

»» Project Information

Wind – Morocco

A pioneer in the region

Ambitious, carefully considered, visionary – Morocco’s project focusing on using renewable energy sources for the national energy supply is receiving a good deal of international recognition. It aims to gain 52 % of power plant capacity from hydro, solar, and wind power by 2030. The government and the monarchy are doing everything to meet this objective. KfW has been providing support for this project on behalf of the German Federal Government for a long time.

Current situation

Morocco does not have any notable fossil resources and is thus largely dependent on imports of crude oil, natural gas or coal. This is both unsustainable and associated with significant costs.

At the same time, electricity demand is constantly on the rise. This is not only due to population growth, the country’s increasing level of industrialisation and the higher living standard of broad groups of the population; it is also due to the rural electrification programme. The result: Morocco needs to import electricity from Spain to cover demand – despite substantial efforts to expand its own energy production. This is because securing the energy supply is of paramount importance to the country’s economic development.

The Moroccan government has developed an ambitious energy strategy to help the country become less dependent on expensive imports and cover the rapidly increasing demand for energy. For instance, the government initially adopted a national solar plan in 2009; one year later it adopted a national wind programme.

German Development Cooperation provided important impetus for introducing the new technologies via KfW: it

not only financed the first pilot wind farm in Morocco, it also participated in financing additional wind farms in Essaouira and Tangier – milestones on the way to an integrated wind power programme.

Project approach

The national plan to expand wind energy production aims to establish several wind farms within the scope of public-private partnerships (PPP). In doing so, over one sixth of the installed power will come from this environmentally friendly resource which saves three million tonnes of carbon emissions annually.

KfW is providing reduced-interest loans amounting to up to EUR 200 million for three sites in Morocco. Fur-

Project name	Wind Farm Programme I – IV
Commissioned by	Federal Ministry for Economic Cooperation and Development (BMZ)
Country/Region	Morocco
Lead executing agency	Office National de l’Electricité et de l’Eau Potable





Tangier Wind Farm. Source: KfW Group, photographer: Bernhard Schurian

Other donors include the European Commission, the European Investment Bank, the African Development Bank and the World Bank's Clean Technology Fund.

Within the scope of the national wind programme, the Midelt (180 MW), Jbel Lahdid (200 MW) and Tangier II (70 MW) sites will be connected to the grid one after the other.

The ONEE National Office of Electricity and Drinking Water is financing preliminary wind measurements, technical studies and a comprehensive investigation of environmental and social compatibility, including studies of birds. Furthermore, ONEE is financing the connection of the future wind farm to the national power grid.

However, the task of securing financing for the wind farm belongs to a specialised project company that ONEE founded within the scope of a public-private partnership (PPP) together with a private consortium that won the international public tender for the respective wind farm. This company will be responsible for operating and maintaining the plant. ONEE is also concluding a power purchase and supply contract with the company over a term of 20 years.

The total costs for the three wind farms within the scope of the wind programmes are estimated at EUR 557 million. The German Federal Government will contribute a total of EUR 200 million through KfW. A consortium consisting of Nareva (Morocco), ENEL (Italy) and Siemens was selected as the preliminary contractor and founding member of the three project companies.

Impact

The wind farm financed by the German Federal Government will be able to save over one million tonnes of

climate-damaging carbon emissions annually.

But Morocco does not just want to expand energy production in environmentally friendly and cost-efficient ways. As it implements the wind programme, the government is deliberately focusing on public-private partnerships (PPP): cooperation between the public sector and private companies in this field mobilises fresh capital and solid expertise. Private companies become joint owners of the wind farms and contribute to the knowledge transfer by sharing their business and management experience. Research and development in the energy sector is promoted at the national level and Moroccan companies are encouraged to participate in the wind programme and produce parts for the plants themselves. This promotes economic growth, creates jobs and leads to higher incomes.

Improving the energy supply also indirectly contributes to reducing poverty levels by providing electricity for manufacturing goods and by lighting up dark households. As over 99% of rural households have already been connected to the power grid, the poorer population has also benefited from this.



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