

# Prototal Sustainability Report 2022

# 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

390

390 employees  
(end of year)

6

Sites in six  
countries



Our head office is in Jönköping, Sweden.  
We have sites 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

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**AT PROTOTAL**, we like to share first-time-experiences. Testing a new bio-based material. Seeing a client unlock the opportunity to reduce climate impact thanks to our products.

We try to make such experiences happen more often on society's path to replace current materials and production methods with something new that moves us away from a fossil-based economy to a circular economy.

Prototal's 3D printed polymer components significantly reduce material waste in manufacturing and the carbon footprint from transportation. 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.

As we fully integrate sustainability as a core perspective in our business, we find new ways to improve and innovate. In 2022, we adopted our first sustainability strategy, which has induced new energy and provided direction for our daily operations.

In fact, you are sharing a first-time experience with us right now. This is our first yearly sustainability report. We want it to provide a brief overview of our current impact and our direction for the future. I hope you enjoy reading it!

**Jan Löfving, CEO**





# Sustainability at Prototal

## Our Strategic Approach

In 2022, Prototal adopted a sustainability strategy. Sustainability is now 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. The strategy has three focus areas that guide our sustainability journey.



\*) This focus area supports the following UN Sustainable Development Goals.

# 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

### UN GOALS\*



# 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

### UN GOALS\*



# 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

### UN GOALS\*



## Understanding our context





### Materiality analysis

We conducted a materiality analysis in 2022 to identify our most significant impacts on the economy, environment, and people. Major inputs to this analysis were a stakeholder dialogue and the internal analysis conducted in the process of developing our sustainability strategy. In 2023, the analysis of our impact continues through a life cycle assessment that will provide further details on our impacts and ways to mitigate them.

### 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

	<p><b>Environment</b></p> <ul style="list-style-type: none"> <li>• Energy consumption</li> <li>• CO<sub>2</sub> emissions</li> <li>• Chemicals</li> <li>• Waste</li> </ul> <p>PAGE 7 </p>
	<p><b>Social</b></p> <p>Health and safety</p> <p>PAGE 11 </p>
	<p><b>Governance</b></p> <p>Ethical business relations</p> <p>PAGE 14 </p>

# 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, metals and chemicals, 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.



**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.**



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



#### **Moving towards circular solutions**

We want to secure that our products can be reused or recycled at the highest possible value. We are looking at the possibility of taking back products from the market to recycle them. 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 have an opportunity to be the first company to test and evaluate new biobased materials, putting us ahead of our competitors.

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

#### **Energy**

We will secure 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% renewable energy in 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.

# 3D

Through our position as a market leader in 3D printing, we have an opportunity to be the first company to test and evaluate new biobased materials, putting us ahead of our competitors.



## Key developments

### Sweden

We are one of the founders of the Polymer Technology Institute (PTI, Polymertekniska institutet), a Swedish business collaboration to find new alternatives to the polymer materials available today. By collaboration with big industry actors, we can create a bigger demand for replacing fossil-based polymers and developing new standards.

Recently, we introduced a new grease cartridge based on recycled plastic. With 40 million of these units produced each year, the impact of a 100% recycled product is huge.



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



### Denmark

For several years we only used energy delivered from renewable sources on our Danish production sites.

We have built a powder system that up-cycles used material to new material, which can reduce carbon footprint with 20% for specific materials. We try to bring a material based on castor beans into production, currently working to improve the quality of the builds.

### 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 also looking at transitioning to better alternatives for packaging, using less bubble wrap and polymer bags in favour of paper alternatives. We are working with our landlord to reduce the amount of non-renewable energy consumed by our site.



## Key figures

### Energy

Energy consumption (electricity)	11 377 MWh
Renewable energy (electricity)	64%

### Greenhouse gas emissions

Scope 1	49 tonnes CO <sub>2</sub> e
Scope 2	100 tonnes CO <sub>2</sub> e
Scope 3	2 284 tonnes CO <sub>2</sub> e
Total	2 433 tonnes CO <sub>2</sub> e

### Raw materials

Total raw materials	3 494 tonnes
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### Waste

Total waste	532 tonnes: 15,23%
Recycling	108 tonnes: 3,09%
Energy recovered	313 tonnes: 8,96%
Landfill	30 tonnes: 0,86%
Hazardous waste	7 tonnes: 0,20%

## Notes

### Energy

Our reported energy consumption consists of Prototal's total electricity consumption. As we develop our reporting, other energy categories could be included in future reports.

### Greenhouse gas emissions

The scope 1 figures include emission from company vehicles. Our scope 2 emissions are calculated with a mix of market-based and location-based methods. Scope 3 emissions currently include only downstream transportation and distribution, with emission data reported by couriers. In future reports, we aspire to report scope 3 emissions from additional upstream and downstream emission sources. In 2022, we initiated a life cycle assessment (LCA) for our 3D printing and injection moulding, which will be finalised in 2023. Preliminary results from the

LCA indicate that climate impact from purchased goods and waste could be relevant categories to examine further.

### 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.



**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.**

## Key developments

### Denmark

The monthly meetings with our internal organisation for working environment and the yearly risk assessment show high employee satisfaction. In terms of safety, we are building a system to handle powder internally, feeding the machines in a way that reduces the use of powder and risk for air pollution. This is a big investment in a better work environment.



### United Kingdom

Recently we have had no accidents or near misses recorded. 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 safe and secure. Our management team is 50% female and 50% male, and we pride ourselves on recruiting the right person for the job, irrespective of race, gender, sexuality etc. at all times.

Our management team is 50% female and 50% male

# 50/50

### Sweden

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





## Key figures

### EMPLOYEES (2022 AVERAGE)

	Women	Men	Total
<b>Parent company</b>	1	2	3
Subsidiaries			
Sweden	43	117	160
Denmark	2	16	18
Norway	4	13	17
UK	4	17	21
Italy	7	14	21
Austria	37	109	146
<b>Total, Prototal group</b>	<b>98</b>	<b>288</b>	<b>386</b>

### HEALTH

Total sick-leave rate (% of total ordinary working hours)	4.9
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### WORKPLACE SAFETY

Number of reported incidents	40
Number of fatalities	0



**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.**

# Governance information

## Strategy

In 2022, Prototal has taken a series of steps to improve our sustainability governance. Most importantly, we developed and adopted our Sustainability Strategy. 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

Starting in 2022, 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.



**Sustainability is now a topic with follow-up taking place quarterly on senior management level and board level.**

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 and ISO 14001.

## 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. Our "Whistle Blower System" allows employees to report any issues anonymously. 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.



This is the Sustainability Report for  
Prototal Holding AB for the period  
1 January 2022–31 December 2022.

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