



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

TYPE II - ENERGY EFFICIENCY IMPROVEMENT PROJECTS

All the approved small-scale methodologies, general guidance to the methodologies, information on additionality and abbreviations can be found at: <http://cdm.unfccc.int/methodologies/SSCmethodologies/approved.html>

II.D. Energy efficiency and fuel switching measures for industrial facilities

Technology/measure

1. This category comprises any energy efficiency and fuel switching measure implemented at a single industrial facility. This category covers project activities aimed primarily at energy efficiency; a project activity that involves primarily fuel switching falls into category III.B.¹ Examples include energy efficiency measures (such as efficient motors), fuel switching measures (such as switching from steam or compressed air to electricity) and efficiency measures for specific industrial processes (such as steel furnaces, paper drying, tobacco curing, etc.). The measures may replace existing equipment or be installed in a new facility. The aggregate energy savings of a single project may not exceed the equivalent of 15 GWh_e per year. A total saving of 15 GWh_e per year is equivalent to a maximal saving of 45 GWh_{th} per year in fuel input.

Boundary

2. The project boundary is the physical, geographical site of the industrial facility, processes or equipment that are affected by the project activity.

Baseline

3. The energy baseline consists of the energy use of the existing equipment that is replaced in the case of retrofit measures and of the facility that would otherwise be built in the case of a new facility. In both cases, the electricity component of the energy baseline is adjusted for technical transmission and distribution losses for the electrical grid serving the industrial facility.

4. Each energy form in the emission baseline is multiplied by an emission coefficient (in kg CO₂equ/kWh). For the electricity displaced, the emission coefficient is calculated in accordance with provisions under category I.D. For fossil fuels, the IPCC default values for emission coefficients may be used.

Leakage

5. 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.

¹ Thus, fuel switching measures that are part of a package of energy efficiency measures at a single location may be part of a project activity included in this project category.



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Monitoring

6. In the case of retrofit measures, monitoring shall consist of:
 - (a) Documenting the specifications of the equipment replaced;
 - (b) Metering the energy use of the industrial facility, processes or the equipment affected by the project activity;
 - (c) Calculating the energy savings using the metered energy obtained from sub-paragraph (b).
7. In the case of a new facility, monitoring shall consist of:
 - (a) Metering the energy use of the equipment installed;
 - (b) Calculating the energy savings due to the equipment installed.
8. Published values for technical transmission and distribution losses may be used. Alternatively, technical transmission and distribution losses for the grid that supplies the industrial facility may be monitored.