



Long-term High Efficiency with AET Biomass Plan

The AET Combustion System, AET Biomass Boiler and our experienced AET engineers ensure excellent plant efficiency, boiler efficiency and combustion efficiency for the entire lifetime of the plant.

One of the most important decisions for you as an investor in a biomass-fired plant, is to obtain as much energy from the fuel as possible and to minimise the losses as well as the residues from the biomass-fired plant.

High Plant Efficiency

The need for high plant efficiency is paramount in ensuring a good business case for a biomass-fired plant, irrespective of whether it is a biomass-fired power plant or a combined heat and power plant (CHP).

The AET engineers have in-depth experience of a range of process industries such as from steam turbine suppliers, EPC contractors and fuel handling suppliers.

All in all, this extensive experience can bring value to your project through heat balance optimisation and process integration in order to optimise your biomass plant efficiency, irrespective of whether it is a [Biomass-fired cogeneration plant](#) or a [Biomass-fired power plant](#).

High Boiler Efficiency

The continuous and uniform combustion results in very low oxygen content in the flue gas, which is the basis of a highly efficient boiler.

With an [AET Combustion System](#), the combustion is very efficient and constant without periods or areas of poor combustion resulting in unburned soot. This results in very clean heating surfaces and thereby minimises the need for soot blowing as well as a long-term low-levelled fouled boiler.

The long-term boiler efficiency with an [AET Biomass Boiler](#) is typically 91 – 94% ensures a good business case for you as a customer.

In addition, AET can also supply tail-end heat exchangers which, with flue gas condensation, will ensure even better boiler efficiencies.



[Linz-Mitte](#) has a very high overall efficiency (85-87%) as a CHP plant.



[Western Wood Energy Plant](#) has a net efficiency of 30%, - even though designed back in 2005.

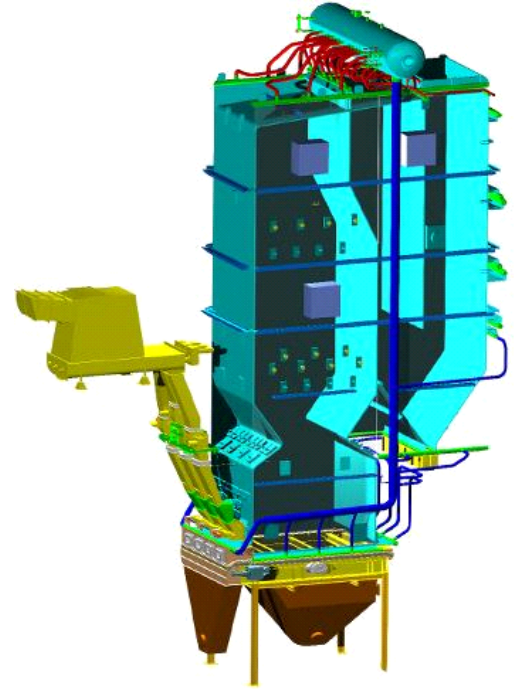
High Combustion Efficiency

The basis for an efficient biomass firing is an optimised combustion; obtained by perfect alignment of the fuel dosing system, the air injection system for primary, secondary and tertiary air as well as the post-combustion chamber.

The [AET Combustion System](#) ensures uniform and continuous injection of fuel over the entire grate surface via the AET Spreader Stokers. The primary air is injected evenly over the cross section of the AET Bio-Grate and this, together with the well-distributed fuel injection, ensures a very efficient combustion.

The optimal injection of the secondary and tertiary air ensures efficient post-combustion and very low emissions; e.g. low NOx and low CO. This minimises the need for secondary measures, such as SNCR, SCR and CO catalyst.

The AET Combustion System is designed to meet customer requirements and a [combustion efficiency better than 99.9%](#)



The AET Fuel Dosing System and [AET Combustion System](#) have been perfected by skilled and very experienced engineers at AET.

LATEST COMMISSIONED PROJECTS

[> GO TO ALL BIOMASS PROJECTS](#)



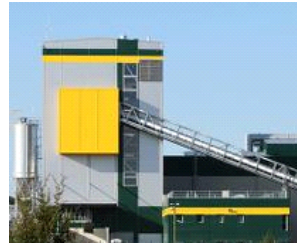
Rothes CoRDe Ltd is a biomass-fired cogeneration plant in Scotland fuelled by a whisky by-product and clean wood.

[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.

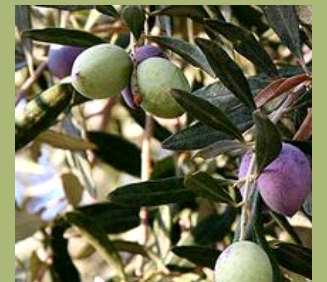
[Read more about Biolacq](#)

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](#) // [Technology](#) // [High Efficiency](#)

[> Cookies](#) // [> 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