



Greenhouse Gas Protocol Report for Kinnevik

Assessment Period: 2016

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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
- Rail (train, tram, light rail, underground)
- 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. 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. 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



Accuracy Overview	tCO ₂ e/year	%
Actual	584	98.8
Estimated	7.28	1.23
Total	591	100

Table 2. Data Quality and Availability

Source of emissions	Data quality
Premises	
District heating	Actual
Electricity	Estimated
Recycled waste	Actual
Business Travel	
Air travel	Actual
Employee owned cars	N/A
Rail (train, tram, light rail, underground)	Actual
Taxi	Mixed
Company-Owned/Leased Vehicles	
Cars	Actual
Office supply	
Coffee and fruit	Unknown
IT Equipment	Unknown
Paper and printed material	Unknown
Materials purchased	
Coffee and fruit	Actual
IT Equipment	Unknown
Paper and printed material	Actual

Assessment Summary for Kinnevik

Gross Overall Emissions: 591 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)	0.766 tCO ₂ e per square metre
40 Full Time Equivalent Employees	14.8 tCO ₂ e per Full Time Equivalent Employee

Summary by Activity (tCO₂e)



By Activity	tCO ₂ e/year	%
Premises	8.3	1.4
Business Travel	537	90.8
Company-Owned/Leased Vehicles	44.5	7.52
Materials purchased	1.82	0.308
Total	591	100

Summary by WBCSD/WRI Scope (tCO₂e)



Scope	tCO ₂ e/year	%
Scope 1	37	6.27
Scope 2	7.12	1.21
Scope 3	547	92.5
Total	591	100

Summary by Greenhouse Gas

Greenhouse Gas	GWP	tGHG/year	tCO ₂ e/year
CO ₂	1	523	523
CH ₄	25	0.00143	0.0357
N ₂ O	298	0.0088	2.62
CO ₂ e	1	65.5	65.5
Total			591

Detailed Results

Detailed Summary by WBCSD/WRI Scope

Source of Emissions	tCO ₂ /yr	tCH ₄ /yr	tN ₂ O/yr	Total Emissions (tCO ₂ e/yr)	%
Scope 1 Total	36.7	3.41e-4	9.72e-4	37	6.27%
Company-Owned/Leased Vehicles Total	36.7	3.41e-4	9.72e-4	37	6.27%
Cars	36.7	3.41e-4	9.72e-4	37	6.27%
Premises Total	0	0	0	0	0%
Recycled waste	0	0	0	0	0%
Scope 2 Total	0.987	2.35e-4	3.96e-5	7.12	1.21%
Premises Total	0.987	2.35e-4	3.96e-5	7.12	1.21%
District heating	0	0	0	6.12	1.04%
Electricity	0.987	2.35e-4	3.96e-5	1	0.17%
Scope 3 Total	485	8.51e-4	0.00779	547	92.5%
Business Travel Total	484	8.33e-4	0.00778	537	90.8%
Air travel	476	7.44e-4	0.00756	479	80.9%
Air travel: Flights, long-haul, average, upstream emissions	0	0	0	3.35	0.566%
Air travel: Flights, long-haul, business, upstream emissions	0	0	0	21.6	3.65%
Air travel: Flights, long-haul, economy, upstream emissions	0	0	0	4.34	0.735%
Air travel: Flights, long-haul, premium economy, upstream emissions	0	0	0	7.93	1.34%
Air travel: Flights, medium-haul, average, upstream emissions	0	0	0	4.99	0.844%
Air travel: Flights, medium-haul, business, upstream emissions	0	0	0	0.916	0.155%
Air travel: Flights, medium-haul, economy, upstream emissions	0	0	0	5.22	0.883%
Air travel: Flights, short-haul, upstream emissions	0	0	0	0.0544	0.0092%
Rail (train, tram, light rail, underground)	0.0455	1.88e-6	1.1e-6	0.0459	0.00777%
Rail (train, tram, light rail, underground): Train, national, upstream emissions	0	0	0	0.00823	0.00139%
Taxi	7.76	8.71e-5	2.22e-4	7.83	1.32%
Taxi: Regular taxi, upstream emissions	0	0	0	1.81	0.307%
Company-Owned/Leased Vehicles Total	0	0	0	7.44	1.26%
Cars: Medium diesel car, upstream emissions	0	0	0	7.42	1.26%
Cars: Medium petrol car, upstream emissions	0	0	0	0.0163	0.00276%
Materials purchased Total	1.06	0	0	1.82	0.308%
Coffee and fruit	1.06	0	0	1.43	0.242%
Paper and printed material	0	0	0	0.393	0.0666%
Premises Total	0.13	1.84e-5	3.1e-6	1.18	0.199%

District heating: District heating (Stockholm, Fortum)	0	0	0	0.84	0.142%
Electricity: Electricity - transmission & distribution losses (MCR)	0.13	1.84e-5	3.1e-6	0.131	0.0222%
Electricity: Electricity grid, T&D losses, upstream emissions	0	0	0	0.0152	0.00256%
Electricity: Electricity grid, generated, upstream emissions	0	0	0	0.189	0.032%
Total	523	0.00143	0.0088	591	100%

Annual Activity Data

Source of Emissions	Value	Unit
Business Travel		
Air travel		
Long-haul, average class (RFI 2)	164,190	pass.km
Long-haul, business (RFI 2)	476,217	pass.km
Long-haul, economy (RFI 2)	278,304	pass.km
Long-haul, premium economy (RFI 2)	317,478	pass.km
Medium-haul, average class (RFI 2)	278,521	pass.km
Medium-haul, business (RFI 2)	34,789	pass.km
Medium-haul, economy (RFI 2)	297,426	pass.km
Short-haul (RFI 2)	1,836	pass.km
Rail (train, tram, light rail, underground)		
Train, national	940	pass.km
Taxi		
Average taxi	28,549	km
Hybrid taxi	9,961	km
Company-Owned/Leased Vehicles		
Cars		
Medium diesel car	13,807	l
Medium petrol car	38	l
Materials purchased		
Coffee and fruit		
Coffee	63	kg
Mixed fruit	1,058	kg
Organic coffee	145	kg
Paper and printed material		
Office paper (from Europe)	311	kg
Office paper (from sweden)	1,352	kg
Printed material (from sweden)	268	kg
Premises		
District heating		
District heating (Stockholm, Fortum)	120	MWh
Electricity		
Electricity consumption	75,780	kWh
Recycled waste		
Waste, recycled	2,048	kg
Waste, recycled	34	m3

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