

Highly efficient thermal recycling technology

# Waste to Energy system

## Characteristics

Hitachi Zosen has engaged in the construction of **990** waste incineration facilities.

The cumulative amount of waste disposal capacity of all facilities is over **120,000 ton/day**.

The cumulative power generation capacity exceeds **4,500 MW**.

## Summary

The system employs a sustainable and a recyclable technology in which a boiler efficiently absorbs the heat generated during waste incineration, and a steam turbine and power generator convert the heat into electric power. Depending on the quality of the waste to be incinerated, the following effects can generally be expected: (1) Harmful substances and bacteria are detoxified by burning at a high temperature of about 1,000 degrees. (2) Weight of waste is reduced by 70-85% and volume is reduced by 90-95%, which can surprisingly extend the life of existing landfills. (3) 1-ton of waste can generate 400-800 kWh electricity as a by-product of treatment.

### Suginami Incineration Plant (Tokyo)

Waste disposal capacity: 600t/d (300t/d x 2)

Maximum power generation capacity: 24,000 kW

Start-up year: 2017

Feature: Located in the heart of residence area in Tokyo.



### Changsha (China)

Waste disposal capacity: 5,100t/d (850t/d x 6)

Maximum power generation capacity: 100,000 kW

Start-up year: 2018

Feature: One of the largest facilities in the world.



### Nam Son (Hanoi, Vietnam)

Waste disposal capacity: 75t/d

Maximum power generation capacity: 1,930 kW

Start-up year: 2017

Feature: First WtE plant to incinerate industrial waste in Vietnam.



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