

2022

Carbon Accounting Report

Every particle counts...

Index

Introduction	2
Key figures GHG emissions	5
Key figures Energy	8
Key figures Energy consumption	9
Methodology.....	11
Sources.....	12
Abbreviations	13
About Tekna.....	14
Contact information	15

Introduction

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 14064-1.

Restatements

CO₂ Scope 2 – Hydro Sherbrooke publishes emissions which are higher than the Cemsys system calculated for hydropower (Cemsys states 0). Cemsys has created the new category and it has been corrected for 2019-2021. This has resulted in a total of 10tCO₂e for the 3 year period.

External Assurances

Internally the Audit Committee approves the GRI report. 'The GRI report was not externally assured on its publication date; Note that the CO₂ metrics were assured for our main shareholder Arendals Fossekompani ASA ("AFK"). Tekna aims to implement assurance for its next reporting period.

This report comprises the following organisational units:

	Comment	Staff in 2022
Tekna Holding ASA [THASA], Norway	holding, no staff	0
Tekna Holding Canada Inc [THC], Canada	holding, no staff	0
Tekna Plasma Systems Inc [TPS], Canada, HQ	operational headquarter, system production	132
Tekna Advanced Materials Inc [TAM], Canada	powder production	47
Tekna Microelectronics Unit [TMC], Canada	activity started end of 2021	0
Tekna Plasma Europe SAS [TPE], France	powder production, European sales office	31
Tekna Plasma Suzhou Co Ltd [TPZ], China	sales office, office move in Q1 2022	4
Tekna Plasma Korea Co Ltd [TPK], Korea	sales office, office move in Q1 2022	2
Tekna Inc [TCU], USA	no staff, activity started end of 2022	0
Only when specifically mentioned:		
Imphytek Powders SAS [Imphytek], France, JV	JV, activity started in 2020	1

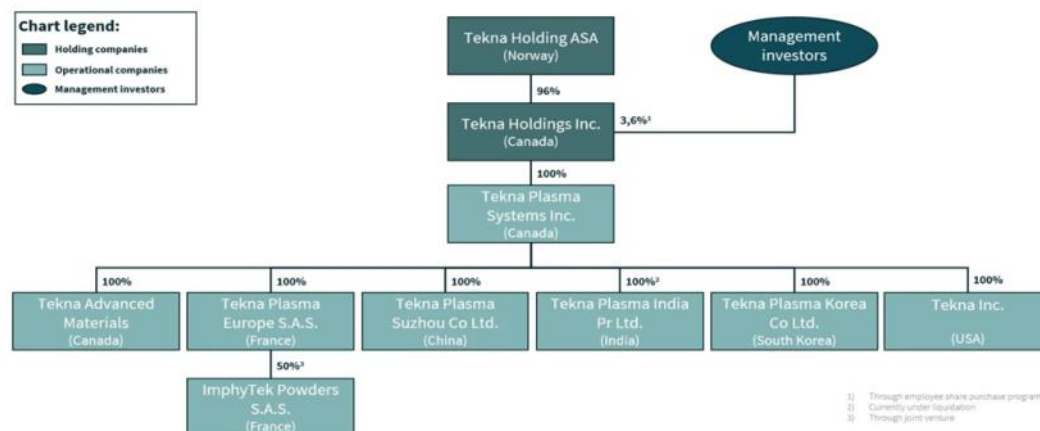
Index

- Introduction 2
- Key figures GHG emissions 5
- Key figures Energy 8
- Key figures Energy consumption 9
- Methodology 11
- Sources 12
- Abbreviations 13

- About Tekna 14
- Contact information 15

Introduction (continued)

Organization chart



Scope 1 and scope 2

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. Tekna has added a third facility in Canada "TMC", increasing natural gas consumption for heating in 2022.

At the end of 2021 Tekna has added Additive Manufacturing production equipment in Canada increasing electricity consumption in 2022.

Both our sales offices in China and Korea moved to another location in the first quarter of 2022. In Korea natural gas is used in the new office. In terms of electricity the new office in China seems more efficient (8 MWh vs. 3 MWh).

Leased building emissions are included in scope 1 and 2.

Scope 1 and scope 2	status	baseline
Scope 1	included worldwide per entity	2021
Scope 2	included worldwide per entity	2021

Index

- Introduction 2
- Key figures GHG emissions 5
- Key figures Energy 8
- Key figures Energy consumption 9
- Methodology 11
- Sources 12
- Abbreviations 13

- About Tekna 14
- Contact information 15

Introduction (continued)

Scope 3

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 2021 increased due to broader emissions mapping in scope 3 and improved data quality.

This report is incomplete in scope 3. Multiple categories up-and downstream have still to be assessed. Only categories which we can substantiate with data have been included.

Fuel and energy related activities

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

Waste

For Canada we have not been able to verify how the hazardous waste is processed. We have used the following assumption both in 2021 and 2022: 10% recycled and 90% treated and then landfill, this was thus split to 50/50 treatment/landfill. 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.

Business Travel

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.

Employee Commute

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 150 answers out of 216 (70%), which we considered a sufficient bases to extrapolate to 100%. We created this form based on the recommendations of the Greenhouse Gas Protocol and Cemasy categories.

Scope 3 categories in GHG protocol:

	status	baseline
1: Purchased Goods and Services	planned for 2023	
2: Capital Goods	planned for 2023	
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
4: Upstream Transportation and Distribution	planned for 2023	
5: Waste Generated in Operations	included for Canada and France	2022
6: Business Travel	included consolidated worldwide	2022
7: Employee Commuting	included consolidated worldwide	2022
8: Upstream Leased Assets	not relevant for Tekna	
9: Downstream Transportation and Distribution	planned for 2024	
10: Processing of Sold Products	planned for 2024	
11: Use of Sold Products	planned for 2024	
12: End-of-Life Treatment of Sold Products	planned for 2024	
13: Downstream Leased Assets	not relevant for Tekna	
14: Franchises	not relevant for Tekna	
15: Investments	not relevant for Tekna	

Yearly report for : Tekna group

Category	Description	Unit	2019	2020	2021	2022	% change from previous year	Comments
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Key Figures GHG Emissions

Scope 1 [GRI 305-1]

Stationary combustion			tCO ₂ e	453.4	474.1	576.6	585.1	1.5%	2021 is the baseline.
Natural gas	Canada TPS - Energir	tCO ₂ e	139.3	128.0	115.8	119.8			
Natural gas	Canada TAM - Energir	tCO ₂ e	314.1	346.1	460.9	433.2			
Natural gas	Canada TMC - Energir	tCO ₂ e	-	-	-	32.1		Entity opened in 2022	
Natural gas	Korea TPK - Sales office	tCO ₂ e	-	-	-	-		New office, only April - December included	
Scope 1 Total			tCO₂e	453.4	474.1	576.6	585.1	1.5%	

Scope 2 [GRI 305-2]

Electricity Green			tCO ₂ e	3.0	2.9	4.1	4.7	14.6%	2019-2021 Corrected for Canada TPS and TAM. Added emissions confirmed by supplier Hydro Sherbrooke, correcting for cemasys undercalculation. 2021 is the baseline.
Hydropower, Quebec	Canada TPS - Hydro Sherbrooke	tCO ₂ e	0.7	0.6	0.9	0.9			
Hydropower, Quebec	Canada TAM - Hydro Sherbrooke	tCO ₂ e	2.3	2.3	3.2	3.8			
Hydropower, Quebec	Canada TMC - Hydro Sherbrooke	tCO ₂ e	-	-	-	0.1			
Electricity location-based			tCO ₂ e	-	-	37.6	29	-22.9%	2021 is the baseline.
Electricity France	France TPE - Alterna	tCO ₂ e	-	-	32.1	26.6			
Electricity France	France Imphytek - sales office	tCO ₂ e	-	-	-	-			
Electricity China	China TPZ - Sales office	tCO ₂ e	-	-	5.0	1.9			
Electricity Korea	Korea TPK - Sales office	tCO ₂ e	-	-	0.6	0.5		New office, only April - December included	
Scope 2 Total			tCO₂e	3.0	2.9	41.7	33.7	-19.2%	

Yearly report for : Tekna group

Category	Description	Unit	2019	2020	2021	2022	% change from previous year	Comments
Scope 3 [GRI 305-3]								
Fuel-and-energy-related activities		tCO₂e	-	-	391.2	385.1	-1.6%	2021 is the baseline.
Natural gas (WTT)		tCO ₂ e	-	-	98.0	98.9		
Electricity Canada (upstream)		tCO ₂ e	-	-	284.2	277.2		
Electricity France (upstream)		tCO ₂ e	-	-	7.1	8.3		
Electricity China (upstream)		tCO ₂ e	-	-	1.6	0.5		
Electricity Korea (upstream)		tCO ₂ e	-	-	0.2	0.1		
Waste		tCO₂e	-	-	2.9	19.1	558.6%	We have added France waste for 2021 and 2022. For Canada, 2021 only reflects hazardous waste. 2022 includes the complete estimated assessment for waste. 2022 is the baseline.
Hazardous waste, treated	Canada TPS - hazardous waste, treated	tCO ₂ e	-	-	-	0.1		
Hazardous waste, treated	Canada TAM - hazardous waste, treated	tCO ₂ e	-	-	-	0.5		
Cardboard waste, recycled	Canada all sites - cardboard	tCO ₂ e	-	-	-	0.3		
Paper waste, recycled	France TPE - paper and cardboard	tCO ₂ e	-	-	0.1	0.1		
Hazardous waste, landfill	Canada TPS - hazardous waste, landfill	tCO ₂ e	-	-	-	0.1		
Hazardous waste, landfill	France TPE - hazardous, landfill	tCO ₂ e	-	-	0.2	0.2		
Hazardous waste, landfill	Canada TAM - hazardous waste, landfill	tCO ₂ e	-	-	-	0.5		
Plastic waste, recycled	France TPE - plastics	tCO ₂ e	-	-	-	-		
Hazardous waste, recycled	Canada TPS - hazardous waste, recycled	tCO ₂ e	-	-	-	-		
Hazardous waste, recycled	Canada TAM - hazardous waste, recycled	tCO ₂ e	-	-	-	0.1		
Wood waste, recycled	France TPE - wood	tCO ₂ e	-	-	0.1	-		
Wood waste, recycled	Canada all sites - wood	tCO ₂ e	-	-	-	0.2		
Residual waste, landfill	France TPE - municipal waste, treated	tCO ₂ e	-	-	2.5	1.6		
Residual waste, landfill	Canada all sites - municipal waste	tCO ₂ e	-	-	-	12.8		
EE waste, recycled	Canada all sites - EE waste	tCO ₂ e	-	-	-	-		
Metal waste, recycled	Canada all sites - metal waste	tCO ₂ e	-	-	-	0.1		
Mineral oil waste, incinerated	Canada all sites - mineral oil	tCO ₂ e	-	-	-	2.5		
Organic waste, composting	Canada all sites - organic	tCO ₂ e	-	-	-	-		
Sorted waste, recycled	Canada all sites - sorted waste	tCO ₂ e	-	-	-	0.2		
Business travel		tCO₂e	-	-	40.3	115.4	186.4%	2021 was influenced by COVID travel restrictions. 2022 is the baseline
Hotel nights, world	Worldwide Tekna - all entities	tCO ₂ e	-	-	6.2	42.1		
Train International	Worldwide Tekna - all entities	tCO ₂ e	-	-	-	0.1		
Mileage all. avg. car	Worldwide Tekna - all entities	tCO ₂ e	-	-	11.3	21.4		
Flights	Worldwide Tekna - all entities	tCO ₂ e	-	-	22.8	51.7		

Yearly report for : Tekna group

Category	Description	Unit	2019	2020	2021	2022	% change from previous year	Comments
Employee commuting		tCO₂e	-	-	-	235.8	N/A	2022 was the first year for measuring Employee Commuting. We had a 70% response rate on the questionnaire and extrapolated to 100%. 2022 is the baseline.
Car, petrol (avg.)	Worldwide Tekna - all entities	tCO ₂ e	-	-	-	170.3		
Car, petrol (medium)	Worldwide Tekna - all entities	tCO ₂ e	-	-	-	56.2		
Electric car EU27	Worldwide Tekna - all entities	tCO ₂ e	-	-	-	6.5		
Bus local avg.	Worldwide Tekna - all entities	tCO ₂ e	-	-	-	2.8		
Scope 3 Total		tCO₂e	-	-	434.3	755.4	73.9%	
Total (Scope 1 + 2)		tCO₂e	456.4	477.0	618.4	618.8	0.1%	2170.6
Total (Scope 1 + 2 + 3)		tCO₂e	456.4	477.0	1052.7	1374.3	30.6%	
Percentage change			-	4.5%	120.7%	30.6%		
Annual Market-Based GHG Emissions								
Electricity Total (Scope 2) with Market-based calculations		tCO₂e	-	-	40.6	27.4		
Scope 2 Total with Market-based electricity calculations		tCO₂e	-	-	44.7	32.1		
Scope 1+2+3 Total with Market-based electricity calculations		tCO₂e	456.4	477.0	1055.6	1372.7		
Percentage change			100%	4.5%	121.3%	30.0%		

Yearly report for : Tekna group

Category	Description	Unit	2019	2020	2021	2022	% change from previous year	Comments
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Key Figures Energy

Category	Description	Unit	2019	2020	2021	2022	% change from previous year	Comments
Scope 1								
Stationary combustion		MWh	2465.9	2578.6	3125.9	3182.6	1.8%	
Natural gas	Canada TPS - Energir	MWh	757.6	696.3	627.5	651.4		
Natural gas	Canada TAM - Energir	MWh	1708.4	1882.3	2498.4	2356.3		
Natural gas	Korea TPK	MWh	-	-	-	0.1		
Natural gas	Canada TMC - Energir	MWh	-	-	-	174.8		
Scope 1 Total		MWh	2465.9	2578.6	3125.9	3182.6	1.8%	
Scope 2								
Electricity Green		MWh	6822.8	5798.8	6832.6	7874.7	15.3%	
Hydropower, Quebec	Canada TPS - Hydro Sherbrooke	MWh	1442.3	1217.2	1440.2	1463.8		
Hydropower, Quebec	Canada TAM - Hydro Sherbrooke	MWh	5380.5	4581.6	5392.4	6300.7		
Hydropower, Quebec	Canada TMC - Hydro Sherbrooke	MWh	-	-	-	110.2		
Electricity		MWh	-	-	602.7	525.4	-12.8%	
Electricity France	France TPE - Alterna	MWh	-	-	593.6	521.3		
Electricity France	France Imphytek - sales office	MWh	-	-	-	-		
Electricity China	China TPZ - Sales office	MWh	-	-	8.0	3.0		
Electricity Korea	Korea TPK - Sales office	MWh	-	-	1.1	1.1		
Scope 2 Total		MWh	6822.8	5798.8	7435.4	8400.1	13.0%	
Total (Scope 1 + 2 + 3)		MWh	9288.8	8377.4	10561.2	11582.7	9.7%	
		GJ	33439.5	30158.7	38020.4	41697.7	9.7%	
Percentage change			-	-9.8%	26.1%	9.7%		
Scope 1 renewable energy		MWh	-	-	-	-		
Scope 1 renewable energy share		%	-	-	-	-		
Scope 2 renewable energy		MWh	N/A	N/A	6964.5	8006.8		
Scope 2 renewable energy share		%	-	-	93.7%	95.3%		
Total renewable energy		MWh	N/A	N/A	6964.5	8006.8		
Total renewable energy share		%	-	-	65.9%	69.1%		

Yearly report for : Tekna group

Category	Description	Unit	2019	2020	2021	2022	% change from previous year	Comments
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Key Figures Energy Consumption

Category	Description	Unit	2019	2020	2021	2022		
Scope 1								
Stationary combustion								
Natural gas	Canada TPS - Energir	m ³	-	-	56890	58949		
Natural gas	Canada TPS - Energir	tCO ₂ e	139.3	128	-	-		
Natural gas	Canada TAM - Energir	m ³	-	-	226506	213236		
Natural gas	Canada TAM - Energir	tCO ₂ e	314.1	346.1	-	-		
Natural gas	Korea TPK	m ³	-	-	-	10		
Natural gas	Canada TMC - Energir	m ³	-	-	-	15823		
Scope 2								
Electricity Green								
Hydropower, Quebec	Canada TPS - Hydro Sherbrooke	kWh	1442327	1217180	1440216	1463835		
Hydropower, Quebec	Canada TAM - Hydro Sherbrooke	kWh	5380490	4581612	5392426	6300664		
Hydropower, Quebec	Canada TMC - Hydro Sherbrooke	kWh	-	-	-	110175		
Electricity								
Electricity France	France TPE - Alterna	kWh	-	-	593646	521288	-12.2%	
Electricity France	France Imphytek - sales office	kWh	-	-	-	-		
Electricity China	China TPZ - Sales office	kWh	-	-	7950	3034		
Electricity Korea	Korea TPK - Sales office	kWh	-	-	1132	1110.7		
Scope 3								
Fuel-and-energy-related activities								
Natural gas (WTT)		m ³	-	-	283396	288018		
Electricity Canada (upstream)		kWh	-	-	6832642	7874674		
Electricity China (upstream)		kWh	-	-	7950	3034		
Electricity France (upstream)		kWh	-	-	593646	521288		
Electricity Korea (upstream)		kWh	-	-	1132	1111		

Yearly report for : Tekna group

Category	Description	Unit	2019	2020	2021	2022	% change from previous year	Comments
Waste								
Hazardous waste, treated	Canada TPS - hazardous waste, treated	kg	-	-	1636	2520		
Hazardous waste, treated	Canada TAM - hazardous waste, treated	kg	-	-	-	21549		
Cardboard waste, recycled	Canada all sites - cardboard	kg	-	-	-	13207		
Paper waste, recycled	France TPE - paper and cardboard	m ³	-	-	16	18		
Hazardous waste, landfill	Canada TPS - hazardous waste, landfill	kg	-	-	1636	2520		
Hazardous waste, landfill	France TPE - hazardous, landfill	kg	-	-	11340	7680		
Hazardous waste, landfill	Canada TAM - hazardous waste, landfill	kg	-	-	-	21549		
Plastic waste, recycled	France TPE - plastics	m ³	-	-	5	9		
Hazardous waste, recycled	Canada TPS - hazardous waste, recycled	kg	-	-	364	560		
Hazardous waste, recycled	Canada TAM - hazardous waste, recycled	kg	-	-	-	4789		
Wood waste, recycled	France TPE - wood	tonne	-	-	2.4	1.5		
Wood waste, recycled	Canada all sites - wood	kg	-	-	-	10000		
Residual waste, landfill	France TPE - municipal waste, treated	m3	-	-	22	14.5		
Residual waste, landfill	Canada all sites - municipal waste	kg	-	-	-	28620		
EE waste, recycled	Canada all sites - EE waste	kg	-	-	-	2000		
Metal waste, recycled	Canada all sites - metal waste	kg	-	-	-	6563		
Mineral oil waste, incinerated	Canada all sites - mineral oil	liters	-	-	-	1000		
Organic waste, composting	Canada all sites - organic	kg	-	-	-	1139		
Sorted waste, recycled	Canada all sites - sorted waste	kg	-	-	-	7200		
Business travel								
Hotel nights, world	Worldwide Tekna - all entities	nights	-	-	137	1067		
Train International	Worldwide Tekna - all entities	pkm	-	-	3035	29886		
Mileage all. avg. car	Worldwide Tekna - all entities	km	-	-	67103	125445		
Flights	Worldwide Tekna - all entities	tCO ₂ e	-	-	22.8	51.7		
Employee commuting								
Car, petrol (avg.)	Worldwide Tekna - all entities	km	-	-	-	998903		
Car, petrol (medium)	Worldwide Tekna - all entities	km	-	-	-	304423		
Electric car EU27	Worldwide Tekna - all entities	km	-	-	-	171880		
Bus local avg.	Worldwide Tekna - all entities	pkm	-	-	-	28790		

Index

Introduction	2
Key figures GHG emissions	5
Key figures Energy	8
Key figures Energy consumption 9	
Methodology.....	11
Sources.....	12
Abbreviations	13
About Tekna.....	14
Contact information	15

Methodology

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 CO₂-equivalents: CO₂, CH₄ (methane), N₂O (laughing gas), SF₆, 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 organization has operational control. The electricity emission factors used in Cemasy 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 method-

ological 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 market-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 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 CO₂e 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.

Index

Introduction 2
Key figures GHG emissions 5
Key figures Energy 8
Key figures Energy consumption 9
Methodology 11
Sources 12
Abbreviations 13

About Tekna 14
Contact information 15

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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.

Index

Introduction 2

Key figures GHG emissions 5

Key figures Energy 8

Key figures Energy consumption 9

Methodology 11

Sources 12

Abbreviations 13

About Tekna 14

Contact information 15

Abbreviations

Legal entities

THASA	Tekna Holding ASA [THASA], Norway
THC	Tekna Holding Canada Inc [THC], Canada
TPS	Tekna Plasma Systems Inc [TPS], Canada, HQ
TAM	Tekna Advanced Materials Inc [TAM], Canada
TMC	Tekna Microelectronics Unit [TMC], Canada
TPE	Tekna Plasma Europe SAS [TPE], France
Imphytek	Imphytek Powders SAS [Imphytek], France, JV
TPZ	Tekna Plasma Suzhou Co Ltd [TPZ], China
TPK	Tekna Plasma Korea Co Ltd [TPK], Korea
TCU	Tekna Inc [TCU], USA

Technical terms

AU	Australia - the CEMAsys carbon accounting system - has a nordic origin. It does not include many codes for the territories Tekna is in yet.
GHG	Greenhouse gases: The main greenhouse gases whose concentrations are rising are carbon dioxide, methane, nitrous oxide, hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs) and ozone in the lower atmosphere.
EE waste	EE waste describes all discarded electrical and electronic devices and
TTW	TTW stands for Tank-to-wheel, which are the emissions from actual usage of the fossil fuels, which is the input in Scope 1 and scope 2.
WTT	WTT stands for Well-to-tank. Well-to-tank emissions for Scope 1 input (fossil fuels such as diesel, petrol, natural gas) is relating to the production of the fossil fuel and transportation to the gas station. Well-to-tank emission for Scope 2 input (electricity, district heating/cooling, etc) is relating to the production of the electricity and the transportation and distribution of the electricity until it is used in your locations (transmission losses included).

Units

tCO ₂ e	tCO ₂ e stands for tonnes (t) of carbon dioxide (CO ₂) equivalent (e). "Tonne" is a fancy way of writing metric ton, or 2,200 pounds. "Carbon dioxide equivalent" is a standard unit for counting greenhouse gas (GHG) emissions regardless of whether they're from carbon dioxide or another gas, such as methane.
avg.	average
GJ	A gigajoule, abbreviated as GJ, is a unit of measurement of energy consumption: a gigajoule is equal to one thousand million joules.
kWh	A kilowatt-hour is a unit of energy: one kilowatt of power for one hour.
km	kilometer, a metric unit of length equal to 1000 meters.
m ³	The cubic meter is the unit of volume in the International System of Units (SI). Its symbol is m ³ .
MWh	Megawatt-hour: A unit of energy, especially of electrical energy, equal to that done by one megawatt acting for one hour.
pkm	A passenger-kilometre, abbreviated as pkm, is the unit of measurement representing the transport of one passenger by a defined mode of transport (road, rail, air, sea, inland waterways etc.) over one kilometre.
tonne	A tonne is a metric unit of weight that is equal to 1000 kilograms.

About Tekna

Tekna is a global leader in the development, manufacturing and sales of advanced micron and nano powders as well as plasma process solutions.

Since we started in 1990, Tekna has developed a unique and proprietary plasma technology platform for manufacturing micro and nano sized powders for a range of industries. Our business model relies on two revenue streams, both with synergistic effects:

- Development and sale of plasma systems: We develop and sell plasma systems customized for the purpose of research and development.
- Development and sale of advanced powders: We develop and operate our own proprietary plasma processes to produce and sell spherical powders and nano powders.

Tekna's is developing the position of its advanced materials in three multi-billion-dollar market verticals. 

Tekna is headquartered in Québec, Canada, and has additional offices in France, China, Korea, USA, and seven distributors operating globally (Europe, Asia and North America).



Note: In India and Japan, Tekna has distribution/sales representative agreements

Additive Manufacturing:

Currently our fastest growing segment. Tekna enjoys an estimated 19 per cent market share, up by 6 per cent on main selling products. This global market is on track to outperform, in terms of growth, traditional machining due to improved environmental efficiency, for instance through resource efficiency and speed of availability of parts.

Microelectronics:

We aim to secure industrial scale supply to global tier 1 customers in the microelectronics industry. Nano powders below 100 nm are expected to become the new industry standard for high-end MLCC devices, and Tekna is one of only three producers that can deliver this.

Energy Storage:

Tekna has developed and patented its industrial process to produce high purity spherical silicon nano powder. Nano silicon used in rechargeable batteries could provide electric vehicles with 60 per cent more distance travelled on a single charge. Important industries for our powders are: batteries, electronics, medical, automotive, aerospace and satellites.

Systems | PlasmaSonic:

In the systems business we launched the PlasmaSonic Product line. This wind tunnel simulates hypersonic conditions to enable research for for instance space tourism.

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

The logo for TEKNA, featuring a stylized 'T' icon followed by the word 'TEKNA' in a bold, sans-serif font.