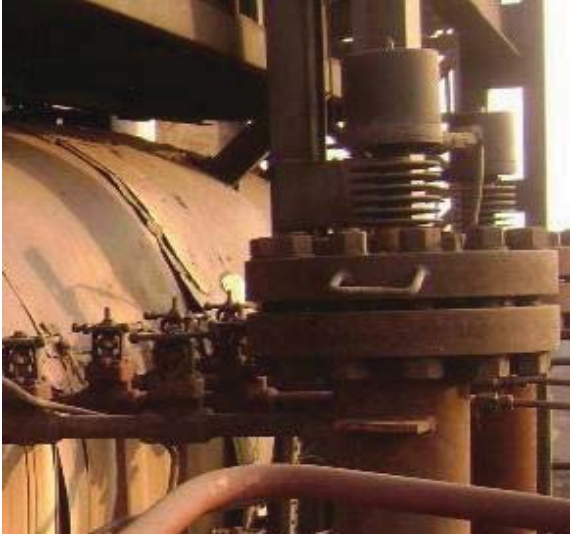


# Renewable Energy Project



## Kurkumbh Bagasse Co-generation

This project generates clean energy through a co-generation power plant in India.

## Standard

Clean Development Mechanism (CDM).

## Country

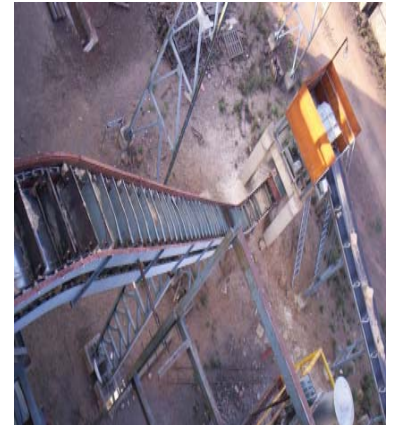
India

## About your project

Based in the Indian state of Maharashtra, this project involves the installation of a captive biomass co-generation power plant (CPP) at a manufacturing facility which supplies chemicals to the pharmaceutical and agricultural industries.

The project achieves greenhouse gas emissions reductions by switching the supply of energy to the facility from fossil fuel sources to biomass, a renewable energy source. Before the implementation of this project, the facility's energy requirements were met by the Maharashtra State Electricity Board, diesel generators for back-up power and combustion of furnace oil for steam. Now, the new CPP produces electricity and steam using a type of biomass called bagasse, which is the fibre left after sugarcane stalks are crushed to extract their juice. Bagasse is considered renewable as it is derived from natural resources and renewed within a human lifetime.

Bagasse is collected from sugarcane factories and farms from the surrounding areas and transported to the project site for storage, to provide year-round renewable energy for the power plant. Disposing of bagasse is a problem in the sugarcane growing regions of India and the most common method of removal is burning. This project not only utilises this waste but places a value on it, providing additional income for sugarcane farmers. Additionally, through the construction and maintenance of the site and the transportation and collection of the bagasse, this project has brought much needed employment opportunities to an isolated, rural area of India.



These images have been provided by individuals working with the project operators

## About biomass co-generation

Biomass is biological matter primarily derived from dead trees, yard clippings, left-over crops, wood chips, sawdust from lumber mills and livestock manure. It is a renewable resource that can be burnt as fuel to produce energy. Biomass is generally considered a 'carbon neutral' fuel since it sequesters carbon from the atmosphere through photosynthesis when it is growing. When biomass is burned, it releases CO<sub>2</sub> back into the atmosphere so the resulting effect is net zero emissions. Biomass co-generation plants use renewable biomass to simultaneously produce both electric power and steam. The plants use less fuel than traditional facilities to produce the same amount of energy and, as a result, are 50 to 70 per cent more efficient than conventional options. This efficient energy production combined with the use of renewable fuels delivers a two-fold environmental benefit.



## How carbon offsetting helps the project

It is expensive to develop and operate biomass co-generation power plants and that is where carbon finance can play an important role. Bagasse co-generation projects like this one are not required by law and often have to overcome financial and technological barriers to realise implementation. Carbon finance provides an additional revenue stream helping to make these projects an attractive and viable option. In this case, the incentives from carbon finance are enabling the generation of electricity and steam from biomass.

The reductions in CO<sub>2</sub> emissions achieved by this project are incremental to 'business as usual' and measured by an independent verifier to internationally recognised standards. These are bought as carbon credits by clients of The CarbonNeutral Company to neutralise their own emissions.

### Verification:

This project has been certified under the Clean Development Mechanism (CDM).



### Project area co-ordinates:

The geographical co-ordinates of this project are latitude 17°5' and 19°2' North and longitude 73°2' and 75°1' East.