



Solvay - Rheinberg

PowerCrop - Russi

Akuo Energy - CBN

JG Pears - Newark

Tilbury Green Power - London

Østkraft - Rønne

ENGIE Cofely - Biolacq Energies

ENGIE Cofely - BES VSG

ENGIE Cofely - SODC Orléans

Rothes CoRDe - Speyside

Zignago Power

ENGIE Cofely - BCN

Verdo Production - Randers

Western Wood Energy Plant

FunderMax - Neudörfel

Linz-Mitte

Boehringer Ingelheim

Best Wood Schneider

Swiss Krono - Heiligengrabe

Pfleiderer - Gütersloh

EPR Glanford - Scunthorpe

Pfleiderer - Neumarkt

Egger - Pannovosges

Aalborg Energie Teknik a/s (AET) Biomass Boiler Plant

ENGIE Cofely, SODC Orléans, France

The SODC Orléans plant supplies district heating for the northern part of Orléans. The district heating network covers 12,000 homes equivalent to 27% of the city of Orléans.

With the plant in operation, the energy bills were expected to be reduced by 28%.

The city of Orléans entrusted ENGIE Cofely with the design, construction and operation of the district heating network and cogeneration plant for the production of district heating and power.

The cogeneration plant is situated in the city centre and therefore most equipment is situated indoor and the buildings are designed by architects. The outer shape of the buildings show chestnut-coloured flames, which can be illuminated during night time.

The biomass (110,000 t/y) is sourced within a radius of 150 km and is based upon three resources: forestry products, residues from sawmills and clean, recycled wood.

Performance Test

The performance of the AET Biomass Boiler was successfully tested by Bureau Veritas in 2015:

- Boiler efficiency: 92.6%
- In-house power consumption: only 1.8% of fuel heat input (642 kW)
- Emissions well within the stringent, French standards.

The plant was completed and commissioned in 2015.

AET designed, supplied, constructed and commissioned the following scope:

- AET Fuel Dosing System
- [AET Combustion System](#) with AET Spreader Stoker and AET Biograte
- Oil burner
- [AET Biomass Boiler](#) with superheaters and economisers
- AET Combustion Air System
- AET Steam Air Preheaters
- Bag filter with lime injection system
- Flue gas system and stack
- Ash handling system
- Air compressor system
- Piping and ducting
- Insulation
- Structural steel for boiler
- Platforms and stairs
- Instrumentation
- PLC control system.

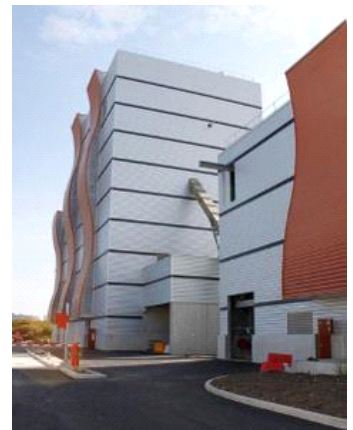
Additional Information

- Biomass has become a rapidly increasing energy source for ENGIE COFELY, which has experienced an increase in the number of projects using biomass, including SODC Orléans: [Read more](#)
- For more information about this biomass-fired plant and about AET: [Contact AET sales](#).

Boiler: 37 MW_{th}
122 bara
525 °C
Electrical power: ≤8 MW_e
Process energy: ≤25 MW_{th}



The biomass-fired CHP plant in Orléans was commissioned in 2015.



A view of the architecturally designed buildings of the SODC Orléans biomass CHP plant.



The SODC cogeneration plant uses wood from forestry, residues from sawmills and clean, recycled wood.



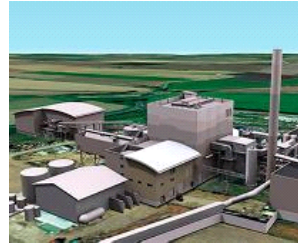
The Biolacq Energies project, in Lacq, is a biomass-fired CHP plant of 54 MW, that utilises forestry wood, and clean, uncontaminated residues from wood processing.

[Read more about Biolacq](#)



Tilbury Green Power is a 125 MW waste wood-fired plant, which commenced operations in 2017.

[Read more about Tilbury Green Power](#)



JG Pears – Newark is a 42 MW MBM-fired cogeneration plant, which commenced operations in 2018.

[Read more about JG Pears - Newark](#)



Akuo Energy - CBN is a 63 MW wood-fired cogeneration plant, which commenced operations in early 2019.

[Read more about Akuo Energy - CBN](#)

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Zignago Power s.r.l.—successfully producing Green Energy in Italy

The 49 MW Zignago Biomass power plant in Italy, owned and managed by Zignago Power s.r.l., belonging to the Marzotto family empire, has since its installation in 2013 been running with a very high availability (98.8%). The plant utilises wood residues and agricultural waste such as straw, miscanthus and maize. [>Read more](#)

