Carbon Accounting Report 2020

SpareBank 1 SMN

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

The report covers all of the registered data related to greenhouse gas emissions from SpareBank 1 SMN's offices in 2020.

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.

Reporting Year Energy and GHG Emissions

Emission source	Description	Consumption	Unit	Energy (MWh)	Emissions tCO_2e	% share
Transportation total				**43.6**	**9.3**	**3.3 %**
Petrol		271.7	liters	2.6	0.6	0.2 %
Diesel (NO)		3,934.0	liters	41.0	8.7	3.0 %
Scope 1 total				**43.6**	**9.3**	**3.3 %**
Electricity total				**2,967.7**	**121.7**	**42.7 %**
Electricity Nordic mix		2,967,651.0	kWh	2,967.7	121.7	42.7 %
DH Nordic locations total				**236.1**	**9.3**	**3.3 %**
District heating NO/Trondheim		236,073.0	kWh	236.1	9.3	3.3 %
Scope 2 total				**3,203.7**	**131.0**	**45.9 %**
Waste total				**-**	**4.6**	**1.6 %**
Residual waste, incinerated		8,788.5	kg	-	4.4	1.5 %
Paper waste, recycled		6,025.9	kg	-	0.1	-
Paper waste, recycled	Til makulering	-	kg	-	-	-
Metal waste, recycled		333.3	kg	-	-	-
Plastic waste, recycled		938.1	kg	-	-	-
EE waste, recycled		481.4	kg	-	-	-
Business travel total				**-**	**132.5**	**46.5 %**
Continental/Nordic		176,672.0	pkm	-	14.5	5.1 %
Intercontinental		-	pkm	-	-	-
Domestic		294,265.0	pkm	-	38.0	13.3 %
Mileage all. car (NO)		571,170.0	km	-	80.0	28.0 %
Purchased goods and services total				**-**	**7.8**	**2.7 %**
Paper, virgin		8,485.5	kg	-	7.8	2.7 %
Scope 3 total				**-**	**144.9**	**50.8 %**
Total				**3,247.3**	**285.2**	**100.0 %**
KJ				**11,690,368,560.0**		

Reporting Year Market-Based GHG Emissions

Category	Unit	2020
Electricity market-based	tCO_2e	780.5
Scope 2 market-based	tCO_2e	789.8
Total market-based	tCO_2e	944.0

Data base

The energy and climate accounts 2020 for SpareBank 1 SMN are based on reports from electricity and waste disposal suppliers, purchasing overviews, travel portal for business travel and system for payroll and travel allowance. Where SpareBank 1 SMN is co-located with Eiendomsmegler 1 Midt-Norge and SpareBank 1 Regnskapshuset SMN AS data related to energy consumption and waste collection collected by SpareBank 1 SMN and divided between the two remaining companies according to different distribution keys, see «Assumptions and clarifications database ». This is done on the basis that SpareBank 1 SMN has the opportunity to extract details reports from supplier.

Assumptions and clarifications data basis

- Data related to energy consumption is composed of actual consumption (measured) and stipulated data. Taken as a whole, 77% are consumption measured and 23% is stipulated. Estimates for locations without meters are made on the basis of average kilowatt per hour (kwh) for locations with meters and is then multiplied by the area (m2) to the locations without meters. Only SpareBank 1 SMN's share of this consumption is included the climate accounts at company level.

- Data for fuel consumption where it is not possible to extract measured consumption associated with owned and leased passenger cars, stipulations have been made on the basis of actual mileage allowance. Then is this multiplied by an assumption of a consumption of 0.7 liters per mile. This applies to both diesel petrol cars. Data for flights are taken from various payroll and travel systems. Here there is a little difference in what is available by data. All systems have data on the number of trips and some have more detailed information on emissions associated with the flight (for example, the number of kilos of CO2).

- Waste data for the co-located companies is distributed using an estimate for waste data per employee with the head office as a basis. Then this estimate is multiplied by the number of employees (excluded head office) to arrive at an estimate. The share of stipulated waste data for SpareBank 1 SMN is 42%, 45% for Eiendomsmegler 1 Midt-Norge AS and 74% for Regnskapshuset. Waste data for the locations that are not co-located are sourced from their own suppliers. Only SpareBank 1 SMN's share is included company level, the rest is redistributed.

- The indirect effect (scope 3) of SpareBank 1 SMN's loan portfolio and / or other financial instruments are not included in the data base. This is something that is being worked on and aims to be including in the long run.

Climate accounting

During 2020, SpareBank 1 SMN had a total greenhouse gas emission of 285.2 tonnes of CO2 equivalents (tCO2e). This is a reduction of of 51.8% from 2019. The reason for this reduction is mainly due to the Covid-19 pandemic that has ravaged Norway from March 2020 to the end of the year. With home offices and travel restrictions, emissions from SpareBank 1 SMN have decreased.

Greenhouse gas emissions are distributed as follows for 2020:

Scope 1: 3.3% (9.3 tCO2e)
Scope 2: 45.9% (131 tCO2e)
Scope 3: 50.8% (144.9 tCO2e)

KPI
Emissions per man-year have been reduced from 0.9 to 0.4 tCO2e from 2019 to 2020, corresponding to a reduction of 52.9%. This is due to a combination of reduced emissions and an increase in the number of man-years. Emissions per square meter heated area in 2020 is 11.5 kgCO2e.

Scope 1

Transport: Fuel consumption in liters for the bank's leased cars. During 2020, 271.7 liters of petrol and 3934 liters of diesel were used, equivalent to 9.3 tCO2e. This is a reduction of 31.5% compared to 2019.

Scope 2

Electricity: Measured and stipulated consumption of electricity in owned and leased buildings for SpareBank 1 SMN. The table above shows greenhouse gas emissions from electricity calculated using the location-based emission factor Nordic mix. The bank's branches had a consumption of 2,967.6 MWh during 2020, which corresponds to an emission of 121.7 tCO2e. During 2019, electricity consumption was 5,120.1 MWh, corresponding to an emission of 199.7 tCO2e. Emissions from electricity have thus been reduced by 39.1% from 2019 to 2020, even though the emission factor Nordic mix increased by 5.1% in the same period. Greenhouse gas emissions calculated with a market-based factor can be found in the table "Market-based emissions in reporting practice "above. The practice of presenting emissions from electricity consumption by two various emission factors are further explained under Scope 2 in Method and sources. As SpareBank 1 SMN does not purchased guarantees of origin (OG / REC) for their consumption of electricity in 2020, the emission factor is Nordic residual mix used in the calculation.

District heating: Measured and stipulated consumption of district heating in owned and leased buildings. The bank used 236.1 MWh district heating in its offices during 2020. This corresponds to an emission of 9.3 tCO2e. This is a reduction of 78.8% from 2019.

Scope 3:

Waste: Reported waste in kilograms divided into different waste fractions, as well as treatment method (recycled, energy recovered). In 2020, emissions from waste amounted to 4.6 tCO2e. This is a reduction of 31.7% from 2019. The amount of waste for several of the waste fractions is so small that the discharge is only shown as a dash in the climate accounts.

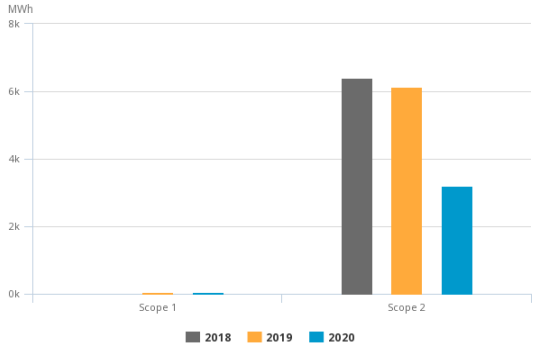
Business travel: During 2020, the bank's employees traveled both domestically and in Europe by air. Emissions from flights in 2020 amounted to 52.5 tCO2e. This is a reduction of 72.6% from 2019. Furthermore, it was given in 2020 kilometer allowance for 571 170 km driven by car, corresponding to an emission of 80 tCO2e. This is a reduction at 35.7% compared to 2019.

Purchased goods and services: The bank purchased 8,485.5 kg of paper during 2020, which corresponds to a discharge of 7.8 tCO2e. This is a reduction of 36.3% compared to last year.

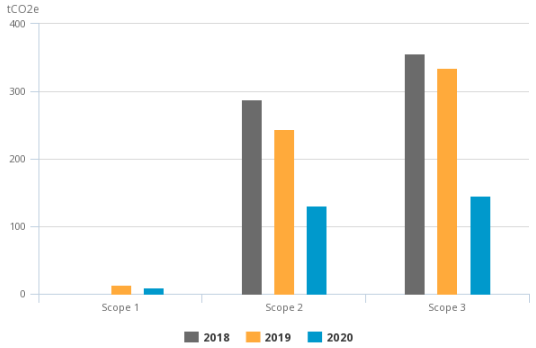
Annual GHG Emissions

Category	Description	2018	2019	2020	% change from previous year
Transportation total		**-**	**13.6**	**9.3**	**-31.5 %**
Petrol		-	1.3	0.6	-50.9 %
Diesel (NO)		-	12.3	8.7	-29.5 %
Scope 1 total		**-**	**13.6**	**9.3**	**-31.5 %**
Electricity total		**287.5**	**199.7**	**121.7**	**-39.1 %**
Electricity Nordic mix		287.5	199.7	121.7	-39.1 %
DH Nordic locations total		**-**	**44.1**	**9.3**	**-78.8 %**
District heating NO/Trondheim		-	44.1	9.3	-78.8 %
Scope 2 total		**287.5**	**243.7**	**131.0**	**-46.3 %**
Waste total		**7.1**	**6.7**	**4.6**	**-31.7 %**
Residual waste, incinerated		6.9	6.5	4.4	-31.9 %
Paper waste, recycled		0.2	-	0.1	376.4 %
Paper waste, recycled	Til makulering	-	0.2	-	-100.0 %
Metal waste, recycled		-	-	-	910.0 %
Plastic waste, recycled		-	-	-	111.3 %
EE waste, recycled		-	-	-	333.7 %
Wood waste, recycled		-	-	-	-
Residual waste, recycled		-	-	-	-
Cardboard waste, recycled		-	-	-	-100.0 %
Paper total		**13.5**	**-**	**-**	**-**
Paper,office		13.5	-	-	-
Business travel total		**335.4**	**315.7**	**132.5**	**-58.0 %**
Continental/Nordic		27.8	8.0	14.5	81.9 %
Intercontinental		12.2	51.0	-	-100.0 %
Domestic		160.8	132.3	38.0	-71.3 %
Mileage all. car (NO)		134.6	124.3	80.0	-35.7 %
Purchased goods and services total		**-**	**12.3**	**7.8**	**-36.3 %**
Paper, virgin		-	12.3	7.8	-36.3 %
Scope 3 total		**356.1**	**334.7**	**144.9**	**-56.7 %**
Total		**643.5**	**592.0**	**285.2**	**-51.8 %**
Percentage change		**100.0 %**	**-8.0 %**	**-51.8 %**	

Annual energy consumption (MWh) Scope 1 & 2



Annual GHG emission per scope



Annual Market-Based GHG Emissions

Category	Unit	2018	2019	2020
Electricity market-based	tCO_2e	1,846.1	1,044.5	780.5
Scope 2 market-based	tCO_2e	1,846.1	1,088.6	789.8
Total market-based	tCO_2e	2,202.2	1,436.8	944.0
Percentage change		**100.0 %**	**-34.8 %**	**-34.3 %**

Annual Key Energy and Climate Performance Indicators

Name	Unit	2018	2019	2020	% change from previous year
tCO2e/FTE (S1+S2+S3)		6.1	0.9	0.4	-52.9 %
kgCO2e/oppvarmet areal (S1+S2+S3)		-	-	11.5	100.0 %
FTE		106.1	658.0	673.0	2.3 %
Oppvarmet areal	m^2	-	-	24,780.0	100.0 %

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 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).

Organisations 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 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.