

 <p style="text-align: center;"><b>CDM: Proposed new methodology expert form (version 04)</b> (To be used by methodology experts providing desk review for a proposed new methodology)</p>	
Name of expert responsible for completing and submitting this form	Richard Tipper
Related F-CDM-NM document ID number	NM0104
<p><i>Note to those completing this form, as applicable: Please provide recommendations on the proposed new baseline and monitoring methodologies based on an assessment of CDM-NMB and CDM-NMM and of their application in sections A to E of the draft CDM-PDD, desk reviews and public input. Please ensure that the form is entirely filled and that arguments and expert judgements are substantiated.</i></p>	
<b>A. Evaluation of the proposed new methodologies by desk reviewers:</b>	
<b>I. Evaluation of the proposed new baseline methodology:</b>	
Title of new baseline methodology:>> Use of renewable reducing agents for the production of pig iron and steel	
<p>i. Conditions under which this methodology is applicable to other potential projects (e.g. project type, region, data availability):</p> <p>&gt;&gt;Should be applicable to any project using sustainable charcoal as a reducing agent for pig iron or steel production, irrespective of region. Requires detailed information about economics of alternative scenarios.</p> <p>ii. Strengths and weaknesses of the methodology:</p> <p>&gt;&gt;Strengths: Provides a reasonably detailed framework for analysing alternative baselin scenarios Weaknesses: Lacks sufficient clarity regarding the starting conditions of the project and the method used for sensitivity analysis is not adequate (see below).</p> <p>iii. Any changes needed to improve the methodology:</p> <p>a. Minor changes:&gt;&gt;</p> <p>b. Major changes:&gt;&gt;1. The methodology should start with a clear description of the current status of the plant(s) concerned, including the type of fuel/reducing agent currently used, the age and condition of equipment and a summary of the economics of operation. Above all there needs to be a clear explanation of whether the plant is currently operating using sustainable charcoal production (in other words does the baseline entail a switch from current mode of operation) or is the plant currently operating using coke (in which case the baseline scenario is a continuation of current mode of operation). 2. The methodology should require a description of the land that is currently used (or proposed to be used) to supply fuelwood for charcoal production. If there is already a functioning plantation resource, the management and state of the resource should be clearly documented. The term “renovation of exhausted plantation assets” needs to be clearly explained (why has the asset become exhausted?). If there is no current plantation resource then the land use and vegetation of the proposed plantation area needs to be clearly described and the emissions associated with any clearance of vegetation or other land preparation activities need to be taken into account. 3. Regarding the proposed method of sensitivity analysis for economic analysis, the use of a standard variation of the mean input prices for a historic period of three years is not scientifically valid way of predicting future prices, neither is it an approach that is likely to represent a business decision-making process.</p>	

**II. Evaluation of the proposed new monitoring methodology:**

Title of new monitoring methodology: >>Monitoring Emission Reductions from Using a Renewable Reducing Agent in the Pig Iron Industry

- i. Conditions under which this methodology is applicable to other potential projects (e.g. project type, region, data availability):  
>> Should be applicable to any project using sustainable charcoal as a reducing agent for pig iron or steel production, irrespective of region. Requires detailed information about economics of alternative scenarios.
- ii. Strengths and weaknesses of the methodology:  
>>Strengths: is a very detailed and well structured monitoring methodology  
Weaknesses: minor corrections needed
- iii. Any changes needed to improve the methodology:
  - a. Minor changes:>>Clarification required on the factors “data” used to calculate baseline emissions, and to determine additionality. It needs to be made clearer which variables are based on the monitored activity of the plant in the project case and which variables are to be used in the initial assessment of additionality.
  - b. Major changes:>>Need to describe information / data that will be used to determine that forestry supplying “sustainable charcoal” is sustainable and therefore that the emission factor for sustainable charcoal is consequently zero.

**B. Details of the evaluation of the proposed new methodology by the desk reviewer:**

**I. Proposed new baseline methodology (specify title here):** >> Use of renewable reducing agents for the production of pig iron and steel

**(1) Short description of the methodology, including an assessment of which approach from paragraph 48 of the CDM modalities and procedures was used:**

*a) Describe the methodology:*

>>The methodology sets out a process by which the most likely reducing agent for pig-iron production is selected. The method considers all the steps of the CDM additionality tool.

*b) State the approach selected:*

>> The main approach is an economic comparison of alternative technical options. This includes an assessment of the barriers to investment.

*c) Indicate (in summary form) why the approach selected is the most appropriate. Please provide your expert judgement on the appropriateness of the selected approach to the project category:*

>>This is the most appropriate approach for this type of project given the particular economic circumstances of individual pig iron production facilities and step-change nature of the fuel switch decision, that involves consideration of capital expenditure and running costs.

**(2) Basis for determining the baseline scenario:**

*a) State whether the documentation explains how the baseline scenario is to be chosen and identified:*

>>The documentation provides a reasonably clear explanation as to how the baseline scenario is to be chosen and identified. However, it does not provide adequate instructions to ensure that there is a clear distinction between the following cases: case (a): where an existing plant is already using charcoal (in this case the financial analysis should include the capital expenditure associated with switching to coke and change in fuel costs; technical risks associated with switching reducing agents and fuel supply sources; plant downtime; and change in product quality); case (b): where an existing plant is using coke but considering a switch to charcoal, where the financial analysis would consider the barriers to switching to charcoal, both capital and downtime, versus cost savings; or case (c): a new-build case, where the project owner is constructing a new plant that could run on either fuel.

*b) State the basic underlying rationale for algorithms/formulae used (e.g. marginal vs. average basis) (see also section 4 below):*

>> The rationale used is based on an analysis of the most economically attractive course of action, taking into account barriers to investment.

*c) State whether the documentation explains how, through the use of the methodology, it can be demonstrated that a project activity is additional and therefore not the baseline scenario. If so, what are the tools provided by the project participants?*

>>The documentation sets out a process for the financial analysis of alternative scenarios. The process includes a number of steps based on the CDM additionality-screening tool. However, the methodology does not set a clear threshold on for what outcome of the economic assessment would indicate that the project activity is additional.

*d) State whether the basis for determining the baseline scenario and for assessing additionality is appropriate and adequate:*

>>The overall approach is appropriate for this type of project. However, there needs to be clarification, as described in 2a, of the baseline case in relating to the current status of the plant. Furthermore, where plants are already using renewable reducing agents, it is suggested that a conservative interpretation of the case for investing in higher emissions technologies should be adopted.

The proposed method of sensitivity analysis for economic analysis, the use of a standard variation of the mean input prices for a historic period of three years is not scientifically valid way of predicting future prices, neither is it an approach that is likely to represent a business decision-making process. It is suggested that the sensitivity analysis could be based upon trends and future contracts for commodities such as coal. In the case of commodities with high price volatility a sensitivity range of 1 unit standard deviation is unlikely to be sufficient.

**It is also recommended that the Meth Panel consider the principle of eligibility of projects that are already using renewable energy but claiming that they may switch to fossil fuels. The policy implications of using carbon finance to subsidise existing non-commercially viable renewable energy processes needs careful consideration.**

**This deliberation should also consider how to take account of changes to internal policies / subsidies. These are clearly important to the case for additionality in charcoal-coke fuel switch projects, such as the one proposed. In the proposed project, cessation of government plantation incentives were one of the main reasons for charcoal becoming less favoured as a reducing agent. The Meth Panel should provide guidance on the extent to which CDM finance can / should be used to replace such incentives.**

**(3) Assessment of the description of the proposed methodology and its applicability**

*a) State whether the methodology has been described in an adequate manner:*

>>Generally yes, but with the qualifications set out in 2a and 2d

*b) State whether the proposed methodology is appropriate for the referred proposed project activity and the referred project context (described in Sections A - E of the draft CDM-PDD and submitted along with CDM-NMB):*

>>Yes. But with the qualifications set out in 2a and 2d. Furthermore in the case of the proposed project, a more critical analysis of some of the cost items in the economic analysis is recommended, notably: (1) the potential income from sale of land; (2) the costs of restocking and maintaining existing plantations; (3) the costs of coke; (4) the cost of converting from charcoal to coke (include downtime / lost production and change in quality of output);

*c) State whether the application of the methodology could result in a baseline scenario that reasonably represents the anthropogenic emissions by sources of greenhouse gases that would occur in the absence of the proposed project activity.*

>>Yes. However, as stated previously the methodology is inadequate in several aspects.

*Please explain:*

>>While the methodology is not sufficiently clear or robust it is still possible that it could result in a scenario that reasonably represents anthropogenic emissions. However, the methodology is unlikely to be able to clearly distinguish between a free-riding project and an additional project.

**(4) Assessment of algorithms/formulae and type of data needed:**

*a) State whether the description of the methodology includes algorithms and generic formulae that can be applied to other potential project activities (if not, the proposed new methodology will be considered as a project-specific methodology):*

>>Partly; as described above, the general approach of comparative economic analysis to distinguish between additional and free-riding projects is reasonable. However, the application of a standard deviation on historic costs is not economically or scientifically adequate.

*b) Explain the spatial scope of data used to determine the baseline and whether the scope is appropriate:*

>>The spatial scope covers all sinks/sources of emissions relevant to the project

*c) Explain the vintage of data used (in relation to the duration of the project crediting period) and whether the vintage of data is appropriate, indicating the period covered by the data:*

>>The vintage of data to be used is generally reasonable, with the exception of the use of historic data on input prices.

**(5) Definition of the project boundary related to the baseline methodology:**

a) State how the project boundary is defined in terms of:

i) Gases and sources

>>All relevant and significant gases and sources are covered; including: CO2 from coke and charcoal combustion, methane and nitrous oxide emissions.

ii) Physical delineation

>>All relevant sources are covered.

b) Indicate whether this project boundary is appropriate:

>>Yes

**(6) Key assumptions/parameters (including emission factors and activity levels) and data sources:**

a) List the implicit and explicit key assumptions. Identify those, if any, which are problematic and explain:

>>Mainly uses standard emission factors for fuels and standard methods of measurement

b) State whether the key assumptions are arrived at in a transparent manner:

>>Yes

c) Give your expert judgement on whether the assumptions/parameters are adequate:

>>Yes

d) Indicate which data sources are used and how the data are obtained (e.g. official statistics, expert judgement):

>>Most emission factors and activity factors are based on standard, recognised values such as IPCC. Other data will be measured using standard techniques.

e) Give your expert judgement on whether the data used are adequate, consistent, accurate and reliable:

>>Yes

f) State possible data gaps:

>>Only significant gap is the need to define the data that will be used to demonstrate that renewable charcoal production is sustainable

**(7) Assessment of uncertainties:**

a) State whether the methodology includes an assessment of uncertainties regarding:

i) The basis for determining the baseline scenario:

>>Yes

ii) Algorithms/formulae:

>>Yes

iii) Key assumptions:

>>Yes

iv) Data:

>>Yes

b) State whether the uncertainties presented are reasonable:

>>Yes, with the exception of the use of standard deviation on historic input factors for the economic assessment of alternative scenarios

<p><b>(8) Leakage:</b></p> <p><i>a) State how the baseline methodology addresses any potential leakage due to the project activity:</i></p> <p>&gt;&gt;The methodology includes consideration of the fate of the forests affected by charcoal production.</p> <p><i>b) Indicate whether the treatment for leakage is appropriate and adequate:</i></p> <p>&gt;&gt;This is reasonable. However, the instructions could be made clearer regarding the specific forest impacts that should be considered: e.g., is the management of the forest for charcoal likely to displace activities to areas of natural forest? (In cases where there is an existing plantation resource the answer would probably be no, but in places where there was not an existing plantation resource the answer could be yes)</p>
<p><b>(9) Transparency and “conservativeness”:</b></p> <p><i>a) Indicate whether the baseline methodology was developed in a transparent way:</i></p> <p>&gt;&gt;As stated above, a number of clarifications are required to make the methodology fully transparent.</p> <p><i>b) State whether the baseline methodology is conservative:</i></p> <p>&gt;&gt;Insofar as it does not definitely separate additional from free-riding projects, it is not conservative</p>
<p><b>(10) Potential strengths and weaknesses of the proposed baseline methodology (please explain):</b></p> <p>&gt;&gt;Strengths: Provides a reasonably detailed framework for analysing alternative scenarios. Incorporation of the CDM additionality tool is a useful feature. Clear breakdown of relevant source of emissions and emission factors.</p> <p>Weaknesses: Lacks sufficient clarity regarding the starting conditions of the project (see above). Method used for sensitivity analysis of economic assessment is not adequate (see above).</p>
<p><b>(11) Other considerations, such as a description of how national and/or sectoral policies and circumstances have been taken into account (please explain):</b></p> <p>&gt;&gt;The application of the methodology in the proposed project makes clear that one of the main reasons for the pig-iron producer to switch to coke from charcoal is the cessation of incentive payments for plantation establishment / management. However, this is not dealt with clearly in the methodology. The methodology should clearly describe how to take account of such changes in public policies within the analytical framework. It is suggested that the Meth Panel should provide guidance to methodology developers on these issues.</p>
<p><b>(12) Applicability of the proposed methodology across project types and regions (please indicate):</b></p> <p>&gt;&gt;This methodology is potentially applicable to all projects involving fuel switching between coke and charcoal for pig-iron production, irrespective of region.</p>
<p><b>(13) Any other comments:</b></p> <p><i>a) State whether any other source of information (i.e. other than documentation on this proposed methodology available on the UNFCCC CDM web site) has been used by you in evaluating this methodology. If so, please provide specific references:</i></p> <p>&gt;&gt;</p> <p><i>b) Indicate any further comments:</i></p> <p>&gt;&gt;</p>
<p><b>II. Proposed new monitoring methodology (specify title here): &gt;&gt; Use of renewable reducing agents for the production of pig iron and steel</b></p> <p><i>In respect of the proposed new monitoring methodology, evaluate each section of CDM-NMM to the draft CDM-PDD. Please provide your comments section by section:</i></p>

<p><b>(1) Brief description of new methodology:</b>  <i>Describe new methodology:</i>          &gt;&gt;The monitoring methodology describes that factors and methods of measurement that should be used to monitor the GHG benefits of projects that use renewable charcoal as a reducing agent for pig-iron production.</p>
<p><b>(2) Key assumptions/parameters:</b>  <i>a) List the implicit and explicit key assumptions. Identify those, if any, which are problematic and explain:</i>          &gt;&gt;The monitoring methodology includes  <i>b) State whether the key assumptions are arrived at in a transparent manner:</i>          &gt;&gt;Yes  <i>c) Give your expert judgement on whether the assumptions/parameters are adequate:</i>          &gt;&gt;Yes</p>
<p><b>(3) Data sources and data quality:</b>  <i>a) Indicate which data sources are used and how the data are obtained (e.g. official statistics, expert judgement):</i>          &gt;&gt; Most emission factors and activity factors are based on standard, recognised values such as IPCC. Other data will be measured using standard techniques  <i>b) Give your expert judgement on whether the data used are adequate, consistent, accurate and reliable:</i>          &gt;&gt;Yes  <i>c) State possible data gaps:</i>          &gt;&gt; The only significant gap is the data / information that will be used to demonstrate the sustainability of “sustainable charcoal”</p>
<p><b>(4) Assessment of the description of the proposed methodology and its applicability:</b>  <i>a) State whether the proposed methodology has been described in an adequate manner:</i>          &gt;&gt;Yes  <i>b) State whether the proposed methodology is appropriate for the referred proposed project activity and the referred project context (described in Sections A - E of the draft CDM-PDD and submitted along with CDM-NMM):</i>          &gt;&gt;Yes, with minor modification stated in 3c  <i>c) State whether this proposed monitoring methodology is compatible with the proposed baseline methodology described in CDM-NMB of the draft CDM-PDD:</i>          &gt;&gt;Yes</p>
<p><b>(5) Leakage (please elaborate, if appropriate):</b>          &gt;&gt;The circumstances in which leakage may occur are reasonably described. Data and information to be collected to monitor leakage is not tabulated</p>
<p><b>(6) Quality assurance and control procedures (please explain):</b>          &gt;&gt;Quality assurance procedures and checks are listed for all relevant data sources. These appear to be adequate.</p>
<p><b>(7) Potential strengths and weaknesses of the proposed monitoring methodology (please explain):</b>          &gt;&gt;Strengths: The monitoring methodology is detailed and comprehensive with minor exception (below)</p>

Weakness: The monitoring methodology does not cover data to demonstrate that renewable charcoal production is indeed sustainable.

**(8) Applicability of the proposed methodology across project types and regions (please indicate):**

>> This methodology is potentially applicable to all projects involving fuel switching between coke and charcoal for pig-iron production, irrespective of region.

**(9) Any other comments:**

*a) State whether any other source of information (i.e. other than documentation on this proposed methodology available on the UNFCCC CDM web site) has been used by you in evaluating this methodology. If so, please provide specific references:*

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*b) Indicate any further comments:*

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Signature of desk reviewer



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Date: 27 / 05 / 2005

**Information to be completed by the secretariat**

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Date when the form was received at UNFCCC secretariat	
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