



# Greenhouse Gas Protocol (Dual Reporting) Report for Avanza

Assessment Period: 2020

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# Assessment Details

## Consolidation Approach

Operational Control

## Organisational Boundaries

Operations of Avanza

### Included

- Avanza

## Operational Boundary

- Air travel
- Bicycle
- Cars
- Coffee and fruit
- Copy Paper
- Electricity
- Employee owned cars
- IT Equipment
- Rail (train, tram, light rail, underground)
- Taxi

## Quality Assurance Assessor

- Jenny Blomberg - [jenny.blomberg@zeromission.se](mailto: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 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, 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.

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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



Location-based Accuracy Overview		
	tCO <sub>2</sub> e/year	%
Actual	52.8	18.8
Estimated	228	81.2
<b>Total</b>	<b>281</b>	<b>100</b>



Market-based Accuracy Overview		
	tCO <sub>2</sub> e/year	%
Actual	40.4	15.4
Estimated	222	84.6
<b>Total</b>	<b>263</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>Third-Party Deliveries</b>	
Bicycle	Actual
Cars	Actual
Postal services	Unknown
Vans	N/A
<b>Company-Owned/Leased Vehicles</b>	
Cars	Actual
<b>Electricity and Heating</b>	
Electricity	Actual
Homeworkers	N/A

<b>Office supply</b>	
Coffee and fruit	Mixed
Copy Paper	Actual
Office Supply	N/A
Paper and printed material	N/A
<b>Hosted servers</b>	
District cooling	N/A
Electricity	Mixed
<b>Waste</b>	
Composted waste treatment	N/A
Hazardous waste treatment	Unknown
Incinerated waste treatment	N/A
Landfilled waste treatment	N/A
Recycled waste treatment	N/A
Road freight, shared vehicle (tonne.km factors)	N/A
<b>Materials purchased</b>	
IT Equipment	Estimated

# Assessment Summary for Avanza

**Gross Overall Emissions (location-based): 281 tCO<sub>2</sub>e**

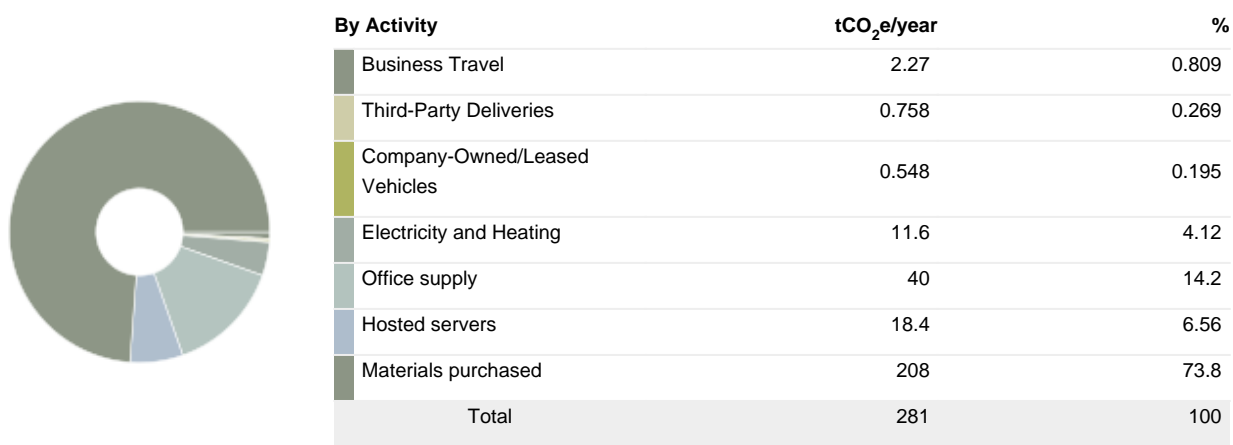
**Gross Overall Emissions (market-based): 263 tCO<sub>2</sub>e**

## Key Performance Indicators

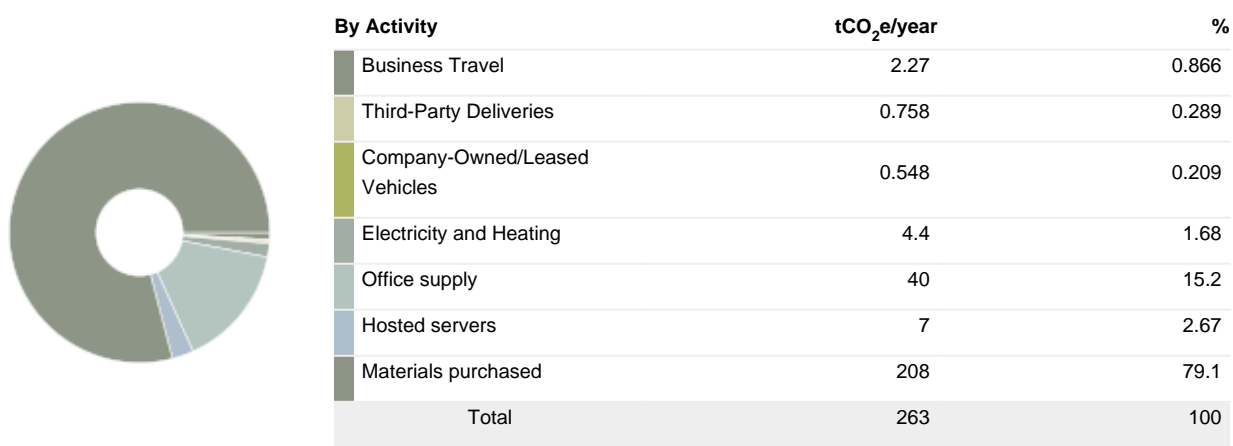
Absolute GHG emissions will vary over time and often correspond to the expansion or contraction of an organisation. It is useful therefore to use reporting metrics that take these effects into account and monitor relative GHG emissions intensity. A common emissions intensity metric is tonnes of CO<sub>2</sub>e per full time equivalent. This has been calculated, along with other relevant metrics, in the table below:

Data	KPI
478 Full Time Equivalent Employees	0.588 tCO <sub>2</sub> e per Full Time Equivalent Employee (Location-Based)
489,114 Portföljvärde (MSEK)	5.75e-4 tCO <sub>2</sub> e per Portföljvärde (MSEK) (Location-Based)
2,349,000 Turnover (KSEK)	1.2e-4 tCO <sub>2</sub> e per Turnover (KSEK) (Location-Based)
478 Full Time Equivalent Employees	0.549 tCO <sub>2</sub> e per Full Time Equivalent Employee (Market-Based)
489,114 Portföljvärde (MSEK)	5.37e-4 tCO <sub>2</sub> e per Portföljvärde (MSEK) (Market-Based)
2,349,000 Turnover (KSEK)	1.12e-4 tCO <sub>2</sub> e per Turnover (KSEK) (Market-Based)

## Summary by Activity (Location-Based, tCO<sub>2</sub>e)



## Summary by Activity (Market-Based, tCO<sub>2</sub>e)



## Summary by WBCSD/WRI Scope (Location-Based, tCO<sub>2</sub>e)



Scope	tCO <sub>2</sub> e/year	%
Scope 2	10.2	3.63
Scope 3	271	96.4
<b>Total</b>	<b>281</b>	<b>100</b>

#### Summary by WBCSD/WRI Scope (Market-Based, tCO<sub>2</sub>e)



Scope	tCO <sub>2</sub> e/year	%
Scope 2	0.0219	0.00834
Scope 3	263	100
<b>Total</b>	<b>263</b>	<b>100</b>

#### Summary by Greenhouse Gas

Greenhouse Gas	GWP	tGHG/year (Location-Based)	tCO <sub>2</sub> e/year (Location-Based)	tGHG/year (Market-Based)	tCO <sub>2</sub> e/year (Market-Based)
CO <sub>2</sub>	1	50.2	50.2	22.4	22.4
CH <sub>4</sub>	25	0.0044	0.11	6.33e-5	0.00158
N <sub>2</sub> O	298	7.07e-4	0.211	6.46e-5	0.0193
CO <sub>2</sub> e	1	231	231	240	240
<b>Total</b>			<b>281</b>		<b>263</b>



# Summary of Scope 2 Market-Based Method for Avanza

## 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 <sub>2</sub> e	%
Client-supplied market-based instrument	438	100	0.0219	100
Residual mix factors	0	0	0	0
Default location-based factors	0	0	0	0
<b>Total</b>	<b>438</b>	<b>100</b>	<b>0.0219</b>	<b>100</b>

# Detailed Results

## Detailed Summary by WBCSD/WRI Scope

### Location-Based methodology

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>10.1</b>	<b>0.00157</b>	<b>2.33e-4</b>	<b>10.2</b>	<b>3.63%</b>
Electricity and Heating Total	10.1	0.00157	2.33e-4	10.2	3.63%
Electricity	10.1	0.00157	2.33e-4	10.2	3.63%
<b>Scope 3 Total</b>	<b>40.2</b>	<b>0.00283</b>	<b>4.74e-4</b>	<b>271</b>	<b>96.4%</b>
Business Travel Total	2.04	1.45e-5	3.67e-5	2.27	0.809%
Air travel	1.6	6.94e-6	2.55e-5	1.61	0.573%
Air travel: Flights, long-haul, average, upstream emissions	0	0	0	0.0997	0.0354%
Air travel: Flights, medium-haul, average, upstream emissions	0	0	0	0.0436	0.0155%
Air travel: Flights, short-haul, upstream emissions	0	0	0	0.0244	0.00866%
Employee owned cars	0.189	7.1e-6	4.06e-6	0.19	0.0676%
Rail (train, tram, light rail, underground)	0	0	0	3.3e-4	1.18e-4%
Taxi	0.245	4.6e-7	7.14e-6	0.247	0.0879%
Taxi: Regular taxi, upstream emissions	0	0	0	0.0585	0.0208%
Company-Owned/Leased Vehicles Total	0.544	2.05e-5	1.17e-5	0.548	0.195%
Cars	0.544	2.05e-5	1.17e-5	0.548	0.195%
Electricity and Heating Total	0.664	1.03e-4	1.53e-5	1.4	0.498%
Electricity: Electricity - transmission & distribution losses (MCR)	0.664	1.03e-4	1.53e-5	0.671	0.239%
Electricity: Electricity grid, T&D losses, upstream emissions	0	0	0	0.0462	0.0164%
Electricity: Electricity grid, generated, upstream emissions	0	0	0	0.684	0.243%
Hosted servers Total	17.1	0.00266	3.95e-4	18.4	6.56%
Electricity	16	0.0025	3.7e-4	16.2	5.77%
Electricity: Electricity - transmission & distribution losses (MCR)	1.06	1.64e-4	2.44e-5	1.07	0.38%
Electricity: Electricity grid, T&D losses, upstream emissions	0	0	0	0.0734	0.0261%
Electricity: Electricity grid, generated, upstream emissions	0	0	0	1.09	0.387%
Materials purchased Total	0	0	0	208	73.8%
IT Equipment	0	0	0	208	73.8%
Office supply Total	19.1	0	0	40	14.2%
Coffee and fruit	0	0	0	20.9	7.44%
Copy Paper	19.1	0	0	19.1	6.78%
Third-Party Deliveries Total	0.752	2.83e-5	1.62e-5	0.758	0.269%

Bicycle	0	0	0	0	0%
Cars	0.752	2.83e-5	1.62e-5	0.758	0.269%
<b>Total</b>	<b>50.2</b>	<b>0.0044</b>	<b>7.07e-4</b>	<b>281</b>	<b>100%</b>

### Market-Based methodology

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>0.0219</b>	<b>0.00834%</b>
Electricity and Heating Total	0	0	0	0.0219	0.00834%
Electricity	0	0	0	0.0219	0.00834%
<b>Scope 3 Total</b>	<b>22.4</b>	<b>6.33e-5</b>	<b>6.46e-5</b>	<b>263</b>	<b>100%</b>
Business Travel Total	2.04	1.45e-5	3.67e-5	2.27	0.866%
Air travel	1.6	6.94e-6	2.55e-5	1.61	0.614%
Air travel: Flights, long-haul, average, upstream emissions	0	0	0	0.0997	0.038%
Air travel: Flights, medium-haul, average, upstream emissions	0	0	0	0.0436	0.0166%
Air travel: Flights, short-haul, upstream emissions	0	0	0	0.0244	0.00928%
Employee owned cars	0.189	7.1e-6	4.06e-6	0.19	0.0724%
Rail (train, tram, light rail, underground)	0	0	0	3.3e-4	1.26e-4%
Taxi	0.245	4.6e-7	7.14e-6	0.247	0.0942%
Taxi: Regular taxi, upstream emissions	0	0	0	0.0585	0.0223%
Company-Owned/Leased Vehicles Total	0.544	2.05e-5	1.17e-5	0.548	0.209%
Cars	0.544	2.05e-5	1.17e-5	0.548	0.209%
Electricity and Heating Total	0	0	0	4.38	1.67%
Electricity: MBI Upstream Emissions	0	0	0	4.38	1.67%
Hosted servers Total	0	0	0	7	2.67%
Electricity	0	0	0	0.0348	0.0133%
Electricity: MBI Upstream Emissions	0	0	0	6.97	2.65%
Materials purchased Total	0	0	0	208	79.1%
IT Equipment	0	0	0	208	79.1%
Office supply Total	19.1	0	0	40	15.2%
Coffee and fruit	0	0	0	20.9	7.96%
Copy Paper	19.1	0	0	19.1	7.26%
Third-Party Deliveries Total	0.752	2.83e-5	1.62e-5	0.758	0.289%
Bicycle	0	0	0	0	0%
Cars	0.752	2.83e-5	1.62e-5	0.758	0.289%
<b>Total</b>	<b>22.4</b>	<b>6.33e-5</b>	<b>6.46e-5</b>	<b>263</b>	<b>100%</b>

# Annual Activity Data

Source of Emissions	Value	Unit
<b>Business Travel</b>		
Air travel		
Long-haul, average class (RFI 2)	4,769	pass.km
Medium-haul, average class (RFI 2)	2,560	pass.km
Short-haul (RFI 2)	911	pass.km
Employee owned cars		
Average car (unknown fuel)	1,109	km
Rail (train, tram, light rail, underground)		
Swedish rail	1,322	pass.km
Taxi		
Average taxi	32,338	SEK
<b>Company-Owned/Leased Vehicles</b>		
Cars		
Average car (unknown fuel)	3,200	km
<b>Electricity and Heating</b>		
Electricity		
Electricity consumption (Nordic Market)	438,059	kWh
<b>Hosted servers</b>		
Electricity		
Electricity consumption (Nordic Market)	696,773	kWh
<b>Materials purchased</b>		
IT Equipment		
Total CO2e emissions	208	tonne
<b>Office supply</b>		
Coffee and fruit		
Coffee and tea	1,682	kg
Mixed fruit	11,383	kg
Copy Paper		
Copy paper (Sweden)	92,520	kg
<b>Third-Party Deliveries</b>		
Bicycle		
Bicycle	143	km
Cars		
Average car (unknown fuel)	4,420	km

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