

Environmental Audit for 2024

1 Background.

Mälarplast has, in accordance with procedures in the management system, prepared an annual environmental report, which is presented in this document. The investigation was carried out by the company's Environmental Manager, Tommy Eriksson, in March 2025 for presentation at the management review in April and to the environmental regulatory authority.

Mälarplast's operations are subject to notification requirements (downgraded from Class B to Class C since 2024), and the operations of the sister company Roltex Nordic are so limited that no environmental permits are required.

Where possible, we link our environmental impact factors to Sweden's 16 environmental quality objectives and the 17 global goals for sustainable development set out in Agenda 2030.

2 Environmental Impacting Factors

2.1 Location

The operations are conducted in modern industrial premises of approximately 3,200 square meters, with offices, changing rooms, and staff facilities integrated into the workshop building. The building is located in an industrial area with no residential housing nearby. In 2015, the facility was expanded by approximately 600 square meters through the construction of a new warehouse and a two-story building with new staff areas and an assembly hall. In 2023, Mälarplast purchased an adjacent railway embankment from the municipality with the intention of constructing a new facility connected to the current building in the future. The planning of the new building and the expansion of the office space is ongoing, and ground-breaking is likely to take place this autumn.

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1.1 Soil Contamination

In the autumn of 2007, Structor Environmental Engineering conducted a preliminary environmental investigation of the property at Hejargatan 14 on behalf of the company. No contamination exceeding current threshold values for industrial properties was found. In 2022, Structor collected soil samples from the railway embankment that has been purchased. Contaminants exceeding threshold values were found 50–60 cm below the surface. Mälarplast must carry out remediation before any construction can begin. Initial clearing of brush has been completed.

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1.1 Water, Consumption/Use

The water used by the company is supplied via the municipal water network. The company's water consumption is approximately 350 cubic meters per year, primarily for

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hygiene and cleaning purposes.

The workshop facility does not have any floor drains.

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1.1 Energy, Consumption

The property has a hydronic heating system for the offices and common areas. The premises are heated via a heat pump and surplus heat from the production process. When the heat generated by production is insufficient, electric heaters are used in the premises, along with geothermal heating supported by an electric cartridge heater for the office and staff areas. Electrical energy is supplied by Eskilstuna Energi och Miljö.

The annual electricity consumption in 2024 amounted to 1,314 MWh (compared to 1,540 MWh in 2023). In 2024, our rooftop solar power system produced 109 MWh, which corresponds to just over 8% of Mälarplast's total electricity consumption. Additionally, 15 MWh of the collected solar energy was sold to the electricity market.

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1.1 Refrigerants

In 2017, the old cooling system for process water (Green Box) was replaced. At that time, the system delivered only 63 kW compared to the original 80 kW. A new cooling system (Blue Box) with a capacity of approximately 120 kW was installed in May 2017. A modern machine offers better performance and has therefore reduced electricity consumption. An annual inspection report is carried out by EK Kyl and submitted by the company to Eskilstuna Municipality.

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1.1 Production Materials

In compression and injection molding of thermoset plastics, production materials such as SMC, BMC, and phenolic molding compounds are used. SMC and BMC contain the monomer styrene, which is necessary for the curing process. The purchase of SMC and BMC decreased significantly during 2024 and will no longer be continued, as thermoset plastic production has ceased at our facility.

A summary of the consumption of production materials has been compiled and is updated annually (see Appendix 1)

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In 2024, we continued the production of mobile phone cases made from PLA and hemp, based on 100% biomass, medical items in bioplastics, and candy boxes made from bioplastic. We now manufacture 7 different types of hazardous waste containers using bioplastic with 30% wood fiber material. Currently, bioplastics account for just over 44% of the thermoplastic components we produce. Several projects involving bioplastics or recycled plastics are underway.

We also grind rejected plastic components from production, which are then sorted by specific plastic type and mixed with virgin material in production (up to 30%). Additionally, our production planning now includes the use of ground material from stock.

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1.1 Chemicals and Hazardous Substances

A chemical register has been established for the substances used in production. Chemical products and hazardous waste are labeled and stored in sealed containers on an impermeable surface, protected from precipitation and vehicle impact. The company has dedicated chemical cabinets and a clearly marked environmental station. Liquid chemical products and liquid hazardous waste are stored within sealed containment areas in accordance with regulations.

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1.1 Emissions to Air

The operations are conducted in a way that minimizes the risk of air pollution. Plastic raw materials and other materials containing solvents are stored and handled in such a way that emissions to air are minimized. The company has not received any complaints regarding odors during the year.

During the curing process of SMC and BMC, styrene is released into the surrounding air. Measurements were carried out in June 2021, and new measurements were scheduled for 2024. However, the company decided to phase out the thermoset plastic production instead.

According to the manufacturer's specification, the material contains approximately 12.5% styrene. In 2024, approximately 1.3 tons of SMC/BMC were processed (22.6 tons in 2023), which corresponds to about 128 kg of styrene with emissions of about 2.6 kg to the air. Other emissions to air are considered negligible.

Since thermoset plastic production was phased out in March 2024, no further measurements or actions will be necessary.

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1.1 Noise

Outside the workshop premises, no noise directed towards residential areas from the operations has been detected.

No measurements need to be carried out, as the distance to the nearest residential area is significant.

The company has also not received any complaints regarding noise during the year. Furthermore, there is nothing in the operations that generates high or sustained noise.

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1.1 Waste and Hazardous Waste

All operational waste is handled by Stena Recycling under an agreement.

The total amount of waste decreased from 90 tons in 2023 to 80 tons in 2024. With the expected production volumes, the amounts are expected to decrease to around 30–40 tons over time.

The amount of combustible waste in 2024 was 24.7 tons (30.8 tons in 2023).

The amount of plastic waste decreased in 2024 to 32.5 tons (45.9 tons in 2023).

In 2024, 3,010 kg of hazardous waste was sent (614 kg in 2023). Due to the scrapping of two outdated machines, the sale of one machine, and the sale of all hydraulic presses from the thermoset plastic department, a larger amount of hydraulic oil was drained. Additionally, leftover SMC and BMC were disposed of as hazardous waste.

The average amount is around 1–1.5 tons over time.

Stena Recycling AB reports hazardous waste data to the Swedish Environmental Protection Agency's electronic waste register through the signed mandate from Mälarplast AB.

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1.1 Packaging

Soft plastics and corrugated cardboard are handled under an agreement with Stena Recycling.

The companies are affiliated with the Swedish Producer Responsibility Organization (NPA) and report the quantity of paper and plastic packaging, as well as wooden pallets, placed on the market.

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1.1 Emergency Situation

The company conducts systematic fire protection work in-house. Fire extinguishers are available and are inspected annually by a third party, and emergency exits are properly marked according to regulations. Eskilstuna's fire department conducted a fire safety inspection on September 3, 2020, with no remarks found.

Any potential leakage of oils or chemicals is addressed with absorbents and treated as hazardous waste.

A list of possible incidents and accident risks has also been compiled, and it is regularly reviewed and updated. There is no need for additional emergency preparedness.

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1.1 Transport & Travel

The company has sold its diesel-powered pickup and now only uses leased cars that are fully electric or hybrids for key personnel.

Other transportation is contracted with certified suppliers. All transport takes place during daytime hours.

The majority of Mälarplast's transportation is via recipient freight with the freight forwarder designated by the customer. Therefore, the company has limited influence over transportation methods, routes, etc.

The main freight forwarders used by Mälarplast are DHL, Schenker, and Geodis Wilson.

All of these companies prepare environmental reports and actively work on environmental improvement measures.

The number of business trips has increased slightly. However, many meetings are still held digitally.

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1.1 Collaborations

International:

In 2023, we acquired a company in Belgium called Roltex NV, with whom we have had a good collaboration for some time. This acquisition allows us to implement our environmental approach and strengthen both brands.

National:

Roltex Nordic, together with Mälarplast, continues to promote the "Green Loop System" concept, where we offer a rental system for recycled plastic tableware made from certified and

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environmentally friendly bioplastics. The Green Loop System is a complete service that ensures a more consistent cost flow, the best environmental choice through recycling, as well as other benefits that plastic tableware provides.

Menigo (part of Sysco) has purchased the "Green Loop System" concept and is in the process of launching it under the name "Reloop System."

The "Green Loop" business is expected to grow this year with new customers and several wholesalers interested in the concept.

We also have other products that use recycled materials, such as construction plugs. All of these products that can be recycled help reduce our CO2 footprint compared to using virgin materials in the products.

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2 Significant Environmental Aspects of the Company

Considering the above description of environmental impact factors and the consumption figures provided in Appendix 1, the following assessment has been made of the company's most significant environmental aspects.

Styrene and production materials in thermoset plastics (SMC and BMC), which were previously the most significant environmental aspects, have been eliminated as the company has phased out production in these materials.

Environmental Aspect	Frequency/Amount	Impact on Environment and Health	Environmental Index
Electric Energy	3	2	5
Transport & Travel	2	3	5
Production Materials (Thermoplastics)	3	1	4
Hydraulic Oil	1	2	3
Packaging	2	1	3
Cooling Media	1	2	3
Water	1	1	2

An environmental index above 4 indicates significant impact in relation to Mälarplast's operations.

Electric Energy & Travel

Electric energy consumption will decrease moving forward as older injection molding machines will be replaced with electric machines that use less power than the hydraulic ones. Four machines have already been replaced with new electric machines.

Transport and travel have decreased as many meetings are held digitally, and when travel is required, company cars are either electric or hybrid, which reduces our CO2 footprint.

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1.1 Electric Energy

The largest energy consumption occurs with electricity, primarily in the injection molding process, including process cooling. The heating of plastic melt and the drive motors of the injection molding machines are the main energy consumers. The consumption is mainly dependent on production volume; however, several measures can be implemented to reduce consumption:

- Run longer production shifts to reduce the number of start/stops
- Reduce setup times/breaks
- When acquiring new injection molding machines, electric machines are preferable as they consume much less electricity.

In 2024, one new injection molding machine and three better-used electric injection molding machines were purchased, while two older machines were scrapped. The new machines are more energy-efficient and consume less electricity than the older machines.

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1.1 Production Materials (Thermoset Plastics)

Unlike thermoplastics, thermoset plastics cannot be reused and become combustible waste. This point has been retained since we were producing parts in thermoset plastics (SMC and BMC) until March 2024, but it will naturally be removed in the next review.

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1.1 Transport & Travel

See section 2.13.

1.2 Follow-up of Previous Year's Environmental Objectives and Goals for the Coming Year

1.2.1 Follow-up of Environmental Goals for 2024

Goal 1

Thermoset Plastics

- We aim to phase out our thermoset plastics department in 2024 to improve the working environment, reduce environmental impact, and thereby strengthen our slogan "Sweden's Greenest Plastics Company."
This goal has been achieved as we have phased out the thermoset plastics department,

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ceased all production with SMC and BMC materials, and disposed of the related materials, tools, and machines.

Goal 2 Battery Storage

- In 2024, we aim to begin selling electricity from the batteries to grid operators. This goal has been achieved as we have put the batteries into operation and started selling excess electricity to the grid operators.

3.5.2 New Environmental Goals for 2025

These will be developed in conjunction with the management review, and follow-up will occur in 2026.

Eskilstuna 2025-03-28



Tommy Eriksson-Forsell
Environmental Manager Mälarplast AB

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