



Industry Case Study

# Waste to Energy



Case Study:

Waste to Energy based IPP in a paper mill in Germany



*The project is driven by 15.6MWe condensing steam turbine with an inlet steam pressure of 27 Bar and inlet temperature of 320 Deg C in a paper mill in Germany*

**Challenge:** Paper production is energy intensive with considerable utilization of thermal energy (heat) for paper drying process and electrical energy. In order to meet the plant's demand, the client decided to invest in a Refuse-derived fuel (RDF) power plant.

**Solution:** Triveni supplied the steam turbine generator unit and other equipment for generating energy to power the paper plant and also the neighboring communities by processing 300,000 tons of waste produced each year.

#### **Benefits**

- Approximately 850,000 tonnes of steam is required annually by the paper mill and a significant percent of this is generated by incinerating waste in an Eco-friendly way.
- The excess heat from the paper drying process is fed through a district heating pipeline to heat the outdoor swimming pool run by the municipality.
- The RDF power plant saves 32 million cubic meters of natural gas and primary energy through this process thereby reducing CO2 emission from fossil fuels by 55,000 tonnes per year.

**Thank you.**

