



Greenhouse Gas Protocol Report for Avanza

Assessment Period: 2016

Produced on Feb. 13, 2017 by *Our Impacts* on behalf of U&W

Assessment Details

Consolidation Approach

Operational Control

Organisational Boundaries

Operations of Avanza

Included

- Avanza

Operational Boundary

- Air travel
- Cars
- District cooling
- Electricity - Green Tariff
- Employee owned cars
- Paper and printed material
- Rail (train, tram, light rail, underground)
- Taxi

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Table of Contents

Introduction	4
Data Quality and Availability	5
Assessment Summary for Avanza	6
Detailed Results	7
Detailed Summary by WBCSD/WRI Scope	7
Annual Activity Data	8
References	9

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	46.2	75.3
Estimated	15.2	24.7
Total	61.4	100

Table 2. Data Quality and Availability

Source of emissions	Data quality
Business Travel	
Air travel	Actual
Employee owned cars	Actual
Hired cars	N/A
Hotel night stays	N/A
Rail (train, tram, light rail, underground)	Actual
Taxi	Actual
Company-Owned/Leased Vehicles	
Cars	Actual
Electricity and Heating	
Electricity	N/A
Electricity - Green Tariff	Actual
Waste	
Composted waste	N/A
Incinerated waste	N/A
Landfilled waste	N/A
Recycled waste	N/A
Office supply	
Coffee and fruit	N/A
Copy Paper	N/A
Paper and printed material	Estimated
Hosted servers	
District cooling	Estimated
Electricity - Green Tariff	Actual

Assessment Summary for Avanza

Gross Overall Emissions: 61.4 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
343 Full Time Equivalent Employees	0.179 tCO ₂ e per Full Time Equivalent Employee
919,000 Turnover (KSEK)	6.68e-5 tCO ₂ e per Turnover (KSEK)
211,306 Portföljvärde (MSEK)	2.9e-4 tCO ₂ e per Portföljvärde (MSEK)

Summary by Activity (tCO₂e)



By Activity	tCO ₂ e/year	%
Business Travel	22.7	37.1
Company-Owned/Leased Vehicles	12.9	21
Electricity and Heating	4.9	7.99
Office supply	14.6	23.7
Hosted servers	6.26	10.2
Total	61.4	100

Summary by WBCSD/WRI Scope (tCO₂e)



Scope	tCO ₂ e/year	%
Scope 2	4.69	7.63
Scope 3	56.7	92.4
Total	61.4	100

Summary by Greenhouse Gas

Greenhouse Gas	GWP	tGHG/year	tCO ₂ e/year
CO ₂	1	34.8	34.8
CH ₄	25	0.00104	0.026
N ₂ O	298	8.04e-4	0.24
CO ₂ e	1	26.3	26.3
Total			61.4

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 2 Total	0	0	0	4.69	7.63%
Electricity and Heating Total	0	0	0	4.69	7.63%
Electricity - Green Tariff	0	0	0	4.69	7.63%
Scope 3 Total	34.8	0.00104	8.04e-4	56.7	92.4%
Business Travel Total	21.4	2.47e-4	5.35e-4	22.7	37.1%
Air travel	19.5	2.44e-4	4.97e-4	19.6	32%
Air travel: Flights, medium-haul, economy, upstream emissions	0	0	0	0.78	1.27%
Employee owned cars	0.582	0	0	0.582	0.949%
Rail (train, tram, light rail, underground)	0	0	0	0.103	0.167%
Taxi	1.35	2.38e-6	3.81e-5	1.36	2.21%
Taxi: Regular taxi, upstream emissions	0	0	0	0.28	0.456%
Company-Owned/Leased Vehicles Total	12.8	7.95e-4	2.69e-4	12.9	21%
Cars	12.8	7.95e-4	2.69e-4	12.9	21%
Electricity and Heating Total	0	0	0	0.219	0.356%
Electricity - Green Tariff: Electricity, hydropower (Vattenfall AB), T&D losses	0	0	0	0.217	0.353%
Electricity - Green Tariff: Electricity, hydropower (Vattenfall AB), upstream emissions	0	0	0	0.00174	0.00283%
Hosted servers Total	0.609	0	0	6.26	10.2%
District cooling	0.609	0	0	0.609	0.992%
Electricity - Green Tariff	0	0	0	5.4	8.8%
Electricity - Green Tariff: Electricity, hydropower (Vattenfall AB), T&D losses	0	0	0	0.25	0.407%
Electricity - Green Tariff: Electricity, hydropower (Vattenfall AB), upstream emissions	0	0	0	0.002	0.00326%
Office supply Total	0	0	0	14.6	23.7%
Paper and printed material	0	0	0	14.6	23.7%
Total	34.8	0.00104	8.04e-4	61.4	100%

Annual Activity Data

Source of Emissions	Value	Unit
Business Travel		
Air travel		
Medium-haul, economy (RFI 2)	44,441	pass.km
Short-haul	80,870	pass.km
Employee owned cars		
Average swedish car	4,410	km
Rail (train, tram, light rail, underground)		
Swedish rail	84,874	pass.km
Taxi		
Average taxi	167,238	SEK
Company-Owned/Leased Vehicles		
Cars		
Small car (unknown fuel)	82,766	km
Electricity and Heating		
Electricity - Green Tariff		
Electricity, hydropower (Vattenfall AB)	542,268	kWh
Hosted servers		
District cooling		
District cooling (Linköping Tekniska Verken)	38,063	kWh
Electricity - Green Tariff		
Electricity, hydropower (Vattenfall AB)	624,851	kWh
Office supply		
Paper and printed material		
Office paper (from sweden)	147,224	kg

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