



## Greenhouse Gas Protocol Report for Avanza

Assessment Period: 2015

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# 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

## Quality Assurance Assessor

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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 CO<sub>2</sub>e<sup>1</sup>. The seven Kyoto gases are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), nitrogen trifluoride (NF<sub>3</sub>), sulphur hexafluoride (SF<sub>6</sub>) 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 <sub>2</sub> )	1
Methane (CH <sub>4</sub> )	25
Nitrous oxide (N <sub>2</sub> O)	298
Hydrofluorocarbons (HFCs)	124 - 14,800
Perfluorocarbons (PFCs)	7,390 - 12,200
Nitrogen trifluoride (NF <sub>3</sub> )	17,200
Sulphur hexafluoride (SF <sub>6</sub> )	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.

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<sup>1</sup> Carbon dioxide equivalent or CO<sub>2</sub>e is a term for describing different greenhouse gases in a common unit. For any quantity and type of greenhouse gas, CO<sub>2</sub>e signifies the amount of CO<sub>2</sub> 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 <sub>2</sub> e/year	%
Actual	94.9	87.7
Estimated	13.2	12.3
<b>Total</b>	<b>108</b>	<b>100</b>

**Table 2. Data Quality and Availability**

Source of emissions	Data quality
<b>Business Travel</b>	
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
<b>Company-Owned/Leased Vehicles</b>	
Cars	Actual
<b>Electricity and Heating</b>	
District cooling	N/A
District heating	N/A
Electricity (nordic mix)	N/A
Electricity - Green Tariff	Actual
<b>Waste</b>	
Composted waste	N/A
Incinerated waste	N/A
Landfilled waste	N/A
Recycled waste	N/A
<b>Office supply</b>	
Coffee and fruit	N/A
Copy Paper	N/A
Paper and printed material	Estimated
<b>Hosted servers</b>	
District cooling	Actual

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Electricity (nordic mix)

N/A

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Electricity - Green Tariff

Actual

# Assessment Summary for Avanza

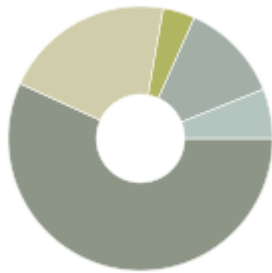
## Gross Overall Emissions: 108 tCO<sub>2</sub>e

### 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 CO<sub>2</sub>e per full time equivalent. This has been calculated, along with other relevant metrics, in the table below:

Data	KPI
166,788 Portföljvärde (MSEK)	6.48e-4 tCO <sub>2</sub> e per Portföljvärde (MSEK)
904,000 Turnover (KSEK)	1.2e-4 tCO <sub>2</sub> e per Turnover (KSEK)
323 Full Time Equivalent Employees	0.335 tCO <sub>2</sub> e per Full Time Equivalent Employee

### Summary by Activity (tCO<sub>2</sub>e)



By Activity	tCO <sub>2</sub> e/year	%
Business Travel	61.4	56.8
Company-Owned/Leased Vehicles	22.7	21
Electricity and Heating	4.22	3.9
Office supply	13.2	12.3
Hosted servers	6.56	6.07
<b>Total</b>	<b>108</b>	<b>100</b>

### Summary by WBCSD/WRI Scope (tCO<sub>2</sub>e)



Scope	tCO <sub>2</sub> e/year	%
Scope 2	4.03	3.73
Scope 3	104	96.3
<b>Total</b>	<b>108</b>	<b>100</b>

### Summary by Greenhouse Gas

Greenhouse Gas	GWP	tGHG/year	tCO <sub>2</sub> e/year
CO <sub>2</sub>	1	74.4	74.4
CH <sub>4</sub>	25	0.00259	0.0648
N <sub>2</sub> O	298	0.00189	0.564
CO <sub>2</sub> e	1	33.2	33.2
<b>Total</b>		<b>108</b>	<b>108</b>

# Detailed Results

## Detailed Summary by WBCSD/WRI Scope

Source of Emissions	tCO <sub>2</sub> /yr	tCH <sub>4</sub> /yr	tN <sub>2</sub> O/yr	Total Emissions (tCO <sub>2</sub> e/yr)	%
<b>Scope 2 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4.03</b>	<b>3.73%</b>
Electricity and Heating Total	0	0	0	4.03	3.73%
Electricity - Green Tariff	0	0	0	4.03	3.73%
<b>Scope 3 Total</b>	<b>74.4</b>	<b>0.00259</b>	<b>0.00189</b>	<b>104</b>	<b>96.3%</b>
Business Travel Total	55	9.33e-4	0.00169	61.4	56.8%
Air travel	52	8.55e-4	0.00165	52.6	48.6%
Air travel: Flights, long-haul, economy, upstream emissions	0	0	0	0.424	0.392%
Air travel: Flights, medium-haul, economy, upstream emissions	0	0	0	0.594	0.549%
Air travel: Flights, short-haul, upstream emissions	0	0	0	4.27	3.94%
Employee owned cars	1.64	0	0	1.64	1.51%
Rail (train, tram, light rail, underground)	0	0	0	0.126	0.116%
Taxi	1.34	7.79e-5	3.99e-5	1.36	1.25%
Taxi: Regular taxi, upstream emissions	0	0	0	0.482	0.446%
Company-Owned/Leased Vehicles Total	18.9	0.00166	1.99e-4	22.7	21%
Cars	18.9	0.00166	1.99e-4	19	17.5%
Cars: Small petrol car, upstream emissions	0	0	0	3.71	3.43%
Electricity and Heating Total	0	0	0	0.188	0.174%
Electricity - Green Tariff: Electricity, hydropower (Vattenfall AB), T&D losses	0	0	0	0.187	0.173%
Electricity - Green Tariff: Electricity, hydropower (Vattenfall AB), upstream emissions	0	0	0	0.00149	0.00138%
Hosted servers Total	0.478	0	0	6.56	6.07%
District cooling	0.478	0	0	0.478	0.442%
Electricity - Green Tariff	0	0	0	5.81	5.37%
Electricity - Green Tariff: Electricity, hydropower (Vattenfall AB), T&D losses	0	0	0	0.269	0.249%
Electricity - Green Tariff: Electricity, hydropower (Vattenfall AB), upstream emissions	0	0	0	0.00215	0.00199%
Office supply Total	0	0	0	13.2	12.3%
Paper and printed material	0	0	0	13.2	12.3%
<b>Total</b>	<b>74.4</b>	<b>0.00259</b>	<b>0.00189</b>	<b>108</b>	<b>100%</b>



# Annual Activity Data

Source of Emissions	Value	Unit
<b>Business Travel</b>		
Air travel		
Long-haul, economy (RFI 2)	27,137	pass.km
Medium-haul, economy (RFI 2)	33,851	pass.km
Short-haul (RFI 2)	143,975	pass.km
Employee owned cars		
Average swedish car	12,400	km
Rail (train, tram, light rail, underground)		
Swedish rail	103,980	pass.km
Taxi		
Hybrid taxi	288,098	SEK
<b>Company-Owned/Leased Vehicles</b>		
Cars		
Small petrol car	118,380	km
<b>Electricity and Heating</b>		
Electricity - Green Tariff		
Electricity, hydropower (Vattenfall AB)	466,810	kWh
<b>Hosted servers</b>		
District cooling		
District cooling (Linköping Tekniska Verken)	29,869	kWh
Electricity - Green Tariff		
Electricity, hydropower (Vattenfall AB)	672,587	kWh
<b>Office supply</b>		
Paper and printed material		
Office paper (from sweden)	130,838	kg

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