

Climate Protection Project

Beluguppa Wind Farm, India,
Gold Standard



Estimated Annual Reduction: 215,729 t CO₂e
Carbon Standard: ÖkoPLUS/ Gold Standard
Project start: 2017

Background & Location

With a population of more than 1.3 billion inhabitants and an annual population growth of 18 million, India is one of the most populated countries of the world. Unfortunately, more than 60% of the population survives on less than two dollars per day, which is best described as extreme poverty. Rapid population growth and industrialization are leading to increased energy demand, which is being met by using fossil sources and that causes climate gas emissions as well as pollution of the environment.

Project Objectives

The Beluguppa wind farm project's purpose is to contribute to the conversion of the region's energy supply scheme into a sustainable, environmentally friendly and climate-friendly one. This is done by harvesting the power of the wind through wind power plants. Which provide for an estimated annual reduction of 215,729 tons CO₂ equivalent compared to India's conventional energy generation and also helps reduce hazardous emissions like SO₂, NO_x and fine dust particles. The project also supports the long-term socioeconomic development of the region.

Sustainability Measures





United Nations determined 17 Sustainable Development Goals as part of the post 2015 Development Agenda called “The Future We Want”. Besides the 13th goal “Climate

Action” and the 7th goal “Affordable and Clean Energy”, this project supports the attainment of the following sustainable goals through its activities and outputs:

1 NO POVERTY



The construction of wind power plants also creates jobs for low skilled workers, who are trained and some of them qualify for long time positions as maintenance workers. This helps reduce poverty and unemployment among the locals.

3 GOOD HEALTH AND WELL-BEING



The project’s operator organizes social and medical support for local communities. Onsite training camps provide medical education, infant care education for young mothers and help prevent and fight the spread of Malaria, HIV and other diseases.

4 QUALITY EDUCATION



The project’s operator supports local schools and lifelong education to help raise the skill and knowledge levels of the local population.

8 DECENT WORK AND ECONOMIC GROWTH



The project needs a large staff and requires a lot of qualified technicians and skilled workers. Many of these employees have been recruited locally and received their job training at the plant’s own training facility.

Project details

Within the scope of this project wind power plants were built in several villages near Beluguppa Mandal in Andhra Pradesh's Anantapur district. These 48 plants have a capacity of 2,1 MW each and a total combined capacity of 100,8 MW with an expected annual production of 220 GWh. In comparison with India's conventional electricity production, which relies heavily on coal power, this leads to an estimated annual reduction of 215,729 tons CO₂ equivalent. Since coal also produces other hazardous emissions like SO₂, NO_x and fine dust particles, these emissions can also be reduced. Thereby the project increases the local air quality and subsequently the health of the local population.



ÖkoPLUS-Project

This project is a certified ÖkoPLUS project. ÖkoPLUS projects guarantee sustainable benefits as defined in the UN Sustainable Development Goals, such as job, infrastructure, environmental, education and medical care improvements. Globally recognized indexes are used to select ÖkoPLUS projects, in order to ensure sustainability, high potential CO₂-savings and optimal project location. ÖkoPLUS undergoes annual audits, reviews, and certifications of itself and of its projects by the TÜV-Rheinland Energy GmbH, a globally renowned and independent auditor.

This project has qualified itself for the ÖkoPLUS standard in accordance with its catalogue of criteria 1.1 by meeting its requirements as measured by:

Sustainability Measures :	4/4 points
Environmental Performance Index:	5/5 points
Human Development Index:	3/4 points
CO ₂ - reduction:	3/4 points

Total: 15/17 points

