

Carbon Accounting Report 2023

Sparebanken Sogn og Fjordane

This report provides an overview of the organisation's greenhouse gas (GHG) emissions, which is an integrated part of the organisation's climate strategy. GHG emission accounting is a fundamental tool in identifying tangible measures to reduce GHG emissions. The annual GHG emission accounting report enables the organisation to benchmark performance indicators and evaluate progress over time.

This report comprises the head office in Førde as well as the sales offices.

The input data is based on consumption data from internal and external sources, which are converted into tonnes CO₂-equivalents (tCO₂e). The GHG emissions 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.

Reporting Year Energy and GHG Emissions

Emission source	Description	Consumption	Unit	Energy	Emissions	% share
				(MWh)	tCO ₂ e	
Transportation total				51.2	12.3	-
Diesel (NO)		3,511.1	liters	34.4	8.0	-
Petrol		1,815.9	liters	16.7	4.3	-
Scope 1 total				51.2	12.3	
Electricity total				1,085.8	30.4	-
Electricity Nordic mix		1,085,848.0	kWh	1,085.8	-	-
Electricity Nordic mix		-	GWh	-	-	-
District heating location total				138.1	0.2	-
District heating NO/Bergen		138,076.0	kWh	138.1	0.2	-
District heating general total				28.6	0.3	-
Electric heat/cooling pump Nordic (output)		28,601.0	kWh	28.6	0.3	-
Scope 2 total				1,252.5	30.8	-
Purchased goods and services total					1.6	
Debit card		12,230.0	Qty	-	0.5	-
Debit card, bioplastic		28,200.0	Qty	-	1.1	-
Waste total				-	6.0	-
Paper waste, recycled		21,061.0	kg	-	0.4	-
Residual waste, incinerated		10,059.0	kg	-	5.5	-
Plastic waste, recycled		155.0	kg	-	-	-
EE waste, recycled		382.0	kg	-	-	-
Metal waste, recycled		1,410.0	kg	-	-	-
Business travel total					27.2	-
Air travel, domestic		19,652.0	kgCO ₂ e	-	19.7	-
Air travel, continental		2,739.0	kgCO ₂ e	-	2.7	-
Mileage all. car (NO)		25,756.0	km	-	1.8	-
Mileage all. el car Nordic		160,537.0	km	-	0.9	-
Hotel nights, Nordic	Norway	296.0	nights	-	2.2	-
Investments total			-		148,341.5	99.9 %
Carbon dioxide (CO2)	Wage earners and pensioners	2,532.8	tonne	-	2,532.8	1.7 %
Carbon dioxide (CO2)	Public administration	50.3	tonne	-	50.3	-
Carbon dioxide (CO2)	Fish farming and hatcheries	51.2	tonne	-	51.2	-
Carbon dioxide (CO2)	Agriculture and forestry	65,490.0	tonne	-	65,490.0	44.1 %
Carbon dioxide (CO2)	Fishing and trapping	14,325.2	tonne	-	14,325.2	9.7 %
Carbon dioxide (CO2)	Industry and mining	15,122.2	tonne	-	15,122.2	10.2 %
Carbon dioxide (CO2)	Power and water supply	13,164.0	tonne	-	13,164.0	8.9 %
Carbon dioxide (CO2)	Construction	4,415.1	tonne	-	4,415.1	3.0 %
Carbon dioxide (CO2)	Trade	4,650.1	tonne	-	4,650.1	3.1 %
Carbon dioxide (CO2)	Transport	26,402.8	tonne		26,402.8	17.8 %
Carbon dioxide (CO2)	Hotels and tourism	1,179.9	tonne	-	1,179.9	0.8 %
Carbon dioxide (CO2)	Service provision	643.3	tonne	-	643.3	0.4 %
Carbon dioxide (CO2)	Property management	314.6	tonne	-	314.6	0.2 %
Scope 3 total					148,376.4	100.0 %



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Reporting Year Market-Based GHG Emissions

Category	Unit	2023
Electricity Total (Scope 2) with Market-based calculations	tCO ₂ e	6.2
Scope 2 Total with Market-based electricity calculations	tCO ₂ e	6.7
Scope 1+2+3 Total with Market-based electricity calculations	tCO ₂ e	148,395.3

In 2023, Sparebanken Sogn og Fjordane had total greenhouse gas emissions of 148,419.5 tons of CO2 equivalents (tCO2e). This is a reduction of 176,796.6 tCO2e, corresponding to 54.35% compared to 2022.

The greenhouse gas emissions in 2023 had the following distribution:

Scope 1: 12.3 tCO2e (0.00008%)

Scope 2: 30.8 tCO2e (0.0002%)

Scope 3: 148,376.4 tCO2e (99.99%)

The reduction in total emissions is primarily due to a reduction in category 15 investments in Scope 3. In Scope 1 and 2, however, a small increase in emissions has been recorded, corresponding to 0.9 tCO2e (Scope 1) and 2.6 tCO2e (Scope 2). The increase in emissions from Scope 1 and 2 comes from a higher consumption of fuel reported in Scope 1, as well as higher consumption of both electricity and district heating reported in Scope 2.

Scope 1

<u>Mobile combustion</u>: Actual consumption of fossil fuel in the company's vehicles (owned, leased, rented). Total fuel consumption in 2023 was 3,511.1 liters of diesel and 1,815.9 liters of petrol. This amounts to a total of 12.3 tCO2e and corresponds to an increase of 0.9 tCO2e compared to the previous year.

Scope 2

<u>Electricity</u>: Measured consumption of electricity in owned or rented premises/buildings for all departments. The table on page 2 shows greenhouse gas emissions from electricity calculated with the location-based emission factor Nordic mix.

Emissions from electricity consumption have increased by 2.6 tCO2e, which corresponds to an increase of 15.4 MWh.

Electricity with a market-based factor is presented in the table on page 4 of this report. The practice of presenting emissions from electricity consumption with two different emission factors is further explained under Scope 2 in Methodology and sources on page 10. Sparebanken Sogn og Fjordane purchased guarantees of origin for its electricity consumption of 1,085.8 MWh in 2023.

<u>District heating:</u> Use of district heating in owned/leased buildings. The consumption of district heating increased by 19.3 MWh from 2022 to 2023, which corresponds to an emission of less than 0.1 tCO2e.

<u>Heat pump</u>: Use of a heat pump in owned/rented buildings. Total greenhouse gas emissions from the use of heat pumps ended up at 0.3 tCO2e, which corresponds to an increase of 3 MWh from 2022 to 2023.

Scope 3

<u>Business trips:</u> Emissions equaling 27.2 tCO2e have been recorded for business trips in 2023, which is a reduction of 8.8% compared to 2022, when emissions were 29.8 tCO2e. The reduction mainly comes from the fact that a larger proportion of the km allowance was driven with an electric car in 2023, in contrast to 2022 when most of the km allowance came from cars that run on fossil fuel.

<u>Flights:</u> Emissions from domestic and continental flights, reported in kgCO2e. Flights taken by the bank's employees produced greenhouse gas emissions of 22.4 tCO2e in 2023. This is an increase of 6.2 tCO2e compared to 2022, which corresponds to an increase of 38.27%. For 2023 it was primarily registered domestic flights.

<u>Kilometer allowance:</u> Reported km for which kilometer allowance was paid. Kilometer allowance was given for 25,756 km with fossil cars, and 160,537 km with electric cars. In total, this amounted to an emission of 2.7 tCO2e in 2023 compared to 12.4 tCO2e in 2022. Thus, the emission for km allowance has been reduced by 78.23% from 2022 to 2023. This stems from the transition from km allowance for fossil cars for mainly electric cars.

<u>Hotel:</u> Number of days in a hotel in the reporting year. The bank's employees spent a total of 296 days in hotels in Norway in 2023. This is an increase of 12 days compared to 2022 but corresponds to an increase of 83.9% in emissions. The reason for the strong increase in emissions is that the emission factor for hotel nights in the Nordics increased by 76.5% from 2022 to 2023.

<u>Waste:</u> Reported waste in kg divided into different waste fractions, as well as treatment method (recycled, energy recovered, landfill). Waste accounted for an emission of 6 tCO2e in 2023. This is an increase of 1.3 tCO2e or 28.3% compared to 2022. The increase mainly comes from the fact that residual waste for incineration increased from 8,808 kg in 2022 to 10,059 kg in 2023, in addition to the fact that the emission factor for residual waste for incineration increased by 9.8% from 2022 to 2023.

<u>Purchased goods and services:</u> Sparebanken Sogn og Fjordane has reported emissions for its 40,430 issued bank cards in 2023. There is a reduction of 10,855 in the number of cards issued compared to 2022. Bank cards are an essential part of a bank's business and are replaced every 3-4 years for all customers. The emissions linked to the bank cards produced emissions of 1.6 tCO2e, which amounts to a reduction of 0.4 tCO2e compared to the previous year. In 2023, the bank has used a larger proportion of bioplastics in its production of bank cards. Of the 40,430 cards issued, a total of 28,200 cards were registered with a larger proportion of bioplastic. In addition to a reduction in the number of bank cards issued, the transition from ordinary cards to cards with a greater proportion of bioplastics is also helping to reduce the emissions associated with purchased goods and services.

<u>Investments:</u> The bank has included emissions for its lending portfolio in 2023. This gives a significant footprint and contributes to emissions increasing significantly. A total of 148,341.5 tCO2e has been registered for investments, and this constitutes 99.99% of the total greenhouse gas emissions of Sparebanken Sogn og Fjordane. In 2023, the bank has used a different division for the financial emissions than in 2022. These changes come from the bank wanting to follow the same industry division as in the financial accounts.

Emissions have been recorded for the following industries in 2023: Wage earners and pensioners, public administration, fish farming and hatcheries, agriculture and forestry, fishing and trapping, industry and mining, power and water supply, construction, trade, transport, hotels and tourism, service provision, and property management. The industries that make up the largest proportion of emissions are agriculture and forestry (44%) and transport (17.8%).

In 2022, the bank started measuring the emissions in the BM portfolio by using the SSB factor methodology. With support from Finans Norge's head of finance for greenhouse gas emissions, this year the bank has carried out more detailed calculations of emissions within agriculture, which has resulted in higher PCAF data quality than last year. For the other industries at BM, the bank has still used the SSB factor methodology to calculate emissions, due to the increased focus on the calculations of agriculture. In addition, Sparebanken Sogn og Fjordane changed the allocations to the industries, so that it is consistent with the financial reporting. The bank has also looked more at what they actually finance from the emissions of their business customers, which led to a decrease compared to the 2022 figure.



Annual GHG Emissions

Category	Description	2021	2022	2023	% change from
					previous year
Transportation total		15.1	11.4	12.3	7.6 %
Diesel (NO)		12.4	7.4	8.0	7.7 %
Petrol		2.7	4.0	4.3	7.3 %
Scope 1 total		15.1	11.4	12.3	7.6 %
Electricity location-based total		38.8	27.8	30.4	9.2 %
Electricity Nordic mix		38.8	27.8	30.4	9.2 %
Electricity total		-	-	-	-
Electricity Nordic mix		-	-	-	100.0 %
District heating location total		0.4	0.2	0.2	-0.4 %
District heating NO/Bergen		0.4	0.2	0.2	-0.4 %
District cooling NO/Trondheim		-	-	-	-
District heating general total			0.2	0.3	59.8 %
Electric heat/cooling pump Nordic (output)		-	0.2	0.3	59.8 %
Scope 2 total		39.2	28.2	30.8	9.5 %
Purchased goods and services total		1.5	2.0	1.6	-19.6 %
Debit card		1.5	1.7	0.5	-70.9 %
Debit card, bioplastic		-	0.3	1.1	229.1 %
Waste total		8.5	4.7	6.0	28.3 %
Residual waste, incinerated		8.1	4.4	5.5	25.4 %
Paper waste, recycled		0.2	0.1	0.4	202.1 %
Plastic waste, recycled		-	-	-	-15.3 %
EE waste, recycled		0.1	-	-	-67.2 %
Metal waste, recycled		0.1	0.1	-	-70.6 %
Business travel total		16.7	29.8	27.2	-8.8 %
Mileage all. car (NO)		8.0	12.4	1.8	-85.9 %
Air travel, domestic, incl. RF		6.8	-	-	-
Air travel, continental, incl. RF		0.2	-	-	-
Air travel, intercontinental, incl. RF		-	-	-	-
Hotel nights, Nordic	Domestic/Nordic	1.7	-	-	-
Hotel nights, Nordic	Norway	-	1.2	2.2	83.9 %
Hotel nights, Europe	Europe	-	-	-	-
Mileage all. el car Nordic	Domestic	-	-	-	-
Mileage all. el car Nordic		-	-	0.9	1,655.2 %
Air travel, domestic		-	15.4	19.7	27.3 %
Air travel, continental		-	0.8	2.7	262.8 %
Investments total		-	325,140.0	148,341.5	-54.4 %
Carbon dioxide (CO2)	Agriculture	-	126,940.0	-	-100.0 %
Carbon dioxide (CO2)	Wage earners and pensioners	-	-	2,532.8	100.0 %
Carbon dioxide (CO2)	Public administration	-	-	50.3	100.0 %
Carbon dioxide (CO2)	Fish farming and hatcheries	-		51.2	100.0 %
Carbon dioxide (CO2)	Fisheries and aquaculture	-	29,500.0	-	-100.0 %
Carbon dioxide (CO2)	Agriculture and forestry	-	-	65,490.0	100.0 %
Carbon dioxide (CO2)	Industry and mining and extraction	-	100,320.0	-	-100.0 %
Carbon dioxide (CO2)	Fishing and trapping	-	-	14,325.2	100.0 %

Carbon dioxide (CO2)	Electricity, gas, steam and hot water supply	-	29,730.0	-	-100.0 %
Carbon dioxide (CO2)	Industry and mining	-	-	15,122.2	100.0 %
Carbon dioxide (CO2)	Building and construction business	-	12,460.0	-	-100.0 %
Carbon dioxide (CO2)	Power and water supply	-	-	13,164.0	100.0 %
Carbon dioxide (CO2)	Sales and operation of real estate	-	480.0	-	-100.0 %
Carbon dioxide (CO2)	Construction	-	-	4,415.1	100.0 %
Carbon dioxide (CO2)	Other transport and storage, pipe transport	-	11,860.0	-	-100.0 %
Carbon dioxide (CO2)	Trade	-	9,190.0	4,650.1	-49.4 %
Carbon dioxide (CO2)	Transport	-	-	26,402.8	100.0 %
Carbon dioxide (CO2)	Service industries	-	590.0	-	-100.0 %
Carbon dioxide (CO2)	Hotels and tourism	-	-	1,179.9	100.0 %
Carbon dioxide (CO2)	Accommodation and catering business	-	3,780.0	-	-100.0 %
Carbon dioxide (CO2)	Service provision	-	-	643.3	100.0 %
Carbon dioxide (CO2)	Other	-	290.0	-	-100.0 %
Carbon dioxide (CO2)	Property management	-	-	314.6	100.0 %
Scope 3 total		26.8	325,176.6	148,376.4	-54.4 %
Total		81.1	325,216.1	148,419.5	-54.4 %
Percentage change			401,084.2 %	-54.4 %	



Annual Market-Based GHG Emissions

Category	Unit	2021	2022	2023

Electricity Total (Scope 2) with Market- based calculations	tCO ₂ e	12.8	-	6.2
Scope 2 Total with Market-based electricity calculations	tCO ₂ e	13.2	0.3	6.7
Scope 1+2+3 Total with Market-based electricity calculations	tCO ₂ e	55.1	325,188.3	148,395.3
Percentage change			590,258.4 %	-54.4 %



Annual Key Energy and Climate Performance Indicators

Name	Unit	2021	2022	2023	% change from
					previous year
Scope 1 + 2 emissions (tCO2e)		54.2	39.6	43.1	8.9 %
Total emissions (s1+s2+s3) (tCO2e)		81.1	325,216.1	148,419.5	-54.4 %
Total energy scope 1 +2 (MWh)		1,505.2	1,268.2	1,303.7	2.8 %
Sum square meters (m2)		9,498.0	8,474.0	8,474.0	-
Sum locations kWh/m2		150.8	143.4	147.8	3.1 %
Total emissions (kgCO2e (s1+s2+s3)) /FTE		286.4	1,129,222.6	513,562.1	-54.5 %
Total emissions (kgCO2e (s1+s2+s3)) /area		9.4	41,705.1	19,033.0	-54.4 %
FTE	Number of employees	283.0	288.0	289.0	0.3 %
Heated area	Square meters	8,648.0	7,798.0	7,798.0	-



Methodology and sources

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 report 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 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).

Organisations who report on their GHG emissions will now have to disclose both location-based emissions from the production of electricity, and 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 twofold. On one hand it shows the impact of energy efficiency measures, and on the other hand this amendment displays how the acquisition of GoOs or RECs affect GHG emissions. Using both methods in emission reporting highlights the effect of all measures regarding electricity consumption.

<u>The location-based method</u>: 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.

<u>The market-based method</u>: 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 GHG emissions accounting should include information that users, both internal and external to the company, need for their decision making. A relevant consideration is the selection of an appropriate inventory boundary which reflects the substance and economic reality of the company's business relationships.

Sources:

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

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WBCSD/WRI (2015). GHG protocol Scope 2 guidance: An amendment to the GHG protocol corportate 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.