

**Sustainable Development:**

The CDM project activity proposed has the following aspects to make it a sustainable development project.

Social well-being:

- The project activity has opened up employment opportunities for the local people not only during the erection and commissioning of the WTGs but also for the operation and maintenance of the WTGs which has definitely improved the standard of living of the local people.
- The project activity would help to a great extent in the improvement of the electricity facilities in the neighboring villages. More because the power generated is supplied to a distribution grid it has been possible for the local community to get maximum benefits from the project activity.

India faces a peak power shortage of 15.20%². The project activity will help to narrow this gap.

Economic well-being:

- Settings up of wind farms require large area which would appreciate the land values which would otherwise command extremely low prices more because most of these lands are unproductive.
- The project also contributes to the economic well-being of the nation's economy by reducing import of coal and other fossil fuel for electricity generation.
- The project contributes to the economic sustainability around the plant site, which is promotion of decentralization of economic power, leading to diversification of the national energy supply, which is dominated by conventional fuel based generating units.
- The generated electricity is fed into the NEWNE & Southern Region Grid through local grid, thereby improving the grid frequency and availability of electricity to the local consumers (villagers and sub-urban habitants) which will provide new opportunities for industries and economic activities to be setup in the area thereby resulting in greater local employment, ultimately leading to overall development.

Environmental well-being:

The wind energy based electricity generation helps in less fossil-fuel burning in the system and thus less GHG emissions in the atmosphere. Use of renewable energy source (wind energy) also helps in conservation of natural resources (like coal), thereby contributing to energy security of the country.

Technological well-being:

The technology used in the power plant is proven and safe. Increased interest in wind energy projects will further push R&D efforts by technology providers to develop more efficient and better machinery in future.