

# CASE STUDY *The Sysav Energy-from-waste Facility in Malmö, Sweden*

*This is one of many case studies similar to the Western Sydney Energy and Resource Recovery Centre proposal.*



The Sysav Energy from Waste plant in Malmö is one of the most energy-efficient facilities in Sweden. It is one of the world's most advanced plants for combustion of waste and its gas cleaning systems.

The facility commenced in operation in 1973 and was upgraded with additional boiler capacity in 2003 and 2008, enabling both electricity and district heating to be produced for residents.

## Proximity to residential areas

The closest residential area is approximately 1 kilometer from the site, with greenspace separating the residential area from the industrial area.



The facility is located in the industrial dock area near Hamnen, a port city, located on the outer suburbs of Malmö.

## How does the community benefit?

Waste that comes into the plant is sorted and recycled. The recycling centre has an educational focus and Sysav has had more than two million visits to its recycling centers across Sweden.

The Sysav group invites the community to take study tours of its facilities and almost 3,100 community members participated in 2017. Over 3,000 school students have participated in the tours.

The site operations team collaborates locally and regionally with universities and colleges on energy and waste research projects.

## What sort of waste is managed?

This facility provides sorting, recycling, storage and composting to ensure landfill is only used as a final resort. The centre converts thousands of tonnes of residual household and business waste into energy, which otherwise would have gone to landfill.

## What happens on site?

Pre-sorted, combustible, household and industrial waste is received at the plant from the southernmost region in Sweden. The waste is carefully combusted, passing through a heat exchanger, where steam is produced, and generated into electricity.

An advanced cleaning process as part of the new plant, passes the gas particles through a 'scrubbing' process returning the gas to water, which acts as the source for a heat pump, producing and capturing the district heat for the local area.

## Key Statistics:

### Material to be processed

Household waste along with combustible waste from businesses.

Waste management capacity

**630,000**  
tonnes per year



### Energy produced

The facility produces up to 60 MW electricity and up to 135MW of district heating, directly exported to the grid.

Electricity approx:

**53,000 homes**

District Heating:

**70,000 homes**



Reporting of emissions data

Daily and monthly air emission reports are provided.

Meeting European standards



The plant is classified as energy recovery in line with the EU policy on waste.