

Agenda item 4.1

Paragraph 32 of the annotated agenda

Development of standards with a methodological framework for specific project types and sectors

CDM EB 90

Bonn, Germany, 18 to 22 July 2016



Background

- EB 88 agreed not to pursue further work in relation to the "Guidelines for the establishment of sector specific standardized baseline" (SB guideline);
- Instead, the Board agreed to focus on the development of standards with a methodological framework for specific project types and sectors;
- As a result, the Board requested the MP to, in consultation with the SSC WG, identify potential project types and sectors for further work;



Purpose

- This concept note is to present the Board the proposed project types and sectors for developing the standards with methodological frameworks to identify the baseline, baseline emission factors and additionality (standardization);
- It is prepared in consultation with the MP (MP 69 and 70) and the SSC WG (SSC WG 50 and 51).



Key issues and proposed solutions

- ❖ Scope of the analysis
 - NOT covering sectors/project types included in other similar mandate provided by the Board in the past, e.g., EE domestic appliances and EE in buildings (EB85); transport sector and agricultural sector (EB 89)

- ❖ Sources of information collected/analyzed:
 - (a) Methodological submissions received in the past;
 - (b) Stakeholder survey/interview;
 - (c) Areas identified by the MP/SSC WG;
 - (d) The NAMA Registry.
 - (e) Mitigation measures proposed in the submitted INDCs;



Key issues and proposed solutions

- ❖ 2013 DNA survey* indicating the following sectors for which the standardised approach can help exploit the mitigation potential:
 - (a) GEF for the power sector;
 - (b) Cement;
 - (c) Iron and steel;
 - (d) Waste sectors; and
 - (e) EE in households and SMEs.

- ❖ GEF has been developed for a number of parties and more submissions are under consideration, and (e) is included in another on-going work streams (EB85).



Key issues and proposed solutions

- Potential areas identified by the MP and the SSC WG

Sectors or Project types	Remark/Justification
Cement	<ul style="list-style-type: none">• Good experience accumulated while discussing the SB guidelines.• One pending bottom-up submission, which may provide needed data, and another DNA is in the process of data collection;
Brick	<ul style="list-style-type: none">• One of the informal sectors of high mitigation potential and with significant co-benefit;• One top-down SB is in the pipeline, pending further input from the DNA. It may provide needed data.
Waste treatment	<ul style="list-style-type: none">• Good experience accumulated while discussing the SB guidelines.• More submissions in this sector, other than landfill gas recovery and utilization have been received, which may provide needed data.• The focus will be on solid waste treatment including waste reuse/recycling; animal manure treatment and wastewater treatment.



Key issues and proposed solutions

- Potential areas identified by the MP and the SSC WG

Sectors or Project types	Remark/Justification
Emission reduction from Fluorinated GHGs	<ul style="list-style-type: none">• Potent GHGs gases with very high GWP;• 4 large scale methodologies abating or displacing SF₆ approved so far; however, only 10 projects registered in the pipeline, which is incommensurable to its mitigation potential;• As for other fluorinated gases (CF₄, C2F6, CHF3, CH3F, CH2F2, C3F8, c-C4F8), which are used as precursors for etching processes in the semiconductor industry, only 1 approved methodology exists, but without any registered project.
N ₂ O destruction in the adipic acid production	<ul style="list-style-type: none">• The potent GHGs gases with very high GWP;• Without national regulation in place and incentive from the CDM, atmospheric venting of N₂O from adipic production plant becomes very likely;• Carbon leakage can be addressed by providing a dynamic baseline based on the global production from different markets.



Key issues and proposed solutions

❖ Overview of relevant sectors/project types in the NAMA pipeline*

Sectors	No. of NAMAs	Technology/measure
Energy distribution	1	Heating network expansion
Energy efficiency	1	Efficient street lighting
Cement	2	Clinker replacement
Fugitive emissions	2	Fugitive emissions reduction from Natural gas pipelines
Water supply	2	Energy efficient water pumping
Waste	9	Animal manure, wastewater treatment, MSW incineration; E-waste

* The NAMApipeline, as of 1 June 2016



Key issues and proposed solutions

- ❖ Mitigation measures proposed in the submitted INDCs;
 - Sectors referred in INDCs are mostly in broader terms, e.g., it only mentions renewable energy or industrial process;
 - Nevertheless, the following sectors have been explicitly mentioned:
 - a) building material (cement, clinker) found in 37 INDCs;
 - b) metal (including iron and steel, and aluminium) in 7 INDCs;
 - c) chemical/petrochemical found in 3 INDCs; and
 - d) EE for street lighting found in 1 INDC.
 - Waste sector identified in 75% INDCs as a mitigation source;
 - Fluorinated GHGs SF6 and NF3 have been included in 37% and 29% of the received INDCs, respectively



Key issues and proposed solutions

❖ The list of the identified sectors, with priorities:

- (a) Cement/clinker production;
- (b) Brick production;
- (c) Waste treatment (solid waste treatment including recycling, animal manure treatment and wastewater treatment);
- (d) Aluminium;
- (e) Iron and steel;
- (f) N₂O destruction from adipic acid production
- (g) Mitigation of fluorinated GHGs (i.e., SF₆, CF₄, C₂F₆);
- (h) Energy efficient water pumping;
- (i) Fugitive emission reduction from natural gas pipelines;
- (j) District Heating/Cooling;
- (k) Efficient street lighting



Key issues and proposed solutions

- ❖ Initial thought by the MP/SSC WG on possible approaches for developing standard with methodological framework for the prioritized sectors (a)-(f) also included in the concept note; For example,

Sectors	Preliminary thought on possible approaches
Iron and steel	To disaggregate the production process covered by this sector namely the Electric arc furnace technology/LADDLE technology and Basic oxygen furnace process and also iron reduction process (Melt Iron and DRI) covered in this sector, and explore to introduce standardization for different product, respectively. As a general approach, looking in equations in methodologies with the primary parameters used for baseline emissions and approaches to arrive at emission factors per unit product could be useful to explore the possibility of standardization and tiered approach.
N ₂ O destruction in the adipic acid production	<p>The intent is not to change the N₂O emissions factor for adipic acid production (tN₂O/t adipic acid), provided by the IPCC Good Practice Guidance.</p> <p>Instead, a conservative, dynamic baseline with a function of global production in this sector, with a view to addressing the potential carbon leakage due to the shift of production can be introduced to AM0021. In this way, the restriction that “the methodology is applicable only for existing production capacity of adipic acid where the commercial production had begun by 31 December 2004” may be removed.</p>



Impacts

- Development of standard with a methodological framework for specific project types/sectors will potentially facilitate the development of more CDM projects and PoAs in a cost-effective manner and facilitate the development of SB in specific sectors.



Recommendations to the Board

- The MP/SSC WG/Secretariat recommend that:
 - a) The Board consider the concept note prepared jointly and provided guidance as necessary;
 - b) The Board may wish to consider and approve the six areas above, i.e., (a)-(f) as contained in paragraph 12, to initiate the work.



Subsequent work and timelines

- Based on the guidance from the Board, the MP and SSC WG will work further to develop the draft standards in consultation with practitioners at their next respective meetings and will recommend the draft standards for the consideration of the Board in 2017.

