Renewable Energy from Sawdust

This climate protection project in Honduras installs a biomass plant which will run on biomass residues of about 20 saw mills. CO₂ emissions are being reduced by displacing the use of fossil based electricity by clean and sustainable electricity produced by this renewable energy source.

In Talanga, Honduras, in the Regional Association of Sawmills Francisco Morazán (ARIDEMA- Asociación Regional de Industriales de la Madera de Francisco Morazán) a ‘first of its kind’ two Megawatt gasification reactor will be installed. It will run on biomass residues of about 20 small saw mills that are associated in the ARIDEMA. The generated clean and sustainable electricity shall be exported to the Honduran national grid. CO₂ emissions are being reduced compared to the situation without project by displacing electricity from other sources like the national on fossil fuel based grid or generators running with fuel oil.

The project will also lead to an improvement of the sustainability of the sawmill business and of the socio-economic situation of the owners of the saw mills, employees and families. Thus by providing cheaper electricity to the sawmill owners compared to the electricity they purchase from the grid; by allowing the participation of the sawmill owners in the project; by providing another source of income to the sawmill producers by purchasing the sawdust that is currently left to decay or which is burnt; and last but not least by improving the health conditions of the sawmill workers and inhabitants of Talanga by reducing the numbers of fires and therefore the amount of pollution.

The gasification project shall be a model for numerous other communities and biomass associations that have a renewable energy resource and productive business at hand. The transfer of innovative technology will lead to the forming of new human capital – like skills and knowledge – in Honduras and also create new jobs.
Association of Sawmills in Talanga. Talanga is a medium sized municipality, located 55 kilometers to the north of capital Tegucigalpa.

Production of timber in Honduras. one of the most important goods for Honduran economy.