



Baseline Scenario

In accordance with the approved baseline methodology AM0029, version – 03 (based on approach 48b of the CDM modalities and procedures) baseline has been established considering “emissions from a technology that represents an economically attractive course of action, taking into account barriers to investment”. In line with this approach a detailed investment comparison analysis has been carried out in section B.4 of this document considering the levelised cost of generation as the most suitable financial indicator.

In the present context it has been established that a new coal based power station using subcritical technology would be the economically most attractive alternative to the project activity and hence the most plausible baseline scenario. The details on technology, efficiency, operating lifetime for various fuel/ technology options have been discussed in detail in Section B.4.

Reduction of greenhouse gas emissions

The project activity involves power generation from the grid connected (Southern Regional Grid) gas based Combined Cycle Power Plant (CCPP). The technology employed in the project activity has been discussed in section A.4.3 of this document.

The carbon intensity of the present project activity would be lower than the southern regional grid (as per Build Margin & Combined Margin) and the coal based power station using sub-critical technology, which has been identified as the most plausible baseline option. Hence the project activity reduces CO₂ emission by way of avoiding power generation from relatively higher carbon intensive sources.

The approved baseline methodology AM0029, version – 03 recommends the lowest emission factor amongst three options to be considered for ascertaining the emission reductions due to the project activity (details are available in section B.6.1); the Build Margin was determined as the baseline emission factor.

In the context of the present project activity the build margin emission factor has been found to be the most conservative. Hence the build margin emission factor has been considered towards determining the emission reduction due to the present project activity. It has been discussed in detail in section B.6.1 of this document.

The description of the sources of greenhouse gases included in or excluded from the project boundary has been discussed in section B.3 of this document.

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

The contribution of this project activity towards sustainable development as per the four indicators prescribed by The National CDM Authority (“NCDMA”) in India i.e., Ministry of Environment and Forests (“MoEF”) is presented below.

Social well being:

- The project activity has generated employment for the local population during the construction as well as operational phases of the project activity, both direct and indirect.
- It has also provided an opportunity for secondary small scale entrepreneurs’ development near the project site, such as small shops, etc. Overall, there has been employment creation as a result of the project activity.

**Economic well being:**

- By creating employment in the area, as described above, the project activity has brought in economic improvement for the local population.
- If the project activity is registered as a CDM project, then by way of generating Certified Emission Reductions (“CERs”) and through transaction of such CERs with Annex I Parties, the project activity would bring in additional revenue to India.

Environmental well being:

- The project activity avoids use of any other fossil fuels., and thus reduces emissions of GHGs, oxides of sulphur and nitrogen, particulate matters and unburned carbon, fly ash (in case of coal and lignite), etc.

Technological well being:

- The project activity is a natural gas based combined cycle power plant and would result in improved power generation efficiency as compared to an open cycle or coal or lignite based thermal power plant of similar capacity.

The project proponent will contribute 2% of the revenue realized from sale of certified emission reduction arising from the candidate CDM project towards sustainable development including initiatives towards society / community development.

LKPL is aware about the DNA guideline and a formal undertaking is being submitted separately.

A.3. Project participants:

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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)	Private Entity: Lanco Kondapalli Power Limited.	No

A.4. Technical description of the project activity:**A.4.1. Location of the project activity:**

>> Village – Kondapalli, District – Krishna, Andhra Pradesh, India

A.4.1.1. Host Party(ies):

>> India

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

>> Andhra Pradesh

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

>> Village – Kondapalli, District – Krishna