A proposed approach for a new methodology “Substitution of virgin raw materials and fuels by secondary materials recovered from scrap tires”

I. Background

1. As per the task in the 2012 SSC workplan, the Small-Scale Working Group (SSC WG) considered an information note prepared by the secretariat on developing a new methodology for recovery and processing of scrap tires.

2. This document describes a proposed approach for a new methodology “Substitution of virgin raw materials and fuels by secondary materials recovered from scrap tires”.

II. Proposed approach for a new methodology

3. The technology/measure introduced by the methodology is the recovery and processing of scrap tires to produce marketable secondary materials (e.g. asphalt). The emission reductions accrue because of displacement of production of secondary materials using virgin materials. The emission reductions are calculated based on the difference of energy consumption associated with the production of virgin material and the recycled material produced using scrap tires.

4. The following key elements were considered in the development of the draft methodology:

   (a) The methodology should be formulated in such a way that emission reductions are claimed for the difference between: Production emissions of of secondary materials from (a) virgin raw materials; and (b) recycled scrap tires. This approach is in line with the framework indicated in AMS-III.AJ “Recovery and recycling of materials from solid wastes” and AMS-III.BA “Recovery and recycling of materials from E-waste”;

   (b) The materials and fuels which recycled scrap tires would displace (e.g. bitumen and Styrene-Butadiene-Styrene etc.) and their production chain/processes from virgin raw materials should be clearly identified. Also, the information on the emissions/energy consumption for the production of secondary raw materials and alternative fuels using virgin raw materials should be available (Refer to Table 1, 2 and 3 in the draft methodology). Such data should be derived from independent sources (e.g. peer reviewed literature). The baseline emissions then may be either determined using global specific CO₂e emission factors (like AMS-III.BA for metals) or using specific electricity/fuel consumption factors (like AMS-III.AJ for plastics) depending on the type of secondary materials displaced;

   (c) Only the baseline emissions which would take place in non-Annex I countries shall be credited. Therefore the baseline emissions are either accounted only for the production quantities in the host country, or discounted by a correction factor, calculated as the ratio of the production of the material “i” in non-Annex I countries and the total production of this material in the world (See for example AMS-III.BA “Recovery and recycling of materials from E-waste” where such discounting factors are included);

   (d) Leakage calculation is not required;

   (e) The following applicability conditions were included in the methodology:

      (i) The project activity does not divert any scrap tires from another recycling pathway. A procedure to demonstrate this condition is required. One option could be to demonstrate based on third party data that recycling rate of scrap...
tires in the region/country is below a threshold [e.g. 20%] (similar approach is indicated in AMS-III.BA). Another option could be through applying guidelines on common practice analysis or First of its Kind;

(ii) The processing/recycling facility shall document the sources and quantities of scrap tires it processes; materials from an unknown source are not eligible. Project proponents shall demonstrate that the proposed project activity does not collect and recycle the scrap tires imported from other countries, but from in-country sources;

(iii) It is possible to measure and record the final output of the processing/recycling facility. The sales of the recycled materials/alternative fuels to manufacturing facilities shall be documented. The manufacturing facilities that purchase the materials recovered by the processing/recycling facility shall be located in an eligible CDM host country. Confirmation from those manufacturing facilities purchasing materials from the processing/recycling facility specifying the final products in which these secondary materials will be used, shall be provided;

(iv) In order to ensure that projects would indeed displace virgin materials, the evidence that the selling price of recycled materials produced from scrap tires is close to [within x % of] the price of the replaced secondary materials produced from virgin raw materials should be provided;

(v) It is possible to measure and record the amount of fuel and electricity consumed by the processing/recycling activities performed at the facility.

5. The SSC WG agreed to request the Board to launch a call for public inputs on the proposed approach. To this objective, the SSC WG is requesting feedback as follows:

(a) Are the proposed approaches described above for calculating emission reductions reasonable and conservative?

(b) Regarding the default values for Table 1, 2 and 3 of the methodology in appendix 1, what default values or methods for their estimations should be used to calculate baseline and project emissions? Please provide the proposed values/methods and their sources;

(c) Are there other alternative approaches to determine emission reductions in a transparent and conservative manner? If any, please recommend providing justification on the proposed approach(es) while ensuring that baseline determination and monitoring procedures are coherent and they comply with CDM modalities and procedures.
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