



Greenhouse Gas Protocol Report for Avanza

Assessment Period: 2014

Produced on Feb. 15, 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
- Copy Paper
- District cooling
- Electricity - Green Tariff
- Employee owned cars
- Rail (train, tram, light rail, underground)
- Taxi

Quality Assurance Assessor

- Jenny Blomberg - jenny.blomberg@zeromission.se

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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 | | 36 | 35.9 |
| Estimated | | 64.4 | 64.1 |
| Total | | 100 | 100 |

Table 2. Data Quality and Availability

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

Hosted servers

| | |
|----------------------------|--------|
| District cooling | Actual |
| Electricity (nordic mix) | N/A |
| Electricity - Green Tariff | Actual |

Assessment Summary for Avanza

Gross Overall Emissions: 100 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 |
|------------------------------------|--|
| 127,241 Portföljvärde (MSEK) | 7.89e-4 tCO ₂ e per Portföljvärde (MSEK) |
| 684,000 Turnover (KSEK) | 1.47e-4 tCO ₂ e per Turnover (KSEK) |
| 283 Full Time Equivalent Employees | 0.355 tCO ₂ e per Full Time Equivalent Employee |

Summary by Activity (tCO₂e)



| By Activity | tCO ₂ e/year | % |
|-------------------------------|-------------------------|------------|
| Business Travel | 42.8 | 42.6 |
| Company-Owned/Leased Vehicles | 15.6 | 15.5 |
| Electricity and Heating | 4.57 | 4.55 |
| Office supply | 25 | 24.9 |
| Hosted servers | 12.5 | 12.4 |
| Total | 100 | 100 |

Summary by WBCSD/WRI Scope (tCO₂e)



| Scope | tCO ₂ e/year | % |
|--------------|-------------------------|------------|
| Scope 2 | 4.37 | 4.35 |
| Scope 3 | 96.1 | 95.7 |
| Total | 100 | 100 |

Summary by Greenhouse Gas

| Greenhouse Gas | GWP | tGHG/year | tCO ₂ e/year |
|-------------------|-----|------------|-------------------------|
| CO ₂ | 1 | 82.4 | 82.4 |
| CH ₄ | 25 | 0.00131 | 0.0327 |
| N ₂ O | 298 | 0.00133 | 0.398 |
| CO ₂ e | 1 | 17.6 | 17.6 |
| Total | | 100 | 100 |

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 | 4.37 | 4.35% |
| Electricity and Heating Total | 0 | 0 | 0 | 4.37 | 4.35% |
| Electricity - Green Tariff | 0 | 0 | 0 | 4.37 | 4.35% |
| Scope 3 Total | 82.4 | 0.00131 | 0.00133 | 96.1 | 95.7% |
| Business Travel Total | 38.2 | 1.68e-4 | 0.0012 | 42.8 | 42.6% |
| Air travel | 35.4 | 1.64e-4 | 0.00113 | 35.8 | 35.6% |
| Air travel: Flights, medium-haul, economy, upstream emissions | 0 | 0 | 0 | 3.6 | 3.58% |
| Employee owned cars | 0.285 | 0 | 0 | 0.285 | 0.284% |
| Rail (train, tram, light rail, underground) | 0 | 0 | 0 | 0.0968 | 0.0964% |
| Taxi | 2.47 | 4.37e-6 | 7e-5 | 2.49 | 2.48% |
| Taxi: Regular taxi, upstream emissions | 0 | 0 | 0 | 0.514 | 0.512% |
| Company-Owned/Leased Vehicles Total | 13 | 0.00114 | 1.36e-4 | 15.6 | 15.5% |
| Cars | 13 | 0.00114 | 1.36e-4 | 13 | 13% |
| Cars: Small petrol car, upstream emissions | 0 | 0 | 0 | 2.55 | 2.54% |
| Electricity and Heating Total | 0 | 0 | 0 | 0.204 | 0.203% |
| Electricity - Green Tariff: Electricity, hydropower (Vattenfall AB), T&D losses | 0 | 0 | 0 | 0.202 | 0.201% |
| Electricity - Green Tariff: Electricity, hydropower (Vattenfall AB), upstream emissions | 0 | 0 | 0 | 0.00162 | 0.00161% |
| Hosted servers Total | 6.21 | 0 | 0 | 12.5 | 12.4% |
| District cooling | 6.21 | 0 | 0 | 6.21 | 6.18% |
| Electricity - Green Tariff | 0 | 0 | 0 | 5.99 | 5.96% |
| Electricity - Green Tariff: Electricity, hydropower (Vattenfall AB), T&D losses | 0 | 0 | 0 | 0.277 | 0.276% |
| Electricity - Green Tariff: Electricity, hydropower (Vattenfall AB), upstream emissions | 0 | 0 | 0 | 0.00222 | 0.00221% |
| Office supply Total | 25 | 0 | 0 | 25 | 24.9% |
| Copy Paper | 25 | 0 | 0 | 25 | 24.9% |
| Total | 82.4 | 0.00131 | 0.00133 | 100 | 100% |

Annual Activity Data

| Source of Emissions | Value | Unit |
|--|---------|---------|
| Business Travel | | |
| Air travel | | |
| Medium-haul, economy (RFI 2) | 205,000 | pass.km |
| Employee owned cars | | |
| Average swedish car | 2,160 | km |
| Rail (train, tram, light rail, underground) | | |
| Swedish rail | 80,000 | pass.km |
| Taxi | | |
| Average taxi | 306,949 | SEK |
| Company-Owned/Leased Vehicles | | |
| Cars | | |
| Small petrol car | 81,337 | km |
| Electricity and Heating | | |
| Electricity - Green Tariff | | |
| Electricity, hydropower (Vattenfall AB) | 505,342 | kWh |
| Hosted servers | | |
| District cooling | | |
| District cooling (Linköping Tekniska Verken) | 387,988 | kWh |
| Electricity - Green Tariff | | |
| Electricity, hydropower (Vattenfall AB) | 692,778 | kWh |
| Office supply | | |
| Copy Paper | | |
| Copy paper (Sweden) | 121,596 | kg |

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