

SECTION A. Description of project activity

A.1. Purpose and general description of project activity

The main purpose of this project activity is to generate clean form of electricity through renewable solar energy source. Arhyama Solar Power Pvt. Ltd. is the promoter of the proposed project activity. The project activity involves installations of 6 MW solar photovoltaic technology based power plant at Nalgonda, Telangana. The project will replace anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 9,535 tCO_{2e} per year, thereon displaces average 9,899 MWh/year amount of electricity from the generation-mix of power plants connected to the Southern grid, which is mainly dominated by thermal/fossil fuel based power plant.

The details of the project and the state of installation are mentioned in the table:

Project Promoters' Name	Capacity	Connection with Grid	State	Use of Electricity
Arhyama Solar Power Pvt. Ltd.	6 MW	Southern	Telangana	Sale to third party

Scenario existing prior to the implementation of project activity:

The scenario existing prior to the implementation of the project activity, is electricity delivered to the grid by the project activity that would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system" version 4.0.

Baseline Scenario:

As the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following as per applied methodology:

Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system".version 4.0

Hence, pre-project scenario and baseline scenario are the same.

Sustainable development indicators

The National CDM Authority (NCDMA), which is the Designated National Authority (DNA) for the Government of India (GOI) under the Ministry of Environment and Forests (MoEF), has mentioned four indicators for the sustainable development in the interim approval guidelines for Clean Development Mechanism (CDM) projects from India¹. Thus the project's contribution towards sustainable development has been addressed based on the following sustainable development aspects:

Social well being

The project activity provided / provides job opportunity to local people during erection, commissioning and maintenance of the solar project. Frequency of visiting villages and nearby

¹ http://www.cdmindia.gov.in/approval_process.php

areas by skilled, technical and industrialist increase due to installation /site visit/operation and maintenance work related to solar project. This directly and indirectly positively effects the economy of villages and nearby area.

Environmental well being

Solar power is one of the cleanest renewable energy powers and does not involve any fossil fuel. There are no GHG emissions. The impact on land, water, air and soil is negligible. Thus the project activity contributes to environmental well-being without causing any negative impact on the surrounding environment.

Economic well being

The CDM project activity generates permanent and temporary employment opportunity within the vicinity of the project. The electricity supply in the nearby area improves which directly and indirectly improves the economy and life style of the area.

Technological well being

The project activity is step forward in harnessing the untapped solar potential and further diffusion of the solar technology in the region. The project activity leads to the promotion of solar projects and demonstrates the success of solar projects in the region which further motivate more investors to invest in solar power projects. Hence, the project activity leads to technological well-being.

The Host County Approval issued by India DNA declaring acceptability of the Sustainable Indicators by the project activity shall be submitted to DOE.

The project falls under Sectoral Scope: 1 - Energy industries (renewable / non renewable sources) and project falls under Type I of small scale projects.

A.2. Location of project activity

A.2.1. Host Party

India

A.2.2. Region/State/Province etc.

Telangana

A.2.3. City/Town/Community etc.

Project Promoters' Name	Capacity	Village	District	State
Arhyama Solar Power Pvt. Ltd.	6 MW	Kolanpaka	Nalgonda	Telangana

A.2.4. Physical/Geographical location

The project is located at Kolanpaka Village, Aleir Mandal, Nalgonda District, Telangana. The land is located about 1000 meters from the main road. The Project is located 17° 63” North and 79° 01” East.

Key Drivers	Distance
Nearest City	Hyderabad 105 km
Nearest Rail Station	Aleir 5 km from the site