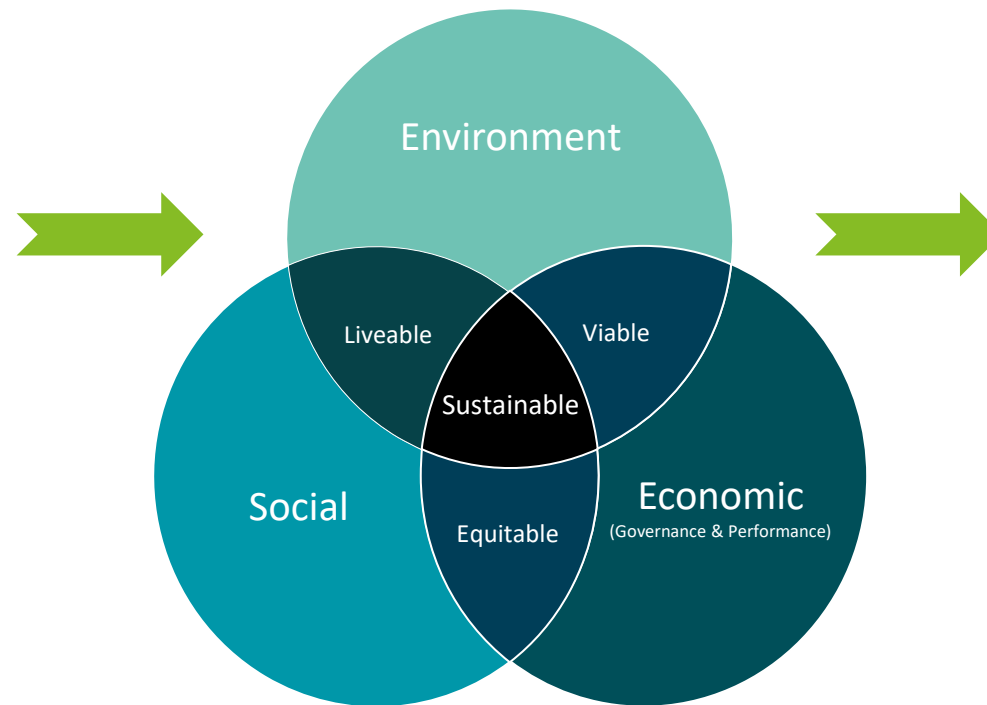
Sources: ¹World Economic Forum (2023): Global Risk Report | ²Turning Point (2022) | ³SBTi (2022) | ⁴Deloitte (2021): Annual report insights | ⁵CDP (2022) | ⁶Environment, Social, Governance | ⁷BlackRock (2022)

0 | What does Sustainability & ESG mean?

ESG stands for a multitude of topics which can have an existential impact on the sustainability of a company’s business model. The relevance of individual topics varies greatly from company to company.

“Sustainable development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

- Brundtland report 1987 -



Sustainable Development

Triple Bottom Line – Company perspective

Environment



- Climate change and CO₂ emissions
- Resource use: renewable vs. fossil
- Linear vs. circular value chains
- Sustainability in the upstream supply chain
- Ecological impact of products, services & infrastructure
- Responsible water consumption
- Specific issues: biodiversity, water, pollution, waste, etc.

Social



- Human rights & working conditions
- Social and cultural responsibility
- Workplace safety and health
- Diversity & equal opportunity
- Training & Education
- Responsible product design & marketing
- Specific issues: animal testing, weapons, narcotics, etc.

Governance



- Transparency & ethical corporate governance
- Remuneration and incentives
- ESG risk management
- Corruption

Performance



- Profit
- Green Turnover, CapEx & OpEx

Relevant ESG & P -Topics within an organisation

0 | What does Sustainability & ESG mean?

Corporate sustainability

Corporate sustainability is the generation of **long-term value creation** (incl. financial stability), **taking into account planetary boundaries and social responsibility**.

Depending on the **business model**, the impact of the company's activities contributes to the problem or to the solution.



0 | What does Sustainability & ESG mean?

Taking chances or managing risks - companies have the choice. Depending on the business model, the impact of the company's activities contributes to the problem or to the solution.

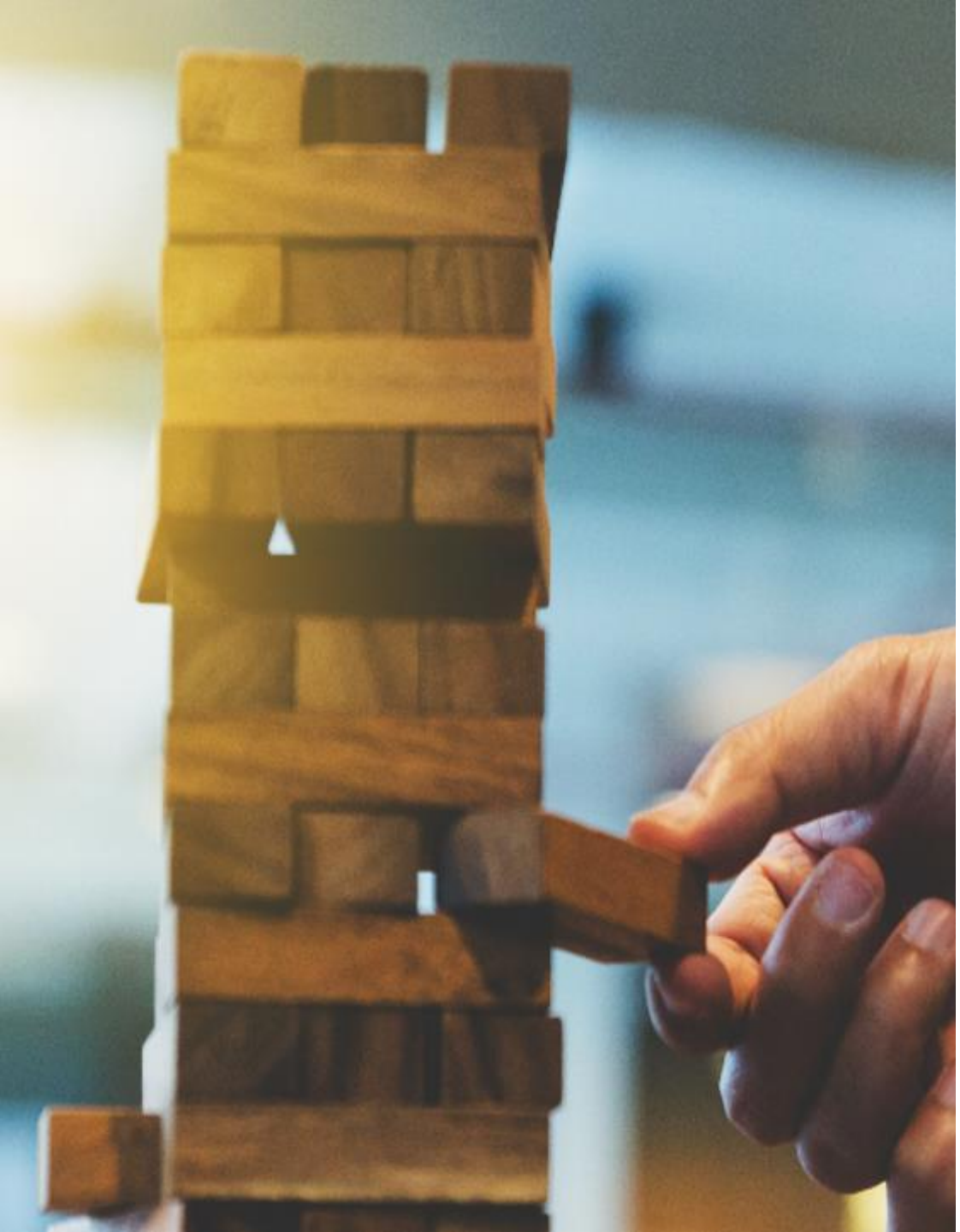


Part of the solution **or** part of the problem?

0 | What does Sustainability & ESG mean?

Corporate sustainability can be integrated into company processes at different levels. The ambition level determines the overall objective and potential of the sustainability strategy and reporting.





1 | Integrated Strategies

Achieving positive and reducing negative impacts, while meeting financial return targets, are the ultimate goals of a sustainability strategy. A well-defined sustainability strategy therefore helps turning the multitude of today's pressures and challenges into opportunities and sources of competitive advantage. Identifying the most material ESG topics and setting an ambition level mark the first steps in this process.

The embeddedness of sustainability in a multitude of business areas, establishes the necessity to integrate ESG into the core of business practices and with that into the corporate strategy, management systems and governance structure.

1 | Integrated Strategies

Integrating sustainability into the overall business strategy allows reaping maximum benefit for people, planet and profit.

Separate Strategy

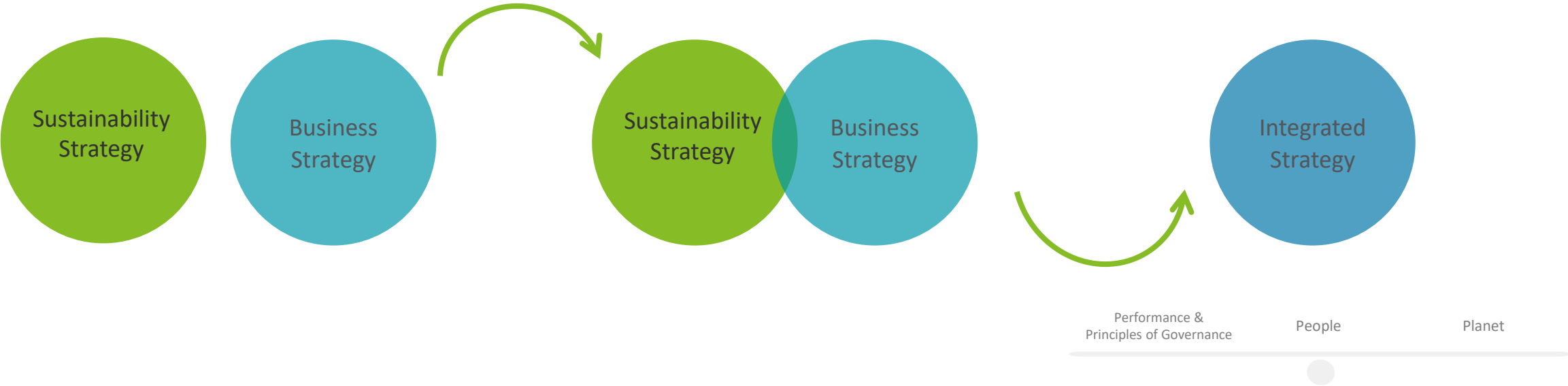
Business strategy and ESG strategy are complementary but separate.

Combined Strategy

Business strategy and ESG strategy are aligned.

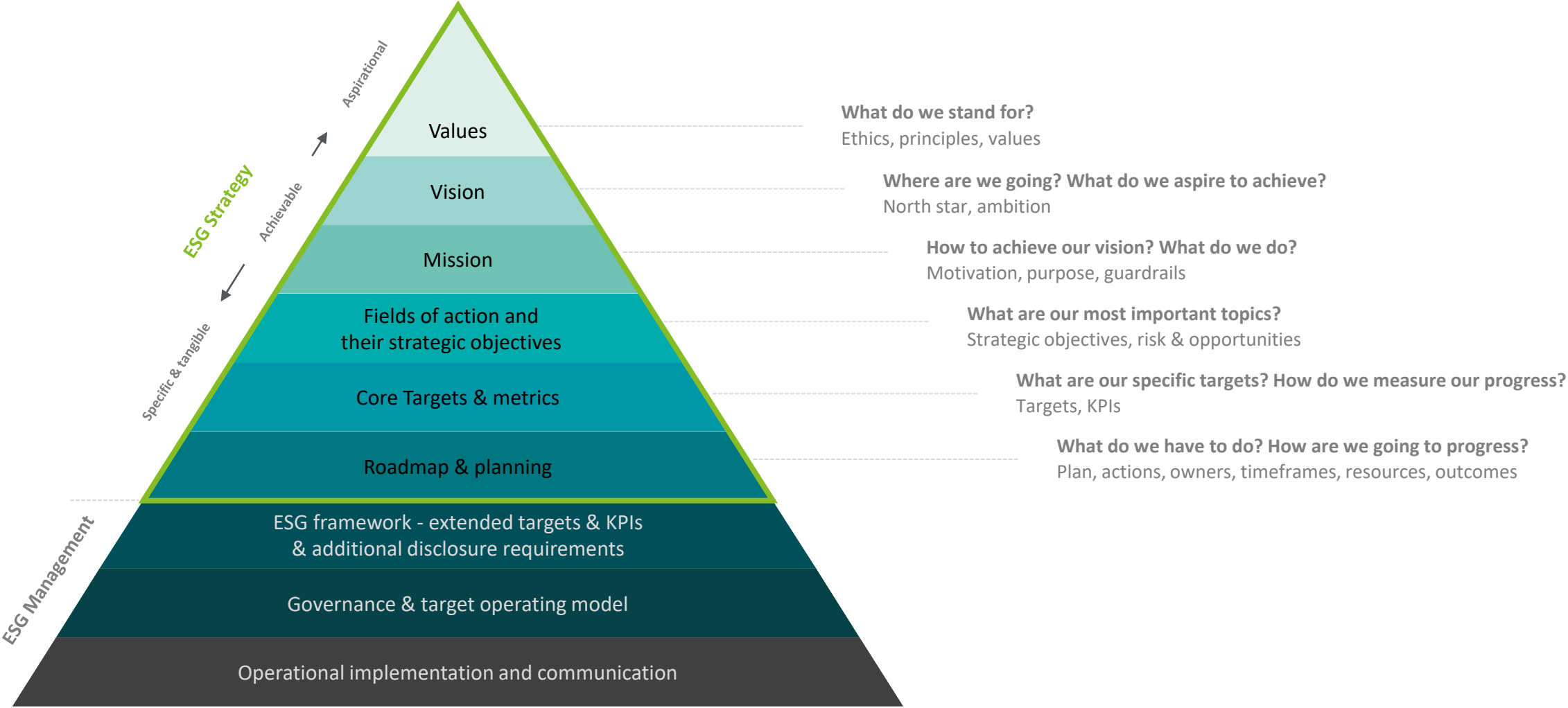
Integrated Strategy

Business strategy and ESG strategy are integrated.



1 | Integrated Strategies

An ESG Strategy articulates how organisations can generate social, environmental and economic value for their stakeholders through their products and services and their operations.



1 | Integrated Strategies (1/2)

An overview of agreements and regulations relevant for the development of a sustainability strategy



Abbreviation	Location	Publisher	Official Name	Content	Publication	German	English
Corporate Sustainability Reporting Directive (CSRD)		EU Commission	Directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting	Constituting a revision of the NFRD, the CSRD distinguishes itself, among others, by an expansion of the reporting components and an extension of the reporting obligation. Companies already falling under the NFRD must apply the CSRD from FY 2024 onwards.	December 2022		
Fit for 55		EU Commission	'Fit for 55': delivering the EU's 2030 Climate Target on the way to climate neutrality (COM/2021/550)	Fit for 55 refers to the EU target to decrease net GHG emissions by at least 55% by 2030. This set of proposals puts in place new initiatives aiming to ensure that EU policies are in line with the climate goals agreed upon by the Council and the European Parliament.	July 2021		
European Climate Law		Council of the European Union	Establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law')	A legally binding target to achieve net-zero greenhouse gas emissions by 2050 obligating EU institutions and member states to take measures to meet the target.	June 2021		
Circular Economy Action Plan		EU Commission	A new Circular Economy Action Plan for a cleaner and more competitive Europe (COM/2020/98)	A building block of the EU Green Deal which facilitates the transition to a circular economy by promoting initiatives along the entire life cycle of products, from the design to the consumption.	March 2020		

1 | Integrated Strategies (2/2)

An overview of agreements and regulations relevant for the development of a sustainability strategy



Abbreviation	Location	Publisher	Official Name	Content	Publication	German	English
EU Green Deal		EU Commission	The European Green Deal	A general action plan set out to improve the well-being and health of citizens and future generations by becoming CO2 neutral by 2050. Decoupling economic growth from resource use and establishing inclusivity are major objectives.	December 2019		
Action Plan: Financing Sustainable Growth		EU Commission	Action Plan: Financing Sustainable Growth	An action plan aiming to promote sustainable investment with a set of new and enhanced regulations such as the EU Taxonomy.	March 2018		
Paris Agreement		UN	Paris Agreement	International treaty between 195 states setting long-term objectives to protect the climate. Its major goal is to decrease global greenhouse gas emissions and limit the global temperature increase in this century to well below 2 degrees Celsius, while pursuing efforts to limit it to 1.5 degrees Celsius.	April 2016		
SDGs		UN	Transforming our world: the 2030 Agenda for Sustainable Development	17 universal goals with in total 169 sub-goals aiming at achieving global sustainable development at economic, social and environmental level.	October 2015		
UN Guiding Principles		UN	Guiding Principles on Business and Human Rights – Implementing the United Nations “Protect, Respect and Remedy” Framework	A global instrument for preventing human rights violations in the economic context, building on the three-pillar structure of the “Protect, Respect and Remedy” framework.	March 2011		

1 | Integrated Strategies

Sustainability and core business matters are highly interlinked. An integrated strategy leverages these dynamics.

5 key questions

- 1 What are my **main ESG risks and opportunities** (impacts) related to my business model from an outside-in and inside-out perspective?
- 2 Which **ESG topics** are most material and which do I aim to prioritize?
- 3 How are my **ESG impacts and dependencies connected to my business strategy**?
- 4 What are the overall **goals, mission and vision** I am to achieve with my ESG strategy?
- 5 How do I want to **position the company on the market**?

How to start...

1 | Understand and set ambition

Identifying and prioritising most material ESG topics

- Outside-in and Inside-out analysis
- Conduct benchmark analysis
- Identify gaps based on status quo assessment

2 | Design

Deriving a set of measures to achieve sustainability targets

- Define vision and mission
- Conduct a materiality analysis
- Derive fields of action and define targets and KPIs
- Develop a roadmap outlining specific measures
- Internal validation of measures and roadmap

3 | Implement

Integrating ESG strategy with business processes

- Implement internal changes regarding responsibilities, controlling, IT infrastructure e.t.c.



2 | ESG Management & Governance

ESG is entangled with every part of a business and will create a lasting impact on organizations not only today, but in the decades to come. ESG is here to stay and needs to be integrated into management and governance structures to see long-term results.

After identifying the most relevant sustainability topics and establishing a strategic direction, the definition of KPIs and an ESG management system lay the basis for evaluating progress - what gets measured gets managed.

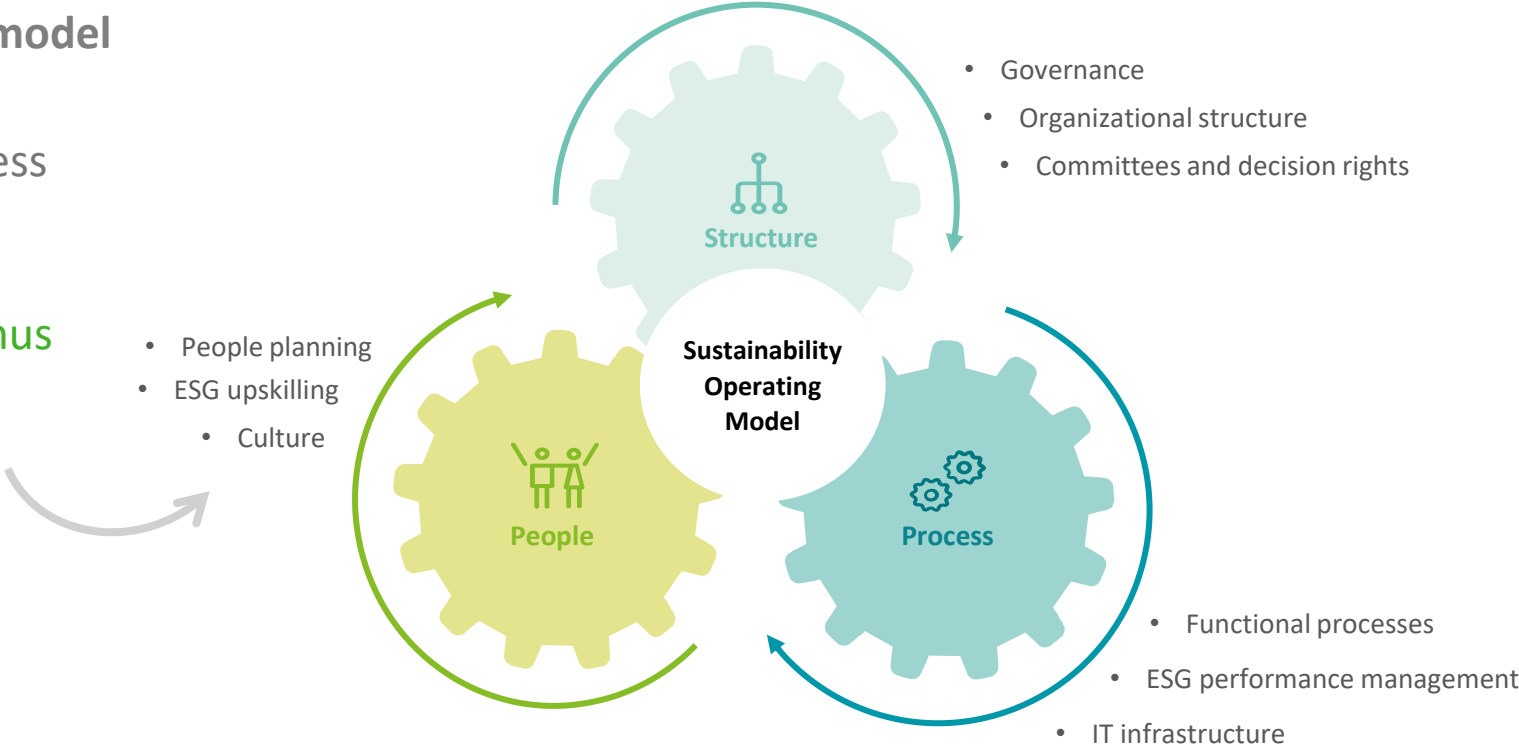
But who carries responsibility towards achieving ESG targets? Which departments and functions will take the lead? These are some of the guiding questions when creating an ESG governance structure. Yet, the optimal structure for an organization is as individual as each

2 | ESG Management & Governance

To create a sustainable operating model, ESG has to be strategically anchored in all overarching areas of the operating model: structure, process and people.

The primary elements of a operating model

An operating model illustrates a business blueprint for value generation. Sustainability is entangled with each element of the operating model and thus has to be integrated holistically.



2 | ESG Management & Governance (1/4)

An overview of relevant regulations, frameworks and publications relevant for the development of an ESG management system and a governance structure

Abbreviation	Location	Publisher	Type	Official Name	Content	Publication	German	English
European sustainability reporting standards (ESRS)		EU Commission	Disclosure requirement	Delegated Regulation (EU) .../... of 31.7.2023 supplementing Directive 2013/34/EU as regards sustainability reporting standards	The Delegated Regulation on the first set of ESRS. Companies in scope of the CSRD are required to prepare their sustainability reports according to the ESRS.	July 2023		
				Draft Delegated Regulation (EU) .../... supplementing Directive 2013/34/EU as regards sustainability reporting standards	A draft of the ESRS delegated act open for public consultation during June and July 2023.	June 2023		
				Draft European Sustainability Reporting Standards - Basis for conclusions	Basis for conclusions (BfC) supplement the draft ESRS issued in November 2022. It illustrates the objective and context of the draft standards, the process followed in their preparation, and the references to other standard-setting initiatives.	March 2023		
				EFRAG's technical advice to the European Commission regarding the first set of draft European Sustainability Reporting Standards (ESRS)	A draft for a unified EU framework for sustainability reporting. The CSRD will oblige companies to report in compliance with ESRS.	November 2022		
Corporate Sustainability Due Diligence Directive Proposal (CSDDD)		EU Commission	Disclosure requirement	Amendments adopted by the European Parliament on 1 st June, 2023 on the proposal for a directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937	A proposal for a European directive on due diligence requirements with a significantly wider duty of care compared to the LkSG, applicable to EU companies with over 250 employees and a global turnover of over €40 million; EU-based parent companies with over 500 employees and a global turnover of over €150 million; and non-EU companies with a global turnover of over €150 million if at least €40 million of this was generated in the EU.	June 2023		

2 | ESG Management & Governance (2/4)

An overview of relevant regulations, frameworks and publications relevant for the development of an ESG management system and a governance structure

Abbreviation	Location	Publisher	Type	Official Name	Content	Publication	German	English
Corporate Sustainability Reporting Directive (CSRD)		EU Commission	Disclosure requirement	Directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting	Constituting a revision of the NFRD, the CSRD distinguishes itself, among others, by an expansion of the reporting components and an extension of the reporting obligation. Companies already falling under the NFRD must apply the CSRD from FY 2024 onwards.	December 2022		
Lieferketten-sorgfalts-pflichtengesetz (LkSG)		Federal Law Gazette	Disclosure requirement	Gesetz über die unternehmerischen Sorgfaltspflichten in Lieferketten	A law for companies with > 3000 employees to prevent and minimize human rights and environmental violations in supply chains and own operations, coming into force on the 1st of January 2023. Companies with > 1000 employees are affected from 1st of January 2024.	July 2021		
EU Non-Financial Reporting Directive (NFRD)		EU Commission	Disclosure requirement	Guidelines on non-financial reporting	Requires large entities of public interest in the EU with > 500 employees to disclose certain non-financial information. The disclosure of measures of environmental protection, social responsibility, anti-corruption and diversity on company boards illustrate the primary focus.	July 2017		
CSR-Richtlinie-Umsetzungsgesetz (CSR-RUG)		Bundesgesetzblatt	Disclosure requirement	Gesetz zur Stärkung der nichtfinanziellen Berichterstattung der Unternehmen in ihren Lage- und Konzernberichten	The CSR-RUG delineates the German implementation of the NFRD and thus imposes a legally binding requirement on non-financial reporting. The law applies to large capital market-oriented corporations with > 500 employees as well as a net turnover of > 40 million EUR or a balance sheet total of >20 million EUR. In the future, the CSR-RUG will be replaced by the CSRD.	April 2017		

2 | ESG Management & Governance (3/4)

An overview of relevant regulations, frameworks and publications relevant for the development of an ESG management system and a governance structure

Abbreviation	Location	Publisher	Type	Official Name	Content	Publication	German	English
Corporate Governance Kodex		German Commission	Disclosure guidelines	Deutscher Corporate Governance Kodex	A code presenting essential statutory regulations, internationally and nationally acknowledged standards, recommendations and suggestions, for the responsible corporate governance of German listed companies.	April 2022		
BaFin ESG Risiken		BaFin	Disclosure guidelines	Merkblatt zum Umgang mit Nachhaltigkeitsrisiken	A document published by the German federal financial services supervisory, disclosing best practices for the management and controlling of processes in relation to sustainability risks.	January 2020		
IDW EPS 991		Institut der Wirtschaftsprüfer (IDW)	Assurance standard - Guidance for non-financial audits	Entwurf eines IDW Prüfungsstandards: Inhaltliche Prüfung mit hinreichender Sicherheit der nichtfinanziellen (Konzern-) Berichterstattung außerhalb der Abschlussprüfung	Next to the IDW EPS 35, the EPS 991 and the IDW EPS 990 are standards for the audit of non-financial information following §§ 289 b HGB. The IDW EPS 990 and 991 are based upon ISEA 3000 (revised). While the EPS 990 aims to obtain reasonable assurance as to whether the non-financial statements are free from material misstatement, the objective of the ESP 991 is to establish limited assurance.	November 2022		
IDW EPS 990		Institut der Wirtschaftsprüfer (IDW)	Assurance standard - Guidance for non-financial audits	Entwurf eines IDW Prüfungsstandards: Inhaltliche Prüfung mit begrenzter Sicherheit der nichtfinanziellen (Konzern-) Berichterstattung außerhalb der Abschlussprüfung		November 2022		

2 | ESG Management & Governance (4/4)

An overview of relevant regulations, frameworks and publications relevant for the development of an ESG management system and a governance structure

Abbreviation	Location	Publisher	Type	Official Name	Content	Publication	German	English
IDW EPS 352		Institut der Wirtschaftsprüfer (IDW)	Assurance standard	Entwurf eines IDW Prüfungsstandards: Inhaltliche Prüfung der nichtfinanziellen (Konzern-) Erklärung im Rahmen der Abschlussprüfung	The IDW EPS 352 lays the basis for the uniform audit of non-financial statements and focusses on specific features regarding the content of the voluntary audit of a non-financial statement as part of the annual report following §§ 289b ff., 315b ff. HGB.	August 2022		
IDW PS 340 n. F.		Institut der Wirtschaftsprüfer (IDW)	Assurance standard	Neufassung des IDW Prüfungsstandards: Die Prüfung des Risikofrüherkennungssystems (IDW PS 340 n.F.)	A standard establishing minimum requirements for an early risk detection system which is able to recognize existentially threatening developments. For publicly listed companies, the verification of the early risk detection system is legally binding.	May 2020		
ISAE 3000 (Revised)		International Auditing and Assurance Standards Board (IAASB)	Assurance standard	ISAE 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information, International Framework for Assurance Engagements and Related Conforming Amendments	A standard for assurance over non-historical financial information, entailing guidelines for ethical behaviour, quality management and performance.	December 2013		

2 | ESG Management & Governance

ESG governance structures depend on organizational structure, maturity of ESG topics as well as ambitions.

5 key questions

- 1 Does a **central or decentral** distribution of ESG responsibilities best suit my organization's needs?
- 2 Which department/function should **take the lead**? What is the role of Finance? What is the role of Sustainability?
- 3 How can **reliable reporting and steering structures** be developed?
- 4 How can ESG be monitored and steered?
- 5 Which group-wide **platforms** can be used for **knowledge exchange**?

How to start...

1 | Understand and set ambition

Where do you stand and what do you aim to achieve?

- Analyze maturity of ESG topics
- Analyze organizational structure
- Define level of ambition

2 | Design

Determining the long-term organizational setup

- Determine Sustainability processes and activities
- Determine roles, responsibilities, processes and task ownership
- Establish necessary committee structures and corresponding decision-making processes

3 | Implement

Putting the designed governance structure into practice

- Implement reporting processes
- Embed ESG within company culture



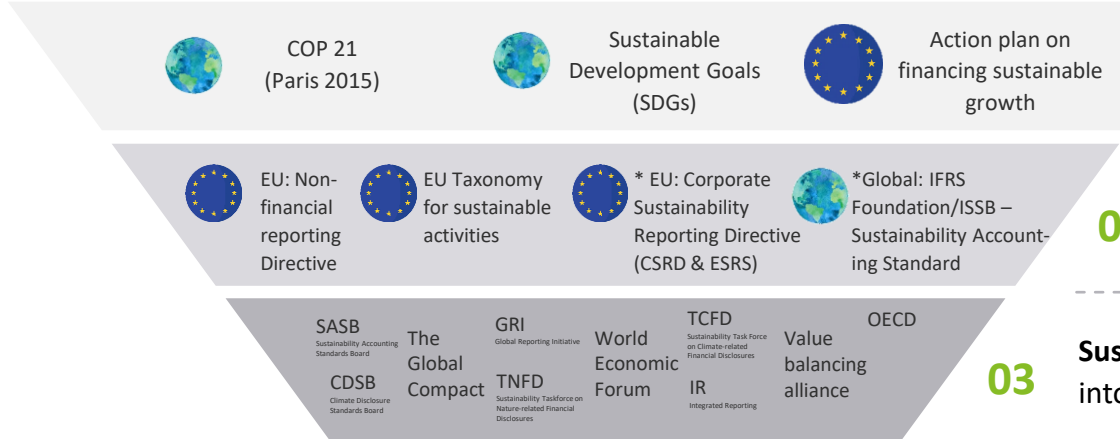
3 | ESG Reporting

ESG reporting is an important instrument to illustrate progress, demonstrate leadership through actions and grant transparency to stakeholders. The ESG reporting landscape is currently composed of a variety of unaligned voluntary and few mandatory frameworks. Yet, with the growing demand for a streamlined sustainability reporting standard, the requirements for reporting non-financial performance indicators are becoming more demanding.

3 | ESG Reporting

It is all connected: national and international regulations set a baseline for ESG activity. Reporting, rating and ranking frameworks grant transparency to stakeholders while laying the foundation for active risk and performance management.

Not exhaustive



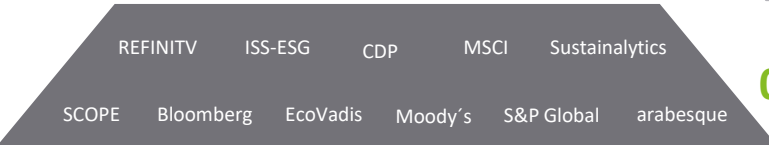
01 International Conventions & Commitments – At the global and regional level, international conventions, legal requirements and corporate commitments form the trajectory of requirements.

02 Regulations – The disclosure requirements for non-financial information are growing, as are the requirements for standardized and comparable reporting.

03 Sustainability Reporting Frameworks – Increasing importance of sustainability and integration into existing traditional financial reporting processes.



04 Ratings & Rankings – Investors increasingly seek to understand the social and environmental impacts of companies in order to assess the value of the reporting company.



* In development

3 | ESG Reporting (1/9)

Disclosure requirements: ESRS, CSDDD

Abbreviation	Location	Publisher	Type	Official Name	Content	Publication	German	English
European sustainability reporting standards (ESRS)		EU Commission	Disclosure requirement	Delegated Regulation (EU) .../... of 31.7.2023 supplementing Directive 2013/34/EU as regards sustainability reporting standards	The Delegated Regulation on the first set of ESRS. Companies in scope of the CSRD are required to prepare their sustainability reports according to the ESRS.	July 2023		
				Draft Delegated Regulation (EU) .../... supplementing Directive 2013/34/EU as regards sustainability reporting standards	A draft of the ESRS delegated act open for public consultation during June and July 2023.	June 2023		
				Draft European Sustainability Reporting Standards - Basis for conclusions	Basis for conclusions (BfC) supplement the draft ESRS issued in November 2022. It illustrates the objective and context of the draft standards, the process followed in their preparation, and the references to other standard-setting initiatives.	March 2023		
				EFRAG's technical advice to the European Commission regarding the first set of draft European Sustainability Reporting Standards (ESRS)	A draft for a unified EU framework for sustainability reporting. The CSRD will oblige companies to report in compliance with ESRS.	November 2022		
Corporate Sustainability Due Diligence Directive Proposal (CSDDD)		EU Commission	Disclosure requirement	Amendments adopted by the European Parliament on 1 st June, 2023 on the proposal for a directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937	A proposal for a European directive on due diligence requirements with a significantly wider duty of care compared to the LkSG, applicable to EU companies with over 250 employees and a global turnover of over €40 million; EU-based parent companies with over 500 employees and a global turnover of over €150 million; and non-EU companies with a global turnover of over €150 million if at least €40 million of this was generated in the EU.	June 2023		

3 | ESG Reporting (2/9)

Disclosure requirements: EU Taxonomy



Abbreviation	Location	Publisher	Type	Official Name	Content	Publication	German	English
EU Taxonomy		EU Commission	Disclosure requirement	Delegated Regulation (EU) .../... of 27.6.2023 supplementing Regulation (EU) 2020/852 establishing the technical screening criteria [for environmental objectives 3-6] (C(2023) 3851)	Determining the conditions under which an economic activity qualifies as contributing substantially to the sustainable use and protection of water and marine resources, to the transition to a circular economy, to pollution prevention and control, or to the protection and restoration of biodiversity and ecosystems and for determining whether that economic activity causes no significant harm to any of the other environmental objectives.	June 2023		
				Delegated Regulation (EU) .../... of 27.6.2023 amending Delegated Regulation (EU) 2021/2139 establishing additional technical screening criteria [for environmental objectives 1 -2] (C(2023) 3850)	Targeted amendments to the EU Taxonomy Climate Delegated Act, which expand on economic activities contributing to climate change mitigation and adaptation not included so far – in particular in the manufacturing and transport sectors.	June 2023		
				Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 establishing the technical screening criteria [for environmental objectives 1-2]	Determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives.	June 2021		
				Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment (2020/L 198/13)	A framework classifying the degree of sustainability of economic activities in order to increase transparency for investors and redirect investments to sustainable products.	June 2020		

The EU Commission launched an [EU Taxonomy Navigator](#), offering a several online tools to help users better understand what the EU Taxonomy is, which activities/sectors and technical screening criteria are covered, and how the reporting obligations work in practice.

3 | ESG Reporting (3/9)

Disclosure requirements: IFRS S1 & S2, CSRD



Abbreviation	Location	Publisher	Type	Official Name	Content	Publication	German	English
IFRS S1 General Requirements		International Sustainability Standards Board (ISSB)	Disclosure requirement	IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information	IFRS S1 provides a set of disclosure requirements designed to enable companies to communicate to investors about the sustainability-related risks and opportunities they face over the short, medium and long term.	June 2023		
IFRS S2 Climate-related Disclosures		International Sustainability Standards Board (ISSB)	Disclosure requirement	IFRS S2 Climate-related Disclosures	IFRS S2 sets out specific climate-related disclosures and is designed to be used with IFRS S1.	June 2023		
Corporate Sustainability Reporting Directive (CSRD)		EU Commission	Disclosure requirement	Directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting	Constituting a revision of the NFRD, the CSRD distinguishes itself, among others, by an expansion of the reporting components and an extension of the reporting obligation. Companies already falling under the NFRD must apply the CSRD from FY 2024 onwards.	December 2022		

3 | ESG Reporting (4/9)

Disclosure requirements: SEC, Social Taxonomy, LkSG



Abbreviation	Location	Publisher	Type	Official Name	Content	Publication	German	English
SEC proposal for enhanced ESG disclosure		Security and Exchange Commission (SEC)	Disclosure requirement	Enhanced Disclosures by Certain Investment Advisers and Investment Companies about Environmental, Social, and Governance Investment Practices	A proposal aiming at providing consistent and comparable information for investors concerning funds' and advisers' incorporation of ESG factor by requiring registered investment companies and advisers to disclose additional specific information regarding ESG strategies.	May 2022		
Social Taxonomy		Platform on Sustainable Finance	Disclosure requirement	Final Report on Social Taxonomy	A proposal for a possible structure of an EU Social Taxonomy, based on the structure of the EU Environmental Taxonomy. It proposes to use screening criteria to identify socially sustainable economic activities that contribute substantially to at least one social objective of the EU Social Taxonomy, do not significantly harm any other social objective, and are carried out in compliance with (social or environmental) minimum safeguards.	February 2022		
Lieferketten-sorgfalts-pflichtengesetz (LkSG)		Federal Law Gazette	Disclosure requirement	Gesetz über die unternehmerischen Sorgfaltspflichten in Lieferketten	A law for companies with > 3000 employees to prevent and minimize human rights and environmental violations in supply chains and own operations, coming into force on the 1st of January 2023. Companies with > 1000 employees are affected from 1st of January 2024.	July 2021		

3 | ESG Reporting (5/9)

Disclosure requirements: NAP, NFRD, CSR-RUG



Abbreviation	Location	Publisher	Type	Official Name	Content	Publication	German	English
Nationaler Aktionsplan (NAP)		Federal Government	Disclosure requirement	Nationaler Aktionsplan Umsetzung der VN-Leitprinzipien für Wirtschaft und Menschenrechte	An action plan based on the United Nations Guiding Principles on Business and Human Rights, establishing the responsibility of German companies to respect human rights along their supply chain.	September 2017		
Non-Financial Reporting Directive (NFRD)		EU Commission	Disclosure requirement	Guidelines on non-financial reporting	Requires large entities of public interest in the EU with > 500 employees to disclose certain non-financial information. The disclosure of measures of environmental protection, social responsibility, anti-corruption and diversity on company boards illustrates the primary focus.	July 2017		
CSR-Richtlinie-Umsetzungsgesetz (CSR-RUG)		Federal Law Gazette	Disclosure requirement	Gesetz zur Stärkung der nichtfinanziellen Berichterstattung der Unternehmen in ihren Lage- und Konzernberichten	The CSR RUG delineates the German implementation of the NFRD and thus imposes a legally binding requirement on non-financial reporting. The law applies to large capital market-oriented corporations with > 500 employees as well as a net turnover of > 40 million EUR or a balance sheet with a total of >20 million EUR.	April 2017		

3 | ESG Reporting (6/9)

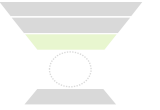
Disclosure frameworks: TNFD, VBA, UNGC



Abbreviation	Location	Publisher	Type	Official Name	Content	Publication	German	English
Task Force on Nature Related Financial Disclosure (TNFD)		TNFD	Disclosure framework	Executive Summary - v0.4 of the TNFD beta framework	The TNFD is a market-led, science-based and government supported initiative which created a reporting framework focusing on disclosing nature and environment-related financial risks and opportunities.	March 2023		
Value Balancing Alliance (VBA)		VBA	Disclosure framework	Value Balancing Alliance	An alliance of multinational companies aiming to build a monetary metric measuring the contributions made by a business to society, the economy, and the environment. The methodology is currently being tested.	October 2022		
UNGC CoP		UNGC	Disclosure framework	Communication on Progress Questionnaire Guidebook	A framework for a report, enabling businesses to disclose their efforts to implement the 10 principles of the UNGC. The ten principles are a multi-stakeholder pact seeking to ensure a sustainable globalization.	August 2022 (effective 2023)		

3 | ESG Reporting (7/9)

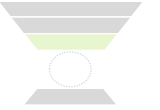
Disclosure frameworks: CDSB, IR, GRI



Abbreviation	Location	Publisher	Type	Official Name	Content	Publication	German	English
Climate Disclosure Standards Board (CDSB)		CDSB	Disclosure framework	CDSB Framework for reporting environmental & social information: advancing and aligning disclosure of environmental and social information in mainstream reports	Framework for reporting environmental and climate information as well as natural capital, with a special focus on associated business impacts. In June 2022, CDSB consolidated with the IFRS.	January 2022		
International Integrated Reporting Framework (IR)		International Integrated Reporting Council (IIRC)	Disclosure framework	International <IR> Framework	A framework to facilitate the global adoption of integrated reporting and a shift of focus towards long-term value creation. In 2022, the IR became part of the IFRS Foundation.	January 2021		
GRI Standards		GRI	Disclosure framework	Standards of the Global Reporting Initiative (GRI)	A modular standards, including universal, sector- and topic-specific standards for reporting economic, environmental and social impacts.	2021		

3 | ESG Reporting (8/9)

Disclosure frameworks: DNK, WEF-IBC, TCFD, SASB



Abbreviation	Location	Publisher	Type	Official Name	Content	Publication	German	English
Deutscher Nachhaltigkeitskodex (DNK)		DNK	Disclosure framework	Leitfaden zum Deutschen Nachhaltigkeitskodex (DNK)	A cross-sector sustainability code that utilizes criteria and selected performance indicators to promote environmental and social sustainability in companies.	2020		
World Economic Forum – International Business Forum (WEF-IBC)		World Economic Forum	Disclosure framework	Toward Common Metrics and Consistent Reporting of Sustainable Value Creation	A core set of metrics and recommended disclosures that IBC members can utilize to establish a more aligned reporting.	January 2020		
Task Force on Climate Related Financial Disclosure		TCFD	Disclosure framework	Recommendations of the Task Force on Climate-related Financial Disclosure	Industry-led initiative on corporate reporting of climate-related financial opportunities and risks.	June 2017		
Sustainability Accounting Standards Board (SASB)		SASB	Disclosure framework	Link to downloads for all industries of the Sustainability Accounting Standards Board (SASB)	Sector-specific reporting standards utilized to identify, manage and communicate financially material sustainability information. In August 2022, the SASB Standards consolidated with the IFRS Foundation.	2011		

3 | ESG Reporting (9/9)

Assurance standards: IDW, ISAE



Abbreviation	Location	Publisher	Type	Official Name	Content	Publication	German	English
IDW EPS 991		Institut der Wirtschaftsprüfer (IDW)	Assurance standard - Guidance for non-financial audits	Entwurf eines IDW Prüfungsstandards: Inhaltliche Prüfung mit hinreichender Sicherheit der nichtfinanziellen (Konzern-) Berichterstattung außerhalb der Abschlussprüfung	Next to the IDW EPS 35, the EPS 991 and the IDW EPS 990 are standards for the audit of non-financial information following §§ 289 b HGB. The IDW EPS 990 and 991 are based upon ISEA 3000 (revised). While the EPS 990 aims to obtain reasonable assurance as to whether the non-financial statements are free from material misstatement, the objective of the ESP 991 is to establish limited assurance.	November 2022		
IDW EPS 990		Institut der Wirtschaftsprüfer (IDW)	Assurance standard - Guidance for non-financial audits	Entwurf eines IDW Prüfungsstandards: Inhaltliche Prüfung mit begrenzter Sicherheit der nichtfinanziellen (Konzern-) Berichterstattung außerhalb der Abschlussprüfung		November 2022		
ISAE 3000 (Revised)		International Auditing and Assurance Standards Board (IAASB)	Guidance for non-financial audits	ISAE 3000 (Revised), Assurance Engagements other than Audits or Reviews of Historical Financial Information, International Framework for Assurance Engagements and Related Conforming Amendments	A standard for assurance over non-historical financial information, entailing guidelines for ethical behaviour, quality management and performance.	December 2013		

3 | ESG Reporting

ESG reporting allows transparent communication and active positioning on the market.

5 key questions

- 1 Which **report contents** are essential for my **internal reporting and steering**?
- 2 What information do **my external stakeholders**, such as society, customers, capital market, etc., require me to disclose?
- 3 Which information am I obliged to disclosed in order to reach **legal compliance**?
- 4 How can I gather **ESG data** most effectively?
- 5 How can I steer and manage my ESG data?

How to start...

1 | Understand and set ambition

What are the regulatory reporting requirements and what do you aim to achieve?

- Map requirements of external stakeholders
- CSRD, GRI and EU Taxonomy gap analysis
- Define ESG ambition and position

2 | Design

Defining reporting framework, contents and processes

- Decide on reporting framework, standards, audit level, reporting scope
- Derive communication concept based on external requirements
- Conceptualize ESG indicators and KPIs

3 | Implement

Putting the defined reporting structure into practice and automating data collection processes

- Implement ESG tools and IT-infrastructure
- Roll-out of ESG management
- Automate ESG reporting



4 | ESG Ratings

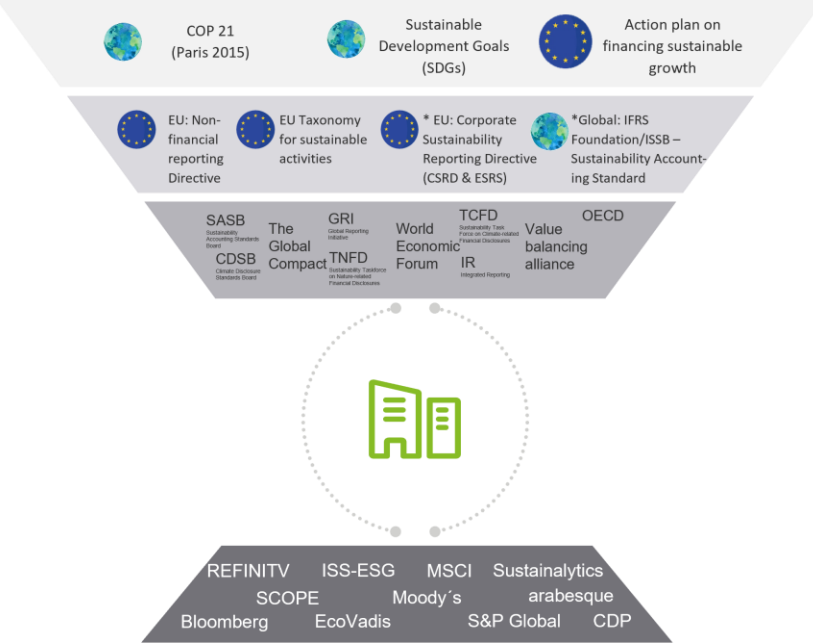
Sustainability related matters are increasingly driving business risk or contributing to business value. Thus, investors, asset managers, financial institutions and other stakeholders are gradually incorporating more ESG elements into their investment decision-making process. Ultimately, an ESG rating translates a company's ESG performance into a rating score usually considering its ESG risk profile and therefore allowing for a holistic assessment of an organization as well as comparison among peers. Yet, varying levels of transparency regarding assessment methodologies pose challenges – both for ESG data users and participating companies.

4 | ESG Ratings

More and more rating agencies enter the market for non-financial information. ESG ratings illustrate an important tool to communicate the sustainability position to the capital market.

Why ESG Ratings?

- Assess the sustainability performance
- Establish transparency
- Convey a holistic picture to investors
- Allow for comparison among companies



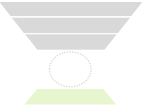
ESG ratings are characterized by different **update frequencies, focus areas** and **resource demands**

<p>S&P Global Corporate Sustainability Assessment (CSA)</p> <ul style="list-style-type: none"> Annually Broad focus 400 working days 	<p>EcoVadis</p> <ul style="list-style-type: none"> Annually Supply chain sustainability 6 to 8 weeks 	<p>CDP</p> <ul style="list-style-type: none"> Annually Company's reaction to climate change 30 working days 	
<p>MSCI</p> <ul style="list-style-type: none"> Continuously Resilience to long-term, financially relevant ESG risks 20 working days 	<p>Bloomberg</p> <ul style="list-style-type: none"> Daily Broad focus 1 working day 		
<p>ISS ESG</p> <ul style="list-style-type: none"> Annually Company's management of ESG issues 20 working days 			<p>Sustainalytics</p> <ul style="list-style-type: none"> Annually Value at risk driven by ESG factors 20 working days

This overview is non-exhaustive. Indicated efforts are estimates and company-dependent.

4 | ESG Ratings (1/3)

Corporate Sustainability Ratings: Arabesque, Bloomberg, CDP, EcoVadis

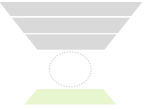


Name (Owner)	Rating Name	Company Coverage (12/22)	Rating based on	Content	Historic Milestones	Publicly Available Data
Arabesque (Arabesque)	Arabesque s-ray	7,000	Publicly available disclosures	An ESG data tool, updated on a daily basis, evaluating a company's ESG performance by issuing an ESG score, an UN Global Compact score and a temperature score.	<ul style="list-style-type: none"> 2013 – Foundation 	<ul style="list-style-type: none"> Company scores Industry comparison
Bloomberg ESG (Bloomberg)	Bloomberg's Environmental, Social & Governance (ESG Data) Dataset	11,800	Publicly available disclosures	Bloomberg provides a variety of different ESG scores such as the Board Composition Scores, Environmental & Social Score, Environmental & Social News Sentiment Score and MSCI ESG Solutions on their Bloomberg Terminal, rating on a point scale from 0 to 100.	<ul style="list-style-type: none"> 2009 - Acquisition of New Energy Finance & Foundation 	<ul style="list-style-type: none"> Subscription required
CDP (CDP)	CDP Climate, Water and Forest Scores	18,700	Questionnaire responses	An ESG rating and reporting framework, scoring companies and cities in the themes of climate change, forests and water security on a scale from 'A' to 'D-'.	<ul style="list-style-type: none"> 2002 – Foundation 	<ul style="list-style-type: none"> Company scores Company response to questionnaire
EcoVadis (EcoVadis)	EcoVadis Sustainability Rating	100,000+	Questionnaire responses	A rating service for companies to assess supplier's ESG performance by providing separate score for environmental, labor and human rights, ethics, as well as sustainable procurement on a point scale from 0 to 100.	<ul style="list-style-type: none"> 2007 – Foundation 	<ul style="list-style-type: none"> Subscription required

This list serves the purpose of providing a non-exhaustive overview of sustainability ratings.

4 | ESG Ratings (2/3)

Corporate Sustainability Ratings: ISS-ESG, Moody's ESG, MSCI-ESG, Refinitive



Name (Owner)	Rating Name	Company Coverage (12/22)	Rating based on	Content	Historic Milestones	Publicly Available Data
ISS-ESG (Deutsche Boerse)	ISS ESG Ratings & Rankings	11,900	Publicly available disclosures	An ESG rating family, entailing a number of ESG ratings, such as the ESG corporate rating, ESG governance quality score, SDG impact rating and Carbon Risk Rating.	<ul style="list-style-type: none"> 2014 – ISS was owned by MSCI until acquired by Vestar Capital Partner 2017 – Acquisition of IW Financial and South Pole Climate Data 2020 – Deutsche Boerse acquired majority share 	<ul style="list-style-type: none"> Company scores Industry comparison
Moody's ESG (Moody's)	Moody's ESG Score Predictor	300,000,000	Publicly available disclosures Third-party databases	A predictive rating concept, providing ESG scores for a wide variety of private and public companies based on machine learning algorithms.	<ul style="list-style-type: none"> 2019 – Acquisition of majority stake of Vigeo Eiris, Four Twenty Seven, SynTao Green Finance and RiskFirst 	<ul style="list-style-type: none"> Subscription required
MSCI-ESG (MSCI)	MSCI-ESG Ratings	8,500+	Publicly available disclosures Third-party databases	A rating concept, evaluating companies on an 'AAA' to 'CCC' scale and identifying industry leaders and laggards according to their exposure to industry-material ESG risks and their ability to manage those risks relative to peers.	<ul style="list-style-type: none"> 2010 – Launch of MSCI ESG Research after acquiring Risk Metrics 2014 – Acquisition of GMI Ratings 2019 - Acquisition of Carbon Delta 	<ul style="list-style-type: none"> Company scores Industry comparison Alignment to global climate goals Company targets
Refinitive (London Stock Exchange Group)	Refinitive ESG Data	12,000+	Publicly available disclosures	An ESG database, rating companies along 10 main themes (emissions, environmental product innovation, human rights, shareholders, etc.) on a scale from 0 to 100.	<ul style="list-style-type: none"> 2018 – Foundation (Blackstone acquired majority share in Thomson-Reuters "Financial & Risk" business unit) 2019 – Blackstone sells majority shares to the London Stock Exchange Group 	<ul style="list-style-type: none"> Subscription required

This list serves the purpose of providing a non-exhaustive overview of sustainability ratings.

4 | ESG Ratings (3/3)

Corporate Sustainability Ratings: Scope, Sustainalytics, S&P Global ESG



Name (Owner)	Rating Name	Company Coverage (12/22)	Rating based on	Content	Historic Milestones	Publicly Available Data
Scope ESG (ScopeOne)	ScopeOne ESG Impact Rating	35,000	Publicly available disclosures Third-party databases	A rating concept, providing an industry assessment, company assessment and management assessment across the dimensions environmental, social and governance.	<ul style="list-style-type: none"> • 2002 – Foundation • 2016 – Acquisition of FERI EuroRating • 2021 – Euler Hermes Rating 	<ul style="list-style-type: none"> • Subscription required
Sustainalytics (Morningstar)	ESG Risk Ratings	14,000+	Publicly available disclosures	An ESG risk rating concept, measuring a company's exposure to industry-specific material ESG risks and the company's management of those risks. Specifically, Sustainalytics discloses the magnitude of unmanaged ESG risk.	<ul style="list-style-type: none"> • 1992 – Foundation from a merger with Jantzi Research • 2019 – Acquisition of GES International • 2020 – Morningstar fully acquires Sustainalytics 	<ul style="list-style-type: none"> • Subscription required
S&P Global ESG (S&P)	S&P Global Corporate Sustainability assessment (CSA)	10,000	Publicly available disclosures Questionnaire responses	An ESG assessment concept, providing separate score for environmental, social and governance activity as well as specific focus areas on a point scale from 0 to 100.	<ul style="list-style-type: none"> • 1999 – The Dow Jones Sustainability Index was launched based on a cooperation between RobecoSAM and S&P Global • 2012 – S&P Global and Dow Jones form a joint venture • 2016 – Acquisition of Trucost • 2019 – Acquisition of RobecoSAM's ESG 	<ul style="list-style-type: none"> • Company scores • Materiality assessment • Industry comparison

This list serves the purpose of providing a non-exhaustive overview of sustainability ratings.

4 | ESG Ratings

ESG ratings allow for an easy comparison of the ESG performance among competitors. A strong rating is vital for securing capital.

5 key questions

- 1 What are the most **relevant ratings** based on **stakeholder requirements**?
- 2 How do different rating providers **assess ESG performance**?
- 3 How do I currently perform in **comparison to my peers**?
- 4 What are the most effective **levers to optimize** my ESG rating score?
- 5 How can I gather **ESG data** most efficiently?

How to start...

1 | Choose

Selecting the rating suiting my organization best

- Map requirements of external stakeholders
- Status quo: analysis of previous rating results, data availability, internal strengths and weaknesses
- Select most relevant rating based on internal and external fit

2 | Improve

Improving the performance of the identified rating

- Identify relevant rating requirements
- Define vision and mission
- Analyze gaps and prioritize identified gaps
- Develop measures to improve performance

3 | Respond

Responding to the rating agency and optimize rating result

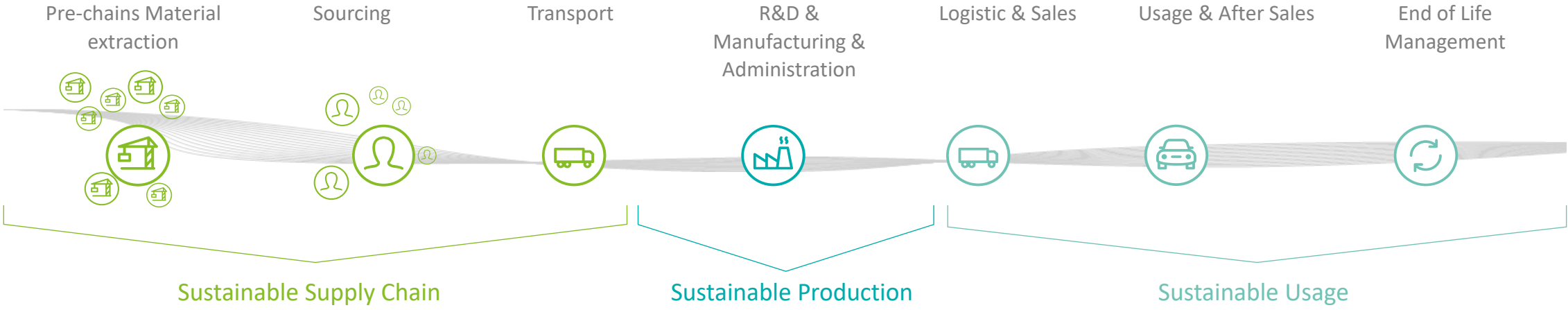
- Implement identified measures
- Draft responses and communications with agency

5 | Sustainable Value Chain

From the design and the procurement of raw materials to the manufacturing – the various steps involved in bringing a product to the market are commonly carried out around the whole globe. Complex global value chains have significantly shaped international trade, now environmental and social considerations have moved into the center of attention. Binding legislations requiring organizations to carry out due diligence practices while stakeholder expectations are growing. Therefore, it is essential for businesses to set in place mechanisms, to increase transparency and to analyze as well as mitigate risks along the entire value chain.

5 | Sustainable Value Chain

New and existing regulations require companies to transform their global value chain. Six mechanisms are key for tackling sustainability challenges in the supply chain, which often is the most intransparent part of the entire value chain.



Mechanism	Sustainable Sourcing Strategy & Governance	Risk Sensing & Monitoring	Issue Management	Audits & Certifications	Supplier Support Strategies	Transparency & Stakeholder Engagement
Actions	Sustainable sourcing strategy	Risk identification (e.g. category or product level)	Sustainable materials & circularity	Monitoring & audit programme	Trainings	Impact & reporting
	Code of conduct	Risk methodology	Carbon & water footprint	Certifications & standards	Cooperation with vendors	Ratings & rankings (CDP, EcoVadis, ...)
	Allocation of responsibilities	Rating & performance management	Human rights & conflict minerals	Corrective action plans	Supplier guidelines	Associations & initiatives (Drive, RBA, VDA,...)
	Procurement process integration	Incentives & penalties	Supplier engagement measures	...
Impact	Ensure governance and accountability for CoC compliance	Establish early warning system	Reduce reputational, ethical and legal risks	Understand and enhance levels of compliance amongst suppliers	Enable suppliers	Joint development of new solutions & standards

5 | Sustainable Value Chain (1/3)

An overview of regulations, agreements and principles relevant for establishing a sustainable value chain



Abbreviation	Location	Publisher	Official Name	Content	Publication	German	English
Corporate Sustainability Due Diligence Directive Proposal (CSDDD)		EU Commission	Amendments adopted by the European Parliament on 1 st June, 2023 on the proposal for a directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937	A proposal for a European directive on due diligence requirements with a significantly wider duty of care compared to the LkSG, applicable to EU companies with over 250 employees and a global turnover of over €40 million; EU-based parent companies with over 500 employees and a global turnover of over €150 million; and non-EU companies with a global turnover of over €150 million if at least €40 million of this was generated in the EU.	June 2023		
LkSG: Handreichung Angemessenheit		Federal Office for Economic Affairs and Export Control (BAFA)	Handreichung zum Prinzip der Angemessenheit nach den Vorgaben des Lieferkettensorgfaltspflichtengesetzes	A guidance document for ensuring appropriateness in accordance with the LkSG.	December 2022		
Corporate Sustainability Reporting Directive (CSRD)		EU Commission	Directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting	Constituting a revision of the NFRD, the CSRD distinguishes itself, among others, by an expansion of the reporting components and an extension of the reporting obligation. Companies already falling under the NFRD must apply the CSRD from FY 2024 onwards.	December 2022		
LkSG: Merkblatt Fragenkatalog		Federal Office for Economic Affairs and Export Control (BAFA)	Fragenkatalog zur Berichterstattung gemäß § 10 Abs. 2 LkSG	A preliminary questionnaire for reporting in accordance with the LkSG.	October 2022		

This list serves the purpose of providing a non-exhaustive overview of cross-industry regulations, agreements and principles relevant for establishing a sustainable value chain.

5 | Sustainable Value Chain (2/3)

An overview of regulations, agreements and principles relevant for establishing a sustainable value chain



Abbreviation	Location	Publisher	Official Name	Content	Publication	German	English
LkSG: Handreichung Beschwerdeverfahren		Federal Office for Economic Affairs and Export Control (BAFA)	Handreichung „Beschwerdeverfahren nach dem Lieferkettensorgfaltspflichtengesetz“	A guidance document for ensuring appropriateness in accordance with the LkSG.	October 2022		
LkSG: Handreichung Risikoanalyse		Federal Office for Economic Affairs and Export Control (BAFA)	Handreichung zur Umsetzung einer Risikoanalyse nach den Vorgaben des Lieferkettensorgfaltspflichtengesetzes	A guidance document for executing the risk analysis in accordance with the LkSG	August 2022		
Due Diligence Guidance for Responsible Business Conduct		OECD	OECD Due Diligence Guidance for Responsible Business Conduct	A guidance document providing practical support to enterprises on the implementation of the OECD Guidelines for Multinational Enterprises.	May 2018		
EU Conflict Mineral Regulation		EU Commission	Regulation (EU) 2017/821 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	A due diligence obligation for union importers of 3TG (tin, tantalum, tungsten and gold) from CAHRAs (Conflict Affected and High Risk Areas) above a certain quantity thresholds.	May 2017		
Guidelines for Multinational Enterprises		OECD	OECD Guidelines for Multinational Enterprises	A set of non-binding principles addressed by governments to multinational enterprises operating in foreign countries. The guidelines aim to support enterprises in contributing to economic, environmental and social progress.	May 2011		

This list serves the purpose of providing a non-exhaustive overview of cross-industry regulations, agreements and principles relevant for establishing a sustainable value chain.

5 | Sustainable Value Chain (3/3)

An overview of regulations, agreements and principles relevant for establishing a sustainable value chain



Abbreviation	Location	Publisher	Official Name	Content	Publication	German	English
UN Guiding Principles		UN	Guiding Principles on Business and Human Rights – Implementing the United Nations “Protect, Respect and Remedy” Framework	Global instrument for remedying and preventing human rights violations in the economic context.	March 2011		
Fundamental Principles and Rights at Work		ILO	ILO Declaration on Fundamental Principles and Rights at Work	A declaration setting international labor standards on a broad range of subjects, including human rights at work, occupational safety and health, employment policy and human resources development. The declaration is binding for ILO members.	July 1998		
International Bill of Human Rights		UN	The International Bill of Human Rights	An international treaty consisting of the Declaration of Human Rights and two covenants, which state a comprehensive list of inalienable human rights. For the two covenants to become binding, government must ratify them.	December 1948		

This list serves the purpose of providing a non-exhaustive overview of cross-industry regulations, agreements and principles relevant for establishing a sustainable value chain.

5 | Sustainable Value Chain

With the implementation of the LkSG and the CSDDD, supply chain due diligence becomes a boardroom issue.

The focus of this chapter lies on human rights related due diligence practices. Input concerning the decarbonization of the supply chain may be found in the following climate topic input.

5 key questions

- 1 How well am I **prepared for the LkSG** and upcoming regulations (CSDDD)?
- 2 Where are **potential and actual risks** in my supply chain including own operations located?
- 3 Which **preventive measures** can I take to minimize potential and actual risks?
- 4 How can sustainability be **embedded into** my existing supply chain **processes**?
- 5 How can I ensure the availability of accurate and high quality **data**?

How to start...

1 | Understand

Assessing regulatory readiness

- Define level of ambition
- Analyze status quo
- Map regulatory requirements
- Conduct gap analysis

2 | Design

Prioritizing relevant measures and developing approaches to close the identified gaps

- Conceptualize measures to close gaps
- Prioritize relevant measures

3 | Implement

Implementing relevant measures and integrating these into existing processes

- Integrate due diligence obligations into existing corporate units, systems and processes

Topic Inputs

Climate



6 | Climate

Today, the earth is about 1.1 °C warmer than in the late 1800s, emissions continue to rise. Climate change increases resource scarcity, threatens populations and drastically increase the cost of doing business. To secure a liveable future, we need to rethink how businesses operate. Now is the time to take decisive action. Understanding, measuring and minimizing one’s carbon footprint illustrates a first and essential step on the road to climate leadership.

1 | Climate

Climate change is already causing adverse natural, human and economic impacts across the world, and is projected to only get worse. We are at a critical point to decide which future we want to live in.

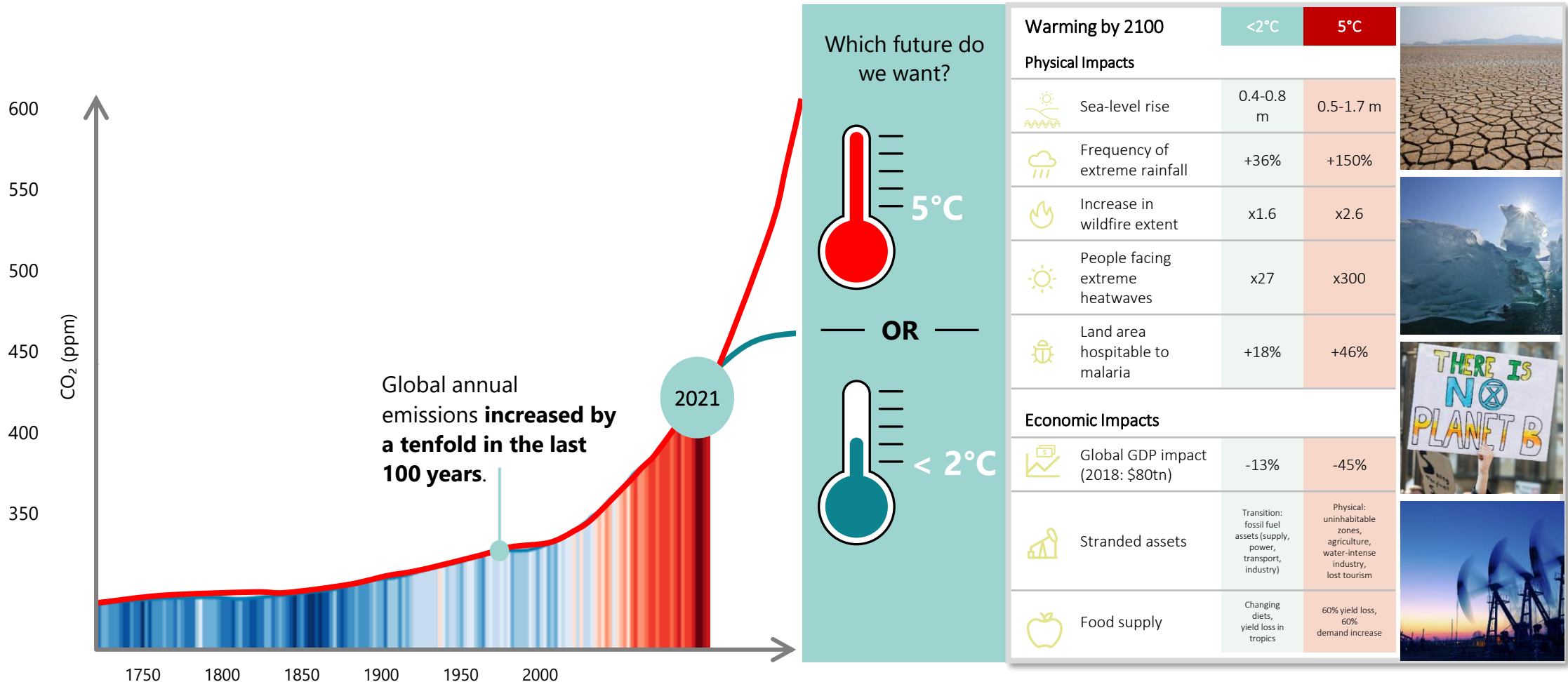


Image source: [Warming stripes - Wikipedia](#)
Deloitte 2023

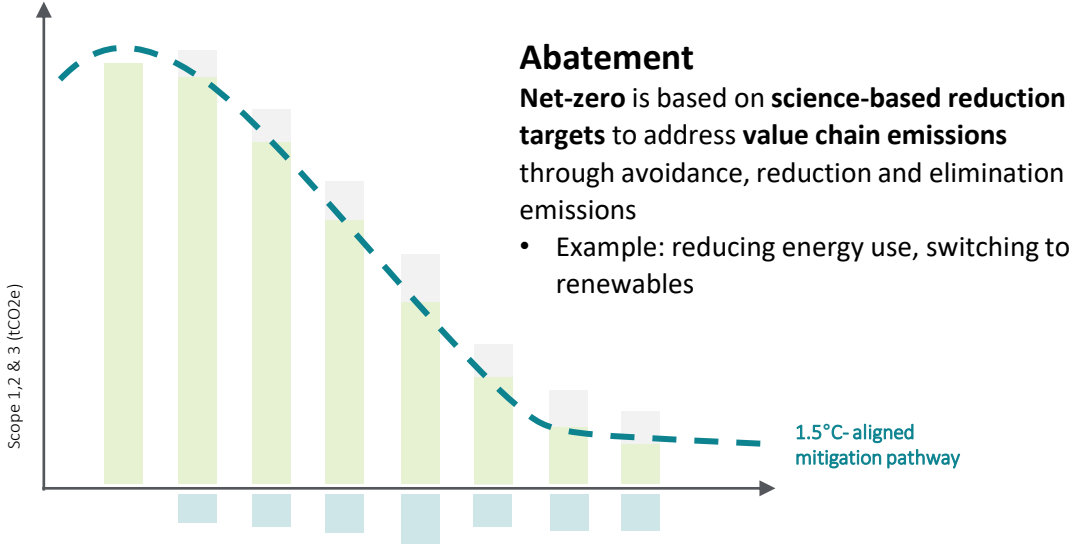
1 | Climate

Staying under the 1,5°C decarbonization curve is of high importance to secure a license to operate in the decades to come.

Carbon reduction process:



Measures to reduce carbon and achieve net zero goals:



Removal
Measures taken to **remove unabated emissions from the atmosphere and permanently store it** within or beyond the value chain

- Example: Direct Air Capture (DAC) and storage, Bioenergy with carbon capture and storage (BECCS), etc.

Compensation
For partially, completely or more of what it emits through avoidance, reduction and elimination of emissions **outside company's value chain**

- Example: REDD+, conservation projects, e.g., peatland or mangrove, renewable energy, e.g., solar/ wind/ biogas

1 | Climate

An overview of relevant climate agreements and regulations

Abbreviation	Location	Publisher	Official Name	Content	Publication	German	English
Science based targets (SBTI)		Science Bases Targets	SBTI Corporate Net-Zero Standard	A standard offering a science-based framework for setting corporate net-zero targets consistent with limiting temperature rise to 1.5°C by 2100.	October 2021		
European Climate Law		EU Commission	Establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law')	A law making the goal set out in the European Green Deal to become climate-neutral by 2050 legally binding. Intermediate targets of reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels, are set.	June 2021		
Nachhaltigkeitsstrategie 2021		Federal Government	Deutsche Nachhaltigkeitsstrategie – Weiterentwicklung 2021	A national strategy aiming to achieve the UN sustainable development goals and to pick up the pace on the path to greater sustainability.	March 2021		
Bundes-Klimaschutzgesetz (KSG)		BMU	Bundes-Klimaschutzgesetz (KSG) des Bundesministerium für Umwelt und Naturschutz und nukleare Sicherheit	A federal law standardizing various climate protection commitments on national level by defining annual reduction targets for the various sectors until 203.	December 2019		
Klimaschutzprogramm 2030		BMU	Klimaschutzprogramm 2030 der Bundesregierung zur Umsetzung des Klimaschutzplans 2050	A program to execute the German Climate Protection Plan 2050, entailing measures to save CO2 for the energy sector, industry, buildings, transport, agriculture and forestry, land use and waste management.	September 2019		
Klimaschutzplan 2050		Federal Government	Klimaschutzplan 2050	A plan outlining the climate protection policy guidelines and goals of the German Federal Government regarding the implementation of the Paris Agreement.	November 2016		

This list serves the purpose of providing a non-exhaustive overview of cross-industry climate agreements and regulations.

1 | Climate

An overview carbon accounting standards (1/2)

Name of Standard	Publisher	Type	Content	Historic Milestones	Data Availability
Greenhouse Gas Protocol Corporate Standard	WRI & WBCSD	Corporate and Product Carbon Footprint for Scope 1, 2 & 3	A corporate accounting and reporting standard outlining requirements and guidance for companies and other organizations preparing a GHG emissions inventory. The GHG Protocol covers greenhouse gases regulated under the Kyoto Protocol and distinguishes between Scope 1, Scope 2 and Scope 3 emissions.	<ul style="list-style-type: none"> • 1997 – WRI and WBCSD formed a steering group to work on a standardized measurement of GHG emissions • 2001 – Publication of first GHG Protocol edition 	<ul style="list-style-type: none"> • Accounting and Reporting Standard • Corporate Value Chain Accounting Standard • Product Lifecycle Standard • Calculation tools
ISO 14040 Environmental management - Life cycle assessment - Principles and framework	ISO	Environmental Footprint	A standard describing the principles and framework for life cycle assessment (LCA) including the definition of the goal and scope of the LCA, the different phases of LCA as well as its limitations and reporting and critical review.	<ul style="list-style-type: none"> • 1947 – Foundation of ISO • 1951 – Publication of first ISO Standards 	<ul style="list-style-type: none"> • Purchase required
ISO 14044 Environmental management - Life cycle assessment - Requirements and guidelines	ISO	Environmental Footprint	A standard laying down the requirements of the LCA and providing guidelines, covering life cycle LCA studies and life cycle inventory (LCI) studies.		<ul style="list-style-type: none"> • Purchase required
ISO 14064 Greenhouse gases - Part 1: Specification with guidance at the organization level	ISO	Environmental Footprint	A standard defining principles and requirements at the organization level for the quantification and reporting of GHG emissions and removals. It includes requirements for the design, development, management, reporting and verification of an organization's GHG inventory.		<ul style="list-style-type: none"> • Purchase required
ISO 14067 Greenhouse gases - Carbon footprint of products	ISO	Product Carbon Footprint for Scope 1, 2 & 3	A standard specifying principles, requirements and guidelines for the quantification and reporting of the carbon footprint of a product (CFP), in a manner consistent with International Standards on LCA.		<ul style="list-style-type: none"> • Purchase required

This list serves the purpose of providing a non-exhaustive overview of cross-industry carbon accounting standards.

1 | Climate





An overview carbon accounting standards (2/2)

Name of Standard	Publisher	Type	Content	Historic Milestones	Data Availability
Pathfinder Framework Guidance for the Accounting and Exchange of Product Life Cycle Emissions	The Partnership for Carbon Transparency (PACT), lead by the WBCD	Product Carbon Footprint with focus on Scope 3	A framework offering industry-agnostic guidance to ensure emissions are calculated in a comparable and consistent manner, resulting in reliable and applicable data.	<ul style="list-style-type: none"> 2021 – Pathfinder Framework was published 	<ul style="list-style-type: none"> Pathfinder Framework Pathfinder Network
PAS 2050:2011 - Specification for the assessment of the life cycle greenhouse gas emissions of goods and services	British Standards Institution (BSI)	Product Carbon Footprint	A standard assessing GHG emissions on product-level. Analyzing the raw materials as well as the activities involved in the production, distribution, consumption and ultimately recycling or disposal of the product, the product-level emissions are broken down.	<ul style="list-style-type: none"> 1901 – Foundation of BSI 2008 – Publication of first PAS standard 	<ul style="list-style-type: none"> Purchase required
PAS 2060:2014 Specification for the demonstration of carbon neutrality	British Standards Institution (BSI)	Corporate and Product Carbon Footprint	A specification for carbon neutrality building on the PAS 2050 standard, setting out requirements for quantification, reduction and offsetting of greenhouse gas (GHG) emissions for organizations, products and events.		<ul style="list-style-type: none"> Purchase required
Product Environmental Footprint (PEF) & Organization Environmental Footprint (OEF) EU Methods	European Commission	Corporate and Product Carbon Footprint	A set of LCA methods for products and organizations with the goal to strengthen the market for green alternatives and ensure comparable assessment. The methods are not mandatory yet and are currently in the “pilot phase”.	<ul style="list-style-type: none"> 2008 - 2013 – Preparation phase 2013 - 2024 – Pilot phase 	<ul style="list-style-type: none"> PEF and OEF category rules E-learning tools and guidance

This list serves the purpose of providing a non-exhaustive overview of cross-industry carbon accounting standards.

1 | Climate



An overview of databases for emission factors (1/2)

Name of Standard	Publisher	Content	Historic Milestones	Data Availability
BEIS (formerly DEFRA) Conversion Factors	UK Government Department for Business, Energy and Industrial Strategy (BEIS)	A set of greenhouse gas emission conversion factors for calculating carbon emissions for a range of activities and processes covering Scope 1, 2 and Scope 3 sources for use by UK and international organization.	<ul style="list-style-type: none"> • 2002 – First set of DEFRA conversion factors was published • 2013 – Change of department publishing conversion factors: from Department for Environment, Food and Rural Affairs (DEFRA) to BEIS 	<ul style="list-style-type: none"> • Annually published conversion factors 
Ecoinvent	Ecoinvent	A Life Cycle Inventory (LCI) database covering a variety of sectors and attributing each activity to a geographic location.	<ul style="list-style-type: none"> • Late 1990s – The Ecoinvent project was formed • 2003 – First Ecoinvent database was published 	<ul style="list-style-type: none"> • License required 
GaBi LCI Data	Sphera	A LCA database, based on primary data collection, including processes and models for a variety of regions and sectors. Ecoinvent data can be accessed via the GaBi database.	<ul style="list-style-type: none"> • 2016 – Foundation of Sphera 	<ul style="list-style-type: none"> • License required 
Globalen Emissions-Modell Integrierter Systeme (GEMIS)	Internationale Institut für Nachhaltigkeitsanalysen und –strategien (IINAS)	A database for LCA and material flow analysis as well as the carbon footprint of energy, material and transport systems. The GEMIS database can be accessed via IINAS or ProBas.	<ul style="list-style-type: none"> • 1989 – The GEMIS database was first published by the “Öko-Institut” • 2012 – Change of institution updating the database: from the “Öko-Institut” to the “Internationale Institut für Nachhaltigkeitsanalysen und –strategien” (IINAS) 	<ul style="list-style-type: none"> • GEMIS model and database 

This list serves the purpose of providing a non-exhaustive overview of cross-industry databases for emission factors.

1 | Climate

An overview of databases for emission factors (2/2)

Name of Standard	Publisher	Content	Historic Milestones	Data Availability
IPCC Emissions Factor Database	Intergovernmental Panel on Climate Change (IPCC)	A database for emission factors and other parameters including background documentation or technical references which can be utilized for the estimation of greenhouse gas emissions and removals.	<ul style="list-style-type: none"> • 1988 – Foundation of IPCC by the UN Environment Program and the World Meteorological Organization • 2002 – Launch of emission factor database 	<ul style="list-style-type: none"> • Emission factor database 
Prozessorientierte Basisdaten für Umweltmanagement-Instrumente (ProBas)	German Federal Environmental Agency in cooperation with IINAS	A web portal offering a broad spectrum of life cycle data with numerous integrated publicly available data sources.	<ul style="list-style-type: none"> • 2000 – Launch of database 	<ul style="list-style-type: none"> • ProBas database 

This list serves the purpose of providing a non-exhaustive overview of cross-industry databases for emission factors.

1 | Climate

Business are influencing and being influence by climate change. To be future proof, it is of high importance to stay under the 1,5°C decarbonization curve.

5 key questions

- 1 Are my business activity currently in line with the **Paris Agreement**?
- 2 Which **climate risks** do I face?
- 3 How can I measure my **carbon impact**, even in Scope 3?
- 4 Which levers can I pull to **reduce** my carbon footprint?
- 5 How can I embed climate measures in my existing **processes and management practices**?

How to start...

1 | Set ambitions

Defining ambitions and long-term climate goals

- Analyze external requirements
- Define level of ambition and positioning

Climate regulations

2 | Measure

Understanding your climate impact and dependencies

- Carbon Footprinting (Scope 1, 2 & 3)
- Climate Risk Assessments

Carbon accounting
Emission factors

3 | Decarbonize

Developing climate strategy and planning actions for change within the given time frame

- Net-zero Pathway 1,5°C
- Avoidance, reduction & removal measures e.g. H2, eFuels etc.
- Define mechanism to monitor and steer the transition

Clean technologies

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