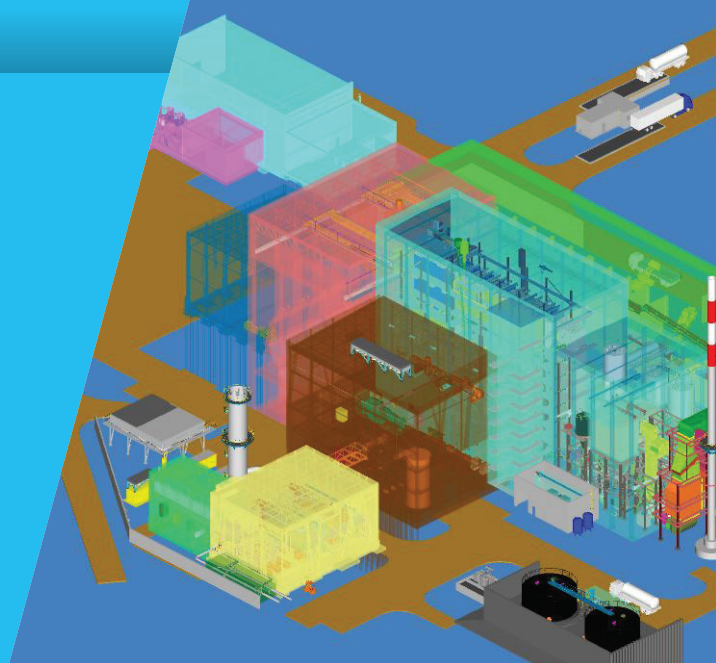


PROJECT PROFILE: Waste-to-energy, Poland

# Olsztyn

## Waste-to-energy



Doosan Lentjes was selected to supply the new waste-to-energy plant in Olsztyn, Poland, together with its consortium partner and parent company, Doosan Heavy Industries & Construction. The scope of Doosan Lentjes' work in the turnkey project will include the design, delivery, erection and commissioning of the complete mechanical & electrical part.

### DELIVERABLES

- One incineration process line with water-cooled counter-reciprocating grate, boiler, flue gas cleaning (Circoclean® & SCR) and stack
- Waste reception and handling
- Bottom ash handling system
- Water-steam-cycle
- Entire E/I&C system
- Balance of plant
- Complete peak load boiler system with two gas-fired units

### CHALLENGES

- Short-term installation of peak load boilers
- Tight schedule, with completion of the construction phase scheduled for mid 2023

### BENEFITS

- Internationally experienced main contractor
- Turnkey solution from one source with reduced interfaces
- Doosan Lentjes has sound experience in the field of WtE on the Polish market
- Local experience with flue gas cleaning and gas & steam projects
- Full compliance with revised BREF requirements
- Attractive architecture

# Enhancing the waste management infrastructure in Poland

The consortium of companies consisting of Doosan Lentjes and Doosan Heavy Industries & Construction was selected by the plant operator, Dobra Energia, to build the new WtE plant in Olsztyn, Poland. Plant owner is the local energy supplier, MPEC Olsztyn.

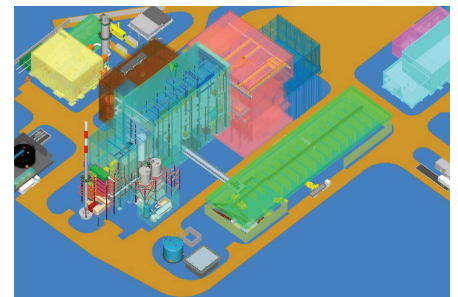
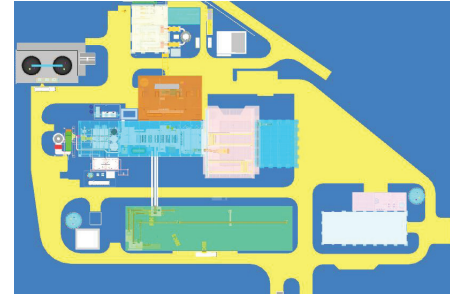
The turnkey plant will be delivered including civil works and two gas-fired peak load boilers for the district heating supply. Once in operation, the new facility will recover valuable energy from local residents' waste using the tried and tested water-cooled counter-reciprocating grate.

Olsztyn will be the first WtE project jointly supplied by Doosan Lentjes and its parent company Doosan Heavy Industries & Construction. The customer thus benefits

from an interface-optimized WtE solution from a single source that combines many years of advanced technology and international EPC experience.

By using Doosan Lentjes' proven dry Circoclean® flue gas cleaning technology, the plant will fully comply with the emission limits according to the revised BREF (Best Available Techniques Reference) documents.

The new plant in Olsztyn will be a milestone in the improvement of the waste management infrastructure in Poland. It is the eighth plant of this type to be built in the country and it is crucial for achieving the goals of the EU waste hierarchy, which prefers recovery of energy from waste to conventional landfill.



## Key Project Data

|                                  |  |
|----------------------------------|--|
| <b>Final customer</b>            | MPEC (Miejskie Przedsiębiorstwo Energetyki Ciepłej Spółka z o.o. in Olsztyn) |
| <b>Plant operator</b>            | Dobra Energia dla Olsztyna sp. z o.o.  |
| <b>Location of power station</b> | Olsztyn, Poland  |
| <b>Award date</b>                | 2020   |
| <b>Main fuels</b>                | Refuse derived fuel (RDF)  |
| <b>Total plant capacity</b>      | 110.000 t/a , max. 15,1 t/h throughput per unit                              |
| <b>Number of lines</b>           | 1  |
| <b>Thermal capacity</b>          | 48 MW <sub>th</sub>  |
| <b>Power generation</b>          | 12 MW <sub>e</sub>   |
| <b>Heating value</b>             | 11,5 MJ/kg   |
| <b>Steam pressure</b>            | 65 bar   |
| <b>Steam temperature</b>         | 420°C  |



## Doosan Lentjes GmbH

Daniel- Goldbach-Str. 19  
40880 Ratingen, Germany

Tel: +49 (0) 2102 166-0  
Fax: +49 (0) 2102 166 2500

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

Doosan Lentjes is a global provider of processes and technologies for energy production from both sustainable and conventional fuels. Our specific areas of expertise include circulating fluidised bed boilers, key technology for the generation of energy from waste and sewage sludge, as well as, flue gas cleaning systems. We have been pioneering energy solutions for 90 years and convert millions of tonnes of waste into valuable energy each year.

Doosan Lentjes is part of a powerful combination of companies united under the Doosan Group to deliver complementary technologies, skills and value to customers the world over.

Doosan Babcock

Doosan Lentjes

Doosan Škoda Power

NUCLEAR | BOILERS | TURBINES | WASTE TO ENERGY | AIR QUALITY CONTROL | SERVICE