



Biomass-fired Plants

Solvay - Rheinberg

PowerCrop - Russi

Akuo Energy - CBN

JG Pears - Newark

Tilbury Green Power

Østkraft - Rønne

ENGIE - Biolacq Energies

ENGIE - BES VSG

ENGIE - SODC Orléans

Rothés CoRDe - Speyside

Zignago Power

ENGIE - BCN

Verdo Produktion - Randers

WWEF - Port Talbot

FunderMax - Neudörfel

Linz-Mitte

Boehringer Ingelheim

B.W. Schneider - Eberhardzell

Swiss Krono - Heiligengrabe

Pfleiderer - Gütersloh

EPR Glanford - Scunthorpe

Pfleiderer - Neumarkt

Egger - Pannosvosges

Service and O&M

Swiss Krono - Heiligengrabe

Aalborg Energie Teknik a/s Biomass Cogeneration Plant

Akuo Energy - CBN, Novillars, France

The biomass-fired cogeneration plant was constructed at the Gemdoub's Paper Mill in Novillars, Eastern France.

The biomass-fired cogeneration plant was developed by Akuo Energy and is located at the Gemdoub's paper mill under the project name Cogénération Biomasse de Novillars (CBN). The plant is fuelled with wood and sawmill residues sourced within a radius of 100 km from the plant.

Gemdoub's interests were to reduce and stabilise cost of energy by substituting gas with biomass and to continue the strengthening of its green profile. The drivers for Akuo Energy were to accomplish the project, initially started in 2007, to continue the build-up of their biomass business unit, to pursue the CRE 4 tender for projects with high efficiency (60%) and to create local jobs.

On a yearly basis, the CBN plant generates 153 GWh of green electricity equivalent to the annual consumption of 105,000 people and 215,000 tonnes of steam, which was previously produced on fossil fuels. In total, the CO₂ emission is reduced by 77,000 t/year.

Technology, EPC and O&M by AET

AET was chosen as technology supplier and EPC contractor due to our many successful reference plants with the AET Combustion System and AET Biomass Boiler installed. These systems operate with low flue gas emissions and high efficiencies. This meant, that the selection of AET was a safe decision for Akuo.

As AET also has solid references on EPC and O&M, the advantage of placing these contracts with the technology supplier was utilised.

In this way, the risk for the investors (Akuo Energy, Caisse des Dépôts, CAM Energie, Gemdoub's, Crédit Agricole) was considerably reduced, as the number of interfaces and handovers were reduced.

As turnkey supplier, AET designed, supplied, constructed and commissioned the following scope:

- Fuel feeding and AET Fuel Dosing System
- [AET Combustion System](#) with AET Spreader Stoker and AET Biograte
- AET Combustion Air System
- Natural gas burner
- [AET Biomass Boiler](#) with superheaters and economisers
- [AET SNCR DeNOx System](#)
- AET Steam Air Preheaters
- Bag filter
- Flue gas system and stack
- Ash handling system
- Steam turbine generator set
- Air cooled condenser
- Water cooled condenser
- Water/steam system
- Water treatment plant
- Air compressor system
- Platforms and stairs
- Boiler house and turbine hall
- Instrumentation
- PLC control system and SCADA system
- 16½ year's operation and maintenance contract.

Boiler: 63 MW_{th}
122 bara
527 °C
Electrical power: ≤20 MW_e
Process energy: ≤24 MW_{th}



Lake view of the Akuo Energy - CBN.



The plant is under construction (OCT 2017).

Additional Information

- [Press release](#) with more detailed project information
- About Akuo Energy: [Read more](#)
- AET made a presentation at PowerGen Europe 2017 in Cologne on the topic: "Key Issues, Challenges and Investment Risk Considerations, when Building Biomass-Fired CHP Plant" with the CBN plant as a case study. For more information: [Contact AET sales](#)
- To obtain more information about this biomass-fired plant and AET: [Contact AET sales](#).

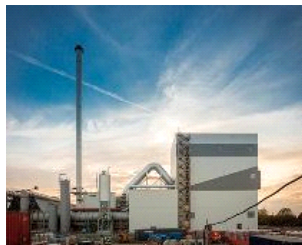
LATEST COMMISSIONED PROJECTS

[> 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 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.

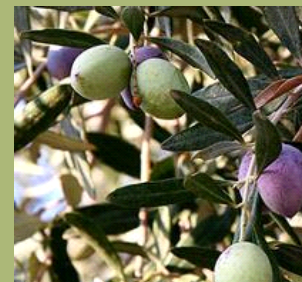
[Read more about Akuo Energy - CBN](#)

FOCUS ON

[> Read full Focus](#) [> Go to Archive](#)

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](#)



www.aet-biomass.com // [Home](#) // [References](#) // [Biomass-fired Plants](#) // [Akuo Energy - CBN](#)

[> Privacy and Cookie Policy](#) // [> Sitemap](#) // [> Terms of use](#) // © AET

Aalborg Energie Teknik a/s Alfred Nobels Vej 21 F 9220 Aalborg East, Denmark Tel +45 96 32 86 00 aet@aet-biomass.com