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Industrial development, production and maintenance of industrial cogeneration plants from 2 to 25 MW.

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inspiration for clean energy®

Biomass Plant British Sky Broadcasting Reference



Sky's studio Harlequin 1 to be powered by CCHP plant

The Harlequin 1 project involves the Technical fit out of a new 23,000 m², 4 storey building, to form a 21st Century media building that will deliver television studios and support facilities in a sustainable, responsible manner. This technical building for B SkyB's Broadcast & Sports department comprises of eight exemplar naturally ventilated Studios, including one specifically for Sky Sports News.

The decision has been made to build a combined cooling, heat and power plant (CCHP) to cover Sky's energy demand. Recycled wood is used to fire a 6,5MWth furnace that supplies heat to a 4,2MWth thermal oil system that operates at 313°C. The thermal oil system powers an ORC (Organic Rankine Cycle) to generate 1,0MWe_{el} power.

Sky covers three operational areas by using generated electricity, warm water as well as cooling by a system of absorption chillers for its new building. Surplus on electrical power will be sold to the grid.

Due to the near location to central London and the use of recycled wood, the emission requirements are based on high standard.

Technical Data

Thermal input	7,6 MW
Thermal output	6,5 MW
Electrical output	1,0 MW
Fuel	cleaned recycled wood (waste wood grade B)
Permission	TÜV Pressure Equipment Directive 97/23/EC



Scope of Supply by VAS

- Fuel handling
- Biomass plant
- Thermal oil plant
- Deashing
- Dedusting by electrostatic precipitator (\downarrow 20mg/Nm³)

First deliver of heat

November 2011

