PROJECT DESIGN DOCUMENT FORM (CDM-SSC-PDD) - Version 03



CDM - Executive Board

SECTION A. General description of small-scale project activity

A.1 Title of the small-scale project activity:

>>

15 MW Solar Photovoltaic Power Plant in Gujarat

Version 03 Date: 30/04/2012

A.2. Description of the <u>small-scale project activity</u>:

>>

Welspun Urja Gujarat Private Limited (WUGPL) is implementing 15 MW solar photovoltaic technology based power project at village Khirsara, taluka – Anjar, in Kutch district in West Gujarat. The electricity generated from the project activity will be exported to the regional electricity grid and sold to the Gujarat State Electricity Utility (Gujarat Urja Vikas Nigam Limited) under a power purchase agreement. WUGPL has decided to use thin film CdTe technology for its 15 MW Gujarat project. The whole installation will have a minimum of 25 years design life.

Since the proposed project activity is a Greenfield project, the approved small scale methodology AMS.I.D Version 17 already prescribes the baseline scenario as being "electricity delivered to the grid by the project activity that otherwise would have been generated by the operation of grid-connected power plants and by the addition of new generation sources". The electricity exported by the proposed project activity would displace an equivalent amount of electricity generated by the power plants already operational and proposed to be added in the North-East-West-North East (NEWNE) Grid which relies predominantly on fossil fuels (particularly coal). Thus, it contributes towards reduction in the demand-supply gap during periods of electricity shortage and increase in the share of renewable energy in the grid mix.

The estimation of GHG emission reductions by the project activity is limited to carbon dioxide (CO₂) only and its primary source is the fossil fuels consumed in the NEWNE grid. The proposed project activity would lead to an estimated emission reduction of 22,576 tCO₂e annually over the chosen crediting period.

The PDD for the project activity was previously webhosted, from 11/06/11 to 10/07/11, under large scale methodology, ACM0002, because the project proponent envisaged allocation of further capacity at the current project site in the near future and hence to avoid the issues of debundling, small scale modalities and procedures were not applied to the project activity. But now WUGPL is not implementing any further capacity addition at the project site as the allocation from the Government of Gujarat is only 15 MW. Further in light of the recent CDM EB decision referred in Attachment A of Appendix B (EB 63, Annex 24) of the Indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activity categories, the project proponent plans to avail the benefits of automatic additionality of solar PV projects of capacity less than or equal to 15 MW. Thus the project proponent, WUGPL, now plans to re-webhost the PDD for the project activity under small scale modalities and procedures.

View of the project participants on the contribution of the project activity to Sustainable Development:

Ministry of Environment and Forests, Govt. of India has stipulated the following indicators for sustainable development in the guidelines for CDM projects:

PROJECT DESIGN DOCUMENT FORM (CDM-SSC-PDD) - Version 03



CDM - Executive Board

Social well being:

- The proposed project would lead to generation of business opportunities and employment in the region thereby contributing towards social upliftment through direct and indirect benefits.
- The project activity in its execution will lead to development of infrastructure in the region and at the same time promote business in the region through the improvement in electricity generation capacity of the grid.

Economic well-being:

- The project activity leads to an investment in the region accompanied with business and employment benefits along with improvement of grid supply which otherwise would not have happened in the absence of project activity.
- The clean electricity generated through solar power by the project activity would be fed into the local grid thereby improving the availability of electricity in the region. This would provide a better scenario for local industries and businesses to improve their production capacities thereby contributing towards the overall economic development of the region.

Environmental well being:

- The project activity employs solar power for generation of electricity thereby displacing fossil fuels which are being rapidly consumed to meet the growing demand of electricity in the country thus contributing towards reduction in GHG emissions.
- Solar power projects generate no end products in the form of solid waste (ash etc.) compared to alternative modes of power generation (e.g. coal based on which the Indian grid is primarily dependent). Hence the project activity is a cleaner source of power generation and is encouraging greener practice of power generation.
- The solar power project indirectly is contributing towards conservation of non-renewable resources which are under the constant threat of depletion due to excessive and rapid growth of energy demand. The growing threat of global warming which is a key concern is also addressed due to renewable energy use thereby mitigating climate change.

Technological well being:

- The project activity uses thin film CdTe solar photovoltaic technology for power generation thereby demonstrating the viability of solar based renewable energy generation in the region, which is fed into the nearest sub-station (part of the NEWNE Regional Grid), thus increasing energy availability under the service area of the substation. Hence the project leads to technological well being.

A.3. Project participants:

>>

Name of Party involved (*) ((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)
India (Host Country)	Welspun Urja Gujarat Private Limited (Private entity)	No

A.4. Technical description of the small-scale project activity:

A.4.1. Location of the small-scale project activity: