CASE STUDY  The Filbornaverket energy-from-waste facility, Sweden

Öresundskraft started operating the Filbornaverket energy-from-waste facility in early 2013. The facility takes waste, that cannot be reused or recycled, from households, industry and business to generate steam, district heating and electricity. This provides a long-term, environmentally responsible waste management solution.

How does the community benefit? The Filbornaverket makes a positive contribution to the community. Besides generating approximately 400 jobs and improving the local economy, the facility is an important local source of electricity. The facility avoids the needs to transport waste (by truck) from this locality to other places in Sweden, saving on greenhouse gas emissions. Filbornaverket is also an important source of heating for the district – some 4.7 kilometres of pipeline has been built to transfer heat to the local community.

What sort of waste is managed? The facility converts thousands of tonnes of residual household, industry and business waste, which otherwise would have gone to landfill, into energy. Each year more than 200,000 tonnes of waste is combusted with a thermal efficiency of 98%.

What happens on site? Up to 50 trucks deliver non-recyclable waste to the facility each day. Similarly to WSERRC, the waste is sorted, separating out recyclable items and hazardous waste. The boiler uses the fuel created by residual waste. Of the 100-degree heat inside the boiler, 100 percent is utilised and becomes electricity and hot water, which are then used to heat industries and homes. Ash and metal products remain at the end of the combustion process. The metals are extracted and recycled, and the final ash is transported for disposal.

Proximity to residential areas The nearest residential area is the suburb of Annerovägen. The unit blocks are approximately 1.6 kilometres away from the facility.

The site is located on Hjortshögsvägen, Helsingborg, about 5 kilometers from Helsingborg’s urban facility.

Key Statistics:

Material being processed Municipal, industry and business waste.

Waste management capacity 200,000 tonnes per year

Energy produced The facility produces up to 18MW of electricity, 60MW heating.

Heating water and electricity: 6,000 villas (40,000 apartments approximately)

Reporting of emissions data Emissions data is published annually as part of their Yearly Sustainability Report.

Meeting European standards The plant achieves very low emissions levels - approximately half the limits provided by the Industrial European Directive and the Swedish regulatory requirements.