

Historical milestones

- 1994/95 Environmental Impact Assessment (EIA)
- 1995 Submission of EIA documents
- 1997 Official hearing with authorities
- 1999 First instance permit
- 2001 Second instance permit
- 2004 Final approval
- 2007 Start of the construction
- 2008 Pressure test of the boiler
- 2009 First incineration

Technical specifications

Combustion equivalent	57MW
Waste categories	Domestic and equivalent industrial waste
Waste capacity	146.000 tpa
Calorific value of waste	11,5 MJ/kg
Power supply	100.000 MWh/a
Slag	35.000 tpa
Ash	7.000 tpa
Operation time per year	8.000 hours
Investment	about 90 Mio. €

About the company

.A.S.A. was established in Austria in 1988 and has become one of Europe's leading companies in the waste management sector. The majority owner is the leading Spanish infrastructure and environmental services company **FCC** (www.fcc.es).

.A.S.A. offers a broad spectrum of services to municipalities, industrial and commercial companies, as well as to individuals in the field of urban services. Our goal is to secure sustainable quality of life for the present and future generations by minimizing environmental impact thanks to the continuous investment in clean technologies. A workforce of more than 4.400 employees is responsible for the smooth running of all its operations.

Waste management – waste to resources

.A.S.A. collects and treats municipal waste from more than 4,7 million residents and 1,6 million tons of commercial and industrial waste from more than 84.000 municipal, industrial and commercial customers in eight countries in Central and South-Eastern Europe.

We see waste as a resource. From the moment collected by our trucks, waste is brought into an integrated waste management system where available technologies for recycling and recovery are embedded. Waste to energy is part of a comprehensive concept and final stage to recover at least energy according European directives. Part of this concept is also treatment of biodegradable materials and processing of sorted out valuable materials to save natural resources.

Provider of smart citizen services

Our company improves the living conditions in towns and cities by providing a wide range of municipal services to keep the streets cleaner and cities greener without any ecological burden or danger for the future.

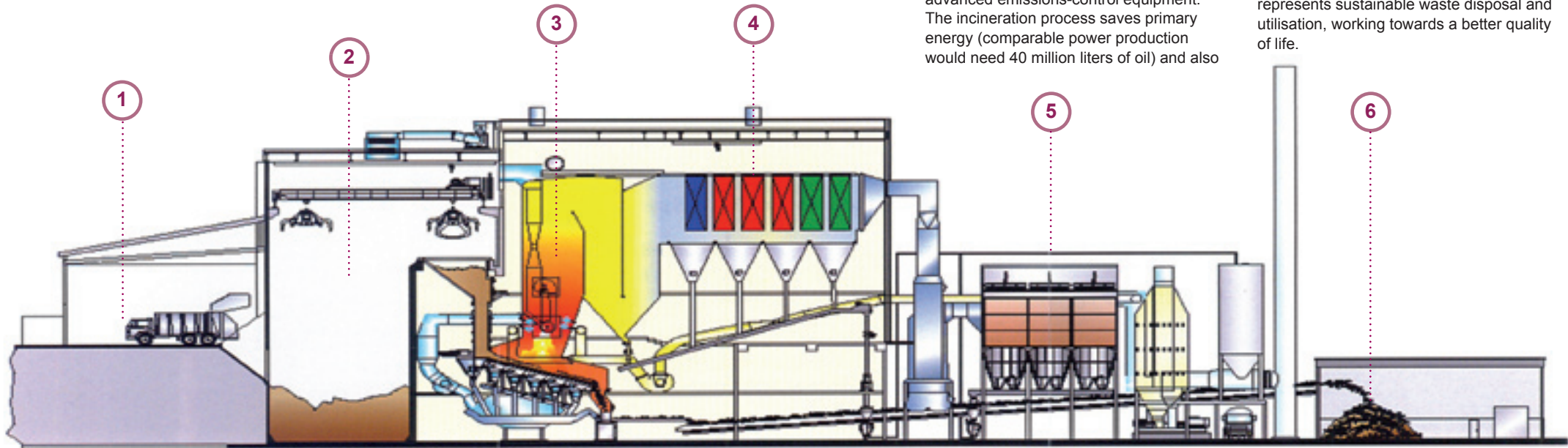
.A.S.A. Waste-to-Energy

Plant Zistersdorf



Waste-to-Energy Plant Zistersdorf

Scheme of the combustion process



.A.S.A.'s modern waste-to-energy facility in Zistersdorf uses residential and commercial (industrial) solid waste as a fuel to generate electricity in almost the same way as traditional power plants produce energy. It is a highly efficient process.

The waste-to-energy plant converts trash to energy through controlled combustion, using advanced emissions-control equipment. The incineration process saves primary energy (comparable power production would need 40 million liters of oil) and also

produces resources needed in the steel industry (removal of scrap).

The impact on the environment is minimized thanks to the use of railway transport to deliver the input material, effective cleaning of flue gases, no effluents and less usage of potable water.

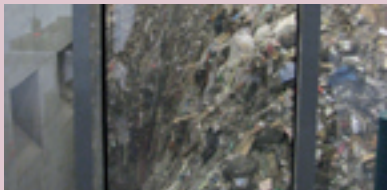
.A.S.A.'s waste-to-energy plant in Zistersdorf represents sustainable waste disposal and utilisation, working towards a better quality of life.



1 Delivery and incineration

Acceptance of 600 tons of waste per day, up to 70% of it delivered by railway. The volume reduction of the waste is up to 90% and mass reduction of about 70%. Therefore the plant saves volumes disposed on landfills and provides a clean alternative to fossil fuels.

2 Bunker



Storage of 4.000 tons waste, which represents the capacity for one week.

3 Grate kiln



Incineration of 18t/h waste on a water cooled grate kiln.

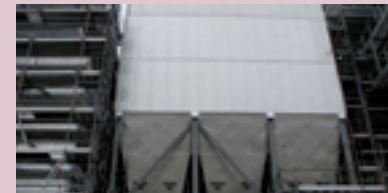
4 Steam boiler

The combustion process converts waste to steam. Production of 68t/h steam with 405°C and 42 bar. Steam drives a turbine to produce electricity.

Turbine

Production of 15MW electricity with 20kV capable of powering 30.000 households.

5 Offgas cleaning



Dry offgas cleaning and pollution control system with activated adsorption, bag filter and NOx reduction clean emissions.

6 Slag stock



Unburned metals are recycled (about 35.000 tons a year). Scrap is used in the steel industry.