Environmental Report 2022

PLASSON®

Table of Contents

Introduction

PLASSON LTD (hereinafter: "PLASSON") is a global leader in the development, manufacturing and marketing of high-quality technical products: Flow Solutions (fittings & valves), livestock equipment, products for the bathroom and kitchen, and in other activities. The Company maintains a tradition of over 59 years of excellence and innovation.

PLASSON's parent company, PLASSON Industries Ltd., is a public company whose shares have been traded on the Tel Aviv Stock Exchange since 1997, and are included in the TA-125 Index.

PLASSON has built a reputation as a manufacturer of high quality products, meeting the strictest standards in its areas of activity. Quality is the key concept in all of PLASSON'S processes, from development and design through production, assembly, packaging, distribution, delivery, and after-sales services.

With over 50 years of experience in product development, we constantly aim to develop added value and stand at the forefront of technology in the development of innovative products and solutions to suit the ever -evolving needs of our customers.

We place great emphasis on providing the best services to our customers.
The PLASSON Group facilitates the exchange of the most innovative practices and knowledge across all countries and segments. In all our manufacturing sites and subsidiaries across the world, PLASSON teams strive for operational excellence and efficiency in delivering the best and most efficient service.

We constantly seek to improve our environmental sustainability.
Therefore, we have decided this year to expand our greenhouse gas (GHG) emissions report on a global level engaging all necessary focal points, obtaining resources and standardizing KPIs collection and reporting process. Hence, we aim to release this environmental report and following periodical releases to be shared with all our stakeholders. This report summarizes the key elements and achievements of our environmental activities worldwide in 2022.

Environmental Governance and Management at PLASSON

PLASSON is a leading international presence, operating in more than 100 international markets, with approximately 2,000 employees and 25 subsidiaries operating worldwide.

PLASSON´s group headquarter is located in Israel, together with its main manufacturing facility. The headquarter facility also houses the PLASSON group's global Development Department, along with additional development branches at the subsidiaries.

This is a global environmental report, which contains an overview of PLASSON's environmental related projects and environmental performances during calendar year 2022. The report details activities from our global manufacturing, logistics and distribution centers worldwide.

Environmental governance and management at PLASSON is led by high management, we have established an EHS Policy which guides our environmental strategy. The Global Chief Operating Officer (COO) overviews and includes into the upper management's meetings environment and climate-related topics for discussion, such as environmental strategy, compliance with environmental regulation, guiding annual budget and business plans.
The COO is responsible for the operation of all industries and logistic centers worldwide, which include environmental key performance indicators management, such as electricity consumption, setting performance objectives, monitoring and overseeing progress against goals and targets. In addition, the COO is responsible for the implementation of an Environmental Management System - ISO14001 third-party certified, and Energy Efficiency Management System – ISO50001 third-party certified, at the headquarters and main production site in Israel.

We conduct on-going activities that advance environmentally friendly practices, including measures to reduce electricity, fuel and water consumption, and maximize waste recycling.
We also started a process of LCA calculations for our most popular products and plan to start performing EPD validations in 2024. These projects help us understand how to reduce our environmental impacts and improve our environmental performances.

Environmental Performance 2022

Greenhouse gas (GHG) emissions calculation and report

Our GHG report from 2022 include Scope 1, Scope 2 and Scope 3 emissions, our activities are divided according to the following scope levels:

Scope 1 (direct emissions)
Emissions are those from activities owned or controlled by our organization:
- Fuel consumption
- Refrigeration operating emissions (AC systems for office and Communication Rooms)
- Fire suppression systems (electric panels and fire extinguishers)

Scope 2 (energy indirect)
Emissions released into the atmosphere that are associated with our consumption of purchased electricity, heat, steam and cooling:
- Electricity (generation factor)

Scope 3 (other indirect)
Emissions that are a consequence of actions that occur at sources we do not own or control and are not classified as Scope 2 emissions:
- Electricity (transmission and distribution and well to tank factors – T&D and WTT)
- Employee commuting (company cars and shuttles)
- Water consumption
- Freighting goods
- Business Travels
- Paper consumption for printing
- Waste management
- Raw materials consumption for products and packaging

The calculation of GHG emissions was conducted according to the GHG Protocol Corporate Accounting and Reporting Standard. Emissions were calculated based on UK Government conversion factors for greenhouse gas reporting (DEFRA) and Ecoinvent database emission factors (V3.8).
For the electricity emission factors (for electricity generation and T&D emissions) we purchased the International Energy Agency (IEA) emission factors file, as well as used factors from the EPA (U.S Environmental Protection Agency) for American sites, from the AIB (Association of Issuing Bodies) for European sites and from the Israeli Ministry of Environmental Protection for Israeli sites.
Our GHG report from 2022 was verified by a third-party independent auditor in accordance with ISO14064-3 for all Scope 1, Scope 2 and Scope 3 emissions.

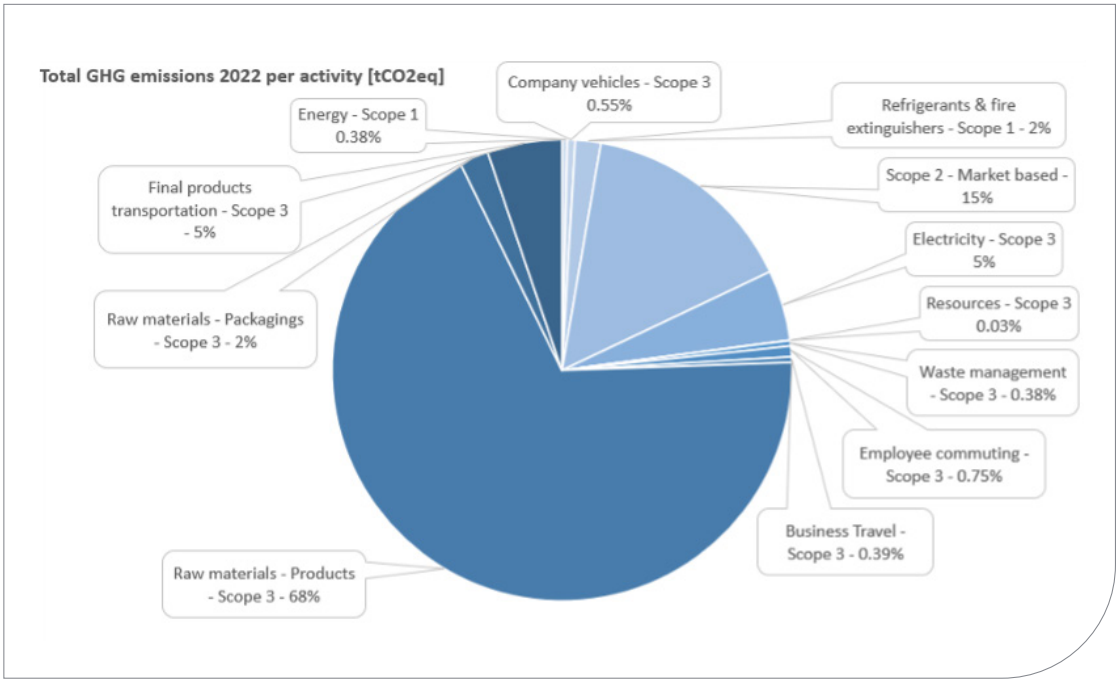
In 2022, our global emissions accounted for a total of 181,484 metric tons of CO2 equivalent (tCO2e), divided as follows:

Greenhouse gas emissions	tCO2e
Scope 1	4,926
Scope 2 – Market based	27,691
Scope 2 – Location based	25,636
Scope 3	148,867
Total emissions – Market based	181,484
Total emissions – Location based	179,429

Environmental KPIs breakdown:

GHG Emissions Overview:

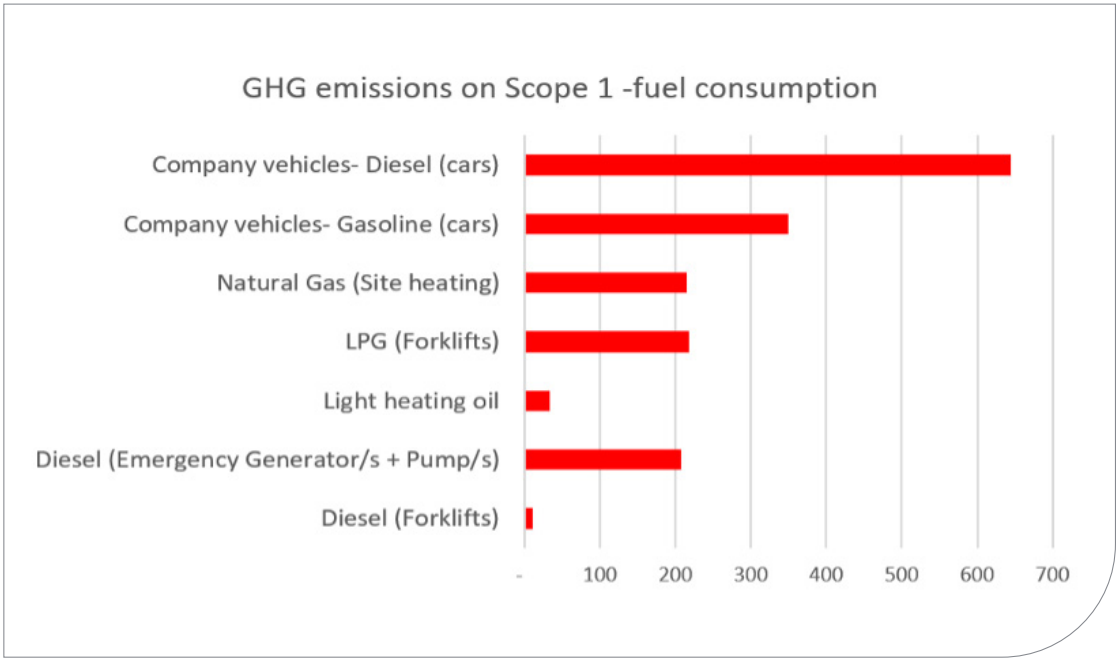
For the 2022 GHG emissions report we managed to collect environmental KPIs from 24 of our major sites, including factories, and storages and distribution centers worldwide. The significant majority of 82% was accounted under scope 3 emissions, electricity consumption – scope 2, accounts for 15 %, leaving our direct emissions (Scope 1) at 3%.
The below graph shows an overview of GHG emissions distribution per activity type.



Scope 1 - Fuel Consumption and Ozone Depleting Substances:

Refrigeration gases from air conditioning systems for offices and communication rooms, and gases from fire suppression systems encountered at some of our sites on main electrical panels and communication rooms are defined as ODS – ozone depleting substances. In 2021, we conducted a survey mapping all the refrigerant and fire extinguisher systems which allowed us to use it for this year's reporting.
Wherever possible we obtained gas recharges information, and if not available, we reported operating emissions considering annual leak rates estimates, and reported accordingly the emissions.

As a significant portion of our direct emissions (scope 1), fuel consumption is found mainly at our manufacturing subsidiaries. In the 2022 report we collected and reported emissions from diesel consumption – used for emergency generators and forklifts, gasoline and liquefied petroleum gas (LPG) – used at the production machinery; natural gas and light heating oil – which are used mostly for heating, and diesel and gasoline for company vehicles. Below is a breakdown of scope 1 emissions per fuel type.



Scope 2 - Electricity Consumption:

Electricity consumption is fundamental for powering our operations, in the deployment of our solutions and at our worldwide storages and offices.

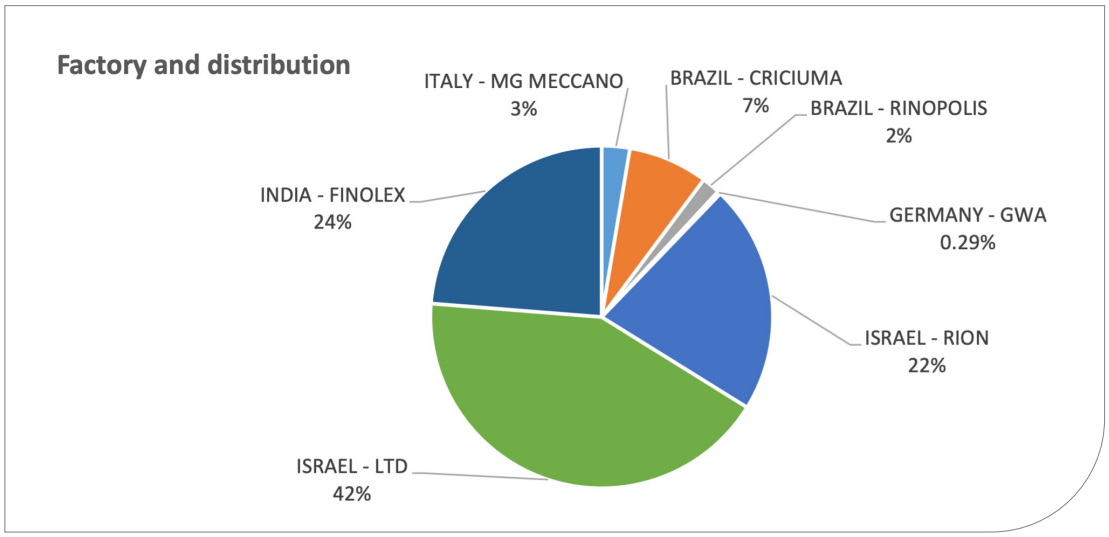
Our global GHG emissions related to electricity consumption sum up to 20% of the total emissions, where 15% were accounted under scope 2, and 5% under scope 3. Scope 2 emissions were calculated using market-based and location-based methodology, since PLASSON's sites rely on electricity consumption from the local grid and national providers as well as private providers. Transmission and distribution (T&D) emissions associated with grid losses (the energy loss that occurs in getting the electricity from the power plant to the organizations that purchase it) and well-to-tank (WTT) emissions, which reflect the extraction, refining and transportation of primary fuels before their use in the generation of electricity were included in our scope 3 emissions calculations.

Since PLASSON Ltd. is our main production site and headquarters, in 2019 we have set a long-term strategy to improve our production process in several levels, including energy efficiency.
We set a goal to reduce our overall electricity consumption by 2% in 2024. The strategy and goal are aligned with a detailed list of projects and physical changes in our operations, we are aware that many of the projects have long-term ROI and the implementation will take a few years. Nonetheless, we constantly evaluate the electricity consumption of every initiative and follow-up with the implementation to evaluate if the expected electricity consumption reduction is being achieved. We believe that we are in the correct path and will achieve the final target by 2024.

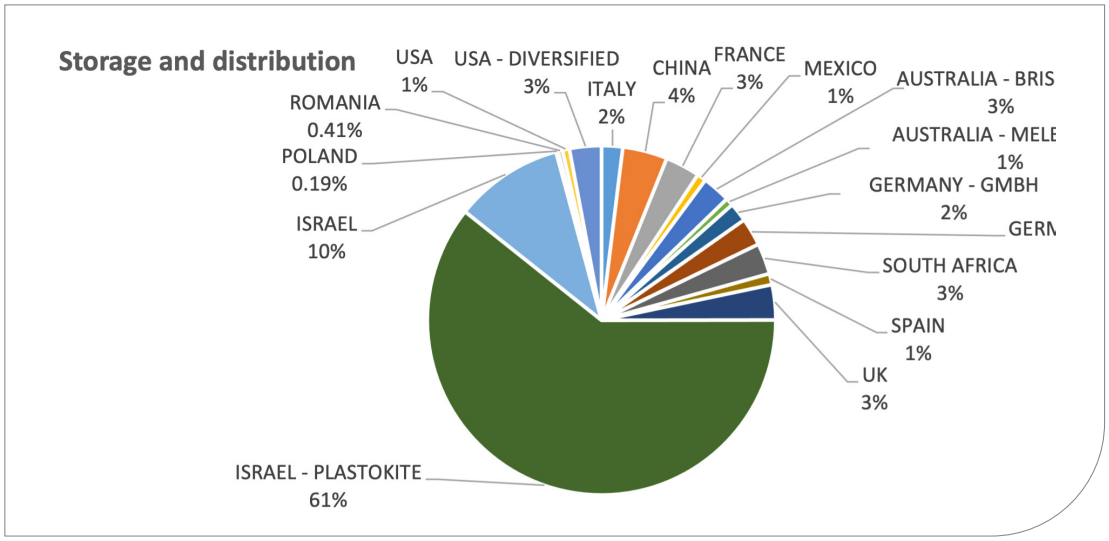
PLASSON Ltd. has established an EHS Policy approved by management, which guides our environmental strategy. We are continuously striving to implement energy efficiency projects. A few examples of initiatives carried in 2022 :

- Production equipment replacement to improve the energy efficiency during the production process.
- Creation of an energy center (2% reduction by the end of 2024).
- Replacement and upgrade of air conditionning system.
- Air compressor replacement for energy efficiency imporvement (implementation in 2023-2024).
- Replacement of diesel forklifts for fuel consumption reduction (2023-2024).

The charts below provide an analysis of electricity consumption per country. Manufacturing sites detain a total of almost 90% of all electricity consumption, Finolex in India, PLASSON Ltd. and Rion Ltd. in Israel alone represent 79%. Our storages and distribution centers are widely spread in 13 countries around the globe, and account for a minor percentage of the overall consumption.



Electricity consumption distribution per location for factory & distribution facilities



Electricity consumption distribution per location for storage & distribution facilities

Raw Material Purchase and Transportation:

From the analysis of scope 3 emissions, it is noticeable that the raw materials purchase and transportation are the most significant emissions sources. It represents 83% of total scope 3 emissions. We strive to reduce our emissions from this aspect by implementing new initiatives.

In 2021, we started conducting LCA studies (Life Cycle Assessments) in order to calculate the emissions from the manufacturing of our most significant products. This process helped us understand the impact of the type of raw materials used in the products and their origin and thus adapt our production process accordingly. In 2024, we plan to publish EPD reports for formal validation of our LCA calculations.

We also aim to choose our suppliers according to their environmental commitment. We plan to start this initiative in 2024 by requiring from our suppliers to answer an ESG value chain questionnaire and provide information regarding their environmental behavior

Additional Scope 3 Emissions:

Downstream transportation and distribution represent 6% of total emissions. This category includes emissions from the freighting of sold products in vehicles not owned or controlled by our company. We took into consideration all parts and final products transported by land, sea or air between our factories and our storages and distribution centers, using distance-based methodology.

We also took into consideration the emissions from the extraction and transportation of fuels used for the electricity production. This represents 6% of the scope 3 emissions. This data was calculated according to the location of the consumed electricity (by purchasing the IEA emission factor file).
Materials for packaging were accounted based on the type of material, their origin (primary or recycled materials), and using average-data method emissions. The packaging materials accounted for 2.5% of scope 3 emissions.

We have also included under our scope 3 the emissions from aviation (business travels) and employee commuting which includes shuttles provided by PLASSON and cars that are provided to some of our employees as a benefit and under a lease agreement. Those overall GHG emissions account for less than 1.4% of scope 3.

Information on waste disposal was included under our scope 3 emissions as well, summing 0.5% of our total emissions. We have streamlined our global efforts to obtain and report precise information.
We support a circular economy and adopt waste reduction strategies, reuse and recycling wherever possible. Recycling programs cover several waste streams: paper, plastic, cardboard, metals, oils, wood, industrial and electronic waste. A small amount of waste is classified as hazardous, and we dispose of it and its packaging safely and in accordance with applicable regulations. Additional waste streams such as food, regular household and yet some industrial wastes are sent to landfill.

Engagement with Our Value Chain

Added Value to Our Customers

As one of the leading manufacturers of plastic products in the world and with a reputation for products in its areas of activity, we constantly aim to develop added value and stand at the forefront of technology in the development of innovative products and solutions to suit the ever-evolving needs of our customers, especially in the field of water transport and have an environmental contribution to saving water, as they prevent leaks. The group invests a great deal of resources and efforts, since our core organizational culture is to strive for operational excellence and efficiency. On we believe will play a significant role in water security and conservation. We even provide 50 years' warranty for our products, outstanding compared to the market. We proudly share all environmental and climate-related benefits of our products to all customers. Our website contains public information on those matters. We started to conduct Life-Cycle Assessments (LCAs) on families of products to evaluate and estimate their avoided emissions.

Engaging within Our Industry, Associations and with Policy Makers

At PLASSON, we are constantly seeking for high quality products, meeting the strictest standards in this area of activity. Quality is the key concept in all of PLASSON'S processes, from development and design through production, assembly, packaging, distribution, delivery, and after-sales services. We are active members of Standards Committees, to promote higher standards for pressure, ducting and pipping systems for better water distribution, avoiding leakages, and use of recycled materials.

Our main activities are within:

- CEN TC155 WG12 "Pressure systems of polyolefin material for gas supply, water supply and drainage and sewerage" – definitions of quality materials that shall be used which ensure a minimum design basis of 50 years for the complete supply system. Actual research on long term performance prediction of existing PE water distribution systems shows a possible service life of at least 100 years. Such systems ensure reduced need for servicing and minimization of scrap as a result of material degradation.

- CEN/TC 155 "Plastics piping systems and ducting systems" - in which the consideration of increasing the uptake of recycled plastic has been especially taken into account. In this sense, CEN/TC 155 has taken different actions:

1. The chapter related to material characteristics has been revised, and some product/system standards (for non-pressure applications) currently allow and specify the use of recycled material.
2. New product/systems standards have been recently developed by CEN/TC 155 with a different approach (performance based) and allowing the use of up to 100% of recycled plastic
3. The development of other standards (and R&D projects) that support the uptake of recyclates: terminology, guidance, recycled material testing (durability, characteristics).
4. A clear definition of the terminology for rework and pre-consumer material is considered of high relevance to clearly identify the use and content of recycled plastic in our products and to make consistent (and aligned with the CPA) the terminology used in our product/system standards.
5. It also has to be considered that the aim of the industry is to offer long-lasting products, using a design time of 50 years for an intended life-time in service for 100 years.

6. Recycled plastics are mainly generated from plastic waste from short life applications (packaging) and it is a difficult challenge to use them in long lasting and high-performance applications such as pressure piping systems.
7. Standards for non-pressure applications have been revised in a first step and modified to specify the use of recycled material maintaining the needed and required performance of the products. In pressure applications the use of recycled material does not allow us to meet the high-performance requirements (mechanical, functional, hygienic, longevity…) needed for that type of infrastructures.

Circular Economy Project with Our PP Supplier

At PLASSON Ltd, we created a circular economy project with our polypropylene (PP) supply, our main raw material. All of the polypropylene process waste is collected and sent to a recycling contractor who processes the material and sell it back to us. This recycled material is then used in the manufacturing of a specific product at Plasson. This initiative was implemented in order to environmentally improve our products and reduce our wastes. We believe this initiative opens the door for a more sustainable way to utilize plastics.

Sustainable Partnership with Maagan Michael Kibbutz, Israel

PLASSON was founded in 1964, by the members of the Maagan Michael Kibbutz, a collective community located 30 km south of Haifa, Israel. The company's headquarters and one of its manufacturing plants is still located at the kibbutz, with which we have a strict partnership, also on projects that are related to climate change. For example, the factory's roof is covered with solar panels that provide renewable energy to the kibbutz, and one of our cooling processes is done through a water heating process that is used by the ongoing activities of the kibbutz.
This engagement allows a better and more sustainable use of energy between the partners..

Innovation: Africa, Giving Back to the Society

PLASSON Ltd funds a project called **Innovation: Africa**, which is a 501 (c)(3) non-profit organization that brings Israeli solar, water and agricultural technologies to rural African villages.
Since 2008, using Israeli solar and water technology, Innovation: Africa has delivered access to clean water and light to over 3 million people across 10 African countries. In 2021 and in 2022, our company invested 50 thousand USD in this project and we intend to continue to support this initiative in different villages in Africa. Besides the support to the organization, we also encourage all our employees to promote efficiency ideas. We have a non-monetary recognition forum, where the best ideas and performance are presented to upper management, and the elected employees are invited to join in person the projects that were funded.

We believe this is not only an initiative to promote employee engagement and benefit to local communities, but also show our climate-related engagement strategy on a broader perspective.

About This Report

This report contains an overview of PLASSON's environmental projects and activities until the end of 2024 and environmental performance during calendar year 2022.

The report details activities from our global manufactures, logistics and distribution centers.

This is our second report and we intend to present our performance, providing clear and easily comparable data, on future annual reports.

The report was written with the assistance of Green Target – an EHS and Sustainability Consulting Firm.

We wish to thank all the people involved in the collection of data, writing and production of this report.