

## Additional information to the proposed JCM methodology

### “Energy Saving by Introduction Low Greenhouse Gas-Emitting Safe Drinking Water Production Systems in the Philippines” on setting default value for reference emissions

#### Determination of the default value for emission reductions

The proposed methodology aims at introducing low GHG emitting water purification systems to provide safe drinking water and displace water boiling using non-renewable biomass or fossil fuel. According to WHO-UNICEF report, only 47.46% of population access to clean drinking water in the Philippines in 2020<sup>1</sup>. However, there is a large disparity between urban areas and rural areas. Majority 61.80% of the population in urban areas and 34.54% in rural areas, had access to safely managed drinking water. Every year millions of people – most of them, children die from diseases associated with inadequate water supply, sanitation and hygiene<sup>1</sup>. There are many ways to boil water (the traditional cookstove, the fossil fuel combusting system, ...). To ensure the net emission reductions, the efficiency of the reference water boiling systems is conservatively set as default values in the following manner which are based on the latest CDM methodology<sup>2</sup>:

1. **0.10** default value may be optionally used if the replaced system or the system that would have been used is a three-stone fire or a conventional system for woody biomass lacking improved combustion air supply mechanism and flue gas ventilation system that is without a grate as well as a chimney; for the rest of the systems using woody biomass **0.2** default value may be optionally used.
2. **0.5** default value may be used if the replaced system or the system that would have been used is a fossil fuel combusting system
3. The efficiency of the water boiling system shall use weighted average values if more than one type of system is encountered.

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<sup>1</sup> <https://newsinfo.inquirer.net/1456912/who-unicef-report-nearly-half-of-filipinos-get-safe-drinking-water>

<sup>2</sup> <https://cdm.unfccc.int/UserManagement/FileStorage/HYBRFAJ97PLO8TZXD1CG2Q643KN5IM>