

Gold Standard Suppressed Demand Small-scale Methodology for Energy Use for the Processing of Agricultural Products

This methodology allows introduction of renewable energy systems and/or energy efficiency measures at (small) facilities operated for processing of agricultural products. A typical example would be the installation of photovoltaics or a wind power plant that provide electricity to a mill.

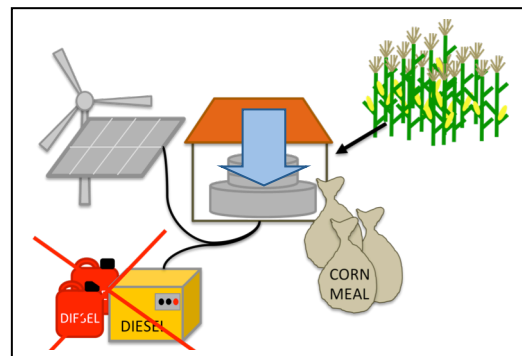
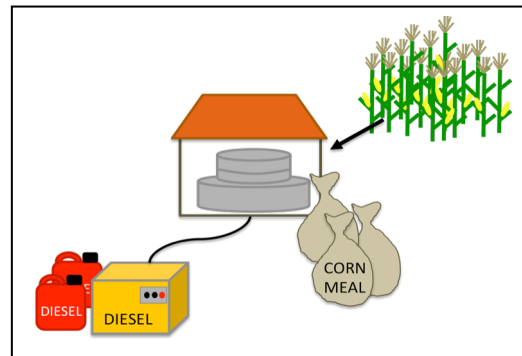
The methodology is structured according to three different applications that allow project participants easy identification of related provisions and formulas:

- Application A1: Mechanical and/or thermal processing with or without energy efficiency involving complete fuel switch
- Application A2: Mechanical and/or thermal processing with or without energy efficiency involving partial fuel switch
- Application B1: Mechanical and/or thermal processing with only energy efficiency (i.e. no fuel switch)

Being a suppressed demand methodology, the project shall result in one of the following improvements: (i) increased production, (ii) increased quality of products and/or (iii) decreased manual labour.

Determination of Baseline

The baseline is determined as the most realistic combination of technology and fuel, which would have provided the *project service level*. As a simplification, for mechanical power, an isolated diesel-power generator system can be assumed to be the baseline technology/fuel. For thermal processing and for improved mechanical and thermal processing, the baseline technology/fuel is either the pre-project situation or the most common combination of fuel/technology observed to be used in similar applications.



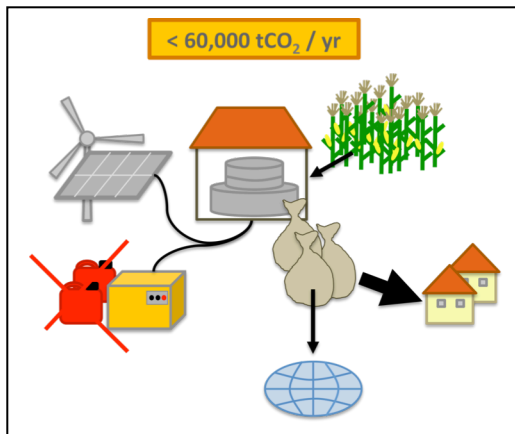
Additionality must be demonstrated through regular Gold Standard procedures (*Tool for the demonstration and assessment of additionality*).

Renewable Energy. Baseline emissions for introduction of renewable energy systems are calculated based on the quantity of processed products and the specific power/energy consumption of the processes in the baseline situation. Any project emissions occurring from the operation of the renewable energy system would be deducted from the baseline emissions to calculate related emission reductions.

Energy Efficiency. Emission reductions for energy efficiency measures are calculated based on the quantity of processed products and the difference in the specific power/energy consumption of the processes in the project and the baseline situation. Accordingly the key parameters to be monitored are the quantity of processed products and the specific power or energy consumption.

The following conditions apply for the methodology.

1. Introduction of renewable energy systems and/or energy efficiency measures is possible. 2. The focus of the methodology is (small) facilities for mechanical and



thermal processing of agricultural products. 3. The facilities can be new or existing. 4. The methodology is only applicable if the facilities lack adequate access to the grid (less than 50% grid availability during the daylight hours based on an annual average). 5. The methodology aims at an increased local use of processed products. Therefore, the Local Stakeholder Consultation will

enable projects to decide whether they can export the processed products. If demand is established as part of the Local Stakeholder Consultation then it will be compulsory for 75% of the processed products to be supplied within the project boundary. In the case when processed products are exported without meeting local demand, then credits would only be issued for the quantity supplied locally and up to 25% of that exported. In situations where more than 25% of the processed product is exported outside the project boundary, emission reductions can be claimed for the entire amount but only if it can be demonstrated that there was no local demand. 6. As a small-scale methodology, projects are only eligible, if they generate emission reductions of less than 60,000 t of CO₂ per year.

In order to allow an initial estimation of possible emission reductions for a specific project, a [calculation tool](#) has been developed along with the [methodology](#), which is available from the [Gold Standard Website](#).