

## Waste-to-energy plant

*The combined heat and power (CHP) plant in Lisbjerg in the north of Aarhus incinerates household waste as well as industrial waste and transforms it into power and heat, delivering 20% of Aarhus municipality's district heating.*

The plant is characterised by its remarkable architecture and highly efficient energy product and flue gas cleaning.



Source: AffaldVarme Aarhus

### WASTE MANAGEMENT

The plant is part of the Waste Centre Lisbjerg, which is constituted by a recycling center, including several smaller waste management facilities. It handles both hazardous waste, construction and garden waste. A new biomass fired CHP plants is also part of the complex. The plant was put into operation in 1978 and has been expanded and renovated several times since. The latest addition was added in 2004, when a new and much more efficient furnace line was built.

### DISTRICT HEATING

Waste-to-energy plants are known in other countries, but in Denmark the efficiency is very high because the heat can be used in the district heating system. The concept and technology of district heating is unknown in many countries, which makes it interesting to visit a state-of-the-art plant like this.

The plant is fully owned and operated by the Municipality of Aarhus.

### FACTS:

- The efficiency of the plant is around 95%.
- It contains 3 furnace lines.
- The silo can hold more than 10,000 m<sup>3</sup> of waste.
- Operates 24/7 – 365 days a year - apart from maintenance periods.
- Incineration: App. 254,000 tons (around 31 tons an hour)
- Slag: Around 18-20% of the incinerated waste
- Electricity generation: App. 147 GWh
- Heat generation: App. 634 GWh

### PARTNERS:

Architects	<a href="#">Friis &amp; Moltke Architects</a>
Coordinating contractor	<a href="#">COWI</a>
Boiler & flue gas cleaning	<a href="#">Steinmüller Babcock</a>
SCADA system	<a href="#">FLSmidth</a>
Turbine system	<a href="#">MAN Energy Solutions</a>
Crane system	<a href="#">Konecranes</a>
Buildings – concrete	<a href="#">JME</a>
Buildings – steel	<a href="#">Promecon</a>

**FOR VISITOR REQUESTS – CONTACT:**  
[gogreendelegationservice@aarhus.dk](mailto:gogreendelegationservice@aarhus.dk)

**FOR SITE-SPECIFIC INFORMATION – CONTACT:**  
**Erik Vilstrup Sørensen**  
Project Manager  
AffaldVarme Aarhus  
E-mail: [ervs@aarhus.dk](mailto:ervs@aarhus.dk) // Phone: +45 2117 0059