

Local Energy Solutions

BioPower plant solutions in Belgium

4Energy Invest, the parent company of 4HamCogen, is a Belgian-based renewable energy company that aims at creating and managing a portfolio of small to middle-sized biomass-to-energy projects.



The core business of 4Energy Invest consists of turning wood biomass, which is at its end-of-life in the forestry sector, into energy, either directly through cogeneration to generate heat and electricity, or indirectly through torrefaction to produce renewable solid fuels such as biocoal.

Valmet has significant experience of cooperation with 4Energy Invest in common power plant projects by delivering altogether three power plants to the company. Two of the plants are located at the same site in the township of Amel and one is located in Ham.

All the deliveries were full EPC deliveries including all the necessary equipment, installations, training and commissioning.





The latest delivery is a combined heat and power production plant to the municipality of Ham in the province of Limburg. The BioPower 9 modular biomass power plant utilizes bubbling fluidized bed (BFB) technology and uses clean biomass as the main fuel.



With the new co-generation plant, 4HamCogen feeds 7.6 MW of electricity into the distribution grid and is able to deliver up to 14 MW of heat.

| Main data | |
|------------------------------------|-----------------------------|
| Name | HamCogen |
| Location | Ham, Belgium |
| Type | BioPower 9 CEX |
| Max. power production | 8.4 MWe |
| Guaranteed net electrical capacity | 7.6 MWe |
| Delivery | 2012 |
| Fuel | Non-contaminated wood waste |



Two BioPower 5 CEX biomass-fuelled combined heat and power plants are located in the municipality of Amel in the Ardennes in the southern part of Belgium. Both of the plants have a net electrical power output of 3,3 MW_e, a thermal output of up to 10 MW_{th} for district heating and the electrical output in condensing operation is 5,3 MW_e.

These BioPower 5 plants utilize BioGrate combustion technology and burn clean wood residues supplied by the local forestry industry. Both plants deliver hot water to local industrial businesses and the generated electricity is fed into the local grid.

| Main data | |
|-------------------------|--------------------|
| Name | Amel I/ Amel II |
| Location | Amel, Belgium |
| Type | 2 x BioPower 5 CEX |
| Max. power production | 5.3 MWe/ 5.3 MWe |
| Power production, CHP | 3.3 MWe / 3.3 MWe |
| Thermal production, CHP | 10 MWth |
| Delivery | 2007/2008 |
| Fuel | Wood residues |