

# SIA GROGLASS

## Greenhouse Gas Emissions Report 2022



Date: **10.05.2023.**

Reporting period: **2022**

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## Introduction

This study is done by Dr. Ing. Kaspars Zudrags / SIA BM Certification in 2023 according to the requirements of the standard EN ISO 14064-1:2019 “Greenhouse gases - Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals” and GHG protocol “A Corporate Accounting and Reporting Standard”.

## GENERAL DESCRIPTION OF THE ORGANIZATION GOALS AND INVENTORY OBJECTIVES

### Description of organization

SIA GroGlass is one of the world’s leading developers and manufacturers of anti-reflective and other high-performance coatings on glass and acrylic for various industries: high-end electronic and static displays, picture framing, museum showcases, architecture and other applications.

SIA GroGlass manufacturing processes comply with international standards - ISO 9001: 2015, ISO 14001:2015, ISO 50001:2018, ISO 45001:2018.

### Responsible persons

SIA GroGlass is responsible for the provision of the GHG statement and the supporting information. SIA BM Certification was contracted to provide consultancy for reporting.

### Purpose of the report and intended users

Target audiences of the study are company’s management and employees, customers, and any parties which have an interest in company’s GHG emissions. The aim of the study is to provide GHG emission information for both business-to-consumer and business-to-business communication.

Aim of this report is monitoring and reporting the greenhouse gas emissions and activities to reduce these emissions in the future. 2022 is considered to be the base year – this is the period SIA GroGlass has started its accounting of GHG emissions. In the future, obtained base year data of 2022 will be used for further monitoring of GHG emissions

### Dissemination

The report is available for company’s internal use, as well as for third parties upon request.

### Reporting period

Data for calculation was collected by SIA GroGlass and covers 12 months period during 2022. This is the first time SIA GroGlass carries out its emission inventory.

## Data and information included in the report

This Report includes Category 1 direct emissions and Category 2 indirect emissions from electricity, reported in accordance with the requirements of the EN ISO 14064-1:2019 Greenhouse gases - Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.

The Scope 1 and Scope 2 emissions are included in this report, according to the GHG protocol "A Corporate Accounting and Reporting Standard".

Other categories are not calculated for the first year, due to the lack of accounting.

The data collected are based on analyses of invoices. The activity data is multiplied by the appropriate emission factor to calculate GHG emissions for the organization.

The electricity-emission factors are based on Tier 1 emission factors assuming an averaged or typical technology and country.

## Statement about verification

The greenhouse gas emissions reported by SIA GroGlass for the period are stated below. SIA GroGlass is responsible for the data collection and fair presentation of the GHG statement.

## Organizational boundaries

SIA GroGlass has the following manufacturing sites which are covered in this report:

- Manufacturing site and head office Katlakalna street 4b, Riga, Latvia
- Manufacturing site Granīta street 26, Riga Latvia

SIA GroGlass accounts for all GHG emissions generated from facilities over which the company has operational control.

## Reporting boundaries

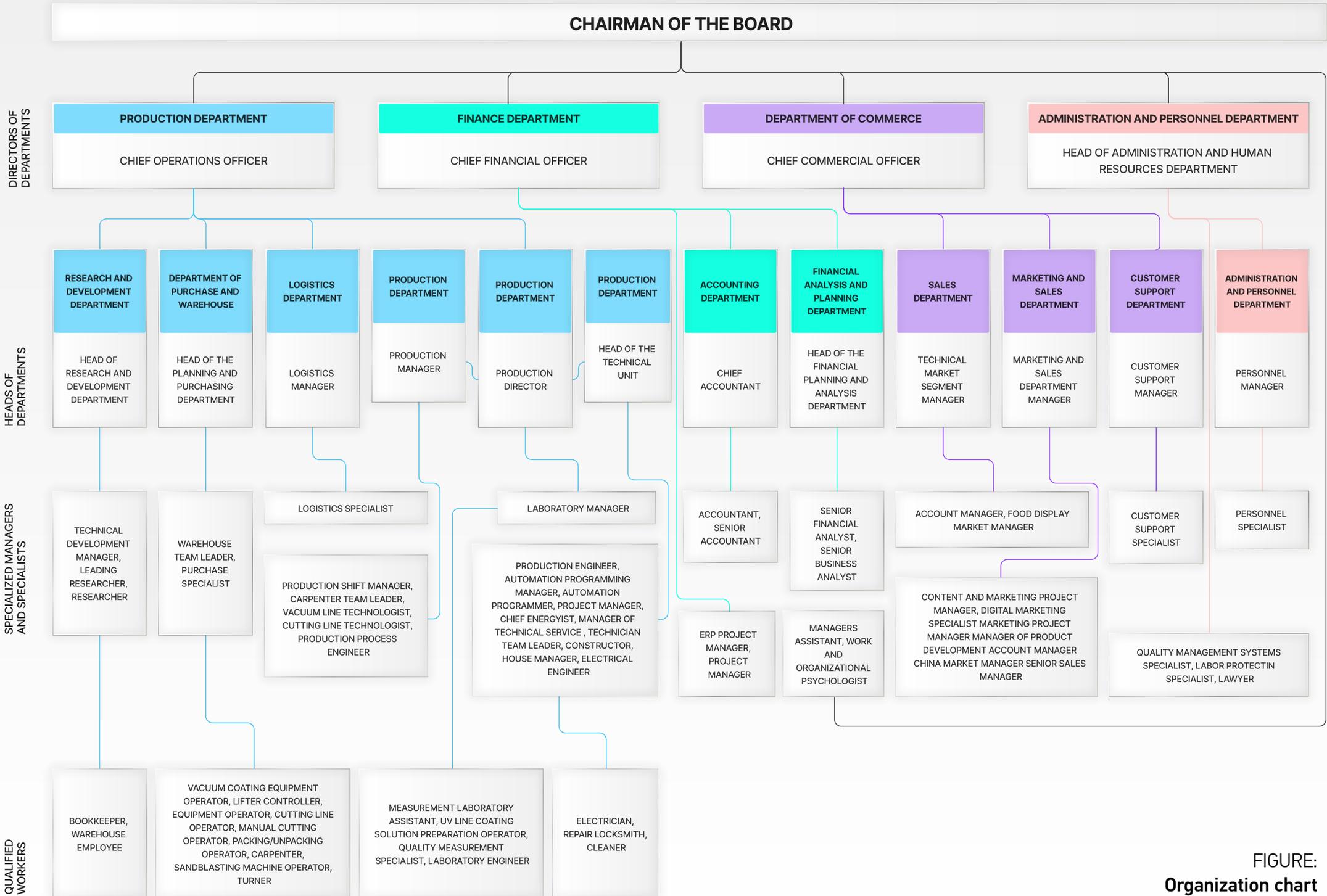
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The Scope 1 and Scope 2 emissions are included in this report, according to the GHG protocol "A Corporate Accounting and Reporting Standard".

| CATEGORY   | TYPE                      | SOURCE            | EMISSIONS FACTORS                                    |
|--|---------------------------|-------------------|--|
| <b>CATEGORY 1</b><br><b>Direct emissions</b>   | Diesel                    | Company cars      | CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O |
|  | Gasoline                  | Company cars      | CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O |
|  | Liquefied Petroleum Gases | Forklift          | CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O |
|  | Natural gas               | Boiler house      | CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O |
|  | Carbon dioxide            | Fire Extinguisher | CO <sub>2</sub>                                      |
| <b>CATEGORY 2</b><br><b>Indirect emissions</b>   | Electricity               | All               | CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O |
| <b>CATEGORY 3</b><br><b>Indirect emissions from transportation</b>                                       |                           | ND                |  |
| <b>CATEGORY 4</b><br><b>Indirect emissions from products used by an organization</b>                     |                           | ND                |  |
| <b>CATEGORY 5</b><br><b>Indirect emissions associated with the use of products from the organization</b> |                           | ND                |  |
| <b>CATEGORY 6</b><br><b>Indirect emissions from other sources</b>  |                           | ND                |  |

\* The company does not have any CO<sub>2</sub> sink.

\*\* Other categories are not calculated for the 2022 year due to lack of accounting.



**FIGURE:**  
**Organization chart**

## QUANTIFIED GHG INVENTORY OF EMISSIONS AND REMOVALS

| EMISSIONS   |  | TOTAL                | CO <sub>2</sub> | CH <sub>4</sub> | N <sub>2</sub> O | UNCERTAINTY                            | SCOPES ACC<br>GHG PROTOCOL |
|---|--|----------------------|-----------------|-----------------|------------------|--|----------------------------|
|   |  | GWP                  | 1               | 30              | 265              |  |                            |
|   |  | eCO <sub>2</sub> , t | kg              |                 |                  |  |                            |
| <b>CATEGORY 1: Direct GHG emissions and removals in tonnes CO<sub>2</sub>e - 171.3</b>            |  |                      |                 |                 |                  |  |                            |
| 1.1.  | Direct emissions from stationary combustion                                      | 141.2                | 141266          |                 |                  | 9.9%                                   | SCOPE 1.                   |
| 1.2.  | Direct emissions from mobile combustion  | 8.0                  | 8041            |                 |                  | 9.9%                                   |                            |
| 1.3.  | Direct process emissions and removals arise from industrial processes            | 22.0                 | 22007           |                 |                  | 9.9%                                   |                            |
| 1.4.  | Direct fugitive emissions arise from the release of GHG in anthropogenic systems | 0                    | 5               |                 |                  |  |                            |
| 1.5.  | Change and Forestry  |                      |                 |                 |                  |  |                            |
|   | Direct emissions in tonnes of CO <sub>2</sub> from biomass                       |                      |                 |                 |                  |  |                            |
| <b>CATEGORY 1: Indirect GHG emissions from imported energy in tonnes CO<sub>2</sub>e - 3866.0</b> |  |                      |                 |                 |                  |  |                            |
| 2.1.  | Indirect emissions from imported electricity                                     | 3866.0               | 3865968         |                 |                  | 9.9%                                   | SCOPE 2.                   |
| 2.2.  | Indirect emissions from imported energy  |                      |                 |                 |                  |  |                            |
| <b>TOTAL<br/>eCO<sub>2</sub>, t</b>   |  | <b>4037.3</b>        |                 |                 |                  | <b>TOTAL<br/>UNCERTAINTY<br/>9.35%</b> |                            |

Reporting company: SIA GroGlass

Reporting period covered: 01.01.2022. - 31.12.2022.

GHG - greenhouse gases

## GHG REDUCTION INITIATIVE AND INTERNAL PERFORMANCE TRACKING

### SIA GroGlass® undertakes:

- Introducing the best available technologies, promoting procurement of energy-efficient products and services
- Ensuring continuous improvements of the company's energy efficiency, providing the necessary resources for organizing events
- Sustainable and rational use of all types of energy resources
- Ensuring compliance with environmental and energy legislation and other requirements of the European Union including the Republic of Latvia
- Performing inventory and analysis of energy resources in order to develop effective energy performance improvement measures
- Replacement of turbo pumps with energy-efficient alternatives in Q4, 2023

Caution that future statements are subject to numerous assumptions, risks and uncertainties which can be changed over time.

### References

EN ISO 14064-1:2019 Greenhouse gases - Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals

UK Government GHG Conversion Factors for Company Reporting, UK Department for Energy Security and Net Zero and Department for Business, Energy & Industrial Strategy, Published 9 June 2020

European Residual Mixes 2021 v1.0 - Table 2, Direct GWP (gCO<sub>2</sub>/kWh), Association of Issuing Bodies, (published Version 1.0, 2022-05-31)

GHG protocol "A Corporate Accounting and Reporting Standard"