

Examples of Waste-to-Energy Facilities in Europe and Japan

Europe has 400 waste-to-energy facilities, and Japan has 100. Here are five examples of waste-to-energy facilities found in densely populated cities.

1. Spittelau Waste-to-Energy Facility, Vienna, Austria



- Located in the heart of Vienna
- Population of metropolitan area is 2.1 million
- Building Architect: Friedensreich Hundertwasser
- Operating since 1971
- Plant capacity is 250,000 tonnes/yr of municipal solid waste
- Produces 60 MW of heat energy used for district heating and 5 MW of electricity used internally with excess sold to the grid.
- 200,000 dwellings and 4,400 industrial consumers are supplied with district heating
- Air emissions controlled using state-of-the-art equipment



2. Maishima Waste-to-Energy Facility, Sports Island, Osaka, Japan



- Located on a constructed island at the mouth of the Yodo River in Osaka Bay.
- Population of metropolitan area is 17,500,000
- Building Architect: Friedensreich Hundertwasser
- Operating since 2001
- Plant capacity is 328,000 tonnes/year of municipal solid waste
- Produces 32 MW of electricity. Surplus electricity sold to the local power company
- Heat is used on site for floor heating, hot water and heating combustion air
- Air emissions controlled using state-of-the-art equipment



3. Naka Waste-to-Energy Facility, Hiroshima, Japan



- Population of metropolitan area is 2.9 million
- Building Architect: Yoshio Taniguchi
- Also a museum and waterfront park
- Operating since 2004
- Plant capacity is 220,000 tonnes/year of municipal solid waste
- Produces 15 MW of electricity. Surplus electricity is sold to the local power company
- Heat is used on site and hot water is supplied to a neighbouring indoor pool
- Air emissions controlled using state-of-the-art equipment

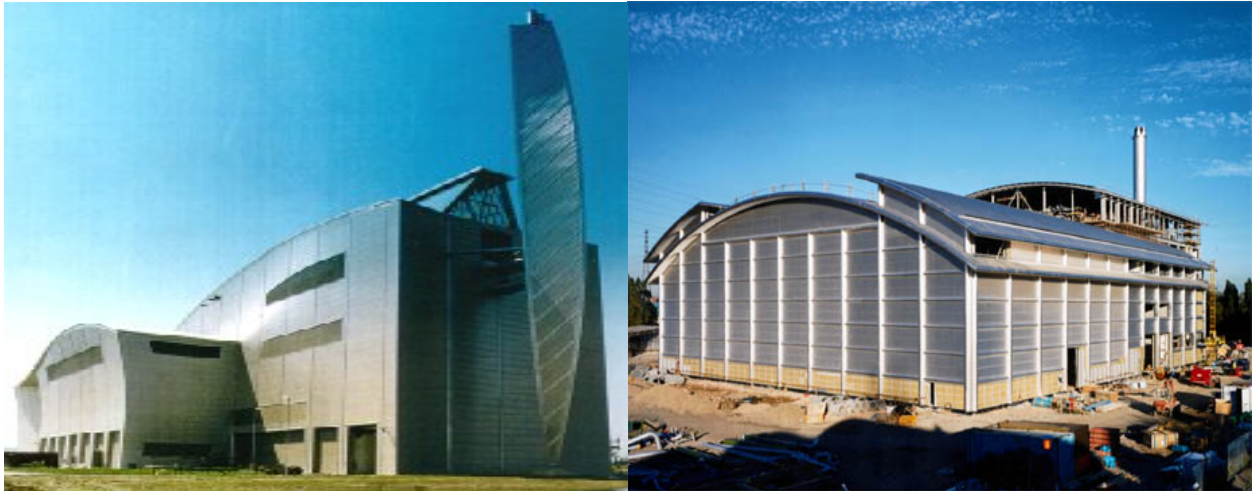


4. VESTA Waste-to-Energy Facility, Rouen, Normandy, France



- Located on a former shipyard in an industrial area on the shore of the River Seine in the City of Rouen
- Population of metropolitan area is 520,000
- Building Architect: Claude Vasconi
- Operating since 2001
- Plant capacity is 325,000 tonnes/year of municipal solid waste and nuisance waste
- Produces 32 MW of electricity. Surplus electricity is sold to the local power company
- Air emissions controlled using state-of-the-art equipment

5. Beckton and Crossness Waste-to-Energy Facilities, London, England



Crossness

Beckton

- Located on the site of the Crossness and Beckton WWTPs in London, England
- Surrounding land use is industrial
- Population served is 5 million
- Operating since 1998
- Total capacity of both plants is 373,000 tonnes/year (122,000 dry tonnes) of sewage sludge
- Produce 15.5 MW of electricity. Surplus electricity is sold to the local power company
- Air emissions controlled using state-of-the-art equipment & meet the most rigorous European standards