CLEAN DEVELOPMENT MECHANISM

**CDM-MP58-A16**

# Concept note on the revision of the large-scale CDM methodology AM0091: Energy efficiency technologies and fuel switching in new buildings

Version 01.0

United Nations
Framework Convention on
Climate Change

# 1. Procedural background

1. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP), at its sixth session, endorsed the concept of standardized baselines and requested the Executive Board (hereinafter referred to as the Board) of the clean development mechanism (CDM) to develop standardized baselines, in particular, prioritizing methodologies that are applicable to least developed countries (LDCs), small island developing states (SIDS), Parties with 10 or fewer registered CDM project activities as of 31 December 2010 and underrepresented project activity types or regions.

2. CMP7 requested the Board to conduct further work to develop simplified top-down baseline and monitoring methodologies, tools and standardized baselines, as appropriate, and in consultation with relevant designated national authorities, for the use in countries and for project activity types underrepresented in the CDM.

3. CMP7 requested the Board the Executive Board to accelerate the implementation of guidelines on suppressed demand in baselines and monitoring methodologies, prioritizing those that are more applicable to least developed countries, small island developing States, African countries, and countries underrepresented in the clean development mechanism;

4. The building sector is responsible for around one-third of global GHG emissions and offers the largest low-cost GHG mitigation potential. Reducing emissions from buildings offers a wide-range of co-benefits including contribution to sustainable low-carbon development in host countries (IPCC 2007).

5. The large-scale CDM methodology “AM0091: Energy efficiency technologies and fuel switching in new buildings” is the only large-scale methodology that focuses on whole building and on-site fuel switching.

6. Despite significant and low-cost GHG mitigation potential offered by the building sector world-wide, as of today, there are no registered CDM projects using this methodology as well as no projects are at the validation stage.

# 2. Purpose

7. The purpose of this concept note is to inform the Board about the available approaches to the revision and possible standardization of the AM0091 methodology that addresses the below-mentioned limitations and seek Board’s mandate to implement these approaches.

# 3. Key issues and proposed solutions

8. The key limitations of the methodology are its limited applicability and the rigorousness and high-data intensity of baseline setting. More specifically, the limited scope of the methodology stems from the fact that the methodology was initially developed to estimate emission reductions from Masdar city in Abu Dhabi, the United Arab Emirates (NM0328 accompanied with the PDD "Energy Efficiency Improvements in new buildings of Masdar City Phase 1 in Abu Dhabi"). Masdar city is a planned city where the

construction of phase 1 began in 2008 and is planned to be completed by 2012. Since large-scale Greenfield developments of buildings such as Masdar City construction is a rare case world-wide, the use of this methodology (which is applicable only to large-scale new-construction only) is very limited.

9. Another limitation that impedes the use of this methodology is rigorous and conservative, but highly-data intensive and difficult to fulfil methodological requirements for baseline setting.

10. To address these limitations, the revision of the AM0091 methodology is suggested to cover the following areas:

    (a) Expanding the applicability of the methodology to retrofits of existing buildings;

    (b) Simplifying baseline setting;

    (c) Providing an alternative less data intensive approach.

11. Expanding the applicability of the methodology to the refurbishment of existing buildings would enhance the usability of the methodology as it would allow project activities to take advantage of the emission reduction potential from such buildings, which are currently not covered.

12. To simplify baseline setting, two approaches are recommended to be incorporated in the methodology and are suggested to the Board for its consideration:

    (a) Approach A – To Improve and to simplify surveys for baseline setting. This will ease the implementation of the methodology while preserving the emission reduction calculations on the conservative side;

    (b) Approach B – To allow a modelling approach in the methodology similar to the one used in the small scale methodology “AMS-II.Q: Dissemination of energy efficient household appliances”. This approach will reduce monitoring requirements and, as a result, transaction costs related to the methodology implementation.

13. Application of approach B would offer the possibility of establishing standardized emissions intensities for specific building types in specific geographic regions in an relatively less costly way compared to approach A. It may be possible to build up a database for emission intensities for different building types in different regions when the methodology is applied by time.

14. Both approaches will also provide options to address the issue of suppressed demand.

# 4. Impacts

15. Since providing low-energy and comfortable housing and developing low-energy construction is one of the key developmental priorities of many countries, many countries potentially benefit from the simplifications of this methodology and expansion of its scope to retrofitting of existing buildings. Moreover, providing an alternative approach for baseline setting may allow for the gradual build-up of standardized emission intensities database which may be used by other project proponents.

# 5. Proposed work and timelines

16. The Board may wish to request the Methodologies Panel:

    (a) To prepare a draft revised methodology by improving the existing approach and adding the modelling approach;

    (b) To launch a call for public input on the draft revised methodology in the second/third quarter of 2013;

    (c) To incorporate the relevant inputs received in response to the call for public inputs on the draft revised methodology;

    (d) To recommend the draft revised methodology to the Board for approval at a future meeting of the Board in the second/third quarter of 2013.

# 6. Recommendations to the Board

17. The Methodologies Panel recommends the Board to consider and agree on the approaches set out in this concept note and provide mandate to the Methodologies Panel to incorporate the approaches in the methodology.

18. After approval of the revision, the Board may wish to request the secretariat to apply the methodology for one building type in a selected country to start the process of standardization of emission intensities.

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