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This document introduces revisions to the methodology "[Technologies and Practices to Displace Decentralized Thermal Energy Consumption](#)" Version 2.0 for clean cookstove activities. These changes are based on feedback received from stakeholders and guidance from our Technical Advisory Committee. It involves following changes:

1. Aging Test Approach for project fuel updates:

According to the TPDDTEC Version 2.0, project developers are required to carry out the baseline and project fuel consumption test (Kitchen Performance Test (KPT)) to estimate the fuel saving prior to first issuance. Project developers update the project fuel consumption by carrying out the biennial project KPTs to account for changes in the project scenario over time as project technologies age. The revision introduces an alternative method to biennial project KPTs to update project fuel consumption. The project developer can now monitor the degradation in the performance of cookstove efficiency following the Water Boiling Test and accordingly adjust the project fuel consumption level. For the Ageing Test approach, you will need to apply the following steps;

a. Determine the efficiency of the project cookstove:

The project developer shall carry out the Water Boiling Test to determine the thermal efficiency of the project cookstove along with the project KPTs prior to first issuance. The efficiency of the project cookstove shall be determined in the field or laboratory, following the latest version of Water Boiling Test protocol, by an independent expert or entity.

b. Monitor the degradation in the efficiency of project cookstove:

The degradation in the efficiency of the project cookstove shall be monitored annually by carrying out the WBT in the field or laboratory by an independent expert or entity.

c. Update the project fuel consumption level:

To update project fuel consumption, the fuel consumption level determined under step a (i.e. result of project KPTs prior to first issuance), shall be adjusted with the ratio of efficiency level determined under step a. and the efficiency level determined under step b. It would imply adjusting the project fuel consumption value for efficiency degradation.

Ideally, the WBT shall not result in higher efficiency values at second, third or subsequent years as compared to the first WBT results. In cases, where it is higher

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compared to the first WBT test results, conservative values shall be applied for emission reductions calculation.

Monitoring requirements:

The following table summarises the monitoring requirements and guidance that should be followed for the Ageing Test approach:

Monitoring parameters	Requirements
Frequency for WBTs	Annual
Timing of WBTs	In last three months of the monitoring period, provided it is representative of annual conditions
Sample size for WBTs	<ul style="list-style-type: none"> - Annual WBTs on a representative sample of each age group - The minimum sample size of each age group shall comply with the 90/10 rule
Sample selection for annual efficiency monitoring	<ul style="list-style-type: none"> - Sample selection following the Guidelines for sampling and surveys for CDM project activities and programme of activities - It is recommended that for activities that involve progressive installation the stratified random sampling approach should be followed.
Parallel use of baseline stove in the project scenario	<p>Any of the following approach with justification on how the chosen option fits within project circumstances</p> <ul style="list-style-type: none"> - Measurement campaigns shall be undertaken using data loggers such as stove utilization monitors (SUMs) which can log the operation of all devices in order to determine the average device utilization intensity - Monitoring surveys to capture cooking habits and stove usage of households in the region, including quantification of use of baseline devices, by formulating questions and/or collecting evidences to determine the frequency of usage of both the project devices and baseline devices. - Monitoring surveys to capture the number of meals cooked

It shall be noted that this method is further clarification on how to apply an Age Test in context of improved/clean cookstove activities, allowed in TPDDTEC Version 2.0. Please refer to the paragraph c) Project FT Update, page 25 of the methodology in this regard. This approach can be applied irrespective of the scale of the activity.

2. Case of Single Sample Test

Following changes are applicable to the footnote 24, TPDDTEC, Version 2.0;

- a. For micro and small-scale improved cookstove project activities, the default thermal efficiency i.e. 10% for suppressed demand situation and case of single sample test can be used under the condition that baseline wood fuel consumption is capped at 0.5 t/capita/year.
- b. The default efficiency i.e. 10% for baseline stove is not valid for charcoal stoves and can only be used for wood-fired stoves.