

# Greenhouse Gas Emissions Inventory Report

## ISO 14064-1

Organizational Level

Revive World

Y-2023



GRUUND

# 1 General Information

This report contains the carbon footprint of for the following organization:

Reporting organization	Revive World
Contact details	Jan Van Schaeren jan@revive.be
Reporting period covered	Y-2023: 01/01/2023 to 31/12/2023

The purpose of this report is to disseminate the inventory of greenhouse gas emission with respect to consistency, comparability and completeness in the accounting procedures.

This report is intended for all stakeholders interested in the greenhouse gas emissions inventory and the associated reporting structure and explanations. All recipients are considered intended users.

This report:

- Covers the footprint of the entire organization: Revive World.
- Has been prepared in accordance with the requirements of the ISO 140641-1:2018 standard.
- Endeavours to use primary data wherever possible but especially surrounding all major emissions sources. Where primary data is not available, a consistent and conservative approach to calculation is applied.
- Excludes specific targets as well as reports on greenhouse gas removals.

The reporting period covered in this document is 01/01/2023 to 31/12/2023. Next iteration of this footprint is expected to be of the same length, starting from the first day following this reporting period. Any deviation from this will be mentioned in communication at the time of publication.

Additional details on the activities of Revive World can be found on the company website. More details on the applied reporting framework can be found in Appendix II.

## 2 Organizational Boundaries

The organizational boundaries were drawn using the consolidation based on operational control approach. This approach considers all emissions that the organization has operational control over, but not necessarily financial control.

The organizational structure of the reporting organization is listed below:

- Revive World
  - Revive nv
    - RBF I
      - Bright Park
      - Den Draad
      - Den Indruk
      - Ekla
      - Kadox
      - Pier Kornel Phase 1
    - RBF II
      - Castelijn
      - Komet
      - Minerve
      - Pier Kornel Phase 2-3-4
      - Rute
      - Saffrou
      - Watt
      - 't Fineer
    - GLDF I
      - Brasserie Aerts
      - Faubourg
      - Maria-Middelares
      - Marie Thumas
      - Mench
      - Ray
      - Stocznia Cesarska
      - Tannat
      - Vynckier
    - GLDF II
      - ACV
      - Arcoverde
      - Cavallia
      - Coutadinha
      - Interescault
      - Nerviens
      - Wauters
    - REIF
      - Revive (Op)
  - Fund Management
  - Revive World (Op)

This report contains the footprint of the entire organization: Revive World.

No allocation percentage is used in the calculation of the emissions share of each subunit.

The chosen consolidation approach applies to all units and subunits.

### 3 Reporting Boundaries

In this report 17 different sources of carbon emissions are considered, grouped in 4 blocks:

#### 1. Scope 1

1. S1 Stationary Combustion
2. S1 Mobile Combustion
3. S1 Fugitive Emissions

#### 2. Scope 2

4. S2 Electricity

#### 3. Scope 3 Upstream

5. S3Cat1 Goods & Services
6. S3Cat2 Capital Goods
7. S3Cat3 Energy Supply
8. S3Cat4 Transport Upstream
9. S3Cat5 Waste
10. S3Cat6 Business Travel
11. S3Cat7 Commuting
12. S3Cat8 Leased Assets as Lessee

#### 4. Scope 3 Downstream

13. S3Cat9 Transport Downstream
14. S3Cat11 Use of Product
15. S3Cat12 End-of-life of Product
16. S3Cat15 Investments
17. S3Cat13 Leased Assets as Lessor

See Appendix I for a description of all these sources.

This includes all relevant sources of greenhouse gas emissions. These were selected based on their relevance to the organizations operations and/or their relative size in the total footprint.

The excluded emission categories are listed below. All of these sources are identified as not applicable or not significant for the current reporting objectives.

Criteria used for exclusion are among others and in no particular order:

- Estimated size of the emissions is too small
- Order of magnitude of the emission source is not significant
- The organization's influence on the emission source is too limited
- High difficulty in obtaining data for that emission source
- The organization has very limited influence on the source of emissions
  - Process Emissions
  - Purchased Steam Heat Cooling
  - Processing Of Sold Products
  - Franchises

More details on the applied reporting framework can be found in Appendix II.

## 4 Quantified GHG inventory

In the reporting period Y-2023 the total emissions for the reporting organization add up to 120,256 tCO<sub>2</sub>e.

The greenhouse gas emissions are expressed as tonnes of CO<sub>2</sub>-equivalent.

See Appendix II for the Methodologies for the Collection and Quantification of Data.

See Appendix III for the full table of the Quantified Greenhouse Gas Inventory.

See Appendix IV for the table of the Quantified Inventory for biogenic and other emissions.

## I Reporting Boundaries with description

1. **Scope 1** - *Direct emissions from operations that are owned or controlled by the reporting company*
  1. S1 Stationary Combustion - *Emissions resulting from combustion of fuels in stationary sources*
  2. S1 Mobile Combustion - *Emissions resulting from the combustion of fuels in company owned/controlled mobile combustion sources*
  3. S1 Fugitive Emissions - *Emissions resulting from the leakage of refrigerants or the direct release of greenhouse gasses*
2. **Scope 2** - *Indirect emissions from the generation of purchased electricity, steam, heating, or cooling consumed by the reporting company*
  4. S2 Electricity - *Emissions resulting from the generation of electricity, purchased by the company*
3. **Scope 3 Upstream** - *Indirect emissions that occur in the value chain related to purchased goods & services*
  5. S3Cat1 Goods & Services - *Embedded emissions in purchased goods and services*
  6. S3Cat2 Capital Goods - *Embedded emissions in capital goods like buildings, cars, ICT and machinery*
  7. S3Cat3 Energy Supply - *Embedded emissions in the purchase of fuels and energy in other activity categories*
  8. S3Cat4 Transport Upstream - *Emissions related to the transport of goods upstream of the production process or any transport purchased by the company*
  9. S3Cat5 Waste - *Emissions related to the disposal and processing of waste generated in operations*
  10. S3Cat6 Business Travel - *Emissions related to transportation of employees for business-related activities*
  11. S3Cat7 Commuting - *Emissions related to commutes of employees in vehicles not under control of the company*
  12. S3Cat8 Leased Assets as Lessee - *Emissions related to the operation of assets leased by the reporting company*
4. **Scope 3 Downstream** - *Indirect emissions that occur in the value chain related to sold goods & services*
  13. S3Cat9 Transport Downstream - *Emissions related to the transport of goods downstream of the production process not paid for by the company*
  14. S3Cat11 Use of Product - *Emissions related to energy use of the product during its planned lifetime*
  15. S3Cat12 End-of-life of Product - *Emissions related to the disposal of the sold product at the end of its planned lifetime*
  16. S3Cat15 Investments - *Emissions related to the operation of investments*
  17. S3Cat13 Leased Assets as Lessor - *Emissions related to the operation of assets owned by the reporting company*

## II Methodologies for the Collection and Quantification of Data

The emissions summary reflects the consolidation of emissions data according to the ISO 140641-1:2018 Standard.

### GHG classification structure

The reported GHG are aggregated into the following category groups at the organizational level

1. direct GHG emissions and removals
2. indirect GHG emissions from imported energy
3. indirect GHG emissions from transportation
4. indirect GHG emissions from products used by organization
5. indirect GHG emissions associated with the use of products from the organization
6. indirect GHG emissions from other sources

Each of these category groups are further subdivided into categories. The full list of these can be found in Appendix III.

Each of the above categories contains non-biogenic emissions, which are reported in the table in Appendix III. All biogenic anthropogenic emissions present in these categories are reported separately in Appendix IV.

Carbon offsets are not reported in this report nor have they been subtracted from the total.

### Reported GHG and GWP

The following greenhouse gases are included in the analysis: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), sulphur hexafluoride (SF<sub>6</sub>), nitrogen trifluoride (NF<sub>3</sub>), hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs).

Emissions from these greenhouse gases are expressed in CO<sub>2</sub>-equivalent (CO<sub>2</sub>e) based on their global warming potential over a time horizon of 100 years (GWP100). The Greenhouse Warming Potential (GWP) values are based on the Intergovernmental Panel on Climate Change (IPCC) Fourth, Fifth or Sixth Assessment Report (AR4, AR5 or AR6), in accordance with the methodological choices of the emission factor publishers used in this report.

The split of the GHG emissions inventory into the individual contributions of each GHG (group) can be found in Appendix III. Activities for which a further split in greenhouse gasses is not known, are reported under the CO<sub>2</sub>e\*-column.

The emission factors for aviation were extended to include the additional effects of radiative forcing through the emission of gases and aerosols and changing cloud abundance. For this a central estimate for a multiplier to the GWP100 figure is used. This estimate tries to reflect the additional effect based on the best available scientific evidence, while being consistent with UNFCCC reporting convention. The total emissions in this report include electricity emissions using the market-based method. Travel emissions in this report include the effects of radiative forcing for aviation.

### Approach to Emission Factors

For each activity the most relevant and localised emission factor possible has been selected, at the discretion of the reporter. Apart from locality and relevancy, other considerations were the availability



of emission factors and consistency in the selection of emission factor publications throughout the document.

A full list of emission factor publications used in this report can be found in the table below:

Publisher	Publication Version	Publication Date	URL
Exiobase	3.8.2	21/10/2021	<a href="#">link</a>
UK.gov	v2023 1.0	15/05/2023	<a href="#">link</a>
ADEME Base Carbone	2022 v22.0	24/06/2022	<a href="#">link</a>
ecoinvent	3.10	12/03/2024	<a href="#">link</a>
Association of Issuing Bodies	2022 v1.0	26/05/2023	<a href="#">link</a>

Each emission factor used in the calculation has an assigned validity period overlapping or partially overlapping with the application period of the reported activity. The validity period of emission factors is determined by its publication document<sup>1</sup>.

### Approach to base year reporting

The reporting period Y-2019 is the first GHG reporting period for Revive World, and counts as the base year for the current and future reporting cycles.

There are no changes in methodology in the reporting between the base year and this report.

Recalculation of the base year will be implemented in case it is necessary to maintain an effective base year comparison. Reasons for this might include:

- changes to the organizational boundaries such as mergers or acquisitions
- changes to the reporting boundaries such as revisions of the excluded categories
- significant changes to the calculation methodologies
- significant changes to data sourcing strategy
- significant changes to emission factor selection

There is no change to the base year calculation in this reporting period.

### Uncertainty Assessment

For this report a qualitative assessment of uncertainty has been applied. Seen that the effectiveness of a quantitative assessment would be limited due to a general lack of accurate uncertainty data .

The applicability of these quantitative assessments will be reviewed in each subsequent reporting period.

The emissions inventory provided in the consolidated statement carries some degree of uncertainty, which can be attributed to the following causes:

- Data sources: Uncertainty about the data collection methods of third-party sources
- Data sources: Uncertainty about the interpretations of data in third-party sources
- Data sources: Involvement of different parties and a large quantities of data
- Data input: Uncertainty about the input accuracy where large quantities of data are involved
- Data input: Uncertainty about the accuracy of boundaries application on the data
- Emission factors: Structural uncertainty in the methodology of emission factors
- Emission factors: Structural uncertainty in the data on which third-party emission factors is based

<sup>1</sup>In case the application period of the activity overlaps with the validity period of more than one emission factor, the median data of the activity period is used to determine which factor to use. (example if an activity stretches from August 2021 to July 2022, the median date is 29/01/2022)

**Review, Internal Audit and Improvement**

This emission inventory for reporting period has been compiled with highest attention for completeness and correctness.

### III Consolidated Statement of GHG Emissions

Emission Category		All GHG (tCO <sub>2</sub> e)	CO <sub>2</sub> (tCO <sub>2</sub> e)	CH <sub>4</sub> (tCO <sub>2</sub> e)	N <sub>2</sub> O (tCO <sub>2</sub> e)	SF <sub>6</sub> (tCO <sub>2</sub> e)	NF <sub>3</sub> (tCO <sub>2</sub> e)	HFCs (tCO <sub>2</sub> e)	PFCs (tCO <sub>2</sub> e)	CO <sub>2</sub> e* (tCO <sub>2</sub> e)
<b>1</b>	<b>Direct GHG emissions</b>	<b>97</b>	<b>97</b>	<b>&lt;1</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
1.1	Stationary Combustion	-	-	-	-	-	-	-	-	-
1.2	Mobile Combustion	97	97	<1	1	-	-	-	-	-
1.3	Process Emissions	-	-	-	-	-	-	-	-	-
1.4	Fugitive Emissions	-	-	-	-	-	-	-	-	-
1.5	Land use changes	-	-	-	-	-	-	-	-	-
<b>2</b>	<b>Indirect GHG emissions from imported energy</b>	<b>21</b>	<b>21</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
2.1	Purchased electricity - market based	21	21	-	-	-	-	-	-	-
	- location based	21	21	-	-	-	-	-	-	-
2.2	Purchased energy (other)	-	-	-	-	-	-	-	-	-
<b>3</b>	<b>Indirect GHG Emissions from transportation</b>	<b>43</b>	<b>42</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
3.1	Upstream transportation and distribution	-	-	-	-	-	-	-	-	-
3.2	Downstream transportation and distribution	-	-	-	-	-	-	-	-	-
3.3	Employee commuting	-	-	-	-	-	-	-	-	-
3.4	Business travel	43	42	<1	<1	-	-	-	-	-
<b>4</b>	<b>Indirect GHG Emissions form products used by organization</b>	<b>24,534</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24,526</b>
4.1	Purchased goods and services	133	8	-	-	-	-	-	-	124
4.2	Capital goods	24,400	-	-	-	-	-	-	-	24,400
4.3	Waste generated in operations	1	0	0	0	0	0	0	0	1
4.4	Use of leased assets (as lessee)	-	-	-	-	-	-	-	-	-
<b>5</b>	<b>Indirect GHG Emissions associated with the use of products from organization</b>	<b>3,492</b>	<b>3,489</b>	<b>2</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
5.1	Use of sold products	3,492	3,489	2	1	-	-	-	-	-
5.2	Use of downstream leased assets (as lessor)	-	-	-	-	-	-	-	-	-
5.3	End-of-life of products	-	-	-	-	-	-	-	-	-
5.4	Investments	-	-	-	-	-	-	-	-	-
<b>6</b>	<b>Indirect GHG Emissions from other sources</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
6.1	Franchises	-	-	-	-	-	-	-	-	-
<b>Total GHG emissions</b>		<b>28,187</b>								

\* This column contains all entries for which a further split in greenhouse gasses is not known.

This table was constructed following the ISO 14064-1:2018 framework.

The total emissions in this report include electricity emissions using the market-based method.

Travel emissions in this report include the effects of radiative forcing for aviation.

## IV Quantified Inventory for biogenic and other emissions

Emission Category		Other (tCO <sub>2</sub> e)	Biogenic CO <sub>2</sub> (tCO <sub>2</sub> e)
1	Direct GHG emissions	-	6
1.1	Stationary Combustion	-	-
1.2	Mobile Combustion	-	6
1.3	Process Emissions	-	-
1.4	Fugitive Emissions	-	-
1.5	Land use changes	-	-
2	Indirect GHG emissions from imported energy	-	-
2.1	Purchased electricity - market based	-	-
	- location based	-	-
2.2	Purchased energy (other)	-	-
3	Indirect GHG Emissions from transportation	-	-
3.1	Upstream transportation and distribution	-	-
3.2	Downstream transportation and distribution	-	-
3.3	Employee commuting	-	-
3.4	Business travel	-	-
4	Indirect GHG Emissions form products used by organization	0	0
4.1	Purchased goods and services	-	-
4.2	Capital goods	-	-
4.3	Waste generated in operations	0	0
4.4	Use of leased assets (as lessee)	-	-
5	Indirect GHG Emissions associated with the use of products from organization	-	-
5.1	Use of sold products	-	-
5.2	Use of downstream leased assets (as lessor)	-	-
5.3	End-of-life of products	-	-
5.4	Investments	-	-
6	Indirect GHG Emissions from other sources	-	-
6.1	Franchises	-	-
	<b>Total emissions</b>	<b>0</b>	<b>6</b>

The total emissions in this report include electricity emissions using the market-based method.

