



India: Energy production from rice husks

Short description

The purpose of the project is to produce vapour and subsequently energy from rice husks originating from rice mills. Rice husks are an, up to now, unused biomass resource. Its cultivation is sustainable.

- **Project type:** Renewable energies, biomass
- **Type of certificate:** VER
- **Quality standard:** The project has been validated and verified by SGS in accordance with the VCS standard and officially incorporated as a CDM activity.



Project background

In the context of the project, rice husks from rice mills are used as a biomass resource, grown under sustainable conditions, unused up to now, to generate steam and subsequently Energy for the local grid. The biomass, originating from rice mills, is available in huge amounts all around in a 100km radius of the project location. Without the projects use, the hulls would simply rot and be treated as waste.

The capacity of the projects energy production is 7,7 MW. It was the first installation in Chhattisgarh with a feed into the local grid. On the national level, it was one of the first projects that used renewable energy resources. About 90 % of The Energy produced in the state of Chhattisgarh comes from coal plants because of the broad amount of local coal deposits.

The reduction of greenhouse gases and the possibility to gain CO₂ certificates were significant factors for the decision to invest. The construction of a Diesel fired plant by the size of a usual small sized energy production site would have been the more attractive possibility with the less amount of technological and economical risk. The new facility now replaces an annual amount of 45 GWh of energy production from thermal plants.



Sustainable development

In the context of the CDM validation processes, the Indian government defined indicators for sustainable development that covers social, economical, ecological and technological aspects. The project activity contributes to India's sustainable development in the following ways:

Socio-economical benefits: The Project is about to be realized in a rural underdeveloped area and creates within new direct and indirect jobs, mainly of the type of qualified workplaces in the domain of the construction and maintenance of the facilities. Furthermore, it contributes to reduce the gap between Energy supply and energy demand on a local and national level. The raising demand for rice husks by the project activity influences its price and leads to higher incomes of the rice millers.

Ecological benefits: With the substitution of the conventional energy production based on combustibles by renewable energy sources, the project reduces CO₂ emissions and saves the equivalent amount of fossil resources.

Technological benefits: The facility uses a new, modern and eco-friendly technology and helps to implement it in a sustainable and welfare increasing way.