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

We offer environmentally smart services

and waste recycling for energy recovery

and the production of new raw materials.

recyclable material and

waste received in 2022.

1 168 100 tonnes

for everyone.

sorting, interim storage,

recycling centre, garage.

We alos operate

recycling centres in

and Stenungsund

on behalf of these

municipalities.

Gothenburg, Kungälv

**BUSINESS CONCEPT** 

#### VISION

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



#### Owners

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

Sales of SEK

1730 miljoner kronor in 2022.

### **RENOVA GROUP LOCATIONS**

#### Gothenburg

Ale: Garage and waste bin handling.

Bönekulla: 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, Lerum interim storage, recycling Transshipment station. for companies.

Certified

systems

management

has a certified

environmental

The Renova Group

management system (ISO 14001:2015), as

well as certified quality

(ISO 9001:2015) and work environment

(ISO 45001:2018)

systems.

Mölndal Sävenäs: Waste-to-energy Transshipment station. plant, reception of hazardous waste and electronics, Stenungsund Renova's Education Cen-Kläpp: Transshipment, tre, 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.

Munkegärde: Transshipment, sorting, interim storage, recycling for companies.

## **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.



produced electricity.



#### Renova AB Box 156

SE-401 22 Gothenburg Sweden

Visiting address Gullbergs strandgata 20-22 SE-411 04 Göteborg

Tel. +46 (0)31-618 000 E-mail info@renova.se Org. no. 556108-3337

renova.se

# 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 Miliö 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

#### **REDUCD 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-toenergy plant produces carbon dioxide (CO2). About 40 percent is carbon dioxide of fossil origin. To reduce emissions of fossil carbon dioxide from the wate-to-energy plant, society needs to redus its plastic use and we all need to help source separate more plastic for reycling.

Renova's Board of Directors has a long-term ambition for the wasteto-energy plant to invest in carbon capture and storage (CCS) technology for flue gas treatment.

A feasibility study on the prerequisites for CCS will be made 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 hydrogenpowered fuel cells, and more are in the pipeline through collaborations with different suppliers.

The goal is that 30 percent of

#### **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 uppersecondary 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 Learning Center 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.

Renova's heavy vehicles to be

powered by electricity 2026.

**A WORKPLACE FOR EVERYONE** 

Within the field of social sustainabi-

work environment that enables our

employees to stay healthy throug-

hout their working life and after-

women employed.

LGBTQI issues.

everyone!

wards. One of Renova's long-term

goals are to increase the number of

Work for gender equality and

diversity is ongoing: New arrivals

with us through Jobbspår, waste

Language training in Swedish for

employees via our Language Lift.

In 2023, we set extra focus on

Renova will be a workplace for

and recycling, and we invest in

have received internships and work

lity, our focus is on delivering a



## Efficient plants with environmental benefits

#### WASTE-TO-ENERGY PLANT

Renova's waste-to-energy plant in Sävenäs is an advanced facility for the production of heating and electricity from waste incineration. The waste is incinerated in four furnaces and the thermal energy generated is subsequently converted into electricity and district heating.

More than 3 MWh of energy in the form of electricity and district heating is recovered from each tonne of waste incinerated. A total of 60 per cent of our electricity production is labelled as being of biofuel-based origin. Each year the plant supplies enough district heating to heat the equivalent of 130,000 apartments, and it supplies approximately five per cent of the electricity needs of Gothenburg's population.

The Sävenäs site also processes potentially biohazardous waste and other substances that should not be returned to circulation, and includes a reception facility for combustible

The flue gases produced during stages. A plant for recycling zinc that is in fly ash from the purification process will be put into operation in 2022.

The Sävenäs site is also home to the Renova Learning Centre, where field trips and training courses are held.

#### **PRE-TREATMENT OF BIOLOGICAL WASTE**

There is a pre-treatment facility for sorted food waste at Marieholm in Gothenburg. After being pulverised, compressed, strained and mixed with liquid food waste, the final product is a slurry suitable for use in biogas production.

Garden waste is also composted at the site in Marieholm. The resulting nutrient-rich compost is used in the production of various soil mixtures.

#### **HAZARDOUS WASTE AND ELECTRONICS**

Our plant in Sävenäs receives, sorts and temporarily stores hazardous waste. The waste is then processed by Renova or transported to one of our partners for recycling, destruction or safe storage.

Renova also sorts around half of all small batteries collected from households in Sweden, and receives, sorts and cleans up electronic waste to enable it to be recycled. We also have a pre-treatment facility to process hazardous waste at our site Rödingen. Here, liquid hazardous waste is mixed with structural material in preparation for energy recovery.

#### SORTING

Our sorting facilities accept waste for sorting from businesses, construction sites, etc. Recycling centres for businesses are also located here.

Recyclable materials are recovered for use in new products, while anything that is unsuitable for material recovery is crushed and used in energy recovery. The residual fraction is sent to landfill. Our sorting facilities also provide interim storage for recyclable material prior to it being transported to various

recycling companies.

#### **PRE-TREATMENT FACILITY FOR** HAZARDOUS WASTE

Our site at Rödingen, close to Skräppekärr in Gothenburg we ar pre-treating liquid hazardous waste by mixing the liquid with structural material in preparation for energy recovery.

baling facility, used predominantly for corrugated cardboard.

hazardous waste and classified waste.

incineration are cleaned in several

At our Rödingen site we also have a

#### **CENTRE FOR MASS RECYCLING**

At our facility Fläskebo you will find our centre for stone, brick and concrete recycling. We recycle aggregates, concrete and asphalt from, among other things, excavated fill.

We also produce topsoil from suitable excavated fill and stone is sorted out for reuse.

Our goal is that ss much material as possible should go back to the community to be used anew.

#### LANDFILLS

At our Fläskebo landfill site, we offer landfill services for non-combustible industrial waste and contaminated soil, as well as some types of hazardous waste.

Our landfill site at Tagene accepts materials such as inert waste, asbestos and non-combustible waste. Bottom ash (slag) from waste incineration is also sorted here and metals are extracted. Any residual product is used as construction material. This site is also used for the interim storage of various materials, including, for example, combustible waste.

#### TRANSSHIPMENT STATIONS

To reduce the number of waste shipments required, Renova reloads household waste and food waste into larger vehicles for shipment to energy recovery facilities or plants that process food waste. The transshipment stations are strategically located throughout the region.

#### WORKSHOP AND TRUCK/CAR WASH

Renova's maintenance workshop repairs and maintains vehicles, containers and waste handling equipment for internal and external customers. We also have heavy vehicle wash equipment, enabling us to offer ecofriendly vehicle washing.