



Indicative simplified baseline and monitoring methodologies  
for selected small-scale CDM project activity categories

**TYPE II - ENERGY EFFICIENCY IMPROVEMENT PROJECTS**

Project participants shall take into account the general guidance to the methodologies, information on additionality, abbreviations and general guidance on leakage provided at:

<http://cdm.unfccc.int/methodologies/SSCmethodologies/approved.html> .

**II.A. Supply side energy efficiency improvements – transmission and distribution**

**Technology/measure**

1. This category comprises technologies or measures to improve the energy efficiency of an electricity or district heating transmission and distribution system by up to the equivalent of 60 GWh<sub>e</sub> per year. Examples include upgrading the voltage on a transmission line, replacing a transformer, and increased insulation of the pipes in a district heating system. The technologies or measures may be applied to existing transmission or distribution systems or be part of an expansion of a transmission or distribution system. A total saving of 60 GWh<sub>e</sub> per year is equivalent to a maximal saving of 180 GWh<sub>th</sub> per year in fuel input.

**Boundary**

2. The project boundary is the physical, geographical boundary of the portion of the transmission and/or distribution system where the energy efficiency measures are implemented.

**Baseline**

3. For retrofit projects, the energy baseline is the technical losses of energy within the project boundary calculated as either:

(a) The measured performance of the existing equipment;

OR

(b) The performance of the existing equipment as determined using a standard selected in accordance with paragraphs of the 'general guidance'.

4. In the case of new facilities the energy baseline is the technical losses of energy within the project boundary calculated using a performance standard for the equipment that would otherwise have been installed selected in accordance with paragraphs of the 'general guidance'.

5. The emissions baseline is the energy baseline multiplied by an emission coefficient. If the energy displaced is electricity, the emissions coefficient (in kg CO<sub>2</sub>e/kWh) shall be calculated as described in category I.D. For measures implemented to improve the efficiency of a district heating system, the emissions coefficient is that of the fossil fuel used by the system. IPCC default values for emission coefficients can be used.

**Leakage**

6. If the energy efficiency technology is equipment transferred from another activity or if the existing equipment is transferred to another activity, leakage is to be considered.



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*II.A. Supply side energy efficiency improvements – transmission and distribution (cont)*

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### Monitoring

7. The energy performance of the project activity shall be the measured technical energy losses of the equipment installed unless such losses cannot be metered.<sup>1</sup> If the technical energy losses cannot be determined from metered data, they shall be calculated using the test results when the installed equipment is commissioned, and if these are not available use the value determined in paragraphs 3 or 4 as appropriate.

#### **Project activity under a programme of activities**

The following conditions apply for use of this methodology in a project activity under a programme of activities:

8. In case the project activity involves the replacement of equipment, and the leakage effect of the use of the replaced equipment in another activity is neglected, because the replaced equipment is scrapped, an independent monitoring of scrapping of replaced equipment needs to be implemented. The monitoring should include a check if the number of project activity equipment distributed by the project and the number of scrapped equipment correspond with each other. For this purpose scrapped equipment should be stored until such correspondence has been checked. The scrapping of replaced equipment should be documented and independently verified.

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<sup>1</sup> When non-technical energy losses are small relative to technical energy losses, technical energy losses after implementation of the efficiency measures can be determined from metered data if available. The electricity or steam delivered to the portion of the system affected by the efficiency improvements as well as the electricity or steam received at the end of the portion of the system affected by the improvements are metered. If the portion of the transmission/distribution system affected by the energy efficiency improvements is not already separately metered, the reduced technical energy losses could be expressed as a percentage of the losses on a portion of the system that is already metered.