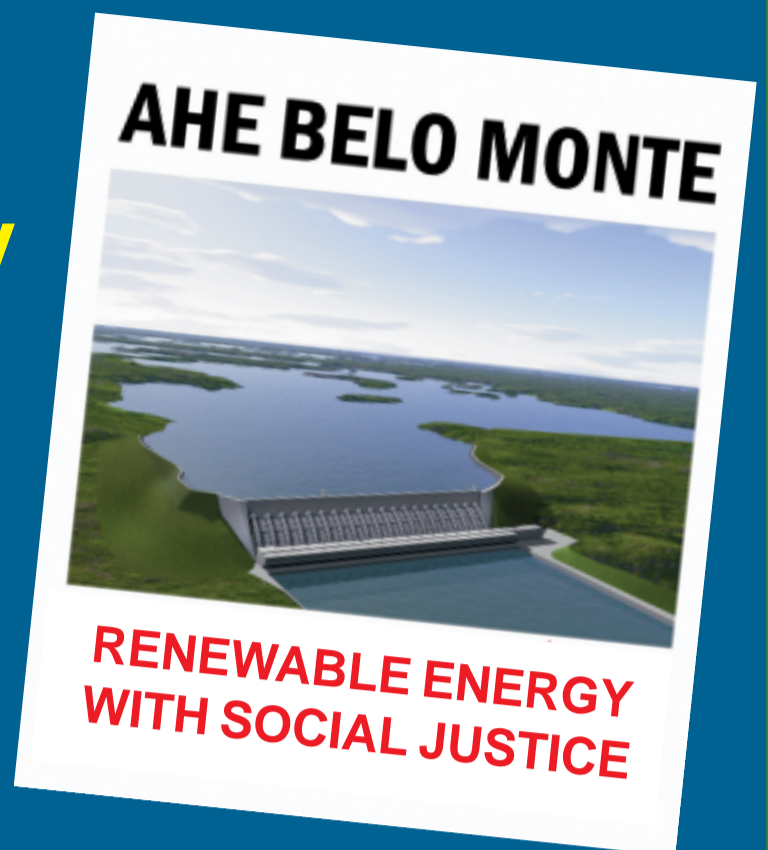


# Belo Monte Hydroelectric Use project: Renewable power with social responsibility

The National Federation of Urban Planners (Federação Nacional dos Urbanitários (FNU/CUT) represents about 250,000 workers in the fields of electricity, gas, sewerage, and the environment in Brazil.

In this 2009 World Social Forum, representatives of all nations will be debating the future of the planet and one of the main questions is the generation of **clean renewable energy**. For this reason, the FNU/CUT will be conducting the most important and strategic discussion about the Belo Monte Hydroelectric Plant, which will be the biggest energy generator in Brazil, with installed power of 11,181 MW and average generation of 4,796 MW. The FNU/CUT has presented several questions to ELETROBRÁS and reproduces the information so that all of our society has access to this kind of knowledge, and also that any doubts be made clear and the Brazilian society, as well as the international community, be protected against environmental and social impacts, and have complete understanding of the Belo Monte Hydroelectric Use project.



## **FNU/CUT - Is it true that the Belo Monte reservoir will flood 400 square kilometers?**

**ELETROBRÁS:** The Environmental Impact Assessment (EIA) which began in 2005 indicates that the Belo Monte reservoir will have an area of 516 square kilometers, of which 211 square kilometers are already filled by the river during the dry season. The project under study reduced the flooded area to less than half the size that was estimated in the 1980's (1.2 million square kilometers).

## **FNU/CUT - What environmental impact will it have on the ecosystems?**

**ELETROBRÁS:** Any human activity - agricultural, industrial or infrastructural - has a socio-environmental impact.

The EIA for the Belo Monte plant is being evaluated in order to (a) describe the positive as well as the negative socio-environmental impacts; (b) propose monitoring, prevention, mitigation and compensation actions for the negative impacts; and (c) multiply the positive impacts. These actions will be implemented under 14 plans, 53 programs and 63 projects, of which we can mention:

- > Plans for the conservation of aquatic and terrestrial ecosystems, with a focus on the native fauna and flora.
- > Plan for the support of the dam-affected people, focusing of the social issues of those who suffer a direct impact on their property, economic activities and way of life.
- > Plan for urban requalification, focusing on the Altamira and Vitória do Xingu towns and the Belo Monte village.

## **FNU/CUT - What will be the consequences of damming the Xingu Big Bend?**

**ELETROBRÁS:** In order to take advantage of the natural gross head between the Xingu River dam and the power house near the Belo Monte village, a 100-km-long section of the river, known as the Xingu Big Bend, will have its natural flow altered, and this will have an impact on navigation, water quality and fish reproduction.

To guarantee the continuity of such activities during the building and operation of the Belo Monte plant, an ecological hydrogram is being proposed which consists of a rule to be followed by the plant operator concerning the volume of water that will need to flow along the Big Bend.

It must be stressed that this procedure will reduce power production by 7%.

## **FNU/CUT - How will the indigenous tribes be affected? How will the Juruna tribe (in Paquissamba) live in the section of the river that might turn into a**

## **nearly dry stone path between the first dam (Pimental) and the restitution channel of operated water (Belo Monte). And how about the Kayapo-Xicrin (in Trinchira-Bacajá) whose Bacajá river will be deeply impacted by the same dry section?**

**ELETROBRÁS:** One of the main aspects of the project is that it will **not** flood any indigenous peoples' lands.

The socio-environmental studies concerning the impact on indigenous peoples is being conducted under supervision of the National Governmental Council on Indigenous Issues (Funai), which has issued the terms of reference for studies in indigenous areas. The indigenous peoples will also benefit from plans, programs and projects designed to (a) monitor, prevent and mitigate negative impacts; (b) compensate for these impacts and (c) multiply positive impacts arising from the operation of the Belo Monte plant.

## **FNU/CUT - There is controversy over the investment costs. What will actually be the total investment in Belo Monte?**

**ELETROBRÁS:** In July 2008, the National Electric Energy Agency (ANEEL) approved the Revision of Inventory Studies for the Xingu River according to which the Belo Monte plant generation cost would amount to 19.5 US\$/MWh, a highly attractive one in relation to other projects and other generation facilities already considered in the Brazilian Electric Sector Planning. Now that the EIA was finished, plant costs are being assessed and adjusted in accordance with new environmental policies. But it must be stressed that all studies in the inventory stage and even before that stage clearly point towards the technical, economical and environmental feasibility of the project.

## **FNU/CUT - How will Belo Monte impact the riverbank dwellers, such as small farmers; the farmers in the agrarian reform agency (Incra) program; the medium and large landowners and their employees and peasants; all the municipalities in Vitória do Xingu and Altamira, as well as the riverbank dwellers living along the Big Bend?**

**ELETROBRÁS:** As the EIA was being undertaken, census studies were made in the areas that will be flooded and socio-anthropological data were sampled in the Big Bend area in order to estimate the size of the local population and to find out how they live. This information, as well as information collected during meetings with the local communities, has been instrumental in preparing the Plan for Support of the Dam Affected People, which establishes the actions to be taken by the concession auction winner.

The guidelines for this plan were presented during the Third Technical Forum organized by Eletrobrás and the

Federal University of Pará from October 14<sup>th</sup>-16<sup>th</sup> in Vitória do Xingu, Altamira and Belém, respectively, as well as in several workshops presented in the areas that will be impacted.

Presentations as well as other relevant information on the impacts of the plant are available at [www.eletrabras.com](http://www.eletrabras.com).

16,420 people live in the Directly Affected Urban Area. Most of them live in areas that are already affected by the annual flooding of the Ambé and Altamira Igarapés.

2,822 people live in the Directly Affected Rural Area, on the right and left banks of the Xingu River, on river islands and in the area of the reservoir channel.

## **FNU/CUT - According to Eletrobrás estimates, the following municipalities will somehow be affected: Altamira, Anapu, Brasil Novo, Medicilândia, Senador José Porfírio, Uruará, Vitória do Xingu and Porto de Moz.**

**ELETROBRÁS:** The assessments being undertaken estimate that there are 11 municipalities in the Direct and Indirect Influence Areas: Altamira, Anapu, Brasil Novo, Gurupá, Medicilândia, Pacajá, Placas, Porto de Moz, Senador José Porfírio, Uruará and Vitória do Xingu. These municipalities are included in the Plan for Sustainable Regional Development of the Xingu, which is being designed by the government of Pará and the presidential Civil Cabinet.

## **FNU/CUT - What will be the benefits? Will 100,000 job positions actually be created? Will there be any medium and long term public policies for creating job opportunities in that region?**

**ELETROBRÁS:** 18,000 direct job positions will be created at the construction peak. It is estimated that the region may receive around 90,000 people in the 10 years during the construction. The EIA has identified the consequences of this population increase and proposed measures to reduce the negative impacts and multiply the positive ones.

Such a huge project may bring about positive institutional cooperation as well as public and private investments that will benefit the local population.

Significant benefits for the region may also result from the good use of resources arising from the environmental compensation established by the National Environment Council (CONAMA) Resolution and the financial compensation paid to the affected municipalities. The use of these resources for the conservation of the Xingu basin and the improvement of the municipalities' infrastructure may contribute to the creation of alternatives for regional development in terms of productive activities, housing, education and health care.

In order to promote the qualification of these municipalities, the EIA will propose the following programs: Institutional Interaction and Cooperation, Public Administration Improvement, Support to the Management of Public Services, Professional Qualification, Productive Activities Development and Environment Compensation.

Some actions will be designed during the environmental licensing process and their execution will be under responsibility of the plant concessionary, while others will be under responsibility of the municipality governments and of the state of Pará.

**FNU/CUT - Is it true that only the Belo Monte dam will be built as the government declares? What about the series of dams that were proposed during the Kararaô project?**

**ELETROBRÁS:** Yes, it is true. The National Energy Policy Council has defined, by means Resolution N° 006 (July 3<sup>rd</sup> 2008), the policy for the exploration of the Xingu River Basin and it clearly mentions only the Belo Monte plant.

Since the basic premises of the inventory studies conducted in the in the 1980's did not assimilate socio-environmental criteria, they were not decisive in the selection of alternatives for hydroelectric development of the Xingu River.

As the legislation evolved, a revision of those inventory studies was necessary. In this new scenario, the several Conservation Units and Indigenous Peoples Areas in the basin became environmental conditionings. Therefore both economic and socio-environmental issues were taken into account in defining the hydroelectric development of the Xingu River.

The studies, which are available at [www.eletronbras.com](http://www.eletronbras.com), have made a thorough diagnosis of the exploration opportunities for the Xingu River Basin, and they have stressed that the site proposed for the Belo Monte plant is extremely attractive, other exploration possibilities upstream notwithstanding.

On July 25<sup>th</sup> 2008, by means of dispatch N° 2756, the National Electric Energy Agency (ANEEL) approved the Revision of Inventory Studies for the Xingu River, which have identified the sole hydroelectric plant of Belo Monte on the Xingu and Iriri Rivers.

It must be stressed that, as a result of this Revision, the Brazilian President signed a decree on June 5<sup>th</sup> 2008 that created the Extractivist Reserve of the Xingu River, in the municipality of Altamira (Pará state).

**FNU/CUT - Who will purchase the energy produced by the Belo Monte plant. In other words, who will benefit from the plant?**

**ELETROBRÁS:** In the new Brazilian Electric Sector Model, energy commercialization is ruled by law (10848/2004) and decree (5163/2004).

By means of a Concession Auction a percentage of the produced energy is used to supply the regulated market, that is, to provide energy for residential and commercial consumers and small industries. In the latest auctions this amount was set at 70%.

**FNU/CUT - Some critics say that the project is intended to subsidize the international metallurgic industry and promote the international commerce of aluminum, nickel, copper, manganese, steel and gold, which is still extracted on the Xingu, Tapajós and Madeira Rivers, exactly where the constructions sites will be.**

**ELETROBRÁS:** The concession to explore the production of energy has tariff modicity and destination of energy to the regulated market as determining factors, as I declared in the previous answer. We could say that the legal background that regulates the energy market nowadays differs from the one that originated such criticism.

**FNU/CUT - According to Eletrobrás, the Belo Monte plant, with its 11,181 MW installed capacity and 4,796 MW of average energy will add to the Interconnected**

Brazilian Interconnected Power System, which allows the virtual interconnection of the hydrographic basins and makes it possible for a plant in the North of Brazil to produce energy while other plants elsewhere store water in their reservoirs. Just as an example, during the annual rainy season on the Xingu River, Belo Monte will generate at its maximum capacity, while the reservoirs in the Southeast and Northeast store water to generate during the dry season in the Northern region.

**FNU/CUT - How far have the Belo Monte studies evolved, especially the ones related to the EIA / EIR? What will be the next steps? What is the federal court's position?**

**ELETROBRÁS:** We are developing the EIA/EIR under supervision of the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA) and the socio-environmental studies under supervision of the FUNAI. At the same time we continue our communication efforts designed to inform, solve doubts of and reorient proposals from the affected population through Technical Forums in partnership with the Federal University of Pará, through meetings called "Conversando sobre o AHE Belo Monte" (Talking about the Belo Monte Plant), through workshops held at rural and urban areas that will be directly affected, through lectures at local schools, and through the distribution and face to face presentation of informative brochures.

There are no legal obstacles to the development of these studies.

**FNU/CUT - Will the deadline for the Belo Monte auction (October 2009) be met?**

**ELETROBRÁS:** In accordance with the Ministry of Mines and Energy orientation and in keeping with the schedule of the Program for the Acceleration of Growth (PAC), we are working hard to get the preliminary license from IBAMA on time for the concession auction in September 2009.