



1. Construction works along the Rio Xingu near Altamira in 2015. Data: Landsat 5, 2015-07-15.

### Hydropower – Belo Monte Dam, Brazil

The Belo Monte Power Station in Brazil's northern state of Pará is one of the largest hydroelectric power plants in the world. Its construction began in 2011 and was completed in 2019. The power station is using the water of the Xingu River, a major tributary of the Amazon River. The total installed capacity of more than 11,000 megawatts (MW) is enough to supply electricity to over 60 million people. The power station has 18 power generating units, each with a capacity of 611 MW.



5. View of the Belo Monte powerhouse during construction.

The construction of the Belo Monte Power Station has been highly controversial. Environmentalists and indigenous groups have raised concerns about the impact of the power station on the local ecosystem and on the livelihoods of the indigenous people in the area. The construction of the power station involved the flooding of a large area of forest and the displacement of thousands of people. Moreover, the changed water regime has impacted the ecosystem of Rio Xingu below the dam. Despite these concerns, the Brazilian government has defended the construction of the Belo Monte Power Station as necessary to meet the country's energy needs and to promote economic development. The power station has also been promoted as a way to reduce Brazil's dependence on fossil fuels and to help combat climate change.



2. Rio Xingu near Altamira in 2011. True colour satellite image showing the forests and agricultural land before the construction of the dam. Data: Landsat 5, 2011-07-27.



3. Rio Xingu near Altamira after completion of the dam. True colour satellite image showing water bodies, forests, and agricultural land. Data: Sentinel-2, 2017-07-28.



4. Rio Xingu near Altamira after completion of the dam. The overlay shows the new water surfaces (blue) and the water courses fallen dry (light green). True colour satellite image, data: Sentinel-2, 2017-07-28.