

## Revision history

Issue 2	Prepared by Gareth Phillips 3/11/05	Amendments to 1.10 and 1.11; exclusion of table 2 – 6 for SSC projects

## Validation Protocol for switching fossil fuels in an industrial facility by Indorama Cement Limited CDM.Val 0321

This validation protocol is designed to ensure that the project meets the requirements for CDM projects that are detailed in paragraph 37 of the CDM modalities and procedures. Each requirement is covered in a separate table. The following requirements are discussed in this protocol:

Requirement	Description	
Participation requirements	The participation requirements as set out in Decision 17/CP7 need to be satisfied	Covered in table 1
Baseline and monitoring methodology	The baseline and monitoring methodology complies with the requirements pertaining to a methodology previously approved by the Executive Board	Baseline methodology is covered in table 2 Monitoring methodology is covered in table 4
Additionality	The project activity is expected to result in a reduction in anthropogenic emissions by sources of greenhouse gases that are additional to any that would occur in the absence of the proposed project activity	Covered in table 3
Monitoring plan	Provisions for monitoring, verification and reporting are in accordance with relevant decisions of the COP/MOP	Covered in table 5

Environmental impacts	Project participants have submitted to the designated operational entity documentation on the analysis of the environmental impacts of the project activity, including transboundary impacts and, if those impacts are considered significant by the project participants or the host Party, have undertaken an environmental impact assessment in accordance with procedures as required by the host Party;	Covered in table 6
Comments by local stakeholders	Comments by local stakeholders have been invited, a summary of the comments received has been provided, and a report to the designated operational entity on how due account was taken of any comments has been received;	Covered in Table 7
Other requirements	The project activity conforms to all other requirements for CDM project activities in relevant decisions by the COP/MOP and the Executive Board.	Covered in Table 8

Small sale projects and AR projects have specific requirements which are covered in Table 9-11. Small scale SSC projects have special requirements which deviate from the requirements of other CDM projects. These requirements are tested in table 9. Tables 2 to 6 are not applicable to SSC projects.

Further remarks on the use of this document:

- text in *italic blue* is meant as guidance for the assessor
- MoV = Means of Verification, DR= Document Review, I= Interview

This protocol should be adapted as required. For example, if the project is not a small scale project or an AR project, some tables can be deleted.

**Table 1 Participation Requirements for Clean Development Mechanism (CDM) Project Activities (Ref PDD, Letters of Approval and UNFCCC website) All CDM project activities**

REQUIREMENT	MoV	Ref	Comment	Draft finding	Concl
1.1 The project shall assist Parties included in Annex I in achieving compliance with part of their emission reduction commitment under Art. 3 and be entered into voluntarily.	Document Rev	PDD	Yes, Project will reduce GHG emissions but, no Annex 1 party is listed.	OK	OK
1.2 The project shall assist non-Annex I Parties in achieving sustainable development and shall have obtained confirmation by the host country thereof, and be entered into voluntarily	DR	PDD	Project will contribute to sustainable development and resource conservation. Letter of Approval from Designated National Authority is to be provided by the client. Letter of approval dated 23 <sup>rd</sup> August 2006 bearing F.No 4/12/2006-CCC was provided and hence CAR1 was closed out.	CAR1	OK, CAR1 Closed out
1.3 All Parties (listed in Section A3 of the PDD) have ratified the Kyoto protocol and are allowed to participate in CDM projects	DR	UNFCCC	India ratified the Kyoto protocol on 26 <sup>th</sup> August 2002 and is allowed to participate. ( <a href="http://unfccc.int/parties_and_observers/parties/items/2109.php">http://unfccc.int/parties_and_observers/parties/items/2109.php</a> )	OK	OK
1.4 The project results in reductions of GHG emissions or increases in sequestration when compared to the baseline; and the project can be reasonably shown to be different from the baseline scenario	DR	PDD	Yes, the project results in CO2 emission reduction. To be checked during site visit. The excel sheet was checked and the formulas used along with the values obtained were also cross checked and it was found that the emission reductions have been calculated according to the formulas mentioned in the PDD.	Pending  OK	OK

REQUIREMENT	MoV	Ref	Comment	Draft finding	Concl
1.5 Parties, stakeholders and UNFCCC accredited NGOs shall have been invited to comment on the validation requirements for minimum 30 days (45 days for AR projects), and the project design document and comments have been made publicly available	DR	UNFCCC web	The project PDD was posted on UNFCCC webpage during 12-4-2005 to 11-5-2005.  <a href="http://cdm.unfccc.int/Projects/Validation/view.html?ProjectId=WAESE1FDHN4NUKDWWFUCPW8WYB1IOZ&amp;OE=SGS-UKL">http://cdm.unfccc.int/Projects/Validation/view.html?ProjectId=WAESE1FDHN4NUKDWWFUCPW8WYB1IOZ&amp;OE=SGS-UKL</a>  The project was also listed on the SGS Climate Change webpage	OK	OK
1.6 The project has correctly completed a Project Design Document, using the current version and exactly following the guidance	DR	PDD	Yes, the guidelines for completing CDM-SSC-PDD have been followed, but specific requirements are pending closure of CARs / NIRs in subsequent sections	Pending	OK
1.7 The project shall not make use of Official Development Assistance (ODA), nor result in the diversion of such ODA	DR	PDD	No ODA utilized as mentioned in PDD	OK	OK
1.8 For AR projects, the host country shall have issued a communication providing a single definition of minimum tree cover, minimum land area value and minimum tree height. Has such a letter been issued and are the definitions consistently applied throughout the PDD?	DR	PDD	Not Applicable	Not Applicable	NA
1.9 Does the project meet the additional requirements detailed in: Table 9 for SSC projects Table 10 for AR projects Table 11 for AR SSC projects	DR	PDD	See Table 9	Pending	OK

REQUIREMENT	MoV	Ref	Comment	Draft finding	Concl
1.10 Is the current version of the PDD complete and does it clearly reflect all the information presented during the validation assessment.	DR	PDD	Pending clearance of CARs / NIRs	Pending	OK
1.11 Does the PDD use accurate and reliable information that can be verified in an objective manner?	DR	PDD	Yes, the PDD uses accurate and reliable information	OK	OK

**Table 2 Baseline methodology(ies) (Ref: PDD Section B and E and Annex 3 and AM) Normal CDM projects only**

**Table 3 Additionality (Ref: PDD Section B3 and AM) Normal CDM projects only**

**Table 4 Monitoring methodology (PDD Section D and AM) Normal CDM Projects only**

**Table 5 Monitoring plan (PDD Annex 4) Normal CDM Project activities only**

**Table 6 Environmental Impacts (Ref PDD Section F and relevant local legislation) Normal CDM Project Activities only**

**Table 7 Comments by local stakeholders (Ref PDD Section G) All CDM Project Activities**

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
7.1 Have relevant stakeholders been consulted?	DR	Sec G	The list of local stakeholders is not provided in PDD clearly. The list of stakeholders is provided in rephrased PDD clearly. Hence CAR2 was closed out.	CAR2	OK, CAR2 Closed out
7.2 Have appropriate media been used			Adequate information on How / media used to invite	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
to invite comments by local stakeholders?	DR		comments is provided in the PDD.		
7.3 If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	DR	G.1	Stakeholder consultation process is not required as per law.  It has been carried out by the project proponent to meet the CDM requirements.	OK	OK
7.4 Is a summary of the stakeholder comments received provided?	DR	G.2	Summary of stake holder comments not mentioned clearly.  Rephrased PDD mentions the summary of stakeholders comments clearly. Hence CAR3 was closed out.	CAR3	OK , CAR3 Closed out
7.5 Has due account been taken of any stakeholder comments received?	DR	G.3	Due account of stakeholder comments received is not mentioned in PDD clearly.  Rephrased PDD mentions the due account of comments mentioned as no negative comments reported	CAR4	OK, CAR4 Closed out

**Table 8 Other requirements All CDM project activities**

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
<b>8.1 Project Design Document</b>					
8.1.1 Editorial issues: does the project correctly apply the PDD template and has the document been completed without modifying/adding headings or logo,	DR.	PD D	Yes The PDD applies the current PDD template	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
format or font.					
8.1.2 Substantive issues: does the PDD address all the specific requirements under each header. If requirements are not applicable / not relevant, this must be stated and justified	DR		Pending CARs / NIRs	Pending	OK
<b>8.2 Technology to be employed</b>					
8.2.1 Does the project design engineering reflect current good practices?			Yes, the project design engineering reflect current good practices	OK	OK
8.2.2 Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country?			Technology specifications to be provided by the client.  Technology specifications provided by the project proponent and same is seen by the local assessor.	NIR5	OK, NIR5 Closed out
8.3 Is the project technology likely to be substituted by other or more efficient technologies within the project period?			Probably not during the crediting period.	OK	OK
8.2.4 Does the project require extensive initial training and maintenance efforts in order to work as presumed during the project period?			Training requirements are not mentioned clearly in the PDD.  Rephrased PDD mentions about the training requirements clearly.	NIR6	OK, NIR6 closed out

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
<b>8.3 Duration of the Project/ Crediting Period</b>					
8.3.1 Are the project's starting date and operational lifetime clearly defined and reasonable?			Project starting date is not mentioned in the PDD but, the operational lifetime of the project activity is mentioned clearly.  Project starting date is clearly mentioned in the rephrased PDD.	CAR7	OK, CAR7 Closed out
8.3.2 Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max. two x 7 years or fixed crediting period of max. 10 years)?			Yes, assumed crediting period is clearly defined as fixed for 10 years.	OK	OK
8.3.3 Does the project's operational lifetime exceed the crediting period	DR		Yes, projects operational life time is mentioned as 20 years which exceeds the fixed crediting period of 10 years.	OK	OK

**Table 9 Additional requirements for SSC project activities only**

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
9.1 Does the project qualify as a small scale CDM project activity as defined in paragraph 6 (c) of decision 17/CP.7 on the modalities and			Yes, the project qualifies as a small scale CDM project activity.	OK	OK



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
procedures for the CDM?					
9.2 The project conforms to one of the categories listed in Appendix B to Annex II to Decision 21/CP8			Yes, the project confirms to AMS- III B of Appendix B	OK	OK
9.3 The small scale project activity is not a debundled component of a larger project activity?			The project activity is not a debundled component of any larger project as there is no small scale project activity which is been registered by same project proponent for last two years.	OK	OK
9.4 PDD has been prepared in accordance with appendix A of Annex II to Decision 21/CP8			Yes, the PDD has been prepared in accordance with appendix A	OK	OK
9.5 The project uses a simplified baseline and monitoring methodology specified in Appendix B. If not, they may propose changes to the meths or a new SSC project category			Yes, monitoring methodology to be checked during site visit.  The project is using the simplified baseline and monitoring methodology.  The baseline of the project activity is that the project is using blast furnace gas which is a derivative of fossil fuel instead of LDO which is a primary fossil fuel. This was verified during site visit and document for BFG as derivative of fossil fuel was also collected from the Project proponent.	TBC	OK
9.6 Are the emission reductions determined in accordance with the methodology described			Yes, Sample calculations needs to be checked during site visit  The excel sheet was checked for the formula used and the values obtained from the formula. It was found in order by the local assessor during site visit.	TBC	OK
9.7 Is there any bundling of SSC			No, There is no bundling of SSC activities in one PDD.	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
activities into one PDD? If so, does the monitoring plan consider sampling of activities? Refer to para 19 of Annex II. Also, note bundling provisions in SSC Briefing Note and SSC meths I C / I D and III D and Para 22e of Appendix B					
9.8 Is EIA required by host party? If not, none is required irrespective of SHC. If yes, has one been performed consistent with local requirements?	F		EIA is not required as per the law. The project proponent carried an internal assessment. Report needs to be checked during site visit.  The internal assessment report was checked and it was found to be in order.	TBC	OK
9.9 The project results in emission reductions that are additional in accordance with the following requirements: <ul style="list-style-type: none"> <li>(para 26) The project is additional if emissions are reduced below those in the absence of the project</li> <li>(Para 27) Simplified baseline can be used; if not, baseline proposed shall cover all gases, sectors and sources listed in Annex A to the KP</li> <li>Para 28) One or more barriers as detailed in attachment A to</li> </ul>	B.3		Investment barrier is not clear.  In technological barrier quantify the production loss due to uncertain quantity and quality of BFG.  In Barrier due to prevailing practices provide evidence that it is the only plant of its kind in the state of Maharashtra.  The additionality was not proved on investment barrier and it was rephrased in PDD.  The technological barrier was used to prove the additionality and the problems related to this were also seen during the site visit by the local assessor and obtained the documentary proof for that as well and the production loss was the perceived production loss in absence of alternative if BFG is not there to run the hot air generator. CDM was seriously considered to mitigate the risk involved in the project activity. The copy of same was	CAR8	OK, CAR8 Closed Out

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
Appendix B to Annex II will be used to demonstrate that the project would not proceed without the CDM			also obtained from the project proponent.  In barrier due to prevailing practice the evidence for the only plant of its kind in the state of Maharashtra was obtained and it was verified by the local assessor.		
9.10 Leakage is calculated according to the provisions of the SSC methodologies in Appendix B			No leakage calculation is required as per the methodology.	OK	OK
9.11 The project boundary shall be constructed in accordance with the requirements of the SSC meths in Appendix B	PDD		The project boundary seems to be fine, but will be checked during site visit by the local assessor.  The project boundary was physically verified by local assessor and found in accordance with the PDD.	TBC	OK
9.12 The Monitoring plan shall be consistent with the requirements of the SSC methodology in Appendix B and shall provide for the collection and archiving of data needed to determine project emissions, baseline emissions and leakage.			The monitoring plan looks consistent. To be checked during site visit by local assessor.  Monitoring plan was checked by the local assessor and it was found in order.	TBC	OK
9.13 The monitoring plan shall present good monitoring practice appropriate to the circumstances of the project activity (para 33)			The monitoring plan is presenting good monitoring practices, but to be checked during site visit.  This was verified by local assessor that the monitoring plan is presenting the good monitoring practices.	TBC	OK
9.14 If project activities are bundled, separate monitoring plan shall be prepared for each of the activities or an overall plan reflecting good			No the project activity is not bundled project activity.	OK	OK



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
monitoring practice will be prepared, consistent with the above requirements					

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