



Carbon accounting report 2019

Eika Boligkreditt

The aim of this report is to get an overview of the organisation's greenhouse gas (GHG) emissions, which is an integrated part of the company's climate strategy. The carbon accounting is a fundamental tool in order to identify concrete measures to reduce the energy consumption and corresponding GHG emissions. The annual report enables the organisation to benchmark performance indicators and evaluate progress over time.

This report comprises Eika Boligkreditt.

The input data is based on information from both internal and external data sources and then converted into tonnes CO₂-eq. The analysis is based on the international standard; A Corporate Accounting and Reporting Standard, developed by the Greenhouse Gas Protocol Initiative (GHG protocol). This is the most important standard for measuring greenhouse gas emissions and was the basis for the ISO standard 14064-1.

Energy and GHG emissions

Category	Description	Consumption	Unit	Energy (MWh eqv)	Emissions (tCO2e)	Emissions (distribution)
<i>Transportation</i>				31.7	7.5	34.2%
Petrol		660.0	liters	6.3	1.5	7.0%
Diesel (NO)		2 480.0	liters	25.4	5.9	27.2%
Scope 1 total				31.7	7.5	34.2%
<i>Electricity*</i>				64.5	2.5	11.5%
Electricity Nordic mix		64 476.0	kWh	64.5	2.5	11.5%
<i>DH Nordic locations</i>				14.5	0.2	1.0%
District heating NO/Oslo		14 534.0	kWh	14.5	0.2	1.0%
<i>Electric vehicles</i>				5.6	0.2	1.0%
Electric car Nordic		33 000.0	km	5.6	0.2	1.0%
Scope 2 total				84.6	3.0	13.5%
<i>Air travel</i>				-	10.7	48.8%
Continental/Nordic		86.0	flight trip	-	8.0	36.5%
Intercontinental		4.0	flight trip	-	2.7	12.3%
Nordic		51.0	flight trip	-	-	-
<i>Business travel</i>				-	0.2	0.7%
Mileage all. car (NO)		1 140.0	km	-	0.2	0.7%
<i>Waste</i>				-	0.6	2.8%
Waste mix, incinerated		1 161.0	kg	-	0.6	2.7%
Paper waste, recycled		243.0	kg	-	-	-
Glass waste, recycled		39.0	kg	-	-	-
Organic waste, recycled		589.0	kg	-	-	0.1%
Hazardous waste, recycled		3.0	kg	-	-	-
Scope 3 total				-	11.4	52.3%
Total				116.4	21.8	100.0%
<i>Electricity market-based</i>					13.2	
<i>Scope 2 market-based</i>					13.6	
<i>Total market-based</i>					32.5	

In 2019, the total GHG emissions for Eika Boligkreditt were calculated to be 21,8 tonnes CO₂-eq (tCO₂e), which is a reduction of 10,5 tCO₂e corresponding to 32% compared to 2018. The emissions are allocated to the different scopes accordingly: 7,5 tCO₂e, 34%, to Scope 1, 3 tCO₂e, 14% to Scope 3 and 11,4 tCO₂e, 52% to Scope 3. There has been a reduction of emissions in all scopes from 2018 to 2019, the largest in Scope 3, constituting a 46% decrease.

Energy consumption per square meter has been reduced by 31% since 2018, and total energy consumption by 25%. There has also been a reduction in emissions per FTE and emissions per million NOK revenue.

Scope 1

Transportation: Consumption of fossil fuels used in company vehicles (owned, rented, leased).

Total fuel consumption in 2019 amounts to 7,5 tCO₂e, which is a reduction of 3% from 2018, corresponding to 0,2 tCO₂e. This is reflected in a reduced consumption of fuels, in addition to a change in the emission factor Diesel (NO). This factor is updated annually to reflect the actual blend of biodiesel in the fuel. From 2018 to 2019 the emission factor has been reduced by 2%.

Scope 2

Electricity: Electricity consumption in own or rented premises (buildings) including share of communal and/or tenant specific consumption.

The main body of both tables included in the report presents location-based emissions using the emission factor Nordic electricity mix. This emission factor has been reduced by 13% since 2018, suggesting that electricity is being produced from sources with lower GHG emissions in 2019, compared to the previous year (e.g. hydropower instead of natural gas). Nevertheless, emissions from electricity consumption have increased by 18% since 2018, indicating an increase in actual electricity consumption of 36% from 2018 to 2019.

The market-based emission is presented on page 6 of this report. As Eika Boligkreditt do not purchase any guarantees of origin, the emission factor Nordic Residual Mix has been used. In 2019 emissions from electricity consumption amount to 13,2 tCO₂e when calculated with a market-based emission factor. The practice of presenting electricity emissions with two different emission factors is further explained under Scope 2 in Methodology and Sources.

District heating: District heating consumption in own or rented premises (buildings) including share of communal and/or tenant specific consumption.

Emissions from district heating contributed to 0,2 tCO₂e in 2019, indicating a reduction of 80% from 2018.

Electric vehicles: Use of own or rented electric vehicles.

Emissions from electric vehicles amount to 0,2 tCO₂e for 2019.

Scope 3

Air and business travel: Measured in number of journeys per region.

Emissions from flights, 10,7 tCO₂e, account for the largest share of Eika Boligkreditt's emissions in 2019, corresponding to 49% of total emissions. Yet, there has been a 48% reduction in emissions from flights since

2018. This is mainly due to a reduction in the number of intercontinental flights in 2019, corresponding to the significant increase this represented in 2018.

Mileage allowance: Reported amount of km driven by employees and paid by the company.

Mileage allowance has been paid for 1 140 km, suggesting an increase of 135% since 2018, totalling in emissions of 0,2 tCO₂e.

Waste: Reported waste fractions in kg with consideration of treatment method.

Emissions from waste has increased with 16% from 2018 to 2019, equalling 0,6 tCO₂e. Waste fractions with emissions lower 0,1 tCO₂e are marked with a line (-) in the presented tables.

Yearly report – GHG emissions (tCO₂e)

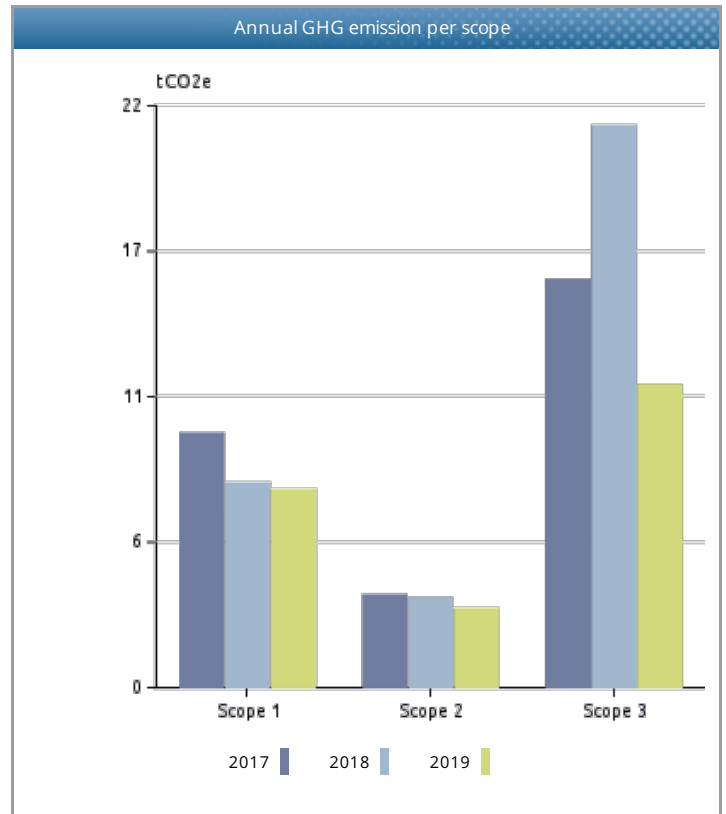
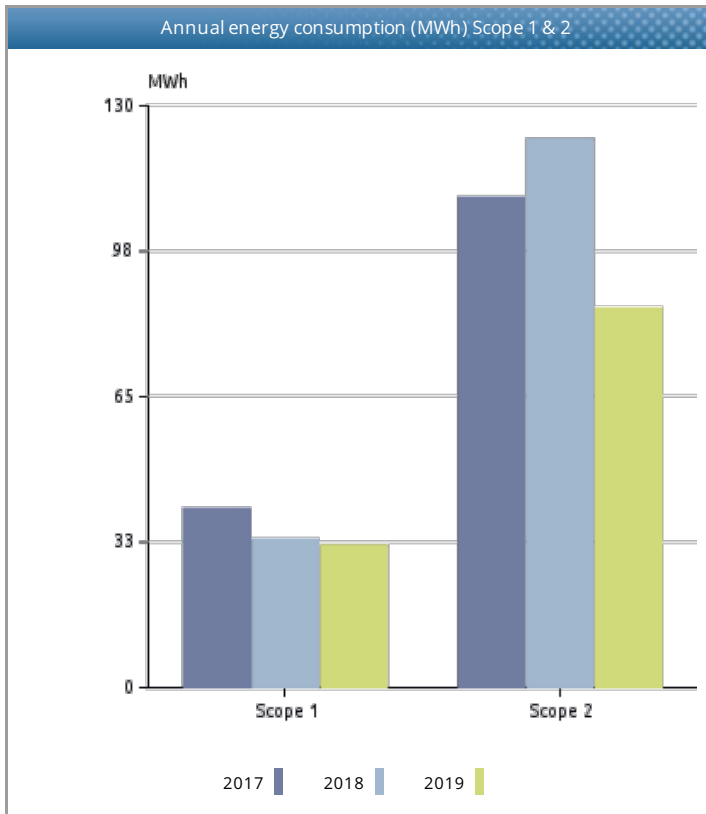
Category	Description	2017	2018	2019	% change from previous year
<i>Transportation</i>					-
Diesel (B5)		9.6			-
Diesel (NO)			6.4	5.9	-8.0%
Petrol			1.3	1.5	20.5%
Scope 1 Emissions		9.6	7.7	7.5	-3.3%
<i>DH Nordic locations</i>					-
District heating NO/Oslo		0.9	1.1	0.2	-79.7%
<i>Electric vehicles</i>					-
Electric car Nordic		0.1	0.2	0.2	41.6%
<i>Electricity*</i>					-
Electricity Nordic mix		2.5	2.1	2.5	17.6%
Scope 2 Emissions		3.5	3.4	3.0	-12.4%
<i>Air travel</i>					-
Continental/Nordic		8.0	6.0	8.0	33.1%
Intercontinental		2.7	10.9	2.7	-75.5%
Nordic		3.5	3.7	-	-100.0%
<i>Waste</i>					-
Glass waste,recycled		-	-	-	-
Hazardous waste, recycled		-	-	-	-
Metal waste,recycled		-	-	-	-
Organic waste,recycled		-	-	-	-
Paper waste,recycled		-	-	-	-
Waste mix,incinerated		1.0	0.5	0.6	16.4%
<i>Business travel</i>					-
Mileage all. car (NO)		0.1	0.1	0.2	135.3%
Scope 3 Emissions		15.4	21.2	11.4	-46.2%
Total		28.5	32.3	21.8	-32.4%
Percentage change			13.5%	-32.4%	

Market-based GHG emissions summary

<i>Category</i>	<i>Unit</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>
<i>Electricity market-based</i>	<i>tCO2e</i>	<i>13</i>	<i>13.7</i>	<i>13.2</i>
<i>Scope 2 market-based</i>	<i>tCO2e</i>	<i>14</i>	<i>15</i>	<i>13.6</i>
<i>Total market-based</i>	<i>tCO2e</i>	<i>39</i>	<i>43.9</i>	<i>32.5</i>
<i>Percentage change</i>			<i>12.5 %</i>	<i>-26 %</i>

Key energy and climate performance indicators

Name	Unit	2017	2018	2019	% change from previous year
Sum locations kWh/m2		367.2	411.3	284.0	-31.0%
Total energy scope 1 +2 (MWh)		149.3	155.6	116.4	-25.2%
Total emissions (s1+s2+s3) (tCO2e)		28.5	32.3	21.8	-32.4%
Utslipp per årsverk		1 437.6	1 631.4	1 102.2	-32.4%
Utslipp per omsetning	MNOK	41.6	47.4	44.6	-6.0%
Årsverk		19.8	19.8	19.8	-%



Methodology and sources

The Greenhouse Gas Protocol Initiative (GHG protocol) is developed by the World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD). This analysis is according to A Corporate Accounting and Reporting Standard Revised edition, currently one of four GHG Protocol accounting standards explaining how to calculate and report GHG emissions. The reporting considers the following greenhouse gases, all converted into CO₂ equivalents: CO₂, CH₄ (methane), N₂O (laughing gas), SF₆, HFCs and PFCs.

This analysis is based on the operational control aspect that defines what should be included in the carbon inventory, as well as in the different scopes. When using the control approach to consolidate GHG emissions, companies shall choose between either the operational control or financial control criteria. Under the control approach, a company accounts for the GHG emissions from operations over which it has control. It does not account for GHG emissions from operations in which it owns an interest but has no control.

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

Scope 1 Mandatory reporting includes all direct emission sources where the organisation has operational control. This includes all use of fossil fuels for stationary combustion or transportation, in owned, leased or rented assets. It also includes any process emissions, from e.g. chemical processes, industrial gases, direct methane emissions etc.

Scope 2 Mandatory reporting includes indirect emissions related to purchased energy; electricity or heating/cooling where the organisation has operational control. The electricity emissions factors used in CEMAsys is based on national gross electricity production mixes on a 3 years rolling average (IEA Stat). The Nordic electricity mix covers the weighted production in Sweden, Norway, Finland and Denmark, which reflects the common Nord Pool market area. Emission factors per fuel type are based on assumption in the IEA methodological framework. Factors for district heating/cooling are either based on actual (local) production mixes, or average IEA stat.

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* method. The location-based method reflects the average emissions intensity of grids on which energy consumption occurs, while the market-based method reflects emissions from electricity that companies have purposefully chosen (or their lack of choice).

Businesses who report on their GHG emissions will now have to disclose both location-based emissions from the production of electricity and the market-based emissions related to the potential purchase of Guaranties of Origin (GoO).

The purpose of this amendment in the reporting method is on one hand to show the impact of energy efficiency and saving measures, and on the other hand to display how the acquisition of GoOs 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 factor using this method is determined by whether the business acquires GoOs or not. When selling GoOs, the supplier certify that the electricity is produced by only renewable sources, which has an emission factor of 0 grams of CO₂e per kWh. However, for electricity without the guarantee of origin, the emission factor is based on the remaining electricity production after all GoOs 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 to foreign consumers. In a market perspective, this implies that Norwegian hydropower is largely substituted with an electricity mix including fossil fuels.

Scope 3 Voluntary reporting of indirect emissions from purchased products or services in the value chain. The scope 3 emissions are a result of the company's different activities, which are not controlled by the company, i.e. they're indirect. Examples are business travel, goods transportation, waste handling, consumption of products etc. In general, the GHG report

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 that reflects the substance and economic reality of the company's business relationships.

References:

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This list of references may not be complete. Depending on the use of the CEMAsys emission factors database, there are a number of different local and national sources. If necessary, please contact CEMAsys Help Desk for further details.