

TANZANIA

Improving national power transmission infrastructure



© Didier Gentilhomme / AFD

AFD is providing its financial support for the rehabilitation and upgrading of 10 of the substations of Tanesco, the national electricity operator. The aim is to improve the energy efficiency of Tanzania's power transmission grid.

CONTEXT

Tanzania has a number of energy sources whose potential is largely untapped: hydro power (4.7 GW, only 12% of which is exploited, solar energy (expansive areas with sunshine at a level of 4 to 7 KWh/m² a day), coal (reserves estimated at 1.5 billion tons), natural gas (reserves estimated at 55 TCFi), geothermal sources (unexploited) and wind energy. The generation capacity connected to the domestic grid stands at 1,521 MW, 38% of which is hydro power capacity (the performance of which has been affected by several years of drought) and 62% thermal capacity (diesel, natural gas).

With only 60% of installed capacity available, in view of the importance and variability of hydro power resources, generation is unable to meet ever-increasing demand (annual growth of 10%). The domestic transmission grid, which is made up of some 2,700 km of 220 kV lines, 1,500 km of 132 kV lines, 550 66 kV lines (544 km) and 38 substations, is overloaded and unable to provide nationwide coverage.

10/07/2015

Project start date

30/03/2021

Project end date



Dodoma
Location



Energy
sector(s)



Sovereign Concessional Loan
financing tool(s)



53 000 000 EUR
Financing amount



5 years
Duration of funding

Tanesco
Beneficiaries

DESCRIPTION

The project supported by AFD will contribute to supplying reliable and competitive energy. It will improve the energy efficiency of the transmission grid, reduce the number and duration of power cuts, and prepare the future regional interconnections. The project has three components:

- The rehabilitation of 10 substations on the transmission grid: Mlandizi, Chalinze, Same, Mufundi, Mbeya, Dodoma, Mwanza, Musoma, Bukoba and Tabora;
- The rehabilitation and extension of the communication grid, with the use of fibre optic cables and an improvement in the remote grid control system with new software;
- Capacity building for Tanesco, thanks to assistance in contract procurement and supervision, in conducting environmental impact assessments, and in the management of the electrical equipment stock.

IMPACTS

- Increased access to electricity for the population;
- Reduction of technical losses and unserved electricity demand;
- Reduction of greenhouse gas emissions due to the increase in grid energy efficiency.

