# Prototal Sustainability Report 2023

PROTOTAL INDUSTRIES

# We are Prototal

**Prototal** is Europe's biggest supplier in 3D printing, vacuum casting, aluminium tools, and injection moulding.

**Our purpose** is to offer our customers in-depth expertise on material selection and the optimum manufacturing method for their products.

**We support** industries with functional parts and fast deliveries of prototypes and serial production.

**We enable this** through our state-of-the-art, highly automated, digital production processes with short lead times and unrivalled quality standards.

€85
€85 million revenue

381
381 employees (end of year)

6
Offices in six countries

Our head office is in Jönköping, Sweden.
We have offices in Sweden, the United Kingdom, Denmark, Norway, Italy, and Austria.


**Through innovation, we aim to become part of a 100 percent circular value chain. We believe that sustainability is not just a corporate responsibility but a crucial driver of business success.**

%

# A word from our CEO

**2023** has been an exciting year at Prototal. It has marked the second year with our Sustainability Strategy, which puts sustainability at the core of our business development.

Three things stand out for me this year:
1. We have increased the share of carbon reduced or carbon neutral raw materials from 1.5 to 15 percent.
2. We now use 99 percent renewable electricity at our facilities.
3. We have had a significant drop in workplace safety incidents.

This is the result of structured efforts in all parts of the company to improve workplace safety and environmental performance.

3D printed polymer components significantly reduce waste and transportation compared to traditional manufacturing methods. But we are not satisfied with just being better than the alternatives. Our Sustainability Strategy has set us on a path to provide 100 percent carbon neutral and circular solutions.

There are still improvements to make, of course. We continue to work with our suppliers to develop materials with a lower carbon footprint and with our customers to make sure we deliver in line with their ESG demands. Internally, we work hard to standardise procedures and data collection and to spread best practice between subsidiaries.

With the progress we have made this year, I feel confident we can achieve our goal of delivering net positive solutions that lead to positive impact for our customers, society and the planet by 2030.

**Jan Löfving, CEO**

# Sustainability at Prototal

## Our Strategic Approach

Sustainability is a core element of our business, and we will ensure this commitment is reflected throughout everything we do in our manufacturing facilities as well as our entire supply chain. Our sustainability strategi, adopted in 2022, is structured around three focus areas.


1

### Positive Solutions and Collaborations

Delivering net positive solutions that lead to positive impact for our customers, society and the planet by 2030.

**Strategic Goals:**

- 100% Carbon neutral/carbon positive solutions
- 100% Circular Solutions
- 100% Safe and healthy solutions for people and planet

**This focus area supports the following UN Sustainable Development Goals:**

3 | 8 | 9 | 12 | 15

2

### Positive Operations and Outsourcing

Operating net positive impact in our production and supply chain by 2030.

**Strategic Goals:**

- Carbon neutral production and supply chain (company carbon footprint)
- 100% Renewable and fossil free energy sourcing
- Zero waste
- 100% Safe, clean, and responsible supply chain

**This focus area supports the following UN Sustainable Development Goals:**

6 | 7 | 8 | 12 | 13 | 15

3

### People and Society Positive

To be an employer of choice and partner for sustainability in our industry and society by 2030.

**Strategic Goals:**

- Motivated, empowered and competent workforce
- Equal opportunities for all employees
- A zero-accident environment
- A trusted employer and partner with high ethical standards
- Positive impact in our communities and in society at large

**This focus area supports the following UN Sustainable Development Goals:**

3 | 8 | 10 | 12 | 17

## Understanding our context

**Materiality analysis**
Our most significant impacts on the economy, environment, and people have been identified through a materiality analysis conducted in 2022. Major inputs to this analysis were a stakeholder dialogue and the internal analysis conducted in the process of developing our sustainability strategy. While our material topics remain the same this year, we continuously improve the analysis of our impact through updated life cycle assessments.

**Stakeholder dialogue**
In 2022, we held a structured stakeholder dialogue to gain input on our sustainability strategy and to identify our material sustainability impacts. The main categories of stakeholders engaged were customers, suppliers and our senior executives. Engagement took place through interviews and questionnaires.

OUR MATERIAL TOPICS

**Environment**
- Energy consumption
- $CO_2$ emissions
- Chemicals
- Waste

PAGE 7

**Social**
Health and safety

PAGE 11

**Governance**
Ethical business relations

PAGE 13

# Environmental information

## Strategy, impact, risks & opportunities

We are part of complex value chains in sectors with big sustainability challenges: the plastic and chemical industries. As Europe's largest supplier in 3D printing, vacuum casting, aluminium tools and injection moulding to a wide range of industries, we want to be industry leaders within sustainability and be recognised as the go-to actor for sustainable solutions. In order to ensure this, we have initiated close collaboration with key customers and suppliers along our value chain.

### Negative impacts

Our negative environmental impact is largely connected to the climate impact of our raw materials, which still are fossil-based to a large extent. The climate impact depends on the type of plastic used. Electricity consumption in our production processes also has a climate impact, the extent of which is dependent on factors such as the production method used and the source of electricity. Other important environmental impacts are the use of minerals and metal, and the treatment of waste.

### Positive impacts

Our positive impact comes from reducing our clients' climate impact, by reducing resource use and minimising the need for transportation. One way to illustrate this is a customer that would normally produce a large supply of spare parts that need transportation and warehouse storage space. With our services, parts can be produced quickly, on demand, and the only storage needed is that of a blueprint in a computer. This reduces the total amount of resources needed throughout the production process. 3D printing also allows the redesign of products to contain less material. Since parts can be produced locally, customers can reduce transportation, avoiding associated costs and climate impact.

### Our approach to circularity

To reduce our negative impact and enhance our positive impacts, we will develop offerings based on three principles for a circular economy: To design out waste and pollution, keep materials and products in use, and regenerate natural systems.

We strive to minimise the resources needed in our production. We will move towards only using raw materials and chemicals that cause no harm to people or the environment. We will increase the use of polymers certified by credible, third-party certification systems that promote the practice of well managed ecosystem, no hazardous chemicals and no critically threatened raw materials.

**Since parts can be produced locally, customers can reduce transportation, avoiding associated costs and climate impact.**

**Moving towards circular solutions**

We strive to secure that our products can be reused or recycled at the highest possible value.

One challenge is to make sure that future technologies are more efficient and can be combined with renewable (bio-based) materials. Currently, compared to the tens of thousands of kinds of plastic available in the world, the number of bio-based polymers that are suitable for 3D printing is extremely small. Promoting collaborative innovation in this field is necessary for our strategy to succeed.

To this end, we have developed closer collaboration with a selection of our raw material suppliers. Our strategic aim is to establish a position where Prototal as a group has an influence over the materials of the future. Through our position as a market leader in 3D printing, we are directly involved with our suppliers in the development of new bio-based materials.

We have set out to achieve net-zero emissions in our production as well as our value chain by 2030.

**Energy**

We are close to securing that all our production sites use energy from renewable sources. We are actively looking for opportunities to produce our own renewable energy on site and are striving for 100 percent renewable energy from own production.

In addition, we are constantly working with energy efficiency and energy saving programmes to achieve highly effective, optimised and fossil free transportations of raw materials and products.

**Progress in 2023**

An investment in new 3D printing machines has led to less waste, thanks to a more resource efficient production with better precision and heat control. Another factor leading to waste reduction is a volume shift from injection moulding to 3D printing, with the former being a production method with higher waste levels.

We have developed closer relations to suppliers, enabling us to exert more influence over our upstream value chain. As a result, we can see a reduced environmental footprint from raw materials. We have increased our use of bio-based plastics, made from castor oil instead of petroleum. In addition, we purchase more carbon reduced raw materials, meaning that our suppliers have reduced their carbon footprint. In all, this year we have gone from 1.5 percent of our raw materials being carbon neutral or carbon reduced to 15 percent.

This year, most of our subsidiaries have signed contracts for renewable energy with their electricity companies, resulting in a great stride forward for the share of renewable electricity used at our facilities.

**We have developed closer relations to suppliers, enabling us to exert more influence over our upstream value chain. As a result, we can see a reduced environmental footprint from raw materials.**

**Previous activities: examples**

We are one of the founders of the Polymer Technology Institute (PTI), a Swedish business collaboration to find new alternatives to the polymer materials available today.

We have introduced a new grease cartridge based on recycled plastic. With 40 million of these units produced each year, the impact is significant.

Our Danish production sites have a powder system that up-cycles used material to new material, which can reduce carbon footprint by 20 percent.

In the United Kingdom, all of our waste powder is recycled or re-used, ensuring that none of it goes to landfill. The powder that cannot be re-used in manufacturing gets used as a filler for road paints.


We are one of the founders of the Polymer Technology Institute (PTI)

## Key figures

| | 2023 | 2022 |
|---|---|---|
| **Energy** | | |
| Electricity consumption (MWh) | 10,534 | * |
| Heat consumption (MWh) | 981 | * |
| Total energy consumption (MWh) | 11,516 | 11,377 |
| Renewable energy (share of electricity only) | 99% | 64% |
| **Greenhouse gas emissions (tonnes $CO_2e$)** | | |
| Scope 1 | 50 | 49 |
| Scope 2 | 450 | 100 |
| Scope 3, Category 9 – Downstream transport | 115 | 2,284 |
| Scope 3, Category 1 – Purchased goods and services | 8,309 | * |
| Scope 3, Total | 8,424 | 2,284 |
| Total | 8,923 | 2,433 |
| **Raw materials** | | |
| Total raw materials (tonnes) | 2,053 | 3,494 |
| Carbon reduced or carbon neutral raw materials (share of total) | 15% | 1.5% |
| **Waste (tonnes)** | | |
| Total waste | 524 | 532 |
| Recycling | 209 | 108 |
| Energy recovered | 251 | 313 |
| Landfill | 12 | 30 |
| Hazardous waste | 20 | 7 |

## Notes

**Sources of uncertainty**
While we are continuously improving our data collection and verification processes, some level of uncertainty still remains. Our 10 subsidiaries get different quality of data from suppliers, meaning we have to use estimates in some cases. Our sustainability data is collected and processed manually to a large extent, and establishing standardisation in how subsidiaries handle data remains a challenge.

Completeness of data from our subsidiaries may vary, meaning that year-to-year comparability is still inconsistent.

The uncertainty is lowest for electricity consumption, renewable electricity share, scope 1 emissions and waste.

For scope 3 transportation emissions, we lack data for two subsidiaries this year and three subsidiaries last year. For scope 3 purchased goods, we have made some simplified estimates. A large number of different raw materials are used in our production. While we know that these raw materials have different emission factors, we do not have complete data from suppliers and we have therefore used one emission factor for all kinds of 3D printing materials and one emission factor for all kinds of injection moulding materials.

**Changes from previous reporting period**
*Energy*
In 2023, we have collected energy data from all our sites divided into heat and electricity. In 2022, no distinction was made between electricity and heat in our data collection, meaning that only total energy consumption is available for 2022 and that the share of electricity/heat for that year is unknown.

*Scope 2 GHG emissions*
In 2022, scope 2 emissions were calculated based on emission factors for electricity only. In 2023, emissions have been calculated with separate emission factors for heat and electricity. This explains this year's higher scope 2 emissions and the two years are not comparable for this reason.

*Scope 3 GHG emissions.*
In 2022, scope 3 emissions were only calculated for category 9, downstream transportation and distribution. In 2023 we have also collected information on category 1, purchased goods and services. The higher scope 3 emissions and total GHG emissions in 2023 reflect this change in system boundaries.

**Energy**
Our reported energy consumption for 2023 consists of total consumption of electricity and heat. For 2022, only total energy consumption was reported. As we develop our reporting, other energy categories (such as cooling) could be included in future reports.

Information on renewable energy sources is only available for electricity, not for heat.

**Greenhouse gas emissions**
The scope 1 figures include emission from company vehicles.

Our scope 2 emissions are calculated with a mix of marked-based and location-based methods.

Scope 3 emissions this year includes category 9 (downstream transportation and distribution, with emission data reported by couriers) and category 1 (purchased goods and services, with emission data reported by suppliers). Emissions from purchased goods and services is calculated for our plastic raw materials, but not for aluminium. In future reports, we aspire to report scope 3 emissions from additional upstream and downstream emission sources. The life cycle assessment (LCA) for our 3D printing and injection moulding has been updated in 2023. With the industry rapidly improving the carbon footprint from materials, we are continuously reviewing life cycle assessments as new materials become available.

**Raw materials**
Our primary materials are granules for injection moulding, powder for 3D printing and aluminium for tooling manufacturing. Most of the purchased raw material are virgin, and it is a priority for us to replace it with bio-based and recycled material.

**Waste**
Recycling fractions include aluminium, sorted electronics, plastics, paper and corrugated cardboard. Energy recovered waste is mainly plastics, cardboard and wood. Hazardous waste includes aerosols, emulsions, colour, lacquer, glycol, isocyanate, chemicals, grease and unsorted electronics.

# Social information

## Strategy, impact, risks and opportunities

**A place where people want to work**
We want to be the employer of choice in our industry. For us, that means a workplace where all employees thrive and develop in facilities which operate with the highest standards in health and safety. Any facility handling chemicals and plastic powder faces risks in terms of air quality, and we take precautions to ensure a healthy working environment.

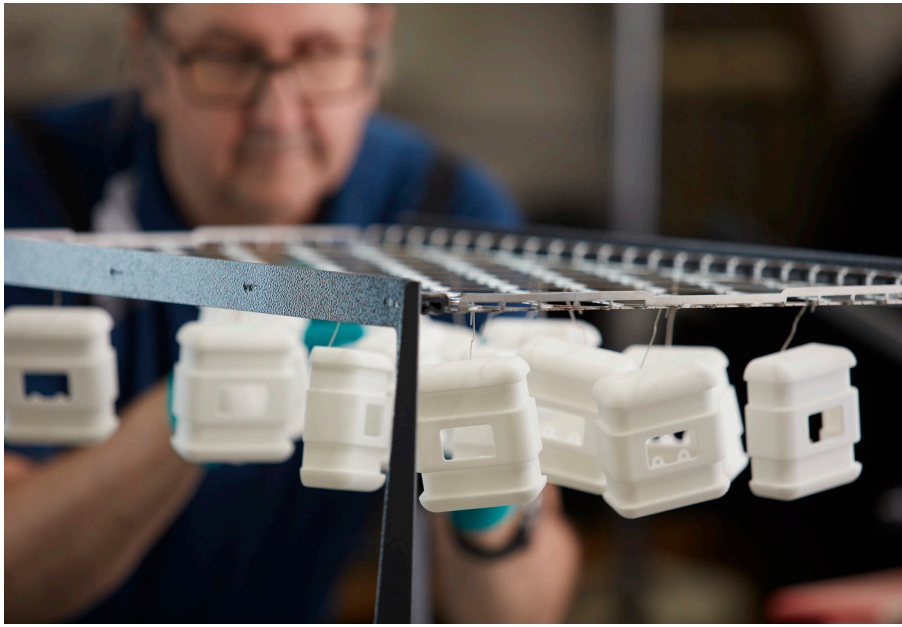
Collective agreements (or an equivalent) set a solid foundation and a high standard for the working conditions of our employees. They secure the right of association and prevent any form of forced, compulsory, or child labour. Across all our sites, a company healthcare system is available for all employees in combination with welfare benefits.

We also carry out employee engagement surveys and annual employee reviews on a regular basis.

**An engaging and fair company culture**
We strive to have a company culture that engages all employees – our most valuable resource – and enables them to reach their full potential with equal opportunities for all. By providing education and internal career development, we enable staff to take on new roles in the company.

Prototal respects fundamental human rights. We recognise our responsibility to observe those rights in any activities involving our employees and, in the communities where we work and live. We do not tolerate any form of discrimination with regard to gender, race, religion, age, disability, sexual orientation, nationality, political opinion, union affiliation, or social or ethnic origin.

**Positive impact in society**
We want the communities we operate in to benefit from our presence. Prototal is a socially engaged business with strong commitment to the local communities, offering job opportunities as well as broader engagements in the local society such as sponsorships and collaborations with different actors such as universities and schools. We also want to be a voice for sustainability in society and influence public policy. Our investments are guided by our commitment to sustainability.



**With 40% women in Group Management, we're proud to reflect our commitment to equality and the value of diverse perspectives.**

**Progress in 2023**
Over the last few years we have begun working with workplace safety in a structured way. This year, we are proud to see that work resulting in a significant drop in the number of reported workplace incidents, from 40 to 16. We attribute this success to an intensified work with risk analysis and safety rounds at one of our production sites, which has enabled us to identify risks and make improvements to equipment and routines. We have also simplified reporting procedures through a smartphone application, so that incidents and risks require less administration by employees.

**Previous activities: examples**
Our Danish production site has built a system to reduce air pollution from powder, resulting in a better work environment.

In the United Kingdom, we carry out yearly hearing and lung function tests on our employees and have an external health and safety auditor come in to check that our processes, personal protective equipment, fire extinguishers, first aid kits and procedures are all good enough.

In Sweden, we are taking an active part in higher vocational education, offering traineeships and as part of education programmes.

## Notes

**Changes from previous reporting period**
Our data collection method for sick-leave has changed between 2022 and 2023, meaning that year-to-year comparisons are not 100 percent accurate.

## Key figures

| EMPLOYEES | 2023 | | | 2022 | | |
|---|---|---|---|---|---|---|
| | **Women** | **Men** | **Total** | **Women** | **Men** | **Total** |
| **Parent company** | 1 | 2 | 3 | 1 | 2 | 3 |
| **Subsidiaries** | | | | | | |
| Sweden | 43 | 119 | 162 | 43 | 117 | 160 |
| Denmark | 2 | 17 | 19 | 2 | 16 | 18 |
| Norway | 3 | 10 | 13 | 4 | 13 | 17 |
| UK | 5 | 20 | 25 | 4 | 17 | 21 |
| Italy | 7 | 15 | 22 | 7 | 14 | 21 |
| Austria | 29 | 108 | 137 | 37 | 109 | 146 |
| **Total, Prototal group** | **90** | **291** | **381** | **98** | **288** | **386** |

| HEALTH | 2023 | 2022 |
|---|---|---|
| | **Total** | **Total** |
| Total sick-leave rate (% of total ordinary working hours) | 4.1 | 4.9 |

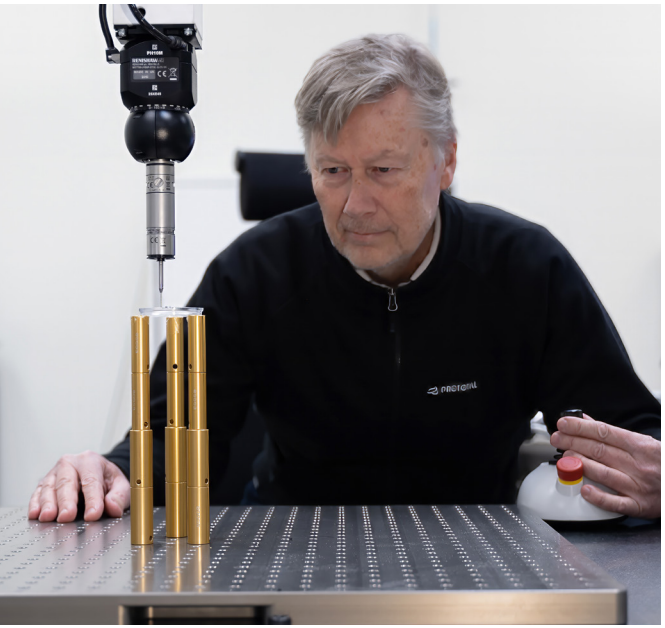
| WORKPLACE SAFETY | 2023 | 2022 |
|---|---|---|
| | **Total** | **Total** |
| Number of reported incidents | 16 | 40 |
| Number of fatalities | 0 | 0 |

# Governance information

## Strategy

Prototal continues to work according to the Sustainability Strategy adopted in 2022. The strategy consists of the three strategic areas described further on page 5:

1. Positive Solutions and Collaborations
2. Positive Operations and Outsourcing
3. People and Society Positive



**Governance structure**

Sustainability is a recurring topic on the board's agenda. The board sets strategy and direction, which is implemented by the senior management group consisting of the CEOs of each of our operations. Sustainability is now a topic with follow-up taking place quarterly on senior management level and board level. We have standardised procedures in place for reporting sustainability performance to board and management team. Our CEO is responsible for driving sustainability progress within the organisation.

During the year, we have communicated the strategy internally to implement it throughout the organisation. Working groups have been established in which site managers collaborate in developing solutions and working methods.

Looking ahead, we are planning to recruit a sustainability manager to further enhance the implementation of sustainability in all parts of our organisation.

Across our sites we have quality certificates for ISO 9001, AS/EN 9100, ISO 13485, ISO 14001 and ISO/TS 16949.

**Code of Conduct & supply chain**

Our Code of Conduct is in place since 2021 and applies to all employees of Prototal Industries and our subsidiaries. It is the responsibility of all managers within Prototal Industries to communicate and make sure the content of the Code of Conduct is considered in day-to-day operations. As of the end of this year, 82 percent of our employees have received training in the Code of Conduct. Our "Whistleblower System" allows employees to report any issues anonymously. In 2023, one whistleblowing report was received and has been resolved. In addition, we have an anti-corruption policy and follow-up processes to ensure compliance.

We want to secure high standards on safety, health, working conditions and human rights in the supply chain. We will work in close collaboration and in long term partnership with responsible suppliers that share our customers' and our own sustainability ambitions. We are in the process of developing a supplier approval programme that ensure responsible sourcing, where our suppliers sign Prototal's Code of Conduct.

**We want to secure high standards on safety, health, working conditions and human rights in the supply chain.**


This is the Sustainability Report for Prototal Industries AB for the period 1 January 2023 – 31 December 2023.

Corporate registration number: 559113-2989

The report is published in August 2024.

Prototal Industries AB
Instrumentvägen 6
SE-553 02 Jönköping
+46 36 38 72 00
info@prototal.se

PROTOTAL
INDUSTRIES