

## Historical milestones

- **94/95** 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	57 MW
Waste categories	Domestic and equival. industrial waste
Waste capacity	162.500 tpa
Calorific value of waste	10,5 MJ/kg
Power supply	106.000 MWh/a
Slag	45.000 tpa
Ash	7.000 tpa
Operation time per year	8.300 hours
Investment	about 90 Mio. €



## About the company

FCC Environment CEE, formerly .A.S.A. Group, was founded in Austria in 1988 and has become one of Europe's leading companies in the waste management industry. The majority owner is the leading Spanish infrastructure and environmental services company FCC ([www.fcc.es](http://www.fcc.es)).

A workforce of more than 4.000 employees provide a wide range of services using our know-how especially in the following areas:



## From waste to resources

We collect and treat municipal waste from more than 4.2 million residents and 5.1 million tons of commercial and industrial waste from more than 54.000 municipal, industrial and commercial customers in 7 countries in Central and South-Eastern Europe.

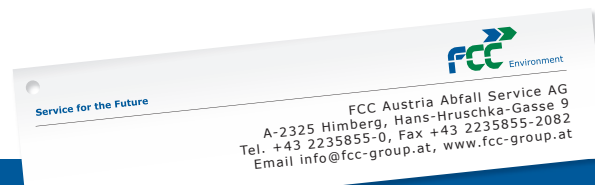
We treat **waste as a resource**. From the moment it is collected by our trucks, all waste enters an integrated waste management system utilizing state-of-the-art recycling and recovery technologies.

Waste-to-energy is the final level of any comprehensive waste management system. Using our facilities, we are able to recover energy from residual and commercial waste as prescribed by EU regulations. A further part of the system is the treatment of biodegradable materials and the processing of separated secondary raw materials with the aim to save natural resources.

# Waste Processing & Resource Recovery

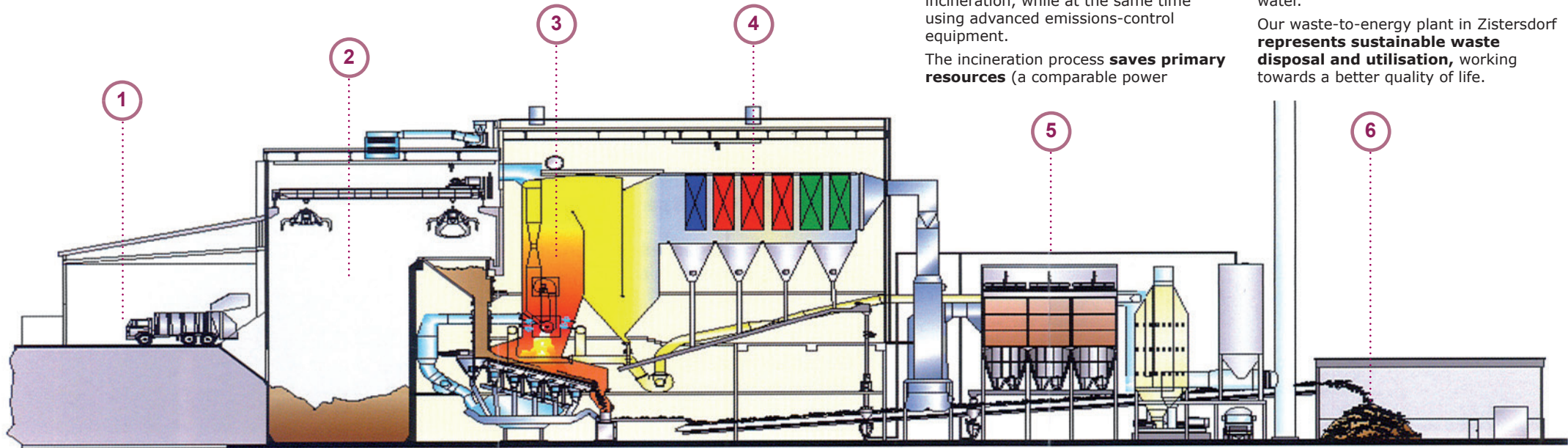
## WASTE-TO-ENERGY

Plant Zistersdorf



# Waste-to-energy Plant Zistersdorf

Scheme of the combustion process



Our modern incineration facility in Zistersdorf **uses municipal and commercial (industrial) solid waste as fuel to generate electricity** in almost the same way a traditional power plant produces energy. It is a highly efficient process.

The waste-to-energy plant converts waste to energy through controlled incineration, while at the same time using advanced emissions-control equipment.

The incineration process **saves primary resources** (a comparable power

production would need 40 million liters of oil) **and also produces raw materials** needed in the steel industry (recovery 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.

Our waste-to-energy plant in Zistersdorf **represents sustainable waste disposal and utilisation**, working towards a better quality of life.

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## 1 Delivery and incineration

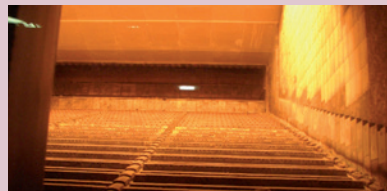
Acceptance of 600 tons of waste per day, up to 70% of it delivered by railway. The volume reduction of the waste is up to 90% and mass reduction of about 70%. Therefore the plant saves volumes disposed on landfills and provides a clean alternative to fossil fuels.

## 2 Bunker



Storage of 4.000 tons of 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



3.000 tons/year of metals are recycled from the bottomash (45.000 tons/year).