

## Compensación

Concedida a:

**GL events CCIB, SL**

Factor CO<sub>2</sub> Trading garantiza que (hasta nueva orden por cuenta de GL events CCIB, SL) queda retirada de manera permanente en la cuenta del Registro Nacional de Derechos de Emisión ES-121-1003700-0 la cantidad de:

**100 CER**

*(Reducciones Certificadas de Emisiones al amparo de proyectos derivados del Mecanismo de Desarrollo Limpio (MDL) del Protocolo de Kioto)*

Correspondientes al proyecto:

**Project BR-209 : "CERPA" de Brasil**

En concepto de:

**Huella de carbono directa del año 2010**

En Bilbao, a 5 de mayo de 2011

Director General



Kepa Solaun

## Brasil: Cerpa (Central Electrica Do Rio Pardo, Cogeneration Project)

### Short description

The project activity consists in the utilization of the bagasse residues to extend cogeneration activities in a sugar mill located in Rio Pardo, Brazil.

- **Project type:** Renewable energy, biomass
- **Project ID:** BR-209
- **Type of certificate:** Certified Emission Reductions of the Kyoto Protocol's Clean Development Mechanism (<http://cdm.unfccc.int>, [Cerpa project](#))

### Project background

Cerpa Cogeneration Project aims to increase its energy efficiency and cogeneration capacity in order to supply electricity to the grid, therefore adding value to the bagasse produced by Da Pedra sugar company (bear in mind that for every 10 tons of sugar cane crushed, 3 come up as sugar bagasse).

### Technical briefing

The main investments of the project include the installation of the following equipment in the Cerpa power plant:

- 65-kgf/cm<sup>2</sup> – operation pressure, 150 tones of steam per capacity.
- Two new turbo-generators ((2 x 15 MW power capacity, 65 bar pressure)
- A sub-station: 13.8-69 KV
- A transmission Line: 69 KV (around 3.2 Km)
- Chiller: 3,300 m<sup>3</sup> /h

### Sustainable development

Generally speaking, bagasse based cogeneration is a way of energy production that turns out neutral in terms of CO<sub>2</sub> emission, as the plant during its growth consumes as much CO<sub>2</sub> as the resulted from the energy generation process. It is not to be forgotten that bagasse itself is a waste, organic fuelled cogeneration has, thus, fulfilled the alchemist dream, converting waste into gold.

Because Cerpa will use bagasse as fuel to generate heat and electricity, the electric energy delivered by Cerpa to the grid will displace the energy generated by marginal fossil-fuelled sources, Cerpa will reduce an estimate of 16.000 tons of CO<sub>2</sub> to the atmosphere each year.

In addition the project activity contributes to the sustainable development of the project region by

- **Employment:** the creation of direct jobs at the industrial area, and also indirect jobs.
- **Technology:** technological development due to use of bagasse cogeneration as a source of renewable energy
- **Energy security:** reduction of Brazilian imports of fuel



Project location: Rio Pardo, Brazil



Sugar bagasse



Sugar plantations