

# Factsheet

## Baoan Waste-to-Energy Facility, Shenzhen

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1. Baoan WTE Facility
2. Keppel Seghers in China
3. Waste-to-Energy



Baoan is a district of Shenzhen.

Shenzhen is located in Guangdong Province (directly north of Hong Kong), China.

Shenzhen is known as China's Silicon Valley.

WTE = Waste-to-Energy or Energy-from-Waste.

## Baoan Waste-to-Energy Facility

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- Upon completion of Phase III, the Baoan WTE facility will be the largest in the world in terms of incineration capacity.
- The facility is owned and operated by Shenzhen Energy Environment Engineering.
- Keppel Seghers and Shenzhen Energy Environment Engineering started their collaboration in 1999. To date, the company has awarded 18 WTE lines to Keppel Seghers.
- The WTE technology employed in Baoan Phase III is among the most advanced in the world.
- The operational lines at the Baoan WTE facility are world-class in terms of performance and reliability.
- Baoan Phase II was conferred China's prestigious national high quality project gold award in 2014. It was the first project in Shenzhen to win the award.



Baoan Waste-to-Energy Facility



## Baoan Waste-to-Energy Facility

The Baoan WTE facility's waste processing capacity is three million tonnes per year.

Piling up the waste processed by the plant over that period on a soccer pitch will result in a 2km high tower.



## Baoan Waste-to-Energy Facility



The Baoan WTE facility's waste treatment capacity is 2.3 X the total operational WTE capacity in Flanders (Belgium).



## Baoan Waste-to-Energy Facility



Every hour, the facility receives 46 waste trucks

## Baoan Waste-to-Energy Facility



### Energy production

1 000 000 citizens

4 000 000 light bulbs (40 W each)

Equivalent to 700 000 tonnes of coal / year



## Baoan Waste-to-Energy Facility



CO<sub>2</sub> reduction

2 000 000 tonnes / year

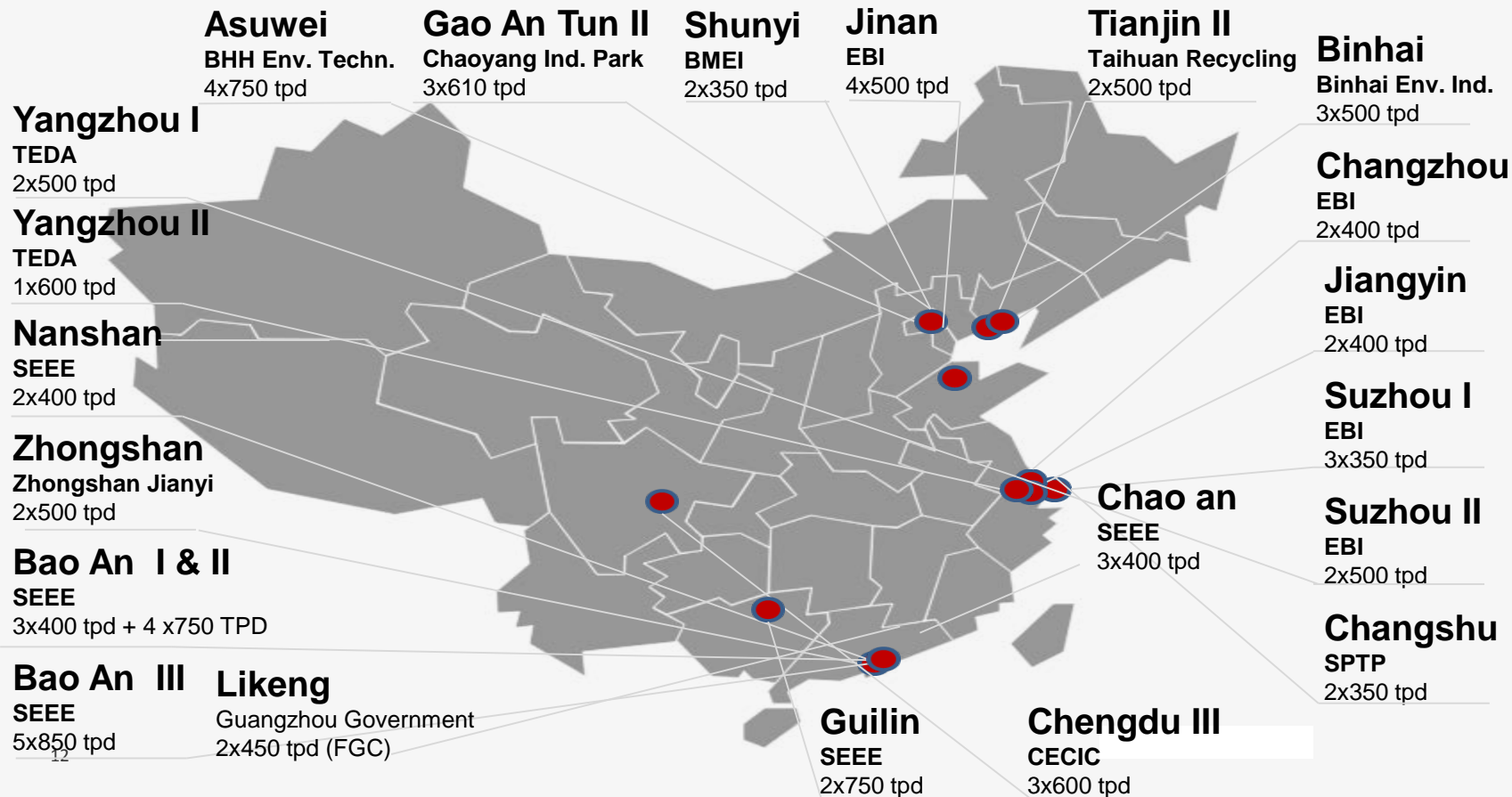
# Keppel Seghers in China

## Keppel Seghers in China

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- Keppel Seghers is the leading provider of imported WTE solutions in China.
- Keppel Seghers' proprietary technology powers 56 WTE lines in China.
- Keppel Seghers' business model in China is to supply the core equipment of the plants. The non-core components are sourced locally according to the design of Keppel Seghers.

## Keppel Seghers in China: WTE References

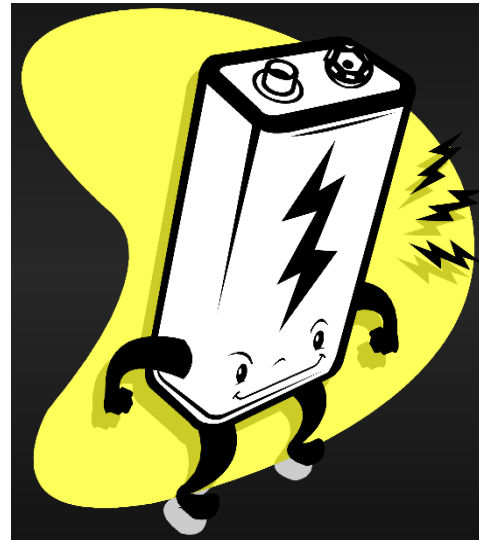






### Treated Waste

- ✓ 10 000 000 tonnes / year
- ✓ 20 000 000 citizens
- ✓ 24 bags of waste / second



### Energy Produced

- ✓ 3 000 000 citizens
- ✓ 13 000 000 light bulbs (40W each)

# Waste-to-Energy

## Waste-to-Energy

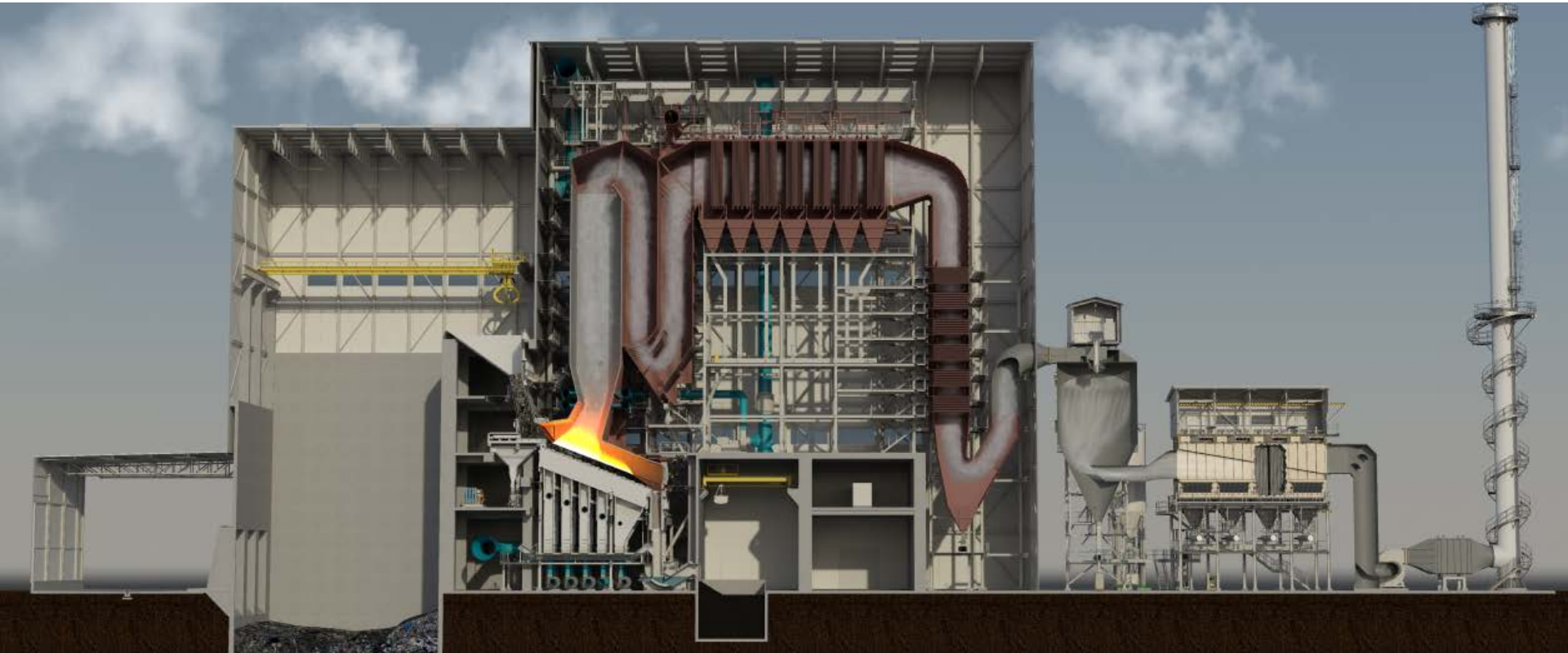
- WTE is the most environmentally friendly method of processing residual waste since it reduces land occupation (landfilling) and provides a meaningful outcome for waste (=energy production).
- Forms an essential part of a sustainable waste management chain.
- Fully complementary to recycling by recovering energy from unrecyclable waste.
- Recovers significant amounts of ferrous and non-ferrous metals.
- Removes toxic substances from the eco-cycle.
- Generates valuable and sustainable electricity and heat, of which 50% is recognised as renewable, and the other 50% is derived from recovered energy sources that would be lost otherwise.
- Reduces carbon footprint of human activities thanks to: a) reduced methane emissions from landfill (methane has 28x higher global warming potential than CO<sub>2</sub>), b) offsets the use of fossil fuels for energy production and c) recovery of materials.
- Allows up to 95% landfill diversion rate.
- Helps diversify energy sources and increases independence of energy supply.
- Reliable European technology from Keppel Seghers.

More information about WTE

[www.youtube.com/watch?v=\\_7SsOuGwUKQ](https://www.youtube.com/watch?v=_7SsOuGwUKQ)

[www.eswet.eu](http://www.eswet.eu)

Source = European Suppliers of Waste-to-Energy Technology, [www.eswet.eu](http://www.eswet.eu)





## General Information

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### Keppel Seghers

[www.keppelseghers.com](http://www.keppelseghers.com)

### Shenzhen Energy Environment Engineering (owner of the Baoan WTE Facility)

[www.seeccn.com.cn/Enbusiness.html](http://www.seeccn.com.cn/Enbusiness.html)

### Information about Keppel Seghers or information in French, Dutch and Polish:

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