Tekna Holding ASA

2024

January 1—December 31

Carbon Accounting Report

(part of **Annual Report** Tekna Group)

one particle at a time...

Appendix V: Carbon accounting 2021-2024

Contents

This report provides an overview of the organization's greenhouse gas (GHG) emissions, which is an integrated part of the organization's climate strategy.

Carbon accounting is a fundamental tool in identifying tangible measures to reduce GHG emissions. The annual carbon accounting report enables the organization to benchmark performance indicators and evaluate progress over time.

The input data is based on consumption data from internal and external sources, which are converted into tonnes CO2-equivalents (tCO2e). The carbon footprint analysis is based on the international standard; A Corporate Accounting and Reporting Standard, developed by the **Greenhouse Gas Protocol Initiative** (GHG Protocol). The GHG Protocol is the most widely used and recognised international standard for measuring greenhouse gas emissions and is the basis for the ISO standard 14064-I.

External Assurances

Internally the Audit Committee approves the Emissions Accounting report. This report was not externally assured on its publication date. Note that the CO2 metrics were internally audited.

Noteworthy

Refer to footprint overview on the next page.

- 2030 Target to reduce scope 2 by 50% achieved!
- Tekna increased its production output by 68% compared to 2021 baseline, while only increasing scope 1 emissions by 3%, and even reducing scope 2 emissions by 67%
  - Energy intensity down 26% to 12.1 kWh/kg of powder[1] produced
- Closing production in France resulted in a shift away from Nuclear while increasing Hydro power.
  - Increased renewable energy percentage (+10pp)
  - Reduced scope 2 emissions significantly (-67%)
  - Total kWh increased by +32% as production in Canada increased
- Reduction in business travel (Cost-saving measure) has reduced related emissions (down 11%)[2]
- All material categories in scope 3 mapped (+4 additional baselines established)

Restatements

2023 Scope 2 Electricity, France (Tekna Plasma Europe): Reduction of 10 000 kWh due to detected summation error (434.822 kWh should be 424.822 kWh). Consequence: Reduction of 0.5 tCO2e [former 22.7 tCO2e -restated 22.2 tCO2e].

Also updated in Scope 3 Fuel and Energy related activities. Consequence: Reduction of 0.2 tCO2e [former 10.3 tCO2e -restated 10.1 tCO2e].

2023 Scope 3.4 Upstream Transportation and Distribution: For those service providers that did not provide a CO2 report the impact is estimated based on type, distance and volume. In 2024 the estimation methodology was changed to the online transport emission calculator EcoTransit instead of calculating it with the distance-based formula of the GHG protocol. 2023 estimations were updated to this new methodology. Consequence: Reduction of 245 523.5 tCO2e [former 246 757.0 tCO2e -restated 1233.5 tCO2e].

2023 Scope 3.7 Employee Commute, global: Changed extrapolation methodology in 2024 and updated 2023 to this new methodology. Consequence: Increase of 23 tCO2e [former 205.6 tCO2e -restated 228.6 tCO2e]

2022 Scope 3.3 Electricity Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2, Canada (Tekna Microelectronics Corporation): Reduction of 74 580 kWh due to correction applied in Scope 2 results of 2022 for the 2023 report, which was not applied to this category. Consequence: Reduction of 2.6 tCO2e of [former 277.2 tCO2e – restated 274.6 tCO2e]

1: Ti64 and AlSiMg combined, compared to baseline 2019. 2: all numbers compare to baseline – see overview slide for year and figures.

Appendix V: Carbon Accounting (continued)

Tekna's climate footprint

Energy Intensity per kg metal powder produced

Performance vs baseline FY19

Direct electricity of plasma systems within Tekna | Ti64 and AlSiMg | in kWh per kg

FY19: 16.3 kWh/kg — baseline

FY23: 12.4 kWh/kg — -24% (vs FY19)

FY24: 12.1 kWh/kg — -26% (vs FY19)

Our capacity improvement program increases the productivity of the plasma atomization systems, ie higher output for the same energy. The Production output for Ti64 and AlSiMg powder has more than doubled since 2019.

Renewable energy share

76 % ▲ vs 66% **(+10 pp)** in 2021 (Location based).

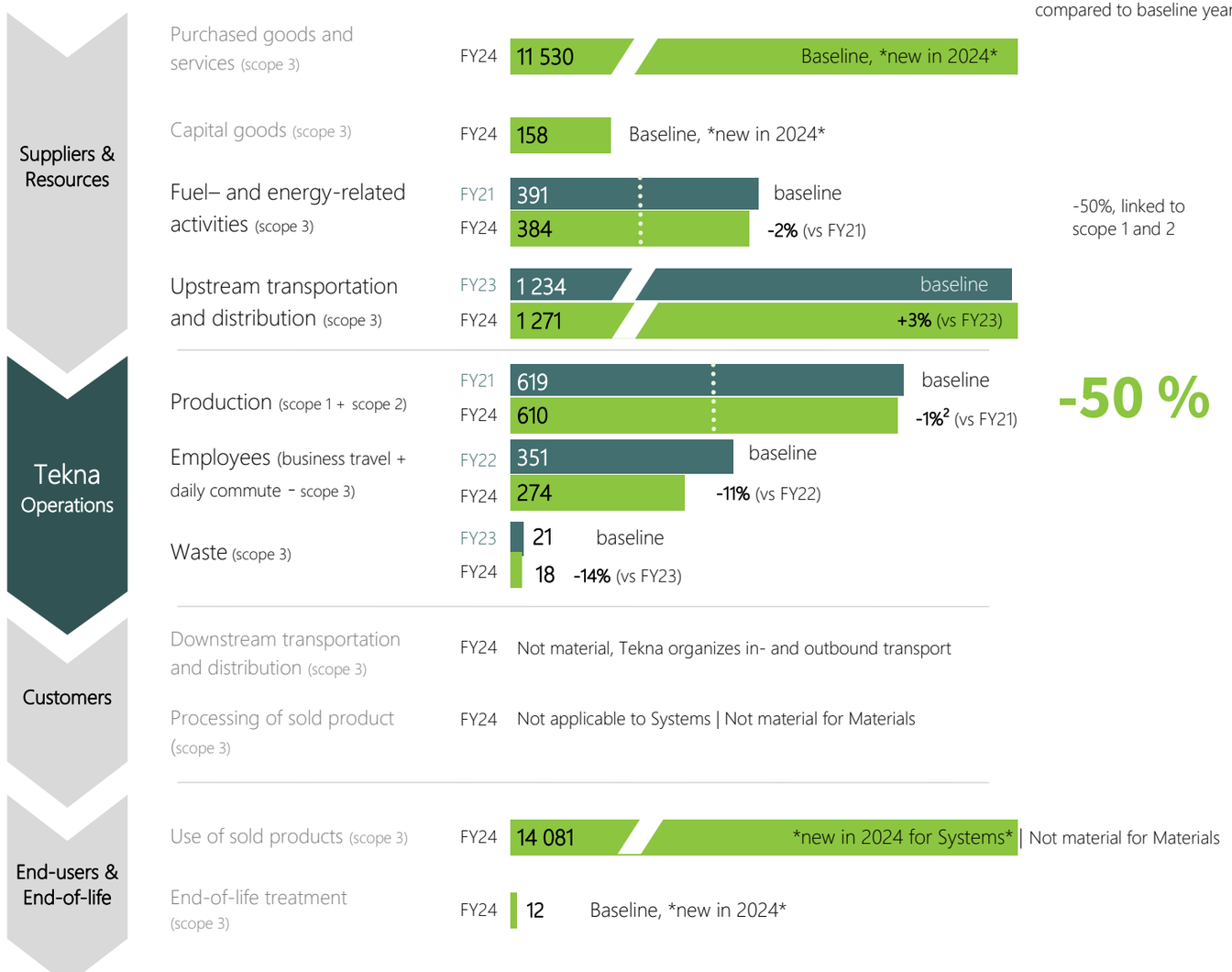
Scope 1 ▶ **596 tCO2e** vs 577 **(+3%)** in 2021. Tekna has added a third facility in Canada in 2022 increasing natural gas consumption for heating compared to baseline 2021.

Scope 2 ▼ **14 tCO2e** vs 42 **(-67%)** in 2021. Tekna continues to improve energy efficiency in its powder production[2]. By reducing production in France the consumption of nuclear electricity is reducing.

Scope 3 **27 730 tCO2e** This is the first year that we have a nearly complete estimation of the value-chain footprint. This creates a solid basis from which to focus our reduction effort.

Tekna's climate footprint at different stages of the value chain

(GHG protocol[1] | in tCO2e)



Target 2030

Reduce in absolute terms compared to baseline year

-50%, linked to scope 1 and 2

-50 %

1 Historical data should not change, but we always revise historical figures if data quality or science has improved. 2: Tekna increased its production output by 68% compared to 2021 baseline, while only increasing scope 1 emissions by 3%, and even reducing scope 2 emissions by 67%.

Appendix V: Carbon Accounting (continued)

Accounting principles

The input data is based on consumption data from internal and external sources, which are converted into tonnes CO_2-equivalents (tCO_2e). The carbon footprint analysis is based on the international standard; *A Corporate Accounting and Reporting Standard*, developed by the Greenhouse Gas Protocol Initiative (GHG Protocol). The GHG Protocol is the most widely used and recognised international standard for measuring greenhouse gas emissions and is the basis for the ISO standard 14064-I.

Scope 1 and scope 2

Scope 1 includes all direct emission sources. This includes all use of fossil fuels for stationary combustion or transportation, in owned and, depending on the consolidation approach selected, leased, or rented assets.

Scope 2 includes indirect emissions related to purchased energy; electricity and heating/cooling where the organisation has operational control.

Baseline 2021 was chosen as it was the first year we collected data of our worldwide emissions instead of just Canada.

At Tekna, natural gas is only used for heating the buildings in Canada and Korea.

At the end of 2021 and throughout 2023 and 2024 Tekna has added Additive Manufacturing production equipment in Canada increasing electricity consumption. In France, it reduced operating hours in 2023 and then stopped producing in 2024 reducing electricity consumption in France.

Leased building emissions are included in scope 1 and 2. Lease car consumption is included in Scope 3 business travel.

Although we are working on replacing the refrigerants we consider the consumption non material for this report (~20lbs in TPS).

Tekna US office opened in October 2024. Tekna in South Korea moved offices in April 2024. Estimated TMC Q4, invoices not received.

Scope 1 and scope 2

	status	baseline	2030 commitment	2050 ambition
Scope 1	included worldwide per entity	2021	-50% vs baseline	carbon neutral
Scope 2	included worldwide per entity	2021	-50% vs baseline	

Scope 3

1: Purchased Goods and Services	Included for Canada and France	2024		*Carbon neutrality is achieved by reducing our carbon footprint to zero through a combination of efficiency measures in-house and supporting external emission reduction projects.*
2: Capital Goods	Included for Canada and France	2024		
3: Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2	Included upstream emissions of scope 1 and 2 consolidated per country	2021	50% (as scope 1 and 2)	
4: Upstream Transportation and Distribution	included consolidated worldwide	2023	TBC	
5: Waste Generated in Operations	included for Canada and France	2023	TBC	
6: Business Travel	included consolidated worldwide	2022	TBC	
7: Employee Commuting	included consolidated worldwide	2022	TBC	
8: Upstream Leased Assets	not relevant for Tekna			
9: Downstream Transportation and Distribution	not material for Tekna			
10: Processing of Sold Products	not applicable to Systems, not material for Materials (at present)			
11: Use of Sold Products	included for Systems, not material for Materials (at present)	2024	TBC	
12: End-of-Life Treatment of Sold Products	included for Systems and Materials	2024	TBC	
13: Downstream Leased Assets	not relevant for Tekna			
14: Franchises	not relevant for Tekna			
15: Investments	not relevant for Tekna			

Scope 3

Scope 3 includes indirect emissions resulting from value chain activities. The scope 3 emissions are a result of the company's upstream and downstream activities, which are not controlled by the company, i.e. they are indirect.

For scope 3 the baseline year is chosen based on when we have worldwide data available for a category.

The scope 3 emissions compared to 2023 increased due to broader emissions mapping in scope 3 and improved data quality.

This report is now complete for material categories in scope 3.

The Greenhouse Gas Protocol considers 15 categories in scope 3 emissions. The table below includes an overview of the categories. Categories 8, 13, 14 and 15 are not relevant for Tekna and categories 9 and 10 are not material at present.

Scope 3 Upstream

Purchased Goods and Services [1]

This category includes all upstream (i.e., cradle-to-gate) emissions from the production of products purchased acquired by the reporting company in the reporting year. Products include both goods (tangible products) and services (intangible products).

This category is based on Tekna's ERP system, which generates a report containing all supplier invoices for the given period. The total expenditure per supplier is then calculated. Tekna's procurement team manually assigns a category to each supplier based on their industry and primary business relationship

Appendix V: Carbon Accounting (continued)

with Tekna. Categories include Employee Expenses, Capex, Feedstock, Warehousing & Transportation, Packaging, and Government-related costs (such as taxes and licenses). Utilities (gas, electricity) and metal feedstock are excluded from this process. The next step is to assess the percentage of spending for suppliers in the categorized, non-excluded group and continue categorizing until at least 70% of the total non-excluded spending is covered. Spending is then grouped by category, and the total for categorized non-excluded spend is summed up. Finally, the categorized percentage of each category is applied to the total non-excluded spend to extrapolate the total spend per category.

Capital Goods [2]

This category includes all upstream (i.e., cradle-to-gate) emissions from the production of capital goods purchased or acquired by the reporting company in the reporting year. Emissions from the use of capital goods by the reporting company are accounted for in either scope 1 (e.g., for fuel use) or scope 2 (e.g., for electricity use), rather than scope 3.

This category follows the same method as the one used for Scope 3 category 1: Purchased Good and Services. A report is pulled from Tekna's ERP systems, suppliers are summed and assigned a category.

Fuel and energy related activities Not Included in Scope 1 or Scope 2 [3]

This category includes emissions related to the production of fuels and energy purchased and consumed by the reporting company in the reporting year that are not included in scope 1 or scope 2.

Includes exactly the same consumption data as reported in scope 1 and 2.

Upstream Transport and Distribution [4]

All transportation paid by the company, inbound and outbound, as well as if the customer is billed for the transport and in addition also inbound transportation not paid by the company (upstream).

This category was calculated based on transaction reports received from transportation and distribution companies Tekna has contracted in the past year. Most reports directly provided the estimated CO2 emissions. In 2024, we used the online transport emission calculator EcoTransit (https://www.ecotransit.org/fr/calculateur-demissions/) for all companies and transactions that did not provide the CO2 emissions (5/11 company reports). Inbound transportation not paid by Tekna is not material. See also restatements as 2023 was recalculated with this new methodology.

Scope 3 @Tekna

Waste Generated in Operations [5]

Includes emissions from third-party disposal and treatment of waste generated in the reporting company's owned or controlled operations in the reporting year. This category includes emissions from disposal of both solid waste and wastewater.

In 2022, we estimated how waste from Canada was treated after pick-up. In 2023, we have obtained clear data with significant shifts in volumes and emissions. We have therefore made 2023 the baseline for waste.

The increase in hazardous waste is due to new Health and Safety measures (single-use protective equipment) and R&D. The rest waste or municipal waste category for Canada or France does not exist in CEMASys as of yet. We have used the closest description to it, in essence "Residual waste, landfill". The emissions are expected to be in the same range.

Composition of hazardous waste: (flammable) metallic powder, rags, acids, coolants and non-chlorine solvents and single-use protective equipment from the nano sector.

Waste for manufacturing sites in Canada is based on facility managments' estimation. In France, the weight and emissions are provided by the service provider per category. Waste from sales offices is estimated using a calculator provided by Arendals Fossekompani (main shareholder) based on following sources: Avfall Sverige, Handbok för avfallsutrymmen (2018); Norsk Gjenvinning, Volum- og vektinformasjon (2015); Avfall Sverige, Volymvikter för avfall (2013)

Total waste reduced by 14% due to the stopped nickel production in France. Waste collected during the annual Sherbrooke industrial park cleaning included in Canada.

Business Travel [6]

Transportation of employees for business-related activities in vehicles owned or operated by third parties, such as aircraft, trains, buses, and passenger cars.

Employees were requested to complete a form per business trip, including km travelled by car (incl taxi) and train, flights (using ICAO Carbon Emissions Calculator) and hotel nights. We created this form by using the ICAO tool and recommendations from Microsoft Sustainability Calculator.

In 2024, travel reduced considerably as cost-reduction measure.

Employee Commute [7]

Transportation of employees between their homes and their worksites during the reporting year (in vehicles not owned or operated by the reporting company).

Employees were requested to complete a form detailing how many days per week they are in the office on average and what their commute is like on average. Adjustments were made upon indication of employees around "significantly greener summer commutes" and carpooling. We obtained 104 answers out of 185 (56%), which we considered a sufficient bases to extrapolate to 100%. We created this form based on the recommendations of the Greenhouse Gas Protocol and Cemasys categories.

In 2024, the rule of 3 method was introduced for extrapolation as it is more accurate: y=(total number of employee at year-end*x)/total employee answers.

See also restatements as 2023 was recalculated with this new methodology.

Scope 3 Downstream

Transport and Distribution [9]

All outbound transportation not paid by the company. More specifically, emissions that occur from transportation and distribution of sold products in vehicles

Appendix V: Carbon Accounting (continued)

and facilities not owned or controlled by the reporting company.

It was found to be not material as we organise the incoming and outgoing transport.

Processing of Sold Products [10]

This category includes emissions from processing of sold intermediate products by third parties (e.g., manufacturers) subsequent to sale by the reporting company. Intermediate products are products that require further processing, transformation, or inclusion in another product before use, and therefore result in emissions from processing subsequent to sale by the reporting company and before use by the end consumer.

Systems: not relevant

Materials: Tekna has deemed the category immaterial at present. Tekna's products represent only a small proportion of the ultimate products sold and used both in weight and in functionality, so it is not significant to attribute to Tekna any scope 3 emissions of the ultimate use of the end sold product

Use of Sold Products [11]

This category includes emissions from the use of goods and services sold by the reporting company in the reporting year. A reporting company's scope 3 emissions from use of sold products include the scope 1 and scope 2 emissions of end users. End users include both consumers and business customers that use final products.

Systems: This category is based on assumptions since Tekna does not collect how its customers use the sold systems. What is known: the number of systems sold, the purpose it was sold for, their power levels and their material composition. What is assumed: the annual operating conditions, including the annual usage, the electrical input, and the quantity of process gases used. As systems are sold across the globe, the emission factor for electricity for average Asia was chosen as a conservative choice.

Materials: Tekna has deemed the category immaterial at present. Tekna's products represent only a small proportion of the ultimate products sold and used both in weight and in functionality, so it is not significant to attribute to Tekna any scope 3 emissions of the ultimate use of the end sold product.

End-of-Life Treatment of Sold Products [12]

This category includes emissions from the waste disposal and treatment of products sold by the reporting company (in the reporting year) at the end of their life.

Systems: Tekna has a guide for customers detailing how a system's different materials should be disposed of. The data is then calculated by multiplying the system's various materials by the number of systems shipped during the reporting period.

Materials: The data comes from the total kilograms of powders sold in 2024.

Methodology CEMASYS

(reporting system)

The Greenhouse Gas Protocol initiative (GHG Protocol) was developed by the World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD). This analysis is done according to *A Corporate Accounting and Reporting Standard Revised edition*, currently one of four GHG Protocol accounting standards on calculating and reporting GHG emissions. The reporting considers the following greenhouse gases, all converted into CO_2-equivalents: CO_2, CH_4 (methane), N_2O (laughing gas), SF_6, HFCs, PFCs and NF3.

For corporate reporting, two distinct approaches can be used to consolidate GHG emissions: the equity share approach and the control approach. The most common consolidation approach is the control approach, which can be defined in either financial or operational terms.

The carbon inventory is divided into three main scopes of direct and indirect emissions.

Scope 1 includes all direct emission sources. This includes all use of fossil fuels for stationary combustion or transportation, in owned and, depending on the consolidation approach selected, leased, or rented assets. It also includes any process emissions, from e.g. chemical processes, industrial gases, direct methane emissions etc.

Scope 2 includes indirect emissions related to purchased energy; electricity and heating/cooling where the organisation has operational control. The electricity emission factors used in Cemasys are based on national gross electricity production mixes from the International Energy Agency's statistics (IEA Stat). Emission factors per fuel type are based on assumptions in the IEA methodological framework. Factors for district heating/cooling are either based on actual (local) production mixes, or average IEA statistics.

In January 2015, the GHG Protocol published new guidelines for calculating emissions from electricity consumption. Primarily two methods are used to "allocate" the GHG emissions created by electricity generation to the end consumers of a given grid. These are the location-based and the market-based methods. The location-based method reflects the average emission intensity of the grids on which energy consumption occurs, while the market-based method reflects emissions from electricity that companies have purposefully chosen (or not chosen).

Organizations who report on their GHG emissions will now have to disclose both the location-based emissions from the production of electricity, and the marked-based emissions related to the potential purchase of Guarantees of Origin (GoOs) and Renewable Energy Certificates (RECs).

The purpose of this amendment in the reporting methodology is on the one hand to show the impact of energy efficiency measures, and on the other hand to display how the acquisition of GoOs or RECs affect the GHG emissions. Using both methods in the

Appendix V: Carbon Accounting (continued)

emission reporting highlights the effect of all measures regarding electricity consumption.

The location-based method: The location-based method is based on statistical emissions information and electricity output aggregated and averaged within a defined geographic boundary and during a defined time period. Within this boundary, the different energy producers utilize a mix of energy resources, where the use of fossil fuels (coal, oil, and gas) result in direct GHG-emissions. These emissions are reflected in the location-based emission factor.

The market-based method: The choice of emission factors when using this method is determined by whether the business acquires GoOs/RECs or not. When selling GoOs or RECs, the supplier certifies that the electricity is produced exclusively by renewable sources, which has an emission factor of 0 grams CO_2e per kWh. However, for electricity without the GoO or REC, the emission factor is based on the remaining electricity production after all GoOs and RECs for renewable energy are sold. This is called a residual mix, which is normally substantially higher than the location-based factor. As an example, the market-based Norwegian residual mix factor is approximately 7 times higher than the location-based Nordic mix factor. The reason for this high factor is due to Norway's large export of GoOs/RECs to foreign consumers. In a market perspective, this implies that Norwegian hydropower is largely substituted with an electricity mix including fossil fuels.

Scope 3 includes indirect emissions resulting from value chain activities. The scope 3 emissions are a result of the company's upstream and downstream activities, which are not controlled by the company, i.e. they are indirect. Examples are business travel, goods transportation, waste handling, consumption of products etc.

In general, the carbon accounting should include information that users, both internal and external to the company, need for their decision making. An important aspect of relevance is the selection of an appropriate inventory boundary which reflects the substance and economic reality of the company's business relationships.

Sources CEMASYS

(reporting system)

Department for Business, Energy & Industrial Strategy (2022). Government emission conversion factors for greenhouse gas company reporting (DEFRA)

IEA (2022). Emission Factors database, International Energy Agency (IEA), Paris.

IMO (2020). Reduction of GHG emissions from ships - Third IMO GHG Study 2014 (Final report). International Maritime Organisation, http://www.iadc.org/wp-content/uploads/2014/02/MEPC-67-6-INF3-2014-Final-Report-complete.pdf

IPCC (2014). IPCC fifth assessment report: Climate change 2013 (AR5 updated version November 2014). http://www.ipcc.ch/report/ar5/

AIB, RE-DISS (2020). Reliable disclosure systems for Europe – Phase 2: European residual mixes.

WBCSD/WRI (2004). The greenhouse gas protocol. A corporate accounting and reporting standard (revised edition). World Business Council on Sustainable Development (WBCSD), Geneva, Switzer- World Resource Institute (WRI), Washington DC, USA, 116 pp.

WBCSD/WRI (2011). Corporate value chain (Scope 3) accounting and reporting standard: Supplement to the GHG Protocol corporate accounting and reporting standard. World Business Council on Sustainable Development (WBCSD), Geneva, Switzerland /World Resource Institute (WRI), Washington DC, USA, 149 pp.

WBCSD/WRI (2015). GHG protocol Scope 2 guidance: An amendment to the GHG protocol corporate standard. World Business Council on Sustainable Development (WBCSD), Geneva, Switzerland /World Resource Institute (WRI), Washington DC, USA, 117 pp.

The reference list above is incomplete but contains the essential references used in CEMAsys. In addition, several local/national sources may be relevant, depending on which emission factors are used.

Appendix V: Carbon Accounting (continued)

Key figures

GHG Emissions—Summary

Category	Unit	2021	2022	2023	2024	▲ to base year	▲ to 2023	Target	▲ to target
Total Scope 1	tCO2e	576.6	585.1	589.0	595.9	3%	1%	288	307.64
Total Scope 2	tCO2e	41.7	33.7	29.1	13.9	-67%	-52%	21	-6.99
Total Scope 3	tCO2e	434.3	752.8	1 981.2	27 730.3	n/a	n/a	n/a	
Total	**tCO2e**	**1 052.7**	**1 371.6**	**2 599.2**	**28 340.1**	n/a	n/a	n/a	

Key figures
GHG Emissions

Category	Unit	2021	2022	2023	2024	▲ to base year	▲ to 2023
Scope 1							
Stationary combustion							
Natural gas	tCO2e	576.6	585.1	589.0	595.9		
Stationary combustion Total	tCO2e	576.6	585.1	589.0	595.9	3%	1%
Total Scope 1	tCO2e	576.6	585.1	589.0	595.9	3%	1%
Scope 2							
Electricity location-based							
Electricity France	tCO2e	32.1	26.6	22.2	5.9	-82%	-73%
Electricity China	tCO2e	5.0	1.9	1.5	1.2	-77%	-24%
Electricity Korea	tCO2e	0.6	0.5	0.4	0.2	-71%	-62%
Electricity USA	tCO2e	-	-	-	0.8	n/a	n/a
Electricity location-based Total	tCO2e	37.6	29.0	24.1	8.0	-79%	-67%
Electricity general							
Hydropower, Quebec	tCO2e	4.1	4.7	4.9	5.8	42%	18%
Electricity general Total	tCO2e	4.1	4.7	4.9	5.8	42%	18%
Total Scope 2	tCO2e	41.7	33.7	29.1	13.9	-67%	-52%

Appendix V: Carbon Accounting (continued)

Category	Unit	2021	2022	2023	2024	▲ to base year	▲ to 2023
Scope 3							
3.01 Purchased goods and services							
Architectural and engineering services	tCO2e				9.1		
Building, repair and maintenance	tCO2e				115.6		
Business Support Services	tCO2e				20.0		
Chemicals, general	tCO2e				425.2		
Cloud & facility management services	tCO2e				38.3		
Compressed gases	tCO2e				1 824.0		
Computer-related hardware	tCO2e				40.9		
Dry-cleaning and laundry	tCO2e				15.5		
Electronic components	tCO2e				73.9		
Electronic components	tCO2e				19.6		
Facility services	tCO2e				35.8		
Insurance and brokerage	tCO2e				7.1		
Laboratory instruments	tCO2e				21.3		
Legal services	tCO2e				37.8		
Machine tool manufacturing	tCO2e				79.0		
Machinery, equipment, and supplies	tCO2e				63.1		
Machinery, repair and maintenance	tCO2e				82.0		
Measuring and Controlling Devices	tCO2e				6.1		
Mechanical power trans.equipment	tCO2e				7.1		
Metal structural products	tCO2e				14.4		
Other electrical equipment	tCO2e				20.9		
Pipes and pipe fittings	tCO2e				141.3		
Plastic products	tCO2e				108.1		
Postal service	tCO2e				11.0		
Pumps and pumping equipment	tCO2e				48.2		
Screws, nuts, and bolts	tCO2e				60.1		
Software	tCO2e				13.9		
Technical consulting services	tCO2e				12.3		
Telecommunications	tCO2e				3.8		
Waste management	tCO2e				71.4		
Advertising and PR	tCO2e				24.1		
Aluminium	tCO2e				774.1		
Titanium	tCO2e				7 304.9		
Total 3.01 Purchased goods and services	tCO2e				11 530.0	2024 is base year	
3.02 Capital goods							
Building, repair and maintenance	tCO2e				7.8		
Machinery, equipment, and supplies	tCO2e				145.2		
Computer-related hardware	tCO2e				1.0		
Office furniture	tCO2e				4.0		
Total 3.02 Capital goods	tCO2e				158.0	2024 is base year	

Appendix V: Carbon Accounting (continued)

Category	Unit	2021	2022	2023	2024	▲ to base year	▲ to 2023
3.03 Fuel-and-energy-related activities							
Natural gas (WTT)	tCO2e	98.0	98.9	96.5	97.2		
Electricity Canada (upstream)	tCO2e	284.2	274.6	269.5	283.3		
Electricity France (upstream)	tCO2e	7.1	8.3	10.1	2.5		
Electricity China (upstream)	tCO2e	1.6	0.5	0.3	0.2		
Electricity Korea (upstream)	tCO2e	0.2	0.1	0.1	0.0		
Electricity USA (upstream)	tCO2e				0.2		
Total 3.03 Fuel-and-energy-related activities	tCO2e	391.2	382.4	376.8	383.6	-2%	2%
3.04 Upstream transportation and distribution							
Truck avg. (WTW)	tCO2e			104.5	39.6		
Air freight avg. (WTT)	tCO2e			89.7			
Air transportation (WTW)	tCO2e			846.1	1 180.0		
Rail freight	tCO2e			3.2			
Sea ship avg. (WTW)	tCO2e			182.4	48.9		
Transportation	tCO2e			7.6	2.6		
Total 3.04 Upstream transportation and distribution	tCO2e			1 233.5	1 271.0	3%	3%
3.05 Waste							
Hazardous waste, landfill	tCO2e	0.3	0.2	0.4	0.0		-93%
Hazardous waste, treated	tCO2e	0.0	1.0	0.1	0.0		-63%
Hazardous waste, recycled	tCO2e	0.0	0.0	1.3	0.5		-62%
Hazardous waste, re-used	tCO2e		0.0	0.1	0.0		-81%
Paper waste, recycled	tCO2e	0.1	0.1		0.0		
Cardboard waste, recycled	tCO2e	-	0.3	0.3	0.1		-74%
EE waste, recycled	tCO2e		0.0	0.0	0.0		-70%
Plastic waste, recycled	tCO2e	0.0	0.0	0.0	0.0		-89%
Metal waste, recycled	tCO2e		0.1	0.2	0.1		-51%
Wood waste, recycled	tCO2e	0.1	0.2	0.4	0.1		-81%
Glass waste, recycled	tCO2e				0.0		
Mineral oil waste, incinerated (H)	tCO2e		2.5	1.5	2.5		67%
Organic waste, recycled	tCO2e				0.0		
Organic waste, composting	tCO2e		0.0	0.0	0.0		-38%
Sorted waste, recycled	tCO2e		0.2	0.2	0.1		-66%
Residual waste, landfill	tCO2e	2.5	14.4	16.3	14.2		-13%
Residual waste, incinerated	tCO2e				0.2		
Total 3.05 Waste	tCO2e	2.9	19.1	20.7	17.8	-14%	-14%
3.06 Business travel							
Hotel nights, world	tCO2e	6.2	42.1	40.6	13.8	-67%	-66%
Train International	tCO2e	0.0	0.1	0.1	0.0	-74%	-67%
Mileage all. avg. car	tCO2e	11.3	21.4	16.1	9.7	-55%	-40%
Flights	tCO2e	22.8	51.7	64.9	41.3	-20%	-36%
Mileage all. el car EU27	tCO2e			0.2			
Total 3.06 Business travel	tCO2e	40.3	115.4	121.8	64.8	-44%	-47%

Appendix V: Carbon Accounting (continued)

Category	Unit	2021	2022	2023	2024	▲ to base year	▲ to 2023
3.07 Employee commuting							
Car, petrol (avg.)	tCO2e		170.3	154.1	134.1	-21%	-13%
Electric car EU27	tCO2e		6.5	10.1	15.3	134%	52%
Motorbike, small	tCO2e			0.3	0.5		79%
Bus local avg.	tCO2e		2.8	3.1	1.2	-58%	-62%
Car, petrol (medium)	tCO2e		56.2	57.7	44.1	-22%	-24%
Car, Hybrid Electric Vehicle (HEV)	tCO2e			3.4	13.9		314%
Total 3.07 Employee commuting	tCO2e		235.8	228.6	209.0	-11%	-9%
3.08 Upstream leased assets					incl. in 3.01	n/a	n/a
3.09 Downstream transportation and Distribution					not material	n/a	n/a
3.10 Processing of sold products					omitted	n/a	n/a
3.11 Use of sold products							
Argon (liquid), Europe	tCO2e				3 029.9		
Sodium hydrogen sulfite	tCO2e				9.2		
Electricity Asia avg.	tCO2e			-	11 042.1		
Total 3.11 Use of sold products	tCO2e			-	14 081.2	2024 is base year	
3.12 End-of-life treatment of sold products							
Metal aluminium waste, recycled	tCO2e				0.3		
Metal iron waste, recycled	tCO2e				-		
Metal stainl steel waste, recycled	tCO2e				0.2		
Metal copper waste, recycled	tCO2e				0.1		
Metal waste, recycled	tCO2e				11.7		
Wood waste, recycled	tCO2e				0.1		
EE waste, recycled	tCO2e				-		
Ceramic waste, recycled	tCO2e				-		
Plastic PVC waste, recycled	tCO2e				-		
Rubber waste, recycled	tCO2e				-		
Plastic waste, recycled	tCO2e				-		
Silicon waste, landfill	tCO2e				-		
Plastic PE/PP waste, recycled	tCO2e				-		
Mineral oil waste, recycled (H)	tCO2e				-		
Total 3.12 End-of-life treatment of sold products	tCO2e				12.4	2024 is base year	
3.13 Downstream leased assets					not applicable	n/a	n/a
3.14 Franchises					not applicable	n/a	n/a
3.15 Investments					not applicable	n/a	n/a
Total Scope 3	tCO2e	434.3	752.8	1 981.2	27 730.3	n/a	n/a

Appendix V: Carbon Accounting (continued)

Category	Unit	2021	2022	2023	2024	▲ to base year	▲ to 2023
Total Scope 3	tCO2e	434.3	752.8	1 981.2	27 730.3	n/a	n/a
Total (Scope 1 + 2)	tCO2e	618.4	618.8	618.1	609.8	-1%	-1%
Total (Scope 1 + 2 + 3)	tCO2e	1 052.7	1 371.6	2 599.2	28 340.1	n/a	n/a
Annual Market-Based GHG Emissions							
Electricity Total (Scope 2) with Market-based calculations	tCO2e	40.6	27.4	55.1	6.1		
Scope 2 Total with Market-based electricity calculations	tCO2e	44.7	32.1	60.0	11.9		
Scope 1+2+3 Total with Market-based electricity calculations	tCO2e	1 055.6	1 370.0	2 630.2	28 338.1		

Appendix V: Carbon Accounting (continued)

Key figures

Energy

Category		Unit	2021	2022	2023	2024	▲ to base year	▲ to 2023
Scope 1								
	Stationary combustion							
	Natural gas	MWh	3 125.9	3 182.6	2 882.1	2 914.4		
	Stationary combustion Total	MWh	3 125.9	3 182.6	2 882.1	2 914.4		
	Scope 1 Total	MWh	3 125.9	3 182.6	2 882.1	2 914.4	-7%	1%
Scope 2								
	Electricity							
	Electricity France	MWh	593.6	521.3	424.8	92.0		
	Electricity China	MWh	8.0	3.0	2.5	2.0		
	Electricity Korea	MWh	1.1	1.1	1.0	0.4		
	Electricity USA	MWh				2.2		
	Electricity Total	MWh	602.7	525.4	428.3	96.6		
	Electricity general							
	Hydropower, Quebec	MWh	6 832.6	7 800.1	8 242.9	9 739.1		
	Electricity general Total	MWh	6 832.6	7 800.1	8 242.9	9 739.1		
	Scope 2 Total	MWh	7 435.4	8 325.5	8 671.2	9 835.7	32%	13%
TOTAL		MWh	10 561.2	11 508.1	11 553.2	12 750.1	21%	10%
		GJ	38 020.4	41 429.3	41 591.6	45 900.2		
Percentage change			%	9%	0.4%	10.4%		
	Scope 1 renewable energy	MWh	-	-	-	-		
	Scope 1 renewable energy share	%	0%	0%	0%	0%	-	-
	Scope 2 renewable energy (Location-based)	MWh	6 964.5	7 932.2	8 345.6	9 764.2		
	Scope 2 renewable energy share (Location-based)	%	93.7%	95.3%	96.2%	99.3%	106%	103%
	Total renewable energy (Location-based)	MWh	6 964.5	7 932.2	8 345.6	9 764.2		
	Total renewable energy share (Location-based)	%	65.9%	68.9%	72.2%	76.6%	111%	104%
	Scope 2 renewable energy (Market-based)	MWh	6 832.6	7 800.1	8 242.9	9 739.1		
	Scope 2 renewable energy share (Market-based)	%	91.9%	93.7%	95.1%	99%	107%	104%
	Total renewable energy (Market-based)	MWh	6 832.6	7 800.1	8 242.9	9 739.1		
	Total renewable energy share (Market-based)	%	64.7%	67.8%	71.3%	76.4%	112%	105%

Appendix V: Carbon Accounting (continued)

Key figures

Energy Consumption

Category	Unit	2021	2022	2023	2024	▲ to base year	▲ to 2023
Scope 1							
Stationary combustion							
Natural gas	m3	283 396.0	288 018.0	286 774.0	288 840.7	2%	1%
Scope 2							
Electricity							
Electricity France	kWh	593 646.0	521 288.0	424 822.0	91 987.0	-85%	-78%
Electricity China	kWh	7 950.0	3 033.6	2 470.0	1 955.0	-75%	-21%
Electricity Korea	kWh	1 132.0	1 110.7	981.0	395.0	-65%	-60%
Electricity USA	kWh				2 241.0		
Electricity general							
Hydropower, Quebec	kWh	6832 642.0	7800 094.0	8242 881.0	9739 073.0	43%	18%
Scope 3							
3.01 Purchased goods and services							
Architectural and engineering services	CAD						
Building, repair and maintenance	CAD						
Business Support Services	CAD						
Chemicals, general	CAD						
Cloud & facility management services	CAD						
Compressed gases	CAD						
Computer-related hardware	CAD						
Dry-cleaning and laundry	CAD						
Electronic components	CAD						
Electronic components	CAD						
Facility services	CAD						
Insurance and brokerage	CAD						
Laboratory instruments	CAD						
Legal services	CAD						
Machine tool manufacturing	CAD						
Machinery, equipment, and supplies	CAD						
Machinery, repair and maintenance	CAD						
Measuring and Controlling Devices	CAD						
Mechanical power trans.equipment	CAD						
Metal structural products	CAD						
Other electrical equipment	CAD						
Pipes and pipe fittings	CAD						
Plastic products	CAD						
Postal service	CAD						
Pumps and pumping equipment	CAD						
Screws, nuts, and bolts	CAD						

Spend based estimation started in 2024, detail spend in CAD not disclosed.

Appendix V: Carbon Accounting (continued)

Category	Unit	2021	2022	2023	2024	▲ to base year	▲ to 2023
Software	CAD				Spend based estimation started in 2024, detail spend in CAD not disclosed.		
Technical consulting services	CAD						
Telecommunications	CAD						
Waste management	CAD						
Advertising and PR	CAD						
Aluminium	kg						
Titanium	kg						
3.02 Capital goods							
Building, repair and maintenance	CAD						
Machinery, equipment, and supplies	CAD						
Computer-related hardware	CAD						
Office furniture	CAD						
3.03 Fuel-and-energy-related activities							
Natural gas (WTT)	m3	283 396.0	288 018.0	286 774.0	288 841.0		
Electricity Canada (upstream)	kWh	6832 642.0	7800 094.0	8242 881.0	9739 073.0		
Electricity France (upstream)	kWh	593 646.0	521 288.0	424 822.0	91 987.0		
Electricity China (upstream)	kWh	7 950.0	3 033.6	2 470.0	1 956.0		
Electricity Korea (upstream)	kWh	1 132.0	1 110.7	981.0	395.0		
Electricity USA (upstream)	kWh				2 241.0		
3.04 Upstream transportation and distribution							
Truck avg. (WTW)	tkm			81.9			
Truck avg. (WTW)	tCO2e			104.5	39.6		
Air freight avg. (WTT)	tkm			294 168.2			
Air transportation (WTW)	tCO2e			846.1	1 180.0		
Rail freight	tCO2e			3.2			
Sea ship avg. (WTW)	tkm			16 112.5			
Sea ship avg. (WTW)	tCO2e			182.1	48.9		
Transportation	tCO2e			7.6	2.6		
3.05 Waste							
Hazardous waste, landfill	kg	12 976.0	11 457.0	17 586.0	4 135.0	-64%	-76%
Hazardous waste, treated	kg	1 636.0	46 441.0	3 735.0	4 590.0	-90%	23%
Hazardous waste, recycled	kg	364.0	240.0	61 009.0	76 869.0	31929%	26%
Hazardous waste, re-used	kg		948.0	2 882.0	1 854.0	96%	-36%
Paper waste, recycled	m3	16.0	18.0				
Paper waste, recycled	kg				431.0		
Cardboard waste, recycled	kg	-	13 207.0	16 414.6	14 078.0	7%	-14%
EE waste, recycled	m3		2.0	2.0	2.0		0%
Plastic waste, recycled	m3	5.0	9.0				
Plastic waste, recycled	kg			775.5	277.0		-64%
Metal waste, recycled	kg		6 563.0	7 197.0	11 666.0	78%	62%

Appendix V: Carbon Accounting (continued)

Category	Unit	2021	2022	2023	2024	▲ to base year	▲ to 2023
Wood waste, recycled	kg	2 400.0	11 500.0	19 600.0	12 320.0	7%	-37%
Mineral oil waste, incinerated (H)	liters		1 000.0	600.0	1 000.0	0%	67%
Glass waste, recycled	kg				11.0		
Organic waste, recycled	kg				276.0		
Organic waste, composting	kg		1 139.0	2 254.0	1 424.0	25%	-37%
Sorted waste, recycled	kg		7 200.0	7 200.0	8 098.0	12%	12%
Residual waste, incinerated	kg				414.0		
Residual waste, landfill	m3	22.0	14.5				
Residual waste, landfill	kg		28 620.0	32 738.4	28 620.0	0%	-13%
3.06 Business travel							
Hotel nights, world	nights	137.0	1 067.0	1 025.0	348.0	-67%	-66%
Train International	pkm	3 035.0	29 886.0	23 829.0	7 752.0	-74%	-67%
Mileage all. avg. car	km	67 103.0	125 445.0	96 339.0	57 838.0	-54%	-40%
Flights	tCO2e	22.8	51.7	64.9	41.3	-20%	-36%
Mileage all. el car EU27	km			3 381.0			
3.07 Employee commuting							
Car, petrol (avg.)	km		998 903.0	940 160.0	815 289.0	-18%	-13%
Electric car EU27	km		171 880.0	226 749.0	322 879.0	88%	42%
Motorbike, small	km			3 337.0	5 977.0		79%
Bus local avg.	pkm		28 790.0	29 904.0	10 803.0	-62%	-64%
Car, petrol (medium)	km		304 423.0	323 795.0	248 537.0	-18%	-23%
Car, Hybrid Electric Vehicle (HEV)	km			28 471.0	110 175.0		287%
3.11 Use of sold products							
Argon (liquid), Europe	kg				2504 010.0		
Sodium hydrogen sulfite	kg				10 398.0		
Electricity Asia avg.	kWh			-	16980 000.0		
3.12 End-of-life treatment of sold products							
Metal waste, recycled	kg				240 163.2		
Metal waste, recycled	m3				12 854.0		
Wood waste, recycled	kg				13 646.8		
EE waste, recycled	kg				1 131.4		
Ceramic waste, recycled	kg				337.3		
Plastic PVC waste, recycled	kg				83.2		
Rubber waste, recycled	kg				117.4		
Plastic waste, recycled	kg				2 203.6		
Silicon waste, landfill	kg				136.4		
Plastic PE/PP waste, recycled	kg				24.1		
Mineral oil waste, recycled (H)	kg				88.6		

Tekna Holding ASA
Langbryggen 9
4841 Arendal
Norway

Headquarter:
2935 Boul. Industriel
Sherbrooke, Québec
J1L 2T9 Canada
+1-819-820-2204

investors@tekna.com
www.tekna.com/investors

esg@tekna.com
www.tekna.com/esg

request

We encourage you to read the document on a device instead of printing it.

TEKNA