



Greenhouse Gas Protocol (Dual Reporting) Report for Kinnevik

Assessment Period: 2018

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Assessment Details

Consolidation Approach

Operational Control

Organisational Boundaries

Operations of Kinnevik

Included

- Kinnevik

Operational Boundary

- Air travel
- Cars
- Coffee and fruit
- District heating
- Electricity
- Paper and printed material
- Recycled waste
- Taxi

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Introduction

A greenhouse gas (GHG) emissions assessment quantifies the total greenhouse gases produced directly and indirectly from a business or organisation's activities. Also known as a carbon footprint, it is an essential tool, providing your business with a basis for understanding and managing its climate change impacts.

A GHG assessment quantifies all seven Kyoto greenhouse gases where applicable and is measured in units of carbon dioxide equivalence, or CO₂e¹. The seven Kyoto gases are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), nitrogen trifluoride (NF₃), sulphur hexafluoride (SF₆) and perfluorocarbons (PFCs). The global warming potential (GWP) of each gas is illustrated in the Table 1.

Table 1. GWP of Kyoto Gases (IPCC 2007)

Greenhouse Gas	GWP
Carbon dioxide (CO ₂)	1
Methane (CH ₄)	25
Nitrous oxide (N ₂ O)	298
Hydrofluorocarbons (HFCs)	124 - 14,800
Perfluorocarbons (PFCs)	7,390 - 12,200
Nitrogen trifluoride (NF ₃)	17,200
Sulphur hexafluoride (SF ₆)	22,800

This assessment has been carried out in accordance with the World Business Council for Sustainable Development and World Resources Institute's (WBCSD/WRI) Greenhouse Gas Protocol; a Corporate Accounting and Reporting Standard, including the GHG Protocol Scope 2 Guidance. This protocol is considered current best practice for corporate or organisational greenhouse gas emissions reporting. GHG emissions have been reported by the three WBCSD/WRI Scopes.

Scope 1 includes direct GHG emissions from sources that are owned or controlled by the company such as natural gas combustion and company owned vehicles.

Scope 2 accounts for GHG emissions from the generation of purchased electricity, heat and steam generated off-site. As the subject of this assessment operates in markets which offer contractual instruments with product or supplier-specific data, scope 2 emissions are reported using both the location-based method and the market-based method. The location-based method applies average emission factors that correspond to the grid where consumption occurs, whereas the market-based method applies emission factors that correspond to energy purchased (or not purchased) through contractual instruments. Contractual instruments include energy attribute certificates, direct energy contracts, and supplier specific emission rates. The subject of this assessment has ensured that any contractual instruments used in the market-based method have met the Scope 2 Quality Criteria, as defined in the Guidance. Where contractual instruments do not meet the Quality Criteria, or where contractual instruments were not purchased, market-based scope 2 emissions have been calculated using residual mix emission factors. Where residual mix emission factors are not available, market-based scope 2 emissions have been calculated using default location grid-average emission factors, per the Protocol hierarchy. This may result in double counting between electricity consumers, as an adjusted emission factor taking into account voluntary purchases of electricity with specific attributes was not available.

Scope 3 includes all other indirect emissions such as waste disposal, business travel and staff commuting. Reporting of these activities is optional under the WBCSD/WRI GHG Protocol, but as they can contribute a significant portion of overall emissions Ecometrica recommends they are reported where applicable.

A GHG assessment is an essential tool in the process of monitoring and reducing an organisation's climate change impact as it allows reduction targets to be set and action plans formulated. GHG assessment results can also allow organisations to be transparent about their climate change impacts through reporting of GHG emissions to customers, shareholders, employees and other stakeholders. Regular assessments allow clients to track their progress in achieving reductions over time and provide evidence to support green claims in external marketing initiatives such as product labelling or CSR reporting. Ecometrica GHG assessments are designed to be transparent, consistent and repeatable over time.

¹ Carbon dioxide equivalent or CO₂e is a term for describing different greenhouse gases in a common unit. For any quantity and type of greenhouse gas, CO₂e signifies the amount of CO₂ which would have the equivalent global warming impact.

Data Quality and Availability

In order to provide the most accurate estimate of an organisation's GHG emissions, primary (actual) data should be used where it is available, up to date and geographically relevant. Secondary data in the form of estimates, extrapolations and industry averages may be used when primary data is not available. Table 2 details the quality of data submitted for this assessment with the key assumptions used stated below.

Data Quality Overview



Location-based Accuracy Overview		
	tCO ₂ e/year	%
Actual	645	100
Total	645	100



Market-based Accuracy Overview		
	tCO ₂ e/year	%
Actual	645	100
Total	645	100

Table 2. Data Quality and Availability

Source of emissions	Data quality
Premises	
District heating	Actual
Electricity	Actual
Recycled waste	Actual
Business Travel	
Air travel	Actual
Taxi	Actual
Company-Owned/Leased Vehicles	
Cars	Actual
Materials purchased	
Coffee and fruit	Actual
Paper and printed material	Actual

Assessment Summary for Kinnevik

Gross Overall Emissions (location-based): 645 tCO₂e

Gross Overall Emissions (market-based): 645 tCO₂e

Key Performance Indicators

Absolute GHG emissions will vary over time and often correspond to the expansion or contraction of an organisation. It is useful therefore to use reporting metrics that take these effects into account and monitor relative GHG emissions intensity. A common emissions intensity metric is tonnes of CO₂e per full time equivalent. This has been calculated, along with other relevant metrics, in the table below:

Data	KPI
772 Floor area (square metres)	0.835 tCO ₂ e per square metre (Location-Based)
36.6 Full Time Equivalent Employees	17.6 tCO ₂ e per Full Time Equivalent Employee (Location-Based)
772 Floor area (square metres)	0.835 tCO ₂ e per square metre (Market-Based)
36.6 Full Time Equivalent Employees	17.6 tCO ₂ e per Full Time Equivalent Employee (Market-Based)

Summary by Activity (Location-Based, tCO₂e)



By Activity	tCO ₂ e/year	%
Premises	10.2	1.58
Business Travel	613	95.1
Company-Owned/Leased Vehicles	20.2	3.13
Materials purchased	1.47	0.229
Total	645	100

Summary by Activity (Market-Based, tCO₂e)



By Activity	tCO ₂ e/year	%
Premises	10.5	1.63
Business Travel	613	95
Company-Owned/Leased Vehicles	20.2	3.13
Materials purchased	1.47	0.228
Total	645	100

Summary by WBCSD/WRI Scope (Location-Based, tCO₂e)



Scope	tCO ₂ e/year	%
Scope 1	16.5	2.56
Scope 2	9.02	1.4
Scope 3	619	96
Total	645	100

Summary by WBCSD/WRI Scope (Market-Based, tCO₂e)



Scope	tCO ₂ e/year	%
Scope 1	16.5	2.55
Scope 2	9.35	1.45
Scope 3	619	96
Total	645	100

Summary by Greenhouse Gas

Greenhouse Gas	GWP	tGHG/year (Location-Based)	tCO ₂ e/year (Location-Based)	tGHG/year (Market-Based)	tCO ₂ e/year (Market-Based)
CO ₂	1	570	570	569	569
CH ₄	25	0.00129	0.0323	0.00111	0.0278
N ₂ O	298	0.00961	2.86	0.00958	2.86
CO ₂ e	1	71.4	71.4	72.9	72.9
Total			645		645

Summary of Scope 2 Market-Based Method for Kinnevik

Energy Consumed and Emissions By Factor Type In Scope 2 Market-Based Method

Scope 2 Market-Based Energy



Scope 2 Market-Based Emissions



Emission Factor Type	Energy		Market-Based Emissions	
	MWh	%	tCO ₂ e	%
Client-supplied market-based instrument	0	0	0	0
Residual mix factors	49.7	27.2	1.54	16.5
Default location-based factors	133	72.8	7.81	83.5
Total	183	100	9.35	100

Detailed Results

Detailed Summary by WBCSD/WRI Scope

Location-Based methodology

Source of Emissions	tCO ₂ /yr	tCH ₄ /yr	tN ₂ O/yr	Total Emissions (tCO ₂ e/yr)	%
Scope 1 Total	16.2	1.06e-4	7.43e-4	16.5	2.56%
Company-Owned/Leased Vehicles Total	16.2	1.06e-4	7.43e-4	16.5	2.56%
Cars	16.2	1.06e-4	7.43e-4	16.5	2.56%
Premises Total	0	0	0	0	0%
Recycled waste	0	0	0	0	0%
Scope 2 Total	1.2	1.8e-4	2.62e-5	9.02	1.4%
Premises Total	1.2	1.8e-4	2.62e-5	9.02	1.4%
District heating	0	0	0	7.81	1.21%
Electricity	1.2	1.8e-4	2.62e-5	1.21	0.188%
Scope 3 Total	553	0.00101	0.00884	619	96%
Business Travel Total	551	9.95e-4	0.00884	613	95.1%
Air travel	545	9.44e-4	0.00866	548	85%
Air travel: Flights, long-haul, business, upstream emissions	0	0	0	47.1	7.31%
Air travel: Flights, medium-haul, average, upstream emissions	0	0	0	2.07	0.322%
Air travel: Flights, medium-haul, business, upstream emissions	0	0	0	1.97	0.306%
Air travel: Flights, medium-haul, economy, upstream emissions	0	0	0	5.83	0.905%
Air travel: Flights, short-haul, upstream emissions	0	0	0	0.033	0.00512%
Taxi	6.2	5.18e-5	1.82e-4	6.26	0.971%
Taxi: Regular taxi, upstream emissions	0	0	0	1.61	0.25%
Company-Owned/Leased Vehicles Total	0	0	0	3.72	0.577%
Cars: Medium diesel car, upstream emissions	0	0	0	3.7	0.574%
Cars: Medium petrol car, upstream emissions	0	0	0	0.0219	0.0034%
Materials purchased Total	1.34	0	0	1.47	0.229%
Coffee and fruit	1.34	0	0	1.34	0.208%
Paper and printed material	0	0	0	0.135	0.021%
Premises Total	0.0699	1.05e-5	1.53e-6	1.17	0.181%
District heating: District heating (Swedish average), upstream emissions	0	0	0	0.998	0.155%
Electricity: Electricity - transmission & distribution losses (MCR)	0.0699	1.05e-5	1.53e-6	0.0706	0.011%
Electricity: Electricity grid, T&D losses, upstream emissions	0	0	0	0.00497	7.71e-4%
Electricity: Electricity grid, generated, upstream emissions	0	0	0	0.0949	0.0147%

Total	570	0.00129	0.00961	645	100%
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Market-Based methodology

Source of Emissions	tCO ₂ /yr	tCH ₄ /yr	tN ₂ O/yr	Total Emissions (tCO ₂ e/yr)	%
Scope 1 Total	16.2	1.06e-4	7.43e-4	16.5	2.55%
Company-Owned/Leased Vehicles Total	16.2	1.06e-4	7.43e-4	16.5	2.55%
Cars	16.2	1.06e-4	7.43e-4	16.5	2.55%
Premises Total	0	0	0	0	0%
Recycled waste	0	0	0	0	0%
Scope 2 Total	0	0	0	9.35	1.45%
Premises Total	0	0	0	9.35	1.45%
District heating	0	0	0	7.81	1.21%
Electricity	0	0	0	1.54	0.239%
Scope 3 Total	553	0.00101	0.00884	619	96%
Business Travel Total	551	9.95e-4	0.00884	613	95%
Air travel	545	9.44e-4	0.00866	548	84.9%
Air travel: Flights, long-haul, business, upstream emissions	0	0	0	47.1	7.31%
Air travel: Flights, medium-haul, average, upstream emissions	0	0	0	2.07	0.321%
Air travel: Flights, medium-haul, business, upstream emissions	0	0	0	1.97	0.306%
Air travel: Flights, medium-haul, economy, upstream emissions	0	0	0	5.83	0.905%
Air travel: Flights, short-haul, upstream emissions	0	0	0	0.033	0.00512%
Taxi	6.2	5.18e-5	1.82e-4	6.26	0.97%
Taxi: Regular taxi, upstream emissions	0	0	0	1.61	0.25%
Company-Owned/Leased Vehicles Total	0	0	0	3.72	0.577%
Cars: Medium diesel car, upstream emissions	0	0	0	3.7	0.574%
Cars: Medium petrol car, upstream emissions	0	0	0	0.0219	0.0034%
Materials purchased Total	1.34	0	0	1.47	0.228%
Coffee and fruit	1.34	0	0	1.34	0.207%
Paper and printed material	0	0	0	0.135	0.0209%
Premises Total	0.0699	1.05e-5	1.53e-6	1.17	0.181%
District heating: District heating (Swedish average), upstream emissions	0	0	0	0.998	0.155%
Electricity: Electricity - transmission & distribution losses (MCR)	0.0699	1.05e-5	1.53e-6	0.0706	0.0109%
Electricity: Electricity grid, T&D losses, upstream emissions	0	0	0	0.00497	7.71e-4%
Electricity: Electricity grid, generated, upstream emissions	0	0	0	0.0949	0.0147%

Total	569	0.00111	0.00958	645	100%
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Annual Activity Data

Source of Emissions	Value	Unit
Business Travel		
Air travel		
Long-haul, business (RFI 2)	911,002	pass.km
Medium-haul, average class (RFI 2)	116,490	pass.km
Medium-haul, business (RFI 2)	75,256	pass.km
Medium-haul, economy (RFI 2)	333,379	pass.km
Short-haul (RFI 2)	1,011	pass.km
Taxi		
Average taxi	25,552	km
Hybrid taxi	6,113	km
Company-Owned/Leased Vehicles		
Cars		
Medium diesel car	9,690	km
Medium diesel car	5,471	l
Medium petrol car	38	l
Materials purchased		
Coffee and fruit		
Mixed fruit	1,338	kg
Paper and printed material		
Office paper (from Europe)	99	kg
Office paper (from Sweden)	630	kg
Printed material (from Europe)	4	kg
Printed material (from Sweden)	20	kg
Premises		
District heating		
District heating (Swedish average)	133	MWh
Electricity		
Electricity consumption	49,701	kWh
Recycled waste		
Waste, recycled	541	kg
Waste, recycled	33	m3

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