

RWE INNOGY – PELLET PLANT WAYCROSS

The pellet plant in Waycross is the biggest and most modern of its type in the world. In full production, the plant can produce up to 750,000 tonnes pellets a year.

The supply of feedstock is the key to success.

In order to achieve the targets for cutting carbon emissions in Germany and in Europe as a whole, the use of biomass for power generation is essential. The increasing demand for resources in this fast-growing sector cannot, however, be satisfied by the European wood market alone.

That's why, from summer 2011, we are operating one of the world's largest green wood pellet plants in the south of the US Federal State of Georgia. In full production, the plant will have the capacity to produce 750,000 metric tonnes of pellets annually.

The pellets are exported to Europe, where they are used primarily in our existing RWE coal-fired power stations. Replacing hard coal with biomass allows us to achieve considerable cuts in carbon emissions.

Unlike Europe, the USA has substantial unused wood resources. This is particularly true in Georgia, where the rate of timber growth far outstrips consumption.

Over the past years, the withdrawal of the pulp and paper industry has freed up even more capacity. Furthermore, high sustainability standards apply in Georgia that correspond with RWE's stringent criteria.

Country	USA
RWE share	100%
Water depth	12 - 25m
Full Time Employees	approx. 85
Time of construction	13 months
Feedstock requirements	1.5 million metric tonnes
Annual pellet production	750,000 metric tonnes



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How to produce pellets?

The pellet production process is separated into three main parts which are also reflected by the architecture of the construction site having a "Wood Yard", a "Dryer" and a "Pelletizing Island".

Starting point is the "Wood Yard", where the logs arrive and are stored before they will be debarked and chipped. Next step is the "Dryer Island", where the chips are dried by using the bark as fuel for the dryer. Finally, in the "Pelletizing Island", the wood chips are grinded in hammermills and compressed to shape in pellet presses. Pelletizing is the applied technology to increase the bulk density of biomass.

The pellets are loaded into rail cars and shipped approximately 100 miles to the port of Savannah. From there they will be shipped to Europe in dry bulk vessels.

