



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. B. Supply side energy efficiency improvements – generation

Technology/measure

1. This category comprises technologies or measures to improve the efficiency of fossil fuel generating units that supply an electricity or thermal system by reducing energy or fuel consumption by up to the equivalent of 60 GWh_e per year.¹ Examples include efficiency improvements at power stations and district heating plants and co-generation.² The technologies or measures may be applied to existing stations or be part of a new facility. A total saving of 60 GWh_e is equivalent to maximal saving of 180 GWh_{th} in the fuel input to the generation unit.

Boundary

2. The project boundary is the physical, geographical site of the fossil fuel fired power station unit affected by the efficiency measures.

Baseline

3. The energy baseline is the technical losses of energy within the project boundary. In the case of retrofit measures, the energy baseline is calculated as the monitored performance of the existing generating unit. In the case of new facilities, the energy baseline is calculated using a standard for the equipment that would otherwise have been installed selected in accordance with relevant paragraphs of 'general guidance'.

4. The emissions baseline is the energy baseline multiplied by an emission coefficient for the fuel used by the generating unit. 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.

Monitoring

6. Energy savings shall be measured after implementation of the efficiency measures, by calculating the energy content of the fuel used by the generating unit and the energy content of the electricity or steam produced by the unit. Thus both fuel use and output need to be metered.

¹ Efficiency improvements to non-fossil fuel generating units, such as turbine replacement for hydro projects, shall be treated in the same way as renewable energy projects. The efficiency improvement is calculated or measured, this improvement, expressed as a percentage, is applied to the measured output of the unit and multiplied by the emission factor calculated in accordance with category I.D projects.

² Biomass co-generation projects shall be considered as category I.C or I.D activities.



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II. B. Supply side energy efficiency improvements – generation (cont)

7. A standard emission coefficient for the fuel used by the generating unit is also needed. IPCC default values for emission coefficients may be used. In the case of coal, the emission coefficient shall be based on test results for samples of the coal purchased if such tests are part of the normal practice for coal purchases.

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.