

## PROJECT DESCRIPTION

Karadere Wind Power Plant consists of 10 x 1.6 MWe turbines with a rotor diameter of 100 m and a hub height of 80 m. The Karadere Wind Farm will be connected to the national electricity grid through a 33.7 km length transmission line, which is part of the project. The plant will have a capacity factor of 41.3% and is expected to produce 53.214 GWh/year equivalent to cover the demand for over 16 thousand households. The energy produced will allow saving over 31,811 tCO<sub>2</sub>/year.

## CARBON FINANCE

Karadere Wind Power Plant (WPP) project is being planned as a Gold Standard GHG emission reduction project and the project is currently in process of carbon certification. The Sponsor signed a contract with a carbon consultant.

## ENVIRONMENTAL AND SOCIAL KEY ISSUES

- Potential pollution/contaminant emissions during construction activities;
- Bird species;
- Presence of other WPPs in the surroundings;
- Noise;
- Use of forestry area.

## MITIGATIONS/SUCCESSFUL IMPLEMENTATION

- Supervision of the construction activities by environmental, social and health & safety;
- Seasonal bird migration monitoring to control the potential adverse impacts on bird species;
- Noise monitoring during operation to assure a noise acceptable level for the close settlements;
- The Sponsor is waiting for forestry permit;
- Photo-impact simulation required to allow an adequate level of awareness of stakeholders about the visual impact of the project considering also other project in the surroundings;
- Stakeholder Engagement Plan implementation to involve and inform the stakeholders and to reduce the risk of conflicts with ensuring good public relations.

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## GENERAL INFORMATION

|                                  |                               |
|----------------------------------|-------------------------------|
| Project Location                 | Kirklareli Province           |
| Technology                       | Wind Power Plant              |
| Plant Capacity                   | 15 MWm                        |
| Annual Energy Production         | 53.214 GWh/year               |
| Annual CO <sub>2</sub> Reduction | 31,811 tCO <sub>2</sub> /year |

## TIME SCHEDULE

|                               |                |
|-------------------------------|----------------|
| Start of Construction         | November 2012  |
| Expected Commercial Operation | September 2013 |

## FINANCIAL PARAMETERS

|                         |                |
|-------------------------|----------------|
| Total Project Cost      | EUR 24,435,696 |
| MidSEFF Loan            | EUR 5,800,000  |
| Payback Time            | 6.7 years      |
| Internal Rate of Return | 16.4 %         |