

# Western Sweden's leading environmental enterprise within recycling and waste!

## VISION

We place a value on everything – for a sustainable future.

## BUSINESS CONCEPT

We offer environmentally smart services and waste recycling for energy recovery and the production of new raw materials.



A fleet of  
**244**  
heavy vehicles

**1 054 000 tonnes**  
recyclable material and  
waste received in 2023.

## Owners

The municipalities Ale, Göteborg, Härryda, Kungälv, Lerum, Mölndal, Partille, Stenungsund, Tjörn and Öckerö.

Sales of SEK


**1 752**  
miljoner kronor  
in 2023.

## Certified management systems

*The Renova Group has a certified environmental management system (ISO 14001:2015), as well as certified quality (ISO 9001:2015) and work environment (ISO 45001:2018) systems.*

**836**  
employees



 A workplace  
for everyone.

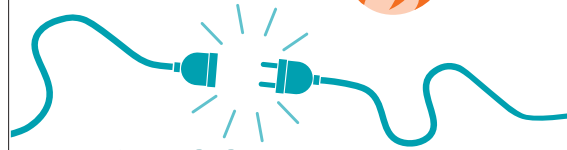
## OUR SERVICES

- Advice, training and consultancy services.
- Collection and transportation of waste and recyclable materials.
- Sustainable waste management and recycling.
- Services for property owners and the construction industry.

**1 378 300 MWh**  
produced district heating.



**228 400 MWh**  
produced electricity.



## Certified transports

*Renova Miljö AB has sustainability-certified transports in accordance with the transport industry's sustainability certification of freight transport on the road, Fair Transport.*

## RENOVA GROUP LOCATIONS

### Gothenburg

**Bönckulla:** Garage, a new maintenance workshop is being built here.

**Holmen:** Administration, vehicle workshop, stores, garage, eco-friendly vehicle wash.

**Högsbo:** Transshipment, sorting, interim storage, recycling for companies.

**Marieholm:** Pre-treatment facility for biological waste, composting garden waste, soil production.

**Ringön:** Sheet metal and machine shop.

**Rödingen:** Sorting, interim storage, baling, pre-treatment facility for hazardous waste.

**Skräppekärr:** Sorting, interim storage, recycling for companies.

**Sävenäs:** Waste-to-energy plant, reception of hazardous waste and electronics, Renova's Education Centre, administration.

**Tagene:** Landfill, interim storage, sorting, transshipment.

### Härryda

**Fläskebo:** Landfill, interim storage, processing, soil production, centre for stone, brick and concrete recycling.

### Kungälv

**Rollsbo:** Garage.

**Munkegårde:** Transshipment, sorting, interim storage, recycling for companies.

### Lerum

Transshipment station.

### Mölndal

Transshipment station.

### Stenungsund

**Kläpp:** Transshipment, sorting, interim storage, recycling centre, garage.

*We also operate recycling centres in Gothenburg, Kungälv and Stenungsund on behalf of these municipalities.*



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# THIS IS RENOVA





# Focusing on customers, the environment and community benefit

The Renova Group is owned by ten municipalities in western Sweden. Our mission is to work with our owner municipalities to take long-term responsibility for waste and its recycling. We aim to deliver community benefit through business activities and actively contribute to sustainable development within our owners' region.

The Group consists of the parent company Renova AB and a subsidiary Renova Miljö AB. The parent company is the owner-municipalities' own waste expert and carries out tasks directly allocated by them. The subsidiary Renova Miljö AB operates on a competitive market and offers complete waste and recycling solutions to businesses and public enterprises in our owners' region.

Our goal is to always be able to offer the market's best range of services within our industry, with the environment, quality and customer service remaining paramount.



## Renova and sustainability

### REDUCED CLIMATE FOOTPRINT

We are all about sustainability here at Renova and engage with sustainability issues in a variety of ways. Together with our customers, owners and partners, we work to minimise waste and to reduce the carbon footprint of waste. We recycle as much as possible and remove hazardous substances that cannot be recycled from circulation.

The incineration at our waste-to-energy plant produces carbon dioxide (CO<sub>2</sub>). About 40 percent is carbon dioxide of fossil origin. To reduce emissions of fossil carbon dioxide from the waste-to-energy plant, society needs to reduce its plastic use and we all need to help source separate more plastic for recycling.

Renova's Board of Directors has a long-term ambition for the waste-to-energy plant to invest in carbon

capture and storage (CCS) technology for flue gas treatment.

A feasibility study on the prerequisites for CCS was carried out in 2023 together with Göteborg Energi.

### VEHICLE DEVELOPMENT

Together with owners and partners, the Renova Group leads the way in terms of developing both vehicles and more ecofriendly fuels.

All our heavy vehicles run on renewable fuels. The first fully electric refuse truck was commissioned in 2019. Today we have two electric refuse trucks where the electricity is produced by hydrogen-powered fuel cells, and more are in the pipeline through collaborations with different suppliers.

The goal is that 30 percent of Renova's heavy vehicles to be powered by electricity 2026.

### A WORKPLACE FOR EVERYONE

Within the field of social sustainability, our focus is on delivering a work environment that enables our employees to stay healthy throughout their working life and afterwards. One of Renova's long-term goals are to increase the number of women employed.

Work for gender equality and diversity is ongoing: New arrivals have received internships and work with us through Jobbspår, waste and recycling, and we invest in Language training in Swedish for employees via our Language Lift.

In 2023, we had an extra focus on LGBTQI issues. In 2024, we will focus on ethnicity/skin color. Renova is a workplace for everyone!

### RENOVA EDUCATION CENTRE, COLLABORATION AND SCHOLARSHIP

Renova Education Centre is the umbrella name for our education, training and visitor activities.

Eco Waste School is our educational project aimed at pupils in compulsory education and right through to upper-secondary school.

We arrange courses for businesses and organisations, such as complete training packages on Ecosmart recycling and Hazardous waste. We can also customise courses to suit specific needs. Renova cooperates with universities and other tertiary educational institutions on research in the areas of waste management, transport and the environment. We offer a great many exciting topics for degree projects, as well as traineeships.

Since 2003, Renova has awarded an annual environmental scholarship to young researchers from the University of Gothenburg or Chalmers University of Technology.

## Efficient plants with environmental benefits

### WASTE-TO-ENERGY PLANT

Renova's waste-to-energy plant, located in Sävenäs Gothenburg, is a state-of-the-art plant for waste incineration. Annually, our facility manages close to 550,000 tons of combustible waste while generating electricity and heat. (Operating with four furnaces, the facility effectively transforms thermal energy into both electricity and district heating.) Each ton of waste incinerated yields more than three megawatt-hours (3 MWh) of energy. A total of 60 percent of Renova's electricity output is certified as biofuel-based.

Annually, the plant provides enough district heating to warm the equivalent of 135 000 apartments and supplies the equivalent to approximately five percent of Gothenburg inhabitants' electricity demand.

The Sävenäs site also manages potentially biohazardous waste and other substances unsuitable for re-circulation. It includes a reception facility for combustible hazardous waste and classified waste.

Stringent environmental measures are in place, notably including a multi-stage cleaning of flue gases. Furthermore, since 2022, a facility for reclaiming zinc from fly ash has been operational.

The Sävenäs site also hosts the Renova Education Centre, facilitating field trips and training courses to promote awareness and understanding of waste management practices.

### HAZARDOUS WASTE

At our Sävenäs facility, we receive, sort and temporarily store hazardous waste. Subsequently, this waste undergoes processing by Renova or is transferred to our partner facilities for recycling, destruction, or safe containment.

Renova sorts approximately half of all small batteries collected from households across Sweden.

Additionally, we operate a specialized pre-treatment facility for hazardous waste processing at our Rödingen site.



### PRE-TREATMENT OF BIOLOGICAL WASTE

At Renova's Marieholm facility in Gothenburg, there is a pre-treatment plant for processing sorted food waste. Following a series of steps involving shredding, compression, straining, and mixing with liquid food waste, the end product yields a slurry ideal for biogas production.

Additionally, garden waste undergoes composting procedures at the Marieholm site, yielding nutrient-rich compost utilized in the formulation of various soil mixtures.

### SORTING

At our sorting facilities, construction and demolition waste from businesses is sorted. Dedicated recycling centres for businesses are available at these sites.

Recyclable materials are retrieved, while other combustible materials are crushed and subsequently converted into energy. Other remaining fractions are deposited in landfills.

Our sorting facilities also provide interim storage for recyclable materials before their transportation to diverse recycling companies for further processing.

### PRE-TREATMENT FACILITY AT RÖDINGEN

At the Rödingen treatment facility located near Skräppekärr in Gothenburg, liquid hazardous waste is pre-treated. This involves blending the liquid hazardous waste with materials that absorb the liquid. Thereafter, the waste is energy-recovered through incineration.

Within the premises, Renova operates an electronics recycling plant where we receive, sort, and environmentally decontaminate electronic waste for subsequent recycling.

Moreover, the facility hosts a baling plant primarily utilized for compressing corrugated cardboard.

### CENTRE FOR MASS RECYCLING

At our Fläskebo facility, we have our center for recycling stone, brick, concrete, and asphalt, primarily coming from excavation masses. Additionally, we produce topsoils. We aim to reintegrate as much material as possible back into society for reuse.

### LANDFILLS

Renova operates two landfill sites. At the Fläskebo facility, non-combustible industrial waste, contaminated soil, and certain types of hazardous waste are deposited.

The Tagene facility accommodates inert waste, asbestos, and non-combustible waste, among other materials. Bottom ash (slag) from waste incineration is sorted at this site. Metals are reclaimed, while the remaining material is repurposed as construction material. Additionally, the Tagene site serves as an interim storage area for various materials, including combustible waste.

### TRANSSHIPMENT STATIONS

To reduce the number of transports, Renova reloads household waste and food waste into larger vehicles for further transportation to energy recovery or food waste treatment facilities. The transshipment stations are strategically located throughout the region.

### WORKSHOP AND TRUCK/CAR WASH

Renova's brand new maintenance workshop (opening in 2024) in Bönekulla on Hisingen specializes in repairing and maintaining vehicles, containers, and waste equipment for both internal and external clients. Additionally, at Holmen in central Gothenburg, we operate a heavy vehicle wash facility where we offer environmentally friendly washing services.