Greenhouse Gas Emissions Inventory
of
D&R DISPERSIONS & RESINS Sp. z o.o.
Adress 87–800 Włocławek, ul. Duninowska 9

Inventory year 2021

Have any facilities, operations and/or emissions sources been excluded from this inventory? If yes, please specify.
NO
Reporting period covered by this inventory
1.01.2021 - 31.12.2021

ORGANIZATIONAL BOUNDARIES

Which consolidation approach was chosen (check each consolidation approach for which your company is reporting emissions.) If your company is reporting according to more than one consolidation approach, please complete and attach an additional completed reporting template that provides your company's emissions data following the other consolidation approach(es).		
Equity Share	Financial Control	Operational Control
☐	☐	☑

OPERATIONAL BOUNDARIES

Are Scope 3 emissions included in this inventory?
NO
If yes, which types of activities are included in Scope 3 emissions?
Not applicable

INFORMATION OF EMISSIONS

The table below refers to emissions independent of any GHG trades such as sales, purchases, transfers, or banking of allowances

EMISSIONS	**TOTAL**	CO_2	CH_4	N_2O	HFCs	PFCs	SF_6
	($MgCO_2e$)	($MgCO_2e$)	($MgCO_2e$)	($MgCO_2e$)	($MgCO_2e$)	($MgCO_2e$)	($MgCO_2e$)
Scope 1	1 044,768	949,956	1,217	0,393	0,000	0,000	0,000
Scope 2 Location	4 638,567	4 638,567	0,000	0,000	0,000	0,000	0,000
Scope 2 Market	5 783,664	5 783,664	0,000	0,000	0,000	0,000	0,000
Scope 3 (optional)							

Direct CO2 emissions from Biogenic combustion ($MgCO_2$)	
0,000	$MgCO_2$

BASE YEAR

Year chosen as base year
No base year indicated
Clarification of company-determined policy for making base year emissions recalculations
Not applicable
Context for any significant emissions changes that trigger base year emissions recalculations
Not applicable

Base year emissions

EMISSIONS	**TOTAL**	CO_2	CH_4	N_2O	HFCs	PFCs	SF_6
	($MgCO_2e$)	($MgCO_2e$)	($MgCO_2e$)	($MgCO_2e$)	($MgCO_2e$)	($MgCO_2e$)	($MgCO_2e$)
Scope 1	0,000	0,000	0,000	0,000	0,000	0,000	0,000
Scope 2 Location	0,000	0,000	0,000	0,000	0,000	0,000	0,000
Scope 2 Market	0,000	0,000	0,000	0,000	0,000	0,000	0,000
Scope 3 (optional)							

METHODOLOGIES AND EMISSION FACTORS

Methodologies used to calculate or measure emissions other than those provided by the GHG Protocol. (Provide a reference or link to any non-GHG Protocol calculation tools used)

1. Basic information on the methodology of calculating greenhouse gas emissions and the emission factors used

GHG Scope 1 have been calculated using the methodology The GHG Protocol Corporate Accounting and Reporting Standard

- for natural gas: based on DEFRA data.
- for acetylen: based on stoichiometric equation
- for petrol and diesel: based on KOBiZE data.

GHG Scope 2 have been calculated using the methodology The GHG Protocol Corporate Accounting and Reporting Standard with GHG Protocol Scope 2 Guidance and amendment to the GHG Protocol Corporate Standard.

- Location based-method: electricity in Poland - based on KOBiZE data
- Market based-method: ENERGA Obrót S.A.
- Heating in Poland - based on URE data

Calculations of consumption of fuels and energy carriers refer to 2021. Consumption measured on invoices and billing meters for fuels and energy was reported

2.1 Electricity

It was assumed that the consumption values measured on invoices for the next 12 months reflect the annual electricity consumption.

2.2 Natural gas

It was assumed that the consumption values measured on invoices for the next 12 months reflect the annual consumption of natural gas.

2.3 Mobile combustion

It was assumed that the consumption values measured on invoices for the next 12 months reflect the annual consumption of natural gas.

2.4 Refrigerants

In 2021, no additions of refrigerants were recorded.

2.5 Process emissions

As part of maintaining production, ad hoc welding works are carried out. It was assumed that the acetylene consumption values measured or forecasted on the invoices for the next 12 months reflect the annual acetylene consumption. In 2021, direct measurements of emissions from production processes were carried out. The obtained results do not indicate the emission of greenhouse gases.

The calculation of greenhouse gas emissions and data estimation was carried out by:

Angelika Kletkiewicz - Młodszy Specjalista Działu Technologicznego

Bartosz Żymańczyk - konsultant firmy EXERGY

Radosław Andrulewicz - konsultant firmy EXERGY

ORGANIZATIONAL BOUNDARIES

List of all legal entities or facilities over which reporting company has equity share, financial control or operational control	Equity share in legal entity (%)	Does reporting company have financial control? (yes/no)	Does reporting company have operational control? (yes/no)
D&R DISPERSIONS & RESINS Sp. z o.o.	100,00%	YES	YES

If the reporting company's parent company does not report emissions, include an organizational diagram that clearly defines relationship of the reporting subsidiary as well as other subsidiaries
Not applicable

INFORMATION ON EMISSIONS

Emissions disaggregated by source types	
Scope 1: Direct Emissions from Owned/Controlled Operations ($MgCO_2e$)	
a. Direct Emissions from Stationary Combustion	870,995
b. Direct Emissions from Mobile Combustion	173,709
c. Direct Emissions from Process Sources	0,064
d. Direct Emissions from Fugitive Sources	0,000
e. Direct Emissions from Agricultural Sources	0,000
Scope 2: Indirect Emissions from the Use of Purchased Electricity, Steam, Heating and Cooling ($MgCO_2e$)	
a1.Indirect Emissions from Purchased/Acquired Electricity - location based	3 874,424
a2. Indirect Emissions from Purchased/Acquired Electricity - market based	5 019,521
b. Indirect Emissions from Purchased/Acquired Steam	0,000
c. Indirect Emissions from Purchased/Acquired Heating	764,143
d. Indirect Emissions from Purchased/Acquired Cooling	0,000

Emissions disaggregated by facility (recommended for individual facilities with stationary combustion emissions over 10 000 Mg CO_2e)	
Facility	Scope 1 emissions
Not applicable	Neither site has emissions emitting a level more than 10 000 Mg CO_2e

Emissions disaggregated by country ($MgCO_2e$)	
Country	Emissions (specify Scopes included)
Poland	Scopes 1 i 2 location based: 5 683,335
Poland	Scopes 1 i 2 market based: 6 828,432

Emissions attributable to own generation of electricity, heat, or stem that is sold or transferred to another organization
Not applicable

Emissions attributable to the generation of electricity, heat or steam that is purchased for re-sale to non-end users
Not applicable
Emissions from GHGs not covered by the Kyoto Protocol (e.g., CFCs, NOx,)
Not applicable
Information on the causes of emissions changes that did not trigger a base year emissions recalculation (e.g., process changes, efficiency improvements, plant closures)
Not applicable
GHG emissions data for all years between the base year and the reporting year (including details of and reasons for recalculations, if appropriate)
Data on GHG emissions for all years between the base year and the reporting year is an attachment to the report.
Relevant ratio performance indicators (e.g. emissions per kilowatt-hour generated, sales, etc.)
Scopes 1+2 per employee: 62,454 MgCO2e/employee
Scopes 1+2 per Mg sold product 0,280 MgCO2e/Mg
Scopes 1+2 per 1mln PLN revenue: 34,409 MgCO2e/1mln PLN revenue

An outline of any GHG management/reduction programs or strategies
Strategy of managment and reduction targets is in the process of being prepared

ADDITIONAL INFORMATION

Information on any contractual provisions addressing GHG-related risks and obligations
In 2021, the enterprise reported GHG emissions to KOBiZE.
Information on the quality of the inventory (e.g., information on the causes and magnitude of uncertainties in emission estimates) and an outline of policies in place to improve inventory quality
The emissions were estimated on the basis of the collected accounting data - energy and fuel invoices. The emissions factors used were selected in accordance with the best knowledge of the persons preparing the report. They relate directly to domestic fuel emissions and the energy used.
Information on any GHG sequestration
Not applicable

INFORMATION ON OFFSETS

Information on offsets that have been purchased or developed outside the inventory boundary		
Quantity of GHGs ($MgCO_2e$)	Type of offset project	Were the offsets verified/certified and/or approved by an external GHG program (np. CDM)
0	Not applicable	Not applicable

Information on reductions inside the inventory boundary that have been sold/transferred as offsets to a third party		
Quantity of GHGs ($MgCO_2e$)	Type of offset project	Were the offsets verified/certified and/or approved by an external GHG program (np. CDM)
0	Not applicable	Not applicable