Solvay - Rheinberg
PowerCrop - Russi
Akuo Energy - CBN
JG Pears - Newark
Tilbury Green Power
Østkraft - Rønne
ENGIE - Biolacq Energies
ENGIE - BES VSG
ENGIE - SODC Orléans
Rothes CoRDe - Speyside
Zignago Power
ENGIE - BCN
Verdo Produktion - Randers
WWEP - Port Talbot
FunderMax - Neudörfl
Linz-Mitte
Boehringer Ingelheim
B.W. Schneider - Eberhardzell
Swiss Krono - Heiligengrabe
Pfleiderer - Gütersloh
EPR Glanford - Scunthorpe
Pfleiderer - Neumarkt
Egger - Pannovosges

Aalborg Energie Technik a/s Biomass Cogeneration Plant

ENGIE Cofely, BES VSG, France

DRT, a world leader in the development of resin and turpentine extracted from pine resin, receives steam from the Biomass Energy Solutions VSG (BES-VSG) plant.

The cogeneration plant is owned by a special project vehicle (SPV), which was created by DRT, ENGIE Cofely and Caisse des Dépôts. These partners have financed, built and now operates the cogeneration plant for a minimum of 20 years, utilising local biomass.

The plant produces 97 GWh of electricity/year and 214 GWh of steam/year without using fossil fuels. This reduces CO_2 emissions by 20,000 tonnes/year as the plant efficiency will be more than 60%.

The biomass-fired cogeneration plant has an annual fuel input of 150,000 tonnes of forestry wood, and uncontaminated residues from wood processing and DerTal. DerTal is a tall-oil and by-product from DRT.

Performance test

The performance of the boiler was successfully tested by Bureau Veritas in 2015:

- Boiler efficiency: 93.3%
- In-house power consumption: only 1.6% of fuel heat input.
- Emissions well within stringent, French standards.

The plant was completed and commissioned in 2015.

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

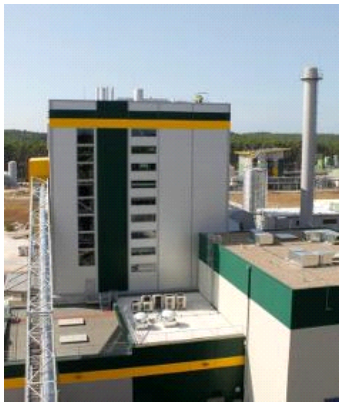
- AET Fuel Dosing System
- AET Combustion System with AET Spreader Stoker and AET Biograte
- Oil burner (Dertal)
- AET Biomass Boiler with superheaters and economisers
- AET Combustion Air System
- AET SNCR DeNOx System
- AET Steam Air Preheaters
- Bag filter with lime injection system
- Flue gas system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

Additional Information

- Biomass has become a rapidly increasing energy source for ENGIE COFELY, which has seen an increase in the number of projects using biomass, including the BES VSG project: Read more
- An article in Bioénergie International was published in Nov-Dec 2014: "A biomass boiler of 50MW from Aalborg Energie Technik delivered to DRT": Read more
- To obtain more information about this biomass-fired plant and about AET:

Boiler:	50MW_{th}
	120 bara
	525 °C
Electrical power:	≤17 MW_e
Process energy:	≤25 MW_{th}

The BES VSG boiler plant.



BES VSG plant.

Contact AET sales.

LATEST COMMISSIONED PROJECTS

> GO TO ALL BIOMASS PROJECTS

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, mischantus and maize. >Read more

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