

CASE STUDIES



Case Study 1



Biomass based IPP in UK



Turbine Details

Powered by
4.2 MWe
Steam Turbine Generating
Set

Project Highlights

- Steam Turbine Generator Commissioned November 2013
- The Proposition: 40,000 MT/year waste wood, destined for landfill, is now converted into heat and electricity
- Primary process: Gasification of Wood waste to "Syngas" through Pyrolysis is combusted, producing 20 TPH steam

Project Highlights

- Value Add: STG solution generating @ 26,000 MWh/year of "Green electricity" enough to power 6200 homes
- Green energy Incentive: Qualifies for 2 Renewable Obligation Certificates (ROCs) per MWh - Energy Bill, UK- 2008

Case Study 2



Rice Husk / Napier Grass based Biomass Power Plants in Philippines



Turbine Details

Powered by
6 MWe
Steam Turbine Generating
Set

Project Highlights

- Bleed Condensing turbine Inlet steam @ 64 Bar(a) 480°C with 1 bleeds at 3.7 Bar(a) to the de aerator
- Steam Admission through 3 inlet Throttle Valve
- Mydraulically operated Automatic Stop and Emergency Valve powered with 24 kg/cm2 oil system
- Unique top exhaust turbine A unique option whereby Customer save on building a 2 floor power house

Project Highlights

- Just one floor of power house is sufficient and condenser is placed next to turbine. A cross over pipe to connect the exhaust / outlet of the turbine to the condenser as can be seen in the picture, is included in the supply
- Condenser is a Air Cooled Condenser (ACC) to save water usage as water is in short supply and quality of water is not also good

