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# Technology:

EMIL has sourced the windmills from Suzlon Energy, an offshoot of Suzlon group that is considered as one of the leading manufacturers of site specific Wind turbine generators with R&D centres in Germany, Netherlands and in Asia. The WTG package for the project includes the latest model from Suzlon named S.70/1250 machines. These machines were being tried for the first time in Maharashtra wind zones. EMIL is the first customer in India as well as in Maharashtra to use S-70 model machines. The specifications of the Suzlon Wind turbo Generator S70 has been briefly explained in section A.4.3.

# **Emission Reductions from anthropogenic sources:**

In the absence of the project activity, an equivalent amount of electricity would have been generated from the power plants connected to the grid, majority of whom are based on fossil fuels. Thus the project is replacing the anthropogenic emission from the fossil fuel based power plant connected to the project electricity grid.

The project activity is in line with the Renewable Energy Policy of the Government of India which targets 10% of additional grid power generation capacity to be from Renewable Energy sources by 2012. It is also getting the benefits provided by the National and sectoral policies<sup>1</sup> for promoting renewable energy generation in India, (e.g. promotional measures of Electricity Act 2003).

Total emission reduction for the 10 year crediting period is expected to be 1,18,2029 tCO<sub>2e</sub>

# Views of the project participant on contribution of the project activity to sustainable development

The Designated National Authority (DNA) for the Government of India (GoI) in the Ministry of Environment and Forests (MoEF), called the National CDM Authority (NCDMA), has stipulated four indicators on sustainable development for Clean Development Mechanism (CDM) projects structured in India. The project participants' views on the contribution of this project activity towards sustainable development follows these four indicators as explained below:

#### **Environmental well being:**

- Reduction in the consumption of fossil fuels at the grid for generating additional electricity equivalent to that generated by the project wind mills;
- Reduction in GHG emission (CH<sub>4</sub> and CO<sub>2</sub>) and other air pollutants occurring from fossil fuel extraction, processing, transportation and burning
- Reducing other pollutants (SOx, NOx, PM, etc.) resulting from power generation;
- Conservation of natural resources including land, forests, minerals, water and ecosystems;

# **Economic well being:**

- Rural and infrastructural development in the areas around the project site
- Assistance in the economic development of a remote village in Maharashtra by making investment in that area.

<sup>&</sup>lt;sup>1</sup> Tariff policy under – MERC Order, dated November 24, 2003, for procurement of Wind Energy and Wheeling for third party-sale and or self-use

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• Assists the state of Maharashtra and India as a whole in stimulating and accelerating the commercialization of grid-connected renewable energy technologies<sup>2</sup>.

### Social well being:

- Contribution towards achieving the objective of the policy on wind power generation of Government of India and state of Maharashtra., which is to promote generation of energy through non-conventional sources and supplement the ever increasing demand of the state.
- Encouragement to other entrepreneurs irrespective of sector to invest in wind technology
- Strengthening India's rural electrification coverage;
- Enhancing local employment and capacity building in the vicinity of the project, which is a rural area;

# **Technological well being:**

• The successful implementation of the new model of wind turbo generator (S70 of Suzlon Energy) will result in increasing the reliability on efficient technology and large capacity wind mills.

### A.3. Project participants:

>>

The project participant is identified in the table below, and the contact information of the project participant has been provided in Annex 1.

| Name of Party involved<br>((host) indicates a host Party) | Private and/or public entity(ies) project participants (as applicable) | Kindly indicate if the Party involved wishes to be considered as project participant (Yes/No) |
|---|--|---|
| Government of India, Ministry of                          | Essel Mining Industries Limited  | No  |
| Environment & Forests. (Host)                             | (EMIL) (Private)   |   |

### A.4. Technical description of the project activity:

|    | A.4.1. Location of the project activity: |                  |  |
|----|--|------------------|--|
| >> |  |                  |  |
|    | A.4.1.1.                                 | Host Party(ies): |  |

>>

India

| A.4.1.2. | Region/State/Province etc.: |  |
|----------|-----------------------------|--|
| A.4.1.2. | Region/State/Province etc.: |  |

>

Western region/ State - Maharashtra

|  | A.4.1.3. | City/Town/Community etc: |
|--|----------|--------------------------|
|--|----------|--------------------------|

 $<sup>^2</sup>$  Potential of wind energy in India – 45000MW whereas only about 6070.2 MW is commercially active; Source : http://mnes.nic.in/ach1.htm