



Datenmanagement und -anforderungen im Kontext der CSRD

BWIK

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KIRCHHOFF | **TEAM
FARNER**

Ihr Referent.

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Vita

> 5 Jahre Erfahrung in Sustainable
Finance und ESG Investing u.a. als
Portfolio Manager bei der
Hamburger Pensionsverwaltung.
Mitglied in der EFRAG
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Mit acht Sessions zu einem umfassenden Überblick.

17.04.2024

1. Wesentlichkeit und allgemeine Informationen

15.05.2024

2. Umweltinformationen für die Nachhaltigkeitsberichterstattung

12.06.2024

3. Sozial- und Governanceinformationen

10.07.2024

Sprechstunde (Nr. 1)

25.09.2024

4. Einführung in die EU-Taxonomie

09.10.2024

5. Bedeutung der Wertschöpfungskette

30.10.2024

6. CSRD für KMU: Vergleich der ESRS

20.11.2024

7. Datenmanagement und -anforderungen



04.12.2024

Sprechstunde (Nr. 2)

18.12.2024

8. CSRD-Umsetzung: Erfahrung aus der Praxis



Update.

CSRD im politischen Kreuzfeuer.

Fehlende CSRD-Umsetzung

Die BuReg war ohnehin zu spät dran, doch jetzt fehlt weiterhin die CSRD-Umsetzung in nationales Recht

2 Szenarien:

- Umsetzung erfolgt noch dieses Jahr
- Umsetzung erfolgt erst nächstes Jahr

Vor allem für die „Welle 1“ Unternehmen entstehen Rechtsunsicherheiten

Konsequenz (bei nicht Umsetzung)

- Bericht nach CSRD/ESRS in 2024 ist keine Pflicht, es bleibt bei den bisherigen Offenlegungspflichten (CS-RuG/NFE)
- Die Pflichtprüfung entfällt
- Ein Bericht auf Basis der ESRS erfüllt allerdings die bisher geltenden Anforderungen
→ Mit einem CSRD-Bericht auf der sicheren Seite



Für „Welle 2 Unternehmen“ (Berichtspflicht 2025) ergeben sich derzeit keine Änderungen!



Agenda Daten.



01

Datenerhebung.

→ Seite 7

02

Darstellung von
Daten und
Kontext-
informationen.

→ Seite 16

03

Struktur
der
Nachhaltigkeits-
erklärung.

→ Seite 35

04

Q&A.

→ Seite 38

1

Datenerhebung.

Berichtsinhalte CSRD.

Qualitativ

(ca. 50% der Berichterstattung)

Policies | Richtlinien

Offenlegung und Beschreibung der Richtlinien, mit denen wesentliche nachhaltigkeitsbezogene Impacts, Risks & Opportunities gemanagt werden.

Actions | Maßnahmen

Offenlegung der (Schlüssel-)Maßnahmen die im Berichtsjahr durchgeführt wurden oder geplant sind (im Zusammenhang mit den wesentlichen Nachhaltigkeitsthemen).

Targets | Ziele

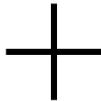
Offenlegung der messbaren, ergebnisorientierten und zeitgebundenen Ziele, die im Zusammenhang mit den wesentlichen Impacts, Risks & Opportunities eingeführt wurden und der erzielte Fortschritt.

Quantitativ

(ca. 30% der Berichterstattung)

Metrics | Kennzahlen

Offenlegung der einschlägigen, von den ESRS geforderten Kennzahlen, ggf. ergänzt um weitere relevante Kennzahlen, die im Unternehmen zur Steuerung verwendet werden.



Diverses

(ca. 20% der Berichterstattung)

(Diverse) allgemeine Anforderungen und Beschreibungen

Qualitative Offenlegungen, die nicht direkt Policies, Actions, Targets (PAT) betreffen. Bspw:

Beschreibung der Wesentlichkeitsanalyse, ESG in der Vorstandsvergütung, Stakeholderengagement etc.

Wichtige Unterscheidung: Qualitativ und quantitativ.

Uneinheitliche Definition von „Datenpunkten“.
Für die Anzahl sollte die EFRAG Datenpunkttabelle herangezogen werden

Qualitative Datenpunkte

- Narrative Anforderungen.
- Beschreibungen von Umständen, Ansätzen und Prozessen
- Viele der qualitativen Anforderungen beziehen sich auch auf die Beschreibungen von Policies, Actions und Targets, die einen besonders großen Stellenwert in den ESRS haben.

ca. 1170 Datenpunkte

Quantitative Datenpunkte

- Metriken, KPIs, numerische Angaben.
- Datenpunkte, deren Erfüllung durch die Offenlegung einer (oder mehrerer) Zahlen erreicht wird.
- Dazugehören aber auch narrative bzw. semi-narrative Datenpunkte, die einen direkten Bezug zu einer quantitativen Offenlegung haben (*Kontextinformationen*).
- Kontextinformationen sind zum Beispiel Angaben zur Methodik oder dem Scope einzelner Berechnungen.

Beispiel: Quantitative Datenpunkte

Disclosure Requirement S1-6 – Characteristics of the undertaking's employees

48. **The undertaking shall describe key characteristics of employees in its own workforce.**
49. The objective of this Disclosure Requirement is to provide insight into the undertaking's approach to employment, including the scope and nature of **impacts** arising from its employment practices, to provide contextual information that aids an understanding of the information reported in other disclosures, and to serve as the basis for calculation for quantitative **metrics** to be disclosed under other disclosure requirements in this Standard.
50. In addition to the information required by paragraph 40(a)iii of ESRS 2 *General Disclosures*, the undertaking shall disclose:
- (a) the total number of **employees** by head count, and breakdowns by gender and by country for countries in which the undertaking has 50 or more employees representing at least 10% of its total number of employees;
 - (b) the total number by head count or full time equivalent (FTE) of:
 - i. permanent employees, and breakdown by gender;
 - ii. temporary employees, and breakdown by gender; and
 - iii. non-guaranteed hours employees, and breakdown by gender.
 - (c) the total number of employees who have left the undertaking during the reporting period and the rate of employee turnover in the reporting period.
 - (d) a description of the methodologies and assumptions used to compile the data, including whether the numbers are reported:
 - i. in head count or full-time equivalent (FTE) (including an explanation of how FTE is defined); and
 - ii. at the end of the reporting period, as an average across the reporting period, or using another methodology.
 - (e) where applicable, a provision of contextual information necessary to understand the data (for example, to understand fluctuations in number of employees during the reporting period); and
 - (f) a cross-reference of the information reported under (a) above to the most representative number in the financial statements.

Beispiel: Quantitative Datenpunkte

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EFRAG-Datenpunkttabelle

DISCLAIMER

Prefinal Draft subject to Approval from EFRAG SRB [still subject to change]

INSTRUCTIONS

- 1) The DPs reported in ESRs E2 are subject to Materiality Assessment.
- 2) With the exception of DPs in IRO1 that are to be disclosed irrespective of the outcome of its materiality assessment [ESRS 1 par. 29], none of these DPs is applicable if the topic is not material.
- 3) Not all DPs are to be reported if the undertaking has not adopted the respective policies, implemented the respective actions or set the respective targets in relation to a sustainability matter that has been assessed to be material [see ESRS 1 par. 33].
- 4) Column I identifies DPs subject to phasing-in for the first 3 years [see Appendix C of ESRS 1]

ESRS	DR	Paragraph	Related AR	Name	Data Type	Appendix B - ESRS 2 (SFR + PILLAR 3 + Benchmark + CL)	DPs subject to phasing-in provisions applicable to undertaking with less than 750	Appendix C - ESRS 1 DPs subject to phasing-in provisions applicable to all undertakings	May [V]
E2	E2-IRO-1	11 a	AR 1- AR 8	Information about methodologies, assumptions and tools used to screen site locations and business activities in order	narrative				
E2	E2-IRO-1	11 b		Disclosure of whether and how consultations have been conducted (pollution)	narrative				
E2	E2-IRO-1	AR 9		Disclosure of results of materiality assessment (pollution)	narrative				
E2	E2-1	14	AR 10	Policies to manage its material impacts, risks and opportunities related to pollution (see ESRS 2 MDR-P)	MDR-P				
E2	E2-1	15 a	AR 11	Disclosure of whether and how policy addresses mitigating negative impacts related to pollution of air, water and soil	narrative				
E2	E2-1	15 b	AR 11	Disclosure of whether and how policy addresses substituting and minimising use of substances of concern and phase-out	narrative				
E2	E2-1	15 c		Disclosure of whether and how policy addresses avoiding incidents and emergency situations, and if and when they occur	narrative				
E2	E2-1	AR 12		Disclosure of contextual information on relations between policies implemented and how policies contribute to EU Air	narrative				V
ESRS 2		62		Disclosures to be reported in case the undertaking has not adopted policies					
E2	E2-2	18		Actions and resources in relation to pollution (see ESRS 2 MDR-A)	MDR-A				
E2	E2-2	19		Layer in mitigation hierarchy to which action can be allocated to (pollution)	semi-narrative				
E2	E2-2	AR 13		Action related to pollution extends to upstream/downstream value chain engagements	semi-narrative				
E2	E2-2	19	AR 14	Layer in mitigation hierarchy to which resources can be allocated to (pollution)	semi-narrative				V
E2	E2-2	AR 15		Information about action plans that have been implemented at site-level (pollution)	narrative				V
ESRS 2		62		Disclosures to be reported if the undertaking has not adopted actions					
E2	E2-3	22	AR 19	Tracking effectiveness of policies and actions through targets (see ESRS 2 MDR-T)	MDR-T				
E2	E2-3	23 a		Disclosure of whether and how target relates to prevention and control of air pollutants and respective specific load	narrative				
E2	E2-3	23 b		Disclosure of whether and how target relates to prevention and control of emissions to water and respective specific	narrative				
E2	E2-3	23 c		Disclosure of whether and how target relates to prevention and control of pollution to soil and respective specific load	narrative				

Limitationen

- Die Datenpunkttabelle ist keine Excel zur Datenerhebungen
- Einzelne „Datenpunkte“ erfordern mehr als einen Eintrag (z.B. >1 Zahl)
- Der Kontext wird aus dem Datenpunkt-Titel nicht immer klar
- Leider nicht Fehlerfrei
- Link: <https://efrag.sharefile.com/public/share/web-s6e410fb208aa4685bf9c482ee405f48d>

Datenerhebungsprozess: Beispielhaftes Vorgehen.

Verantwortliche Personen inhaltlich vorbereiten.
Deadline setzen.

Qualitative Abfrage

- Abfrage der narrativen Datenpunkte
- Ggf. Selektion “brauchbarer“ bestehender Textbestandteile (aus Nachhaltigkeitsbericht etc.)
- Narrative Datenpunkte dienen vor allem zur Beschreibung (z.B. von Richtlinien, Ziele, Maßnahmen oder themenspezifischen Umständen)

z.B. via Redaktionsblätter
(Word)

Quantitative Abfrage

- Abfrage aller einschlägigen numerischen Datenpunkte + qualitativer Kontextinformationen mit direktem Bezug (z.B. angewandte Berechnungsmethode)
- Datenabfrage berücksichtigt die Anforderungen eines prüfsicheren Prozesses

z.B. via Datentemplates
(Excel)

Parallele Begleitung und Unterstützung

- Sprechstunden
- Klären von Fragen
- Schließung von Gaps

Basis für die Texterstellung

Brauche ich für die CSRD- Umsetzung zwingend ein Tool?

Zu berücksichtigen:

Wie viele Datenpunkte muss meine Organisation berichten? 1100 oder 600?

Wie viele sind davon quantitativ? Vielleicht „nur“ 200?

Welche Daten will ich für meine Organisation tatsächlich über ein Tool managen?

Wie stelle ich mir den Berichtsprozess, vor allem die Datenerhebung, in Jahr 1 vor vs. Jahr 2?

Brauche ich qualitative Aussagen unbedingt in einem Tool?

Welches Budget habe ich zur Verfügung?

Welche Alternativen bieten sich an?

Navigation durch den Tool-Dschungel.

<https://www.atlaszero.earth/>

The screenshot displays the AtlasZero website interface. At the top left is the AtlasZero logo. The navigation bar includes 'CSRD', 'All solutions' (highlighted in green), and 'For solution providers'. A dark green button labeled 'Let's Talk' is positioned at the top right. The main content area is a grid of nine solution provider cards. Each card features a logo, the company name, a location pin icon with the city name, and two buttons labeled 'Measure' and 'Reduce'. A dark green 'Learn more' button is located at the bottom of each card.

Company	Location	Capabilities
Greenomy	Brussels	Measure
KEY ESG	London	Measure, Reduce
Equipoise	London	Measure, Reduce
CLIMATA PVT LTD	Colombo 02	Measure, Reduce
WeShyft GmbH	Hamburg	Measure, Reduce
ctrl+s	Berlin	Measure, Reduce
einsfünf° Beratungsgesellschaft mbH	Düsseldorf	Measure, Reduce
SQS Deutschland GmbH	78467 Konstanz	Measure, Reduce
Naldeo Technologies & Industries	Lyon	Measure, Reduce

2

Darstellung von Daten und Kontextinformationen.

Darstellung von Daten im Bericht.

Quantitative Daten unterliegen (fast) immer derselben Darstellungsanforderung

- **Berichtsjahr + Vorjahr** (im Standard das sogenannte „Comparative“) (ESRS 1 7.1)
Ausnahme: bspw. S1-16 (Gender Pay Gap und Median Pay Ratio) mit zwei Vorjahren
- Im Falle von **Korrekturen** (Restatements) müssen diese separat (im Folgejahr) ausgewiesen werden (ESRS 1.84 (a))
Außerdem wird dann ein **Vergleich** zwischen ursprünglich berichtetem Wert und der Korrektur gefordert. (ESRS 1.84 (a))
Ersetzen von Schätzungen (durch neue Modellierung oder reale Daten) gilt nicht als Korrektur (ESRS 1.101).
- Im Beispiel ist alles in einer Tabelle dargestellt.
Praktikabel ist häufig die Verwendung von Fußnoten im Falle von Vorjahreskorrekturen inkl. **kurzem Kontext** (ESRS 1.84 (b)).
- Wichtig: **Im ersten Jahr ist kein Vorjahr anzugeben** (gilt auch für aufgeschobene Datenpunkte) (ESRS 1.136).
Ein Vorjahr oder zusätzliche historische Werte können freiwillig präsentiert werden, unterliegen dann aber Prüfung und Bilanz eid.

Gesamtwasserverbrauch in m3 (ESRS E3.28 (a))

t (z.B. 2025)	t-1 (z.B. 2024)	t-1 korrigiert	$\Delta t-1$
1000	500	700	-200

Die Arten von Daten-Breakdowns

Geforderte Breakdowns

- Für viele Datenpunkte sind die Breakdown-Ebenen vom Standard klar definiert.
- **Beispiel:**
Emissionen
 - > Scope 1
 - > Scope 2 (market-based)
 - > Scope 2 (location-based)
 - > Scope 3
 - > Einzelne (relevante) Scope 3-Kategorien

Freiwillige Breakdowns

- Einige Paragraphen im Standard enthalten freiwillige Breakdown-Ebenen, die klar definiert sind.
- Vor allem Sozial-Bereich häufig zu beobachten.
- **Beispiel:** Mitarbeiterkennzahlen für „Non-employees“ in der Own Workforce.
- Unternehmen können diese Breakdowns grundlos auslassen. Auch eine Rechtfertigung gegenüber dem Prüfer ist nicht notwendig.

Zusätzliche Breakdowns

- Manchmal werden Breakdowns vorgeschlagen oder gefordert, die nicht klar definiert sind.
- **Beispiel (Pflicht):**
Employees by *geographical areas* (ESRS 2.40 (a) iii.)

Breakdown by *Decarbonization levers*
- **Beispiel (“Wenn notwendig“):**
By country oder
By site in allen Fällen, wenn es fürs Verständnis notwendig ist (ESRS 1 3.7)

Breakdowns: Beispiele

TABLE 1 – PROFORMA ENERGY AND CLIMATE DATA

1. ENERGY AND CLIMATE DATA**	2021	2022	2023
EMISSIONS INTENSITY			
MODES	gCO ₂ e/TKM	gCO ₂ e/TKM	gCO ₂ e/TKM
Air	657*	666*	671
Ocean	9*	7*	7
Rail	29*	27*	27
Road	80*	82*	82
Courier	455***	24	23
Total	25	24	23

Table 1 – Proforma energy and climate data; Emissions intensity, page 55

**Restated figures for 2021-2022. See accounting policy on page 60-61.*

***2023 figures in table 1 – energy and climate data are verified by our independent auditors.*

****The reduction is due to change in calculation method why the 2021 numbers are incomparable.*

Emissions intensity (gCO₂e/TKM) declined by 5.32% due to a decrease in Airfreight emissions by 14% in CO₂e and 15% in Tonne-KM in 2023. The drop in Airfreight emissions was due to lower volumes in the first half of the year as post-pandemic supply chain pressures eased, thereby reducing demand for urgent and time-sensitive deliveries.

Darstellung von Kontextinfos

ACCOUNTING POLICIES – ENVIRONMENT

Proforma reporting period.

Our, proforma, reporting covers the period from 1 January 2023 to 31 December 2023

Reporting scope

The report cover all entities under the operational control by SGL Group as referenced in the Annual Report 2023. Energy and Climate Data and the CO₂e in Scope 1, 2 and 3 covers SGL Group except for the acquired entities, 3PL, Inc., FLS – Freight & Logistics Solutions, unipessoal, Lda. as well as Global Cargo Inc, where CO₂e figures are not available. All entities are a part of Scope 3, category 4, where revenue extrapolation has been applied to estimate its CO₂e emissions occurring in this category.

Reporting framework

SGL Group reporting framework includes a sustainability statement in preparation for compliance with the Corporate Sustainability Reporting Directive (CSRD) and the European Sustainability Standards Board (SASB) framework as guidance to determine report content. For reporting on CO₂e emissions, SGL Group abides by the Greenhouse Gas Protocol (GHGP).

Energy consumption

Data regarding energy consumption are generated from a system-supported annual assessment of operational ESG factors.

Restatement

We follow a restatement policy based on guidelines from the Science Based Targets initiative and the Greenhouse Gas Protocol. Recalculations are undertaken when significant changes occur to our data. Structural changes, changes in calculation methodology or improvements in the accuracy of emission factors or activity data as well as discovery of errors that are significant are defined as triggers

for recalculation. A significance threshold of 5% is applied.

We have restated 2021 and 2022 numbers because of the new organisational structure and new methods of calculation. Specific explanations of restatements are described on the following pages. Recalculation of the total energy consumption in electricity and heating has in an increase of the total energy consumption in of 7185 MWh 2021 (+76%), and an increase of 7450 MWh in 2022 (+63%). Energy consumption figures can be found on page 53 in table.

TABLE 1. ENERGY AND CLIMATE DATA

CO₂e emission reporting in Table 1. ENERGY AND CLIMATE DATA, pages 53-55 is as defined by the Greenhouse Gas Protocol (GHGP) standard. The operational control approach is applied to all greenhouse gas emissions (CO₂e).

SCOPE 1

Data from cars, trucks and forklifts are collected through a global digital ESG platform and converted to CO₂e.

A CO₂e/km emission factor from Sveriges Klimatrapporter (2021) is applied for all trucks based on estimated kilometers driven for each truck. The estimated kilometers driven per truck in 2023 is higher than in 2022. The estimate in 2023 is based on driving reports and is more precise than the estimate used in 2022.

CO₂e/liter diesel and CO₂e/liter petrol emission factors from DEFRA (2023) are applied for all cars. Average fuel consumption data per diesel and petrol/plug-in cars has been calculated using fuel consumption data from the Danish car leasing companies. The emission factors are calculated as ton CO₂e per year per liter.

The emission factor for forklifts is based on hours in operation per forklift per year calculated from data from the Danish forklift leasing company. Fuel consumption per hour has been estimated and DEFRA's emission factor for CO₂e/liter diesel (2023) has been applied.

The emission factor is calculated as ton CO₂e per year per unit. Electricity consumed by electric forklifts is counted under Scope 2 electricity.

Data on heat for sites where heat combustion takes place at the site has been included in Scope 1. Data has been measured in MWh. Heat emission factors have been sourced from DEFRA (2023). Refrigerants are not included in the report as the consumption is estimated to be limited and therefore not material. In the case of missing activity data, gas consumption has been estimated using an updated 2023 average consumption of gas per m² office space for the offices/ warehouses where data was not obtainable.

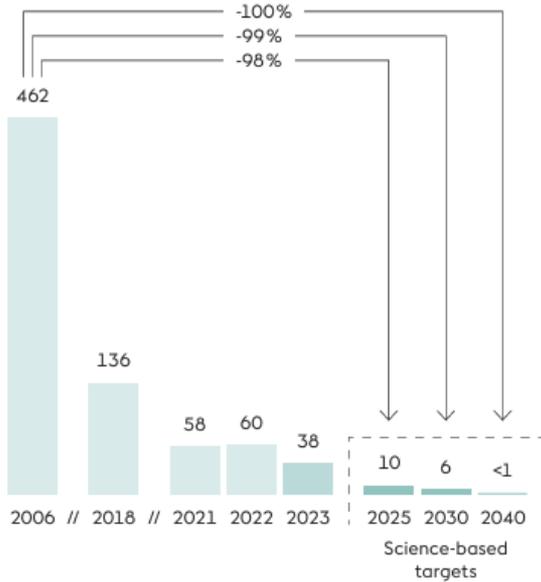
Scope 1 restatement

For Scope 1 both 2021 and 2022, estimated data on heating have been updated in accordance updated methodology for 2023. In 2021 and 2022 the estimates were derived from actual consumption data from reporting units and applied to the rest of the organisation with missing consumption data. The estimates were largely derived from locations with low tons of CO₂e relative to their size, hence why an update to the calculations was needed. The emission factor applied was also internally derived which has now been restated to be aligned with the method used in 2023. This resulted in a decrease of -1162 tCO₂e in 2021 (-18%) and increase of 1885 tCO₂e in 2022 (+52%).

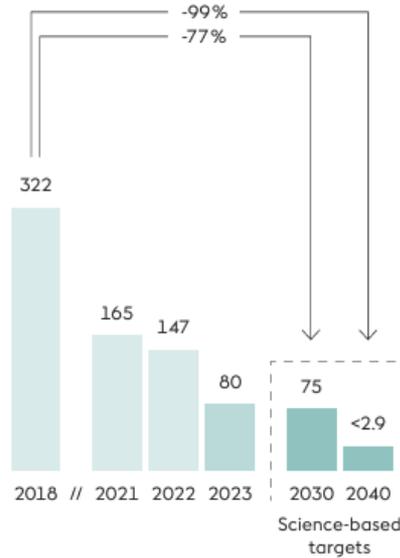
SCOPE 2

Data is calculated following both the location-based and market-based approach. As our SBTi targets are based on the market-based approach, our described Scope 2 figures throughout the report are based on the market-based approach. Data from electricity consumption is measured in MWh and collected in a global digital ESG platform. In the case of missing activity data, electricity consumption has been estimated using an updated 2023 average consumption of electricity per m² office space for the offices/

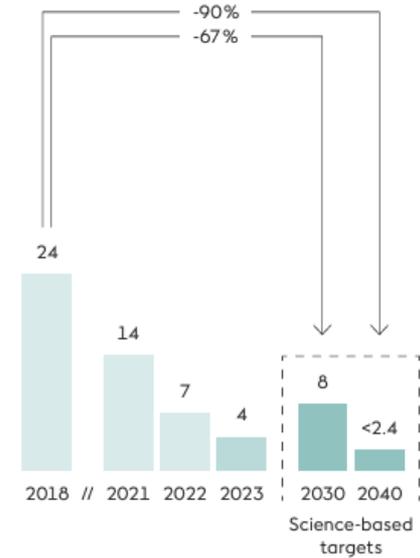
Darstellung von Klimazielen



Scope 1-2 greenhouse gas emissions intensity
g CO₂e/kWh



Scope 1-3 greenhouse gas emissions intensity (excl. natural gas sales)
g CO₂e/kWh



Scope 3 greenhouse gas emissions from natural gas sales
Mt CO₂e

Net-zero 2040 SBTi target

Darstellung von Emissionen

36 Absolute CO₂ emissions (scope 1 and 2) (in kilotonnes) - market-based conversion factors

	2023	2022*	2021	2020	2019
Scope 1	62.3	79.5	94.0	95.1	116.7
Scope 2	6.3	8.5	12.3	10.0	14.4
Total	68.6	88.0	106.4	105.2	131.1

* Restatement of the values disclosed in BAM's annual report 2022: BAM's share of emissions related to the projects in Denmark was omitted in the data. CO₂ emissions for 2022 have been restated, the additional impact on CO₂ emissions - scope 1 and 2 is 2.0 kilotonnes.

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Scope 1	62.3	79.5	94.0	95.1	116.7
Scope 2	16.4	16.3	20.9	22.0	25.0
Total	78.7	95.8	114.9	117.1	141.7

40 Scope 3

Category	Emissions (ktonnes CO ₂ e)	Share of scope 1, 2 and 3
1 Purchased goods and services	1,416	54%
2 Capital goods	119	5%
3 Fuel and energy-related activities	19	1%
4 Upstream transportation and distribution	0	0%
5 Waste generated in operations	13	1%
6 Business travel	5	0%
7 Employee commuting	2	0%
8 Upstream leased assets	-	-
9 Downstream transportation and distribution	-	-
10 Processing of sold products	-	-
11 Use of sold products	924	35%
12 End-of-life treatment of sold products	54	2%
13 Downstream leased assets	-	-
14 Franchises	-	-
15 Investments	-	-
Total scope 3	2,552	97%
Scope 1 and 2	69	3%
Total scope 1,2 and 3	2,621	100%

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3 Fuel and energy-related activities	19	1%
4 Upstream transportation and distribution	0	0%
5 Waste generated in operations	13	1%
6 Business travel	5	0%
7 Employee commuting	2	0%
8 Leased assets	-	-
9 Inbound transportation and distribution	-	-
10 Production and product distribution	-	-
11 Use of sold products	924	35%
12 End-of-life treatment of products	54	2%
13 Downstream leased assets	-	-
14 Franchises	-	-
15 Investments	-	-
Total scope 3	552	97%
Scope 1 and 2	69	3%
Total scope 1,2 and 3	2,621	100%

Darstellung von Emissionen

	Retrospective				Milestones and target years			
	Base year	Compa-rative	N	% N / N-1	2025	2030	(2050)	Annual % target / Base year
Scope 1 GHG emissions								
Gross Scope 1 GHG emissions (tCO ₂ eq)								
Percentage of Scope 1 GHG emissions from regulated emission trading schemes (%)								
Scope 2 GHG emissions								
Gross location-based Scope 2 GHG emissions (tCO ₂ eq)								
Gross market-based Scope 2 GHG emissions (tCO ₂ eq)								
Significant scope 3 GHG emissions								
Total Gross indirect (Scope 3) GHG emissions (tCO ₂ eq)								
1 Purchased goods and services								
[Optional sub-category: Cloud computing and data centre services								
2 Capital goods								
3 Fuel and energy-related Activities (not included in Scope 1 or Scope 2)								

4 Upstream transportation and distribution								
5 Waste generated in operations								
6 Business traveling								
7 Employee commuting								
8 Upstream leased assets								
9 Downstream transportation								
10 Processing of sold products								
11 Use of sold products								
12 End-of-life treatment of sold products								
13 Downstream leased assets								
14 Franchises								
15 Investments								
Total GHG emissions								
Total GHG emissions (location-based) (tCO ₂ eq)								
Total GHG emissions (market-based) (tCO ₂ eq)								

Darstellung von Emissionen

	Retrospective				Milestones and target years	
	Base year (2019)	2022	2023	% vs. LY	2030	Annual % target / Base year
Scope 1 GHG emissions						
Gross scope 1 GHG emissions (tCO ₂ eq)	153.887	141.985	*93,602	-34%	115.018^	4,2%
Percentage of scope 1 GHG emissions from regulated emission trading schemes (%)	0%	0%	0%	0%		
Scope 2 GHG emissions						
Gross location-based scope 2 GHG emissions (tCO ₂ eq)	59.109	45.702	29,369	-36%		
Gross market-based scope 2 GHG emissions (tCO ₂ eq)	59.109	33.454	*15,198	-55%		
Significant scope 3 GHG emissions						
Total Gross indirect (scope 3) GHG emissions (tCO ₂ eq)	758.327	688.192	442,582	-36%	Reduce by 22% per m ³	2,0%
1 Purchased goods and services	700.604	629.612	400,600	-36%		
3 Fuel and energy-related activities (not included in scope 1 or scope 2)	34.964	34.355	23,071	-33%		
4 Upstream transportation and distribution	13.656	14.118	10,932	-23%		
9 Downstream transportation	9.104	10.107	7,978	-21%		
Total GHG emissions						
Total GHG emissions (location-based) (tCO ₂ eq)	971.324	875.879	565,553	-35%		
Total GHG emissions (market-based) (tCO ₂ eq)	971.324	863.631	551,381	-36%		

^Scope 1+2 is a combined target
* ESG figure subject to limited assurance

Darstellung von (gefährlichen) Abfällen

		Hazardous solid waste ¹				
In tonnes or kilogrammes	(tonnes)	2023	2022	2021	2020	2019
Amount of waste directed to disposal (ESRS E5.37 (c))	Waste for incineration	282	284	272	523	357
	Waste for landfill	50	35	25	35	47
	Total waste directed to disposal	332	319	297	558	404
Amount of waste diverted from disposal (ESRS E5.37 (b))	Recycling	598	715	982	820	918
	Total waste diverted from disposal	598	715	982	820	918
	Total hazardous	930	1,034	1,279	1,378	1,322

Darstellung von Datenlimitierungen

UNCERTAINTIES AND ESTIMATES

Solid waste data is collected on a monthly basis from external waste handlers. The waste data is provided by sites via monthly forms, partially centrally based on invoice, supplier system, supplier email, weighted on site or other. The sourced data is based on direct measurements. In Denmark and Sweden, this data collection process is automated, ensuring accuracy and efficiency. However, for other countries, the data is reliant on manual entries made by individual sites, which inherently increases the risk of errors. To mitigate this risk, appropriate controls have been implemented to ensure data accuracy and reliability. In 2023, we chose to restate the historical figures for solid waste to correct errors related to prior years. The impact of the restatements of the individual figures is less than 5%.

Hazardous solid waste ¹	2023	2022	2021	2020	2019
(tonnes)					
Waste for incineration	282	284	272	523	357
Waste for landfill	50	35	25	35	47
Total waste directed to disposal	332	319	297	558	404
Recycling	598	715	982	820	918
Total waste diverted from disposal	598	715	982	820	918
Total hazardous	930	1,034	1,279	1,378	1,322

Datenverfügbarkeiten.

Was tun, wenn (quantitative) Daten
nicht verfügbar sind?

Datenverfügbarkeiten.

Was tun, wenn (quantitative) Daten
nicht verfügbar sind?

Daten erheben

Die ESRS sehen keinen
Auslassungsgrund
„Nicht Verfügbarkeit“ vor!

(Ausnahme: Daten in Bezug auf
die Wertschöpfungs-kette in den
ersten 3 Jahren)

Datenverfügbarkeiten.

Was tun, wenn (quantitative) Daten nicht verfügbar sind?

Daten erheben

Die ESRS sehen keinen Auslassungsgrund „Nicht Verfügbarkeit“ vor!

(Ausnahme: Daten in Bezug auf die Wertschöpfungs-kette in den ersten 3 Jahren)

Nicht möglich? →

Daten schätzen

Sind keine Daten verfügbar, muss daher geschätzt, modelliert, approximiert werden (z.B. hochrechnen).

Grundlage hierfür ist ESRS 1 7.2 und QC 9 (faithful representation)

QC 9:

Information can be **accurate without being perfectly precise** in all respects. [...] As such, estimates shall be presented with a clear emphasis on their **possible limitations and associated uncertainty**. [...] Accuracy requires that: [...] estimates, approximations and forecasts are **clearly identified** as such; **no material errors** have been made in selecting and applying an appropriate process for developing an estimate, approximation or forecast, and the inputs to that process are reasonable and supportable; assertions are reasonable and based on information of sufficient quality and quantity

Darstellung von Schätzungen

Overview of emissions

(2023 data based on 11 months actual + 1 month estimate)

	SO ₂			NO _x			VOC*			NH ₃		
	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Škoda Auto Mladá Boleslav	0.003	0.003	0.003	77.343	86.291	92.626	636.506	668.516	743.237	0	0	0
Škoda Auto Kvasiny	0	0	0	14.452	12.635	13.631	326.944	351.566	372.740	0	0	0
Škoda Auto Vrchlabí	0	0	0	0	0	0	11.983	15.14	21.259	0	0	0
Total Škoda Auto	0.003	0.003	0.003	91.795	98.926	106.257	975.433	1,035.222	1,137.236	0	0	0

* Volatile organic compounds

** Heavy metals

→ Nicht ausreichend

Darstellung von Schätzungen

Resource outflows

The reporting scope of waste includes all waste leaving BAM's sites and offices. Reported waste is mainly based on waste tickets and data provided by suppliers. Reported waste is either measured, calculated or estimated using methods and input data based on BAM's experience in comparable works. Excavation waste and demolition waste are especially difficult to measure and are more often calculated or estimated.

→ Nicht ausreichend

Darstellung von Schätzungen

Water withdrawals and consumption and wastewater discharges

1 000 m ³	2023	2022
WATER WITHDRAWALS		
Surface water	365,100	404,373
Groundwater	870	954
Total water withdrawals	365,970	405,327
WATER WITHDRAWALS IN AREAS OF WATER STRESS		
Surface water	3,397	4,624
Groundwater	0	0
Total water withdrawals in areas of water stress	3,397	4,624
WATER CONSUMPTION		
Water consumption	13 907	15 402
Water consumption in areas of water stress	130	175
WASTEWATER		
Wastewater discharges	118,958	136,022
Wastewater discharges in areas of water stress	1,901	2,436

The 2022 water consumption figures have been estimated retroactively and have not been assured.

Reporting principles for metrics

Water withdrawals include the withdrawal of process and cooling water at all Metsä Group production units.

Process water use per tonne produced is measured as cubic metres from the process water used by Metsä Fibre, Metsä Board and Metsä Tissue and is calculated per tonne of product produced. Metsä Wood's production units and Metsä Fibre's sawmills have been excluded from the calculation, as the production of pulp, paperboard, and tissue and greaseproof papers consumes considerably more water than that of wood products.

Water consumption is an estimate of the amount of water that has evaporated in production and wastewater treatment and water bound in products and wastewater treatment sludge. The calculation is based on an estimate, which considers the matters mentioned above, as well as direct water withdrawal, the water contained in raw materials and the water returned to waterbodies.

The amount of water withdrawn in 2022 has been retroactively adjusted from 394,827 thousand cubic metres to 405,327 thousand cubic metres because the figure for one production unit was not included in the 2022 consolidated data disclosures to the Group and because of an error in the report's publication.

Datenmanagement als Berichtsangabe.

Risiken der Berichterstattung

- GOV-5 fordert die Beschreibung der **wesentlichen Risiken** im Rahmen der **Nachhaltigkeits-berichterstattung** (z.B. Human Error, Berechnungsfehler, Fehlerhafte Interpretationen etc.)
- Gleichzeitig soll beschrieben werden, wie mit diesen Risiken umgegangen wird
- Das **Datenmanagement** ist dabei häufig Bestandteil des Risikomanagementansatzes

Auszug aus dem SGL Group Sustainability Statement (2023)

→ GOV-5

[...]

The Group Sustainability team, led by the Global Head of Sustainability & ESG, is accountable for maintaining a **single consolidated data model for the full group** which is collected via a **dedicated sustainability reporting software application**. This process **automates data collection**, provides full **transparency and traceability of the data** and ensures the **standardisation of terms, formulas, and key variables** such as emissions factors in compliance with the GHG Protocol.

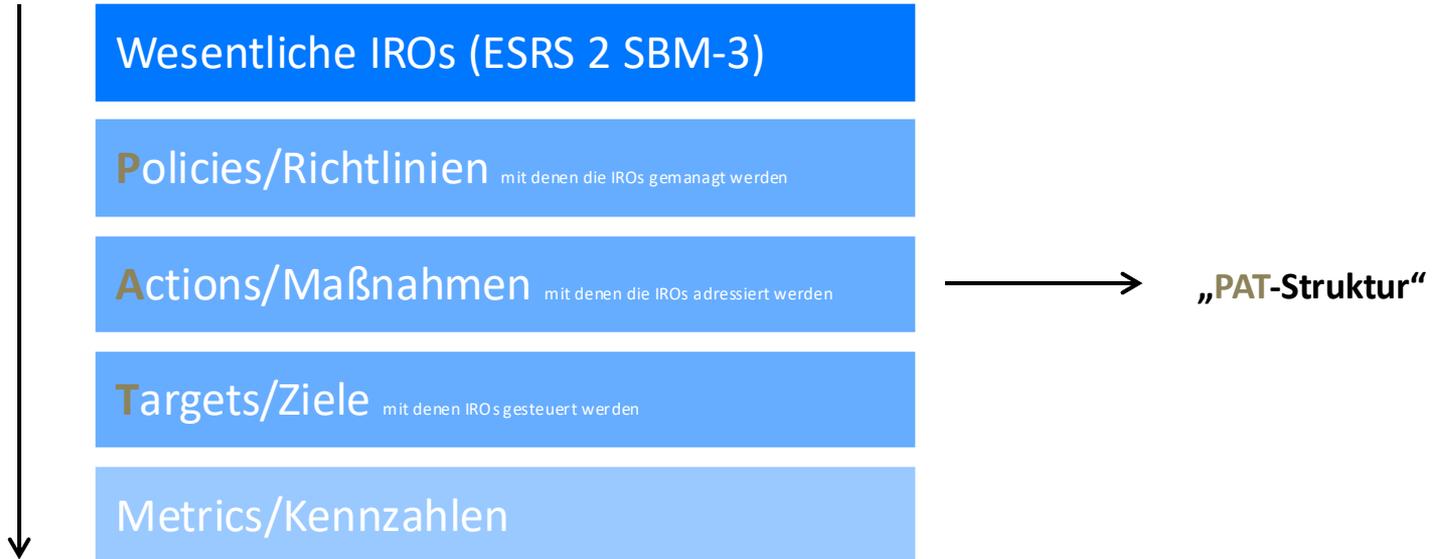
[...]

3

Struktur der Nachhaltigkeitserklärung.

Die Berichtsstruktur der „Themenkapitel“.

IROs als Ausgangslage für
den roten Faden



Kennzahlen separat berichten.

Trennung qualitative/quantitative Daten

- Bei der Umsetzung der ESRS-Berichtspflichten lohnt es sich häufig, sehr strikt zwischen qualitativen und quantitativen Daten zu trennen
- Das gilt sowohl für die Erhebung/Bearbeitung als auch für die Darstellung im Bericht
- **PAT**-Struktur: Kennzahlen werden hinten an den qualitativen Teil der Kapitel „geklebt“
- Das stärkt nicht nur den roten Faden für den Leser (Stichwort: IRO), sondern erleichtert auch Erstellung, Abstimmung und Prüfung der Kapitel



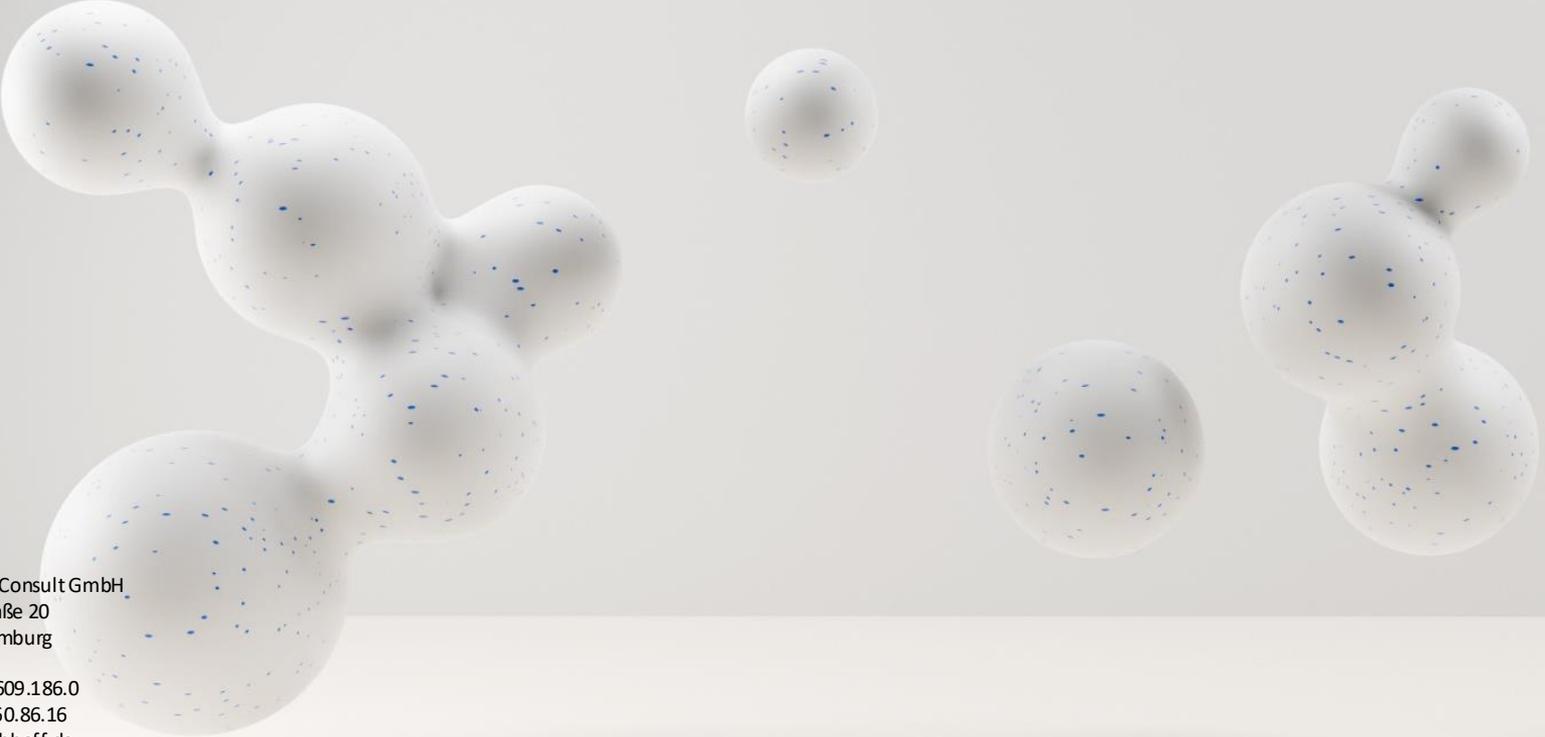
Q&A.

Ergänzung: Sub-Topic zu Disclosure Requirement Mapping

Link

<https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2406201146237832/04-02%20ID%20177%20draft%20explanation.pdf>

AR16			ESRS		Explanatory notes
Topic	Sub-topic	Sub-sub-topic	Disclosure Requirement		
		Any sub-sub-topics	S1-6	Characteristics of the Undertaking's Employees	
			S1-7	Characteristics of non-employee workers in the undertaking's own workforce	
			S1-17	Incidents, complaints and severe human rights impacts	
	Working conditions	Secure employment	S1-11	Social protection	For issues other than social protection available in case of 'challenging life events' (e.g. access to health care, allowances etc...) undertakings shall consider disclosing entity specific information
		Working time	N/A		Undertakings shall consider disclosing entity specific information where working time is assessed as material
		Adequate wages	S1-10	Adequate wages	
		Social dialogue	S1-8	Collective bargaining coverage and social dialogue	
		Freedom of association, the existence of works councils and the information, consultation and participation rights of workers	S1-8	Collective bargaining coverage and social dialogue	
		Collective bargaining, including rate of workers covered by collective agreements	S1-8	Collective bargaining coverage and social dialogue	
		Work-life balance	S1-15	Work-life balance metrics	
Health & safety	S1-14	Health and safety metrics			



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