




VERY HIGH  
AVAILABILITY

AET biomass boilers and plants are designed for:

- High availability
- High efficiency
- High fuel flexibility
- Low maintenance costs

## AET Biomass Power Plants

AET designs and supplies turnkey biomass boiler plants with excellent and well-documented performance and availability.

The benefits of an AET plant include:

- I The unique [AET Combustion System](#)
  - » Low flue gas emissions
  - » High combustion efficiency
  - » Low in-house power consumption
  - » Best Available Technology
- I [High fuel flexibility](#)
  - » Lower operational costs
- I High boiler and plant efficiency
  - » Optimised heat balance
  - » Good customer business case
- I High availability
  - » Improved customer business case

Determining the optimal design for a biomass-fired power involves factoring in many different parameters such as optimum operating conditions, fuel, boiler, turbine, steam/water cycle etc.

AET can assist you in optimising the plant parameters as our expert staff have many years of experience and extensive knowledge of steam cycles and steam turbines.

### AET Biomass Power Plant Parameters

AET power plants can be designed for almost all types of biomass. The high electrical efficiency, very stable electricity production and extremely high availability ensure a good business case for you as the investor. The design parameters below form the basic platform for our plants:

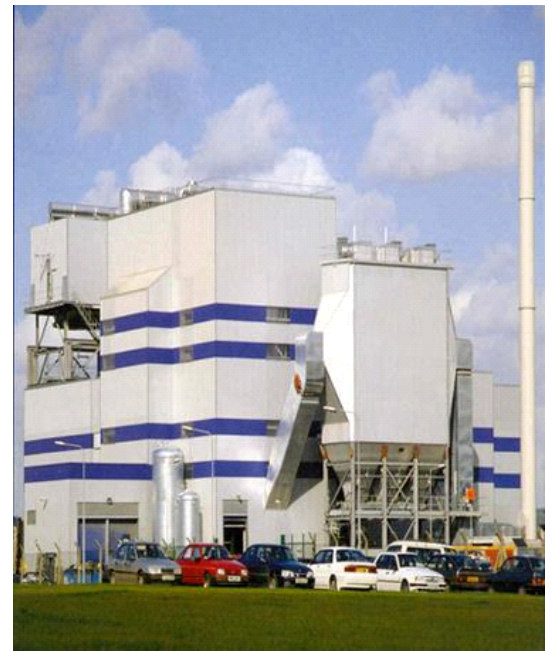
Fuel heat input	25 – 170 MWth
Net electrical power output	7 - 65 MWe
Net electrical efficiency	28 - 38%
Boiler design	Water tube boiler with natural circulation Single pressure or double pressure (reheat, e.g. 140 bar and 25 bar)
Operating time	At least 8000 hours without shutdown for manual cleaning
Boiler efficiency	91% - 94% - depending on fuel moisture
Emission values	Better than European requirements
Fuel flexibility	Fuel moisture content: 10 - 55%
Auxiliary burner	Not necessary
In-house power consumption	< 2.5 % of fuel heat input
Availability	Better than 96%

To see some of AET's Power Plants, click on the links below:

- I [Western Wood Energy Plant](#)
- I [Zignago Power](#)



The Western Wood biomass power plant has a 48 MWth AET Biomass Boiler with the latest [AET Combustion System](#), - which fulfills stringent NOx emission criteria without SNCR. Power production is 15 MWe.



EPR - Fibrogen power plant.



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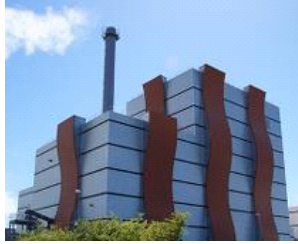
## LATEST COMMISSIONED PROJECTS

[> GO TO ALL BIOMASS PROJECTS](#)



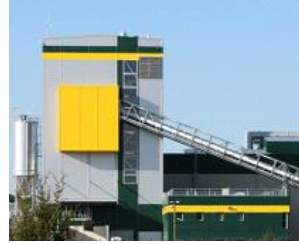
Rothes CoRDe Ltd is a biomass-fired cogeneration plant in Scotland fuelled by a whisky by-product and clean wood.

[Read more about Rothes CoRDe.](#)



The SODC Orléans cogeneration plant supplies district heating to 15,000 homes, equivalent to 27% of the city of Orléans.

[Read more about SODC Orléans](#)



In Landes, France, a 50 MW biomass-fired plant was successfully delivered to Cofely Engie (former GDF SUEZ) in May 2015.

[Read more about BES VSG.](#)



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](#)

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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](#)

