

PROJECT DESCRIPTION

Çakıl Wind Power Plant project consists of 2 x 2 MWe turbines with a hub height of 85 m; 5 x 2 MWe turbines with a hub height of 78 m and 7 x 4 MWe with a hub height of 99 m. The Çakıl WPP will be connected to the national electricity grid with an existing 154 kV ETL. The plant is expected to produce 103 GWh/year of energy (P75) equivalent. The energy produced will allow saving over 58,755 tCO₂/year.

ENVIRONMENTAL AND SOCIAL KEY ISSUES

- Environmental pollution from waste and emissions;
- Land acquisition / rent status of private agricultural areas;
- Labor and working conditions;
- Health and safety for workers and community;
- Dust and noise impact;
- Bird monitoring;
- Cumulative environmental and social impacts;
- Visuality and landscape issues;
- Post construction analysis; bird species, landscape impact and noise impact;
- Stakeholder involvement and public disclosure.

MITIGATIONS/SUCCESSFUL IMPLEMENTATION

- Implementation of a formal HSE management system;
- Completion of the land acquisition process;
- Supervision of construction activities by Environmental, Health and Safety Experts;
- Preparation and implementation of defined, written and declared policies, related to Labour and Working Conditions;
- Workers and community health and safety plan/program;
- Preparation of Landscape Monitoring Plan and post construction monitoring;
- Preparation of Waste Management Plan and related implementation forms;
- Noise modelling study and post construction measurement;
- Photo-impact simulation study;
- Preparation of Cumulative Impact Assessment Report;
- Bird monitoring during the construction and post construction period;
- Stakeholder Engagement Plan implementation.

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GENERAL INFORMATION

Project Location	Armutlu District of the Yalova Province and Gemlik District of Bursa
Technology	Wind Power Plant
Plant Capacity	31.55 MWe
Annual Energy Production	103 GWh/year
Annual CO₂ Reduction	58,755 tCO ₂ /year

TIME SCHEDULE

Start of Construction	April 2017
Commercial Operation	October 2018 / April 2019

FINANCIAL PARAMETERS

Total Project Cost	EUR 44,313,000
MidSEFF Loan	EUR 12,012,400
Payback Time	8.77 years
Internal Rate of Return	10.63 %