

 <p style="text-align: center;">CDM: Proposed New Methodology Meth Panel recommendation to the Executive Board (version 04) <i>(To be used by the Meth Panel to make a recommendation to the Board regarding a proposed new methodology)</i></p>	
Date of Meth Panel meeting:	14 - 17 June 2005
Related F-CDM-NM document ID number (electronically available to EB members)	F-CDM-NM0104: "V&M do Brasil Renewable Reducing Agent Project"
Related F-CDM-NMex document ID number(s) (electronically available to EB members)	F-CDM-NMex0104: Tipper / Kartha
Related F-CDM-NMpu document ID number(s) (electronically available to EB members)	F-CDM-NMpu0104: Kill
<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>	
A. Final recommendations by the Meth Panel	
I. Recommendation on the proposed new baseline methodology: (checkmark the choice made)	
Title of proposed new baseline methodology:>> Use of renewable reducing agents for the production of pig iron and steel.	
<p>a. To approve this proposed methodology with minor changes</p> <p><input type="checkbox"/></p> <p>i. Conditions under which this proposed methodology is applicable to other potential CDM project activities (e.g. project type, region, data availability):</p> <p>>></p> <p>ii. Minor changes:</p> <p>>></p>	
<p>b. To reconsider this proposed methodology, subject to required changes</p> <p><input type="checkbox"/></p> <p>i. Conditions under which the proposed methodology is applicable to other potential projects (e.g. project type, region, data availability):</p> <p>>></p> <p>ii. Required changes:</p> <p>>></p> <p><i>(Project participants shall make required changes to the proposed new methodology and send it back to the Meth Panel. The proposed new methodology will be reconsidered by the Meth Panel if changes required are made by the project participants. The Executive Board will only consider this proposed new methodology after the revised proposed methodology has been reconsidered by the Meth Panel.)</i></p>	

c. Not to approve the proposed methodology



i. Reasons for non-approval:

>> The methodology is clearly written, and has taken on board many of the previous recommendations made for the previous version, NM0029. However, other recommendations previously made have not been incorporated, and new methodological components introduced in NM0104 also are not satisfactory. Given that significant changes are required in order to address these concerns, a new desk review would be needed.

- Financial analysis: The proposed method of sensitivity analysis for financial analysis is not sufficiently robust. Using a standard variation of a historical 3y+ average in input prices prior to the management decision is not an appropriate way of predicting future prices. The application of the proposed method in the draft CDM-PDD indicates that this sensitivity analysis is not robust enough to “remain valid in extremes of the range of variability in key variables” as the methodology claims. For example, the methodology allows for an 11.1% increase in the cost of coke, whereas in practice the price of coke has more than quadrupled since 2001.
- The methodology should include a requirement to describe 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 the methodology should require a clear explanation of whether the proposed project is currently operating using charcoal (in other words does the baseline entail a switch from current mode of operation) or coke (in which case the baseline scenario is a continuation of current mode of operation). The methodology should also require a description of land currently (or proposed to be) used to supply fuelwood for charcoal production. If there is already a functioning plantation, the management and state of the resource should be clearly documented. If there is no current plantation then the land use and vegetation of the proposed plantation area needs to be clearly described and emissions associated with any land-clearing/preparation activities need to be taken into account.
- Distinct procedures should be provided, where appropriate, for the two different cases that this methodology is intended to cover - “switch in reducing agent” and “avoidance of a switch in reducing agent”. The procedures and rigour of several elements will differ depending on the case, such as the costs/risks investing in vs. divesting from plantation activities, the information needed to assess the starting date, the need to consider changed conditions (see below), and so on. It may be simpler to have two separate methodologies, one for each case.
- Common practice analysis: Given that the methodology is designed for a project type that is relatively common practice, a method to implement the common practice component of the additionality tool must be specified. From the application of the proposed methodology outlined in the draft CDM-PDD, it is unclear whether market share or market trends are used, and if the latter how this can be translated into a methodology. A practice that accounts for more than a quarter of a sector may appear to many observers to be a common practice; clearer means to establish that the practice is (no longer) common is needed.
- Analysis of changed conditions: Where the methodology is applied to projects that are a continuation of existing activities, the additionality assessment should include an assessment of changes that have made the activity no longer feasible and viable.
- Baseline scenarios: The number of alternative baseline scenarios considered should be expanded. The fate of the plantation should be elaborated in a range of baseline scenarios (further details outlined in the sections below). Currently, the only baseline options directly considered are the use of coke vs charcoal. However, each option could be associated with e.g. the sale of the plantations, use of purchased charcoal, sale of charcoal to other facilities etc. Since the emissions reductions of projects proposing to use this methodology depend critically on the outcome with respect to the fate of the plantation and any wood products it produces, the baseline scenarios need to be more thoroughly considered (i.e. if in the absence of the project, the switch to coke was made, and the same plantation produced charcoal that prolonged the use of charcoal at other pig iron plants, then net emissions

reductions might be zero). Leakage analysis may be insufficient here.

- The treatment of leakage and plantation/forest product supply economics also needs to be expanded to examine the market effect on wood use (see below).
- Definition of the starting date of project activity: The recommendation on NM0029 indicated that the methodology “shall provide clear stepwise instructions on how to assess the starting date of the project activity...”. However, the proposed new methodology does not provide these clear, stepwise instructions: these are crucial for the “avoided switch in reducing agent”-type project. It is also important to make it clear when exactly the incentive for “avoiding” a switch occurs – given the timelag between investing in a plantation and harvesting wood, this time may not coincide with a decision to invest in the plantation.
- The methodology is not transparent in some key aspects (see section 9a below).
- Uncertainty: the previous recommendation on elaborating the possibility of switching back from coke to charcoal has not been addressed. In other words, if the relative economics of charcoal use were to improve, subsequent to project implementation, might it be reasonable to consider whether the baseline would return to charcoal use.
- Further, the financial assessment does not include the risks (e.g. increase/decrease in availability of financial incentives for plantations, security of supply of reducing agent) involved related to the plantation (this was asked for in the previous assessment of the methodology).
- Other issues not relating to non approval: Project participants shall consider the recommendations by the Meth Panel regarding potential changes in carbon pools due to the project activity as contained in the report of its sixteenth meeting and further decisions by the Board on that subject.

(A new proposal should be submitted in accordance with the procedures for submission and consideration of proposed new methodologies of the Executive Board.)

II. Recommendation on the proposed new monitoring methodology: (checkmark the choice made)

Title of proposed new monitoring methodology: >> [Monitoring Emission Reductions from using a Renewable Reducing Agent in the Pig Iron Industry.](#)

a. To approve this proposed methodology with minor changes

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i. Conditions under which methodology is applicable to other potential projects (e.g. project type, region, data availability):

>>

ii. Minor changes:

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b. To reconsider this proposed methodology, subjected to required changes

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i. Conditions under which the proposed methodology is applicable to other potential projects (e.g. project type, region, data availability.):

>>

ii. Required changes:

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(Project participants shall make required changes in the proposed new methodology and send it back to the Meth Panel. The proposed new methodology will be reconsidered by the Meth Panel if changes required are correctly made by the project participants. The Executive Board will only consider this proposed new methodology after required changes proposed have been made and the revised proposed methodology has been reconsidered by the Meth Panel.)

c. Not to approve the proposed methodology



i. Reasons for non-approval:

>> The monitoring methodology will need to be revised in order to take into account changes required in the baseline methodology, outlined above. In particular, it should include more adequate treatment of leakage, and of sourcing renewable biomass (see below).

(A new proposal should be submitted in accordance with the procedures for submission and consideration of proposed new methodologies of the Executive Board.)

B. Details of the evaluation of the proposed new methodology by the Meth Panel:

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:

>> This methodology is designed for project activities that either switch from coke to charcoal for the production of pig-iron, *or* avoid a reducing agent switch from charcoal to coke (i.e. continue using charcoal) for the production of pig-iron. The production of pig iron requires the use of a carbon-based reducing agent. This methodology compares the long-term cost (including investment and operating costs) of using coke and charcoal for the production of pig iron in order to determine the most economically attractive long-term alternative. The methodology also analyses (qualitatively) the barriers and risks of charcoal use. The cashflows from the two alternatives will be compared, and the Net Present Value of the difference between the two cashflows will be calculated. The methodology uses the “Tool for the demonstration and assessment of additionality” for its additionality assessment.

Emissions reductions are calculated based on algorithms that account for emissions from the transportation and production of charcoal, the use of non-sustainably produced charcoal, the production and use of coke, forestry-related emissions and any quantified leakage.

b) State the approach selected:

>> The approach selected is as per paragraph 48 (b) of the CDM modalities and procedures. “Emissions from a technology that represents an economically attractive course of action, taking into account 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:

>> The approach selected is appropriate, but the application in this methodology is not obviously adequate.

(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 cover a wide enough range of baseline scenarios. In particular, the fate of the plantation should be elaborated in a range of baseline scenarios. Thus, alternative 2 (coke) should include: 2a – conversion to coke, and supply of other pig-iron facilities with plantation charcoal; 2b – conversion to coke, and management/supply of plantation wood to pulp/paper industry, 2c – conversion to coke and sale of plantation (with various fates) etc. Alternative 1 (charcoal) should also be expanded to include 1a – Use of charcoal from PP-controlled plantations, 1b – Use of charcoal from market-purchased or contracted producers, 1c- combination.

Further, the proposed methodology does not provide adequate instructions to ensure that there is a clear distinction between the following cases:

- 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);
- 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
- A new-build case, where the project owner is constructing a new plant that could run on either fuel.

Distinct procedures should be provided, where appropriate, for the two different cases that this methodology is intended to cover - “switch in reducing agent” and “avoidance of a switch in reducing agent”. It may be simpler to have two separate methodologies, one for each case.

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 an expanded version of the “Tool for the demonstration and assessment of additionality”. However, the methodology does not set a clear threshold for what outcome of the economic assessment would indicate that the project activity is additional. The methodology also indicates that the analysis “depends on a subjective management decision regarding the long-term cost differential between the use of charcoal and the use of coke” – further rigour is required in the case of project types that avoid the switch of reducing agents.

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

>>

- Baseline scenario: Further clarification is needed, as described in 2a, of the baseline case in relating to the current status of the plant. Further, the number of alternative baseline scenarios considered should be expanded.
 - Additionality: Using the “Tool for the demonstration and assessment of additionality” should be adequate. However, the way that this has been applied is not:
- (a) The proposed method of sensitivity analysis for financial analysis needs to be revised. The use of a standard variation of the mean input prices for a historic period of three years is not an appropriate 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/expected future prices for commodities such as coke, and also take into account exchange rate variations. In the case of commodities with high price volatility a sensitivity range of 1 unit standard deviation is unlikely to be sufficient. This is illustrated by the price of Chinese coke (the source of more than 80% of coke imports in the project-site country), which more than quadrupled between 2002-2004 (http://www.steelonthenet.com/Corey/Commentary_25-Jun-04.pdf). This compares to a sensitivity analysis under the proposed methodology that included calculations for a price increase of 11.1%.

The cost of converting from charcoal to coke should also include an assessment of downtime / lost production and change in quality of output.

Further, the financial analysis should be carried out using an appropriate time horizon. If the main additionality argument has to do with the cost of plantation re-establishment, and the plantation has a 21 year lifetime, then the financial calculation should be at least this long or it unfairly disadvantages the charcoal-using calculation.

Also, the financial analysis hinges on a net present value calculation that is dominated by the upfront cost of plantation establishment and the revenues from selling the plantation. The results will therefore be highly sensitive to the discount rate, which must therefore be very well documented and included in the sensitivity analysis (currently it is not). The revenues from selling the plantation are also critical and must be very well substantiated, and also included in the sensitivity analysis (they are not).

Further, the sensitivity analysis should include exchange rate risks, as coke is imported but charcoal is domestically produced.

- (b) Statistics indicate that in the “starting year” of the project activity (2001), charcoal-based pig iron production accounted for 28.5% of the total. This grew to 29.5% in 2003 (last available figures). (See http://www.silviminas.com.br/anuario%202003/2003_5.htm for a time series). This could therefore indicate that charcoal-based pig iron production is common practice. Further refinement of the common practice component of the methodology is therefore needed.
- (c) The methodology includes the possibility of being applied to projects where charcoal use represents a continuation of existing activities. In such cases, the additionality assessment should include an assessment of changes that have made the activity no longer feasible and viable. Generic, static investment and barriers analysis does not suffice.
- (d) The explanation of how to define the starting date of the project activity is not clear in the CDM-NMB. The current text indicates that the starting date is demonstrated “as by when the investments required for the use of charcoal are made or initiated”. In the case of the associated draft CDM-PDD, this would imply some date in the 1960s.

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

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

>> The methodology is clearly written, and nicely laid out - although there are some serious deficiencies in it (as outlined above and below).

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):

>> No. The methodology states that it is designed for “companies that are considering the use of charcoal... for the production of pig iron” (emphasis added). The company in question in the associated draft CDM-PDD has actually been using (not just considering the use of) charcoal for the production of pig iron for decades.

Further, in the case of the proposed project a more critical analysis of some of the cost items in the economic analysis is recommended, notably:

- The potential income from sale of land;
- The costs of restocking and maintaining existing plantations;

- The costs of coke;
- 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.

>> Possibly, but then again it might not as it is inadequate in several respects.

Please explain:

>> It is not clear that this methodology is sufficiently detailed and rigorous to adequately apply to project activities that are ongoing activities.

(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):

>> Generally the formulae are generic and can be applied elsewhere. However, the application of a standard deviation on historic costs is not economically or scientifically adequate (as outlined above).

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

>> The spatial scope uses project-level, national and sector data, as appropriate.

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 CDM-NMB indicates that data should be “most recent data at the time of project beginning”.

(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

>> CO₂, CH₄, N₂O from charcoal (incl. transportation). CO₂, N₂O from coke (not incl. transportation)

CO₂ from forestry.

ii) Physical delineation

>> Charcoal/coke use in pig iron production at the facility. Emissions associated with forestry.

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:

>> A very long list of assumptions is given in pp19-21 of the proposed CDM-NMB. Further assumptions include:

Implicit:

- There are no incentives available from national/state governments or other sources for plantation establishment. This is problematic, as there seem to be very significant incentives available in potential host countries where this methodology could be applied (see public comments by Jutta Kill for some examples).
- The sensitivity analysis does not need to include an analysis of the effect of different discount rates. This is problematic, as discount rates make a significant difference to the NPV of the different options assessed.
- Exchange rate risks do not need to be explicitly addressed in a financial analysis. This is problematic, given a) that this analysis compares the use of (domestic) charcoal and (imported) coke and b) that there have been significant exchange rate fluctuations R\$/ over the last few years.
- (Further problems with assumptions in the additionality assessment are included in section 2 above).
- Charcoal originating from “renewable” plantations can be confidently certified. This is problematic (see CDM-NMM for further details).

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

>> No.

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

>> See above.

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

>> Some project-specific data, other data based on a baseline report for another proposed CDM project (Plantar), published literature, IPCC.

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

>> In general, yes, although there are some data gaps (e.g. for data on renewable/unrenewable charcoal). Indeed, the ability to verify and document that the charcoal fuel is in fact renewable is crucial. However, this is difficult to do in a context where non-renewable charcoal production is still common. This point should be verified by the DOE.

There is ongoing discussion within the EB about the definition of "renewable biomass". Once this is definition is settled, then the proper data requirements for verifying whether biomass is renewable can be determined. Until then, any baseline/monitoring requirements should be considered provisional.

f) State possible data gaps:

>> See a) and e) above.

(7) Assessment of uncertainties:

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

i) *The basis for determining the baseline scenario:*

>> Yes. Although the statement that “uncertainties will be dealt with by the sensitivity analysis... testing whether the project would remain valid in extremes of the range of variability...” is misleading. As outlined above, the sensitivity analysis as applied to this proposed project activity makes an assessment for an 11,1% increase in charcoal price – in reality, the price has more than quadrupled since 2001 (in \$ terms). Exchange rate fluctuations have exacerbated such trends. Further, the methodology should require that all parameters are provided with a range, so that the degree of uncertainty can be made apparent.

ii) *Algorithms/formulae:*

>> As in i) above

iii) *Key assumptions:*

>> No.

iv) *Data:*

>>No.

b) *State whether the uncertainties presented are reasonable:*

>> The uncertainties related to leakage are not adequate (see below).

(8) Leakage:

a) *State how the baseline methodology addresses any potential leakage due to the project activity:*

>> The key source of leakage is the baseline activity of the charcoal supplier for the project activity. The proposed methodology for dealing with this is given on p. 17.

(A relatively minor source of leakage is the upstream emissions from coke production and transport. This is dealt with conservatively by excluding it from calculation of baseline emissions.)

b) *Indicate whether the treatment for leakage is appropriate and adequate:*

>> The proposed methodology does not adequately address leakage.

As Schneider pointed out in his comments to NM0029, it is extremely important to capture the market leakage effects of any project that claims to be promoting the consumption of a fuel that is supply-constrained, particularly in a situation where there is a high degree of fuel substitutability (as is the case in this project, since switching costs are a small fraction of fuel costs). This issue should not be underestimated.

This is of major consequence, as improper treatment of leakage could completely offset all claimed reductions. For example, the claimed reductions would be completely offset if, in the baseline situation, the charcoal supplier were to simply shift to supplying a different pig-iron facility. If, as the project proponents have claimed, plantation wood is undersupplied to the local market and pig-iron facilities are closing as a result of lack of charcoal, then the transfer of the charcoal to another pig-iron facility is a quite likely baseline situation. The methodology must therefore include a much more detailed and rigorous treatment of the source of charcoal. (This is whether charcoal is being sourced from company plantations or from an independent producer.)

(In the draft CDM-PDD, the charcoal source is the company's own plantations, and the project developer acknowledges that significant. Even their claim that the buyer of the plantation assets would "most likely" be a major pulpwood consumer leakage would result if the company's plantation assets were to continue producing charcoal in the baseline has leakage ramifications; in a market which is undersupplied with plantation wood, the major pulpwood consumer could likely be pushing out charcoal consumers.)

If this major affect is to be addressed properly, the charcoal supplier must be treated a level of detail and rigour much more comparable to the pig-iron facility, especially in a case where the plantation assets belong to the project developer (in which case the charcoal supply should be considered within the project

boundary). Arguably, there should be no credit for any charcoal purchased from independent suppliers to the charcoal market, as the likelihood of complete market leakage is very high given that the draft CDM-PDD states that pig iron mills are shutting down because of lack of charcoal. The leakage procedure states that the project proponent must show this is not happening by "showing that the levels of charcoal purchased by the company has not increased in relation to *previous levels before the project implementation*." This is simply an incorrect comparison, as the proper comparison is relative to the baseline scenario, in which no charcoal is purchased.

(9) Transparency and “conservativeness”:

a) Indicate whether the baseline methodology was developed in a transparent way:

>> Much of the methodology is transparent. The tables provided on project boundary and data assumptions are especially clear and helpful. However, the document still indicates that “in determining the baseline scenario, the project company will have to document the information ... and make it available for inspection by the DOE”. This is not transparent.

b) State whether the baseline methodology is conservative:

>> Insofar as the methodology depends on a subjective management decision, questionable methodology to assess possible future prices, and a (presumably) higher than 25% threshold to define “common practice” it is not conservative. However, there are also some conservative aspects to the proposed methodology:

- Charcoal coming from third parties is assumed to be non-renewable, unless there is a clear demonstration to the contrary.
- Upstream emissions from coal are ignored.
- No credit is taken for the plantation carbon stocks. However, depending on the baseline situation for the source of the charcoal, this could be very non-conservative assumption. (For example, if the plantation land were left to convert back to natural forest.)
- Assumption of "least advanced technology" for charcoal production for CH₄ emissions.
- Chain of custody requirement for documenting renewable charcoal.

(10) Potential strengths and weaknesses of the proposed baseline methodology (please explain):

>>

Strengths:

- Use of the “Tool for the demonstration and assessment of additionality” (although the application of this tool should be improved, as highlighted above);
- Clear presentation of data and explicit assumptions, use of sensitivity analysis.

Weaknesses:

- Methodology designed for two project types one of which consists of a “continuation of existing activities”, i.e. where the project is essentially continuation of BAU activities.
- Inadequate treatment of BAU project activity - specifically with regard to highlighting changes in conditions and proper use of common practice test.
- -Inadequate treatment of leakage
- Analysis depends on subjective management decision of volatile cost differentials, based on backward-looking (not forward-looking) cost trends with insufficient sensitivity analysis.

(11) Other considerations, such as a description of how national and/or sectoral policies and circumstances have been taken into account (please explain):

>> National policies (particularly the discontinuation of subsidies for plantations) have been taken into account, but regional/sectoral policies (that do provide subsidies or credit lines for plantation establishment) have not. This uneven treatment does not seem appropriate.

(12) Applicability of the proposed methodology across project types and regions (please

indicate):

>> The methodology was developed with reference to the Brazilian situation. However, it will need to be significantly modified before it could be applied to a proposed CDM project activity.

(13) 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:

>> Yes, documentation relevant to NM0002, NM0029.

http://www.silviminas.com.br/anuario%202003/2003_7.htm (Produção de Ferro Gusa Independente a Carvão Vegetal Por Estado/Região)

http://www.silviminas.com.br/anuario%202003/2003_5.htm - which indicates that the proportion of pig iron from charcoal has grown in absolute and relative terms between 1998-2003 (2003 is latest available data)

http://www.silviminas.com.br/anuario%202003/2003_5.htm

http://www.steelonthenet.com/Core/Commentary_25-Jun-04.pdf (June 2004) "shortages of coke are affecting steel production worldwide ... spot market prices for Chinese coke are running at \$400-\$440, compared with \$120 last year and \$80 the year before"

[http://www.bjreview.com.cn/200424/Business-200424\(A\).htm](http://www.bjreview.com.cn/200424/Business-200424(A).htm) "Around 80 percent of the coke that India, Italy, Germany and Brazil imported originate from China."

b) Indicate any further comments:

>> The term "renovation of exhausted plantation assets" needs to be clearly explained (why has the asset become exhausted?).

>> The methodology title should be changed so as it represents the proposed associated project activity, which is "continued use of a renewable reducing agent".

II. Proposed new monitoring methodology (specify title here): >> Monitoring Emission Reductions from using a Renewable Reducing Agent in the Pig Iron Industry.

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:

(1) Brief description of new methodology:

Describe new methodology:

>> The monitoring methodology is based on the monitoring the amount of different reductants used for the production of pig iron, and the carbon intensity of these different reductants. This involves measuring a number of factors, i.e. CO₂ emissions during carbonisation or coking, methane emissions, nitrous oxide emissions, emissions associated with the transportation of these reductants from the point of production to the pig iron mills, and the carbon stocks and emissions in the project company's forests.

(2) Key assumptions/parameters:

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

>> While it is good that NM0104 takes credit only for charcoal for which a chain of custody can be traced, and the original supplier must be "renewable", there is a key assumption pertaining to the ability of the charcoal suppliers to be verified as "renewable".

There is no method offered in the CDM-NMM regarding this verification. Such a method is needed.

Indeed, FSC certification does not necessary comply with the Board's definition of renewable, since there is in fact ongoing discussion within the Board about the definition of "renewable biomass". Once this definition is settled, then the proper data requirements for verifying whether biomass is renewable can be determined. Until then, any baseline/monitoring requirements should be considered provisional. (Thus project participants are encouraged to wait for the EB guidance on this issue).

<p><i>b) State whether the key assumptions are arrived at in a transparent manner:</i></p> <p>>> No information is provided about the monitoring and verification of sustainable charcoal production.</p> <p><i>c) Give your expert judgement on whether the assumptions/parameters are adequate:</i></p> <p>>> Yes, with the exception of the above.</p>
<p>(3) Data sources and data quality:</p> <p><i>a) Indicate which data sources are used and how the data are obtained (e.g. official statistics, expert judgement):</i></p> <p>>> Most emission factors and activity factors are based on standard, recognised values such as IPCC. Other data will be measured using standard techniques.</p> <p><i>b) Give your expert judgement on whether the data used are adequate, consistent, accurate and reliable:</i></p> <p>>> Yes, with the exception of the data gaps, above.</p> <p><i>c) State possible data gaps:</i></p> <p>>> (See 2a) above. There should also be continued monitoring of the sector, to determine whether there is any significant switching to charcoal. This will be needed in any subsequent crediting period (to assess “common practice”).</p>
<p>(4) Assessment of the description of the proposed methodology and its applicability:</p> <p><i>a) State whether the proposed methodology has been described in an adequate manner:</i></p> <p>>> Yes.</p> <p><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></p> <p>>> Once revisions have been made.</p> <p><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></p> <p>>> Yes, but both need changing.</p>
<p>(5) Leakage (please elaborate, if appropriate):</p> <p>>> Difficult to assess, as the data and information needed to be collected to monitor leakage are not tabulated.</p>
<p>(6) Quality assurance and control procedures (please explain):</p> <p>>> QA/QC procedures are identified for most parameters. While those included for monitoring the quantity of charcoal consumed appear adequate, it is not clear how they will assess whether the charcoal is renewable or not.</p>

(7) Potential strengths and weaknesses of the proposed monitoring methodology (please explain):

>>

Strengths:

- The monitoring methodology is detailed and
- Comprehensive with minor exception (below).

Weaknesses:

- The monitoring methodology does not cover data to demonstrate that renewable charcoal production is indeed sustainable;
- Lack of information to support the central claim that the charcoal would not have supplied pig-iron producers in the baseline;
- No indication as to what needs monitoring to assess leakage.

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

>> The methodology was developed with reference to the Brazilian situation. However, it will need to be significantly modified before it could be applied to a proposed CDM project activity.

(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:

>> None.

b) Indicate any further comments:

>> No further comments.



Signature of Meth Panel Chair

Date: 22/06/2005 (name)

Signature of Meth Panel Vice-Chair

Date: 22/06/2005 (name)

Information to be completed by the secretariat

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