



## Improved Cook Stove Forecast Methodology Version 2.0 ERRATA AND CLARIFICATIONS

The Climate Action Reserve (Reserve) is publishing its Improved Cook Stove Forecast Methodology Version 2.0. While the Reserve intends for the methodology to be a complete, transparent document, it recognizes that correction of errors and clarifications will be necessary as the methodology is implemented and issues are identified. This document is an official record of all errata and clarifications applicable to the Improved Cook Stove Forecast Methodology Version 2.0.<sup>1</sup>

Per the Climate Forward Program Manual, both errata and clarifications are considered effective on the date they are first posted on the Climate Forward website. The effective date of each erratum or clarification is clearly designated below. All new and listed Improved Cook Stove projects must incorporate and adhere to these errata and clarifications when they undergo confirmation, including those undergoing confirmation at the time any new errata or clarifications are issued. The Reserve will incorporate both errata and clarifications into future versions of the methodology.

All project proponents and confirmation bodies must refer to this document to ensure that the most current guidance is adhered to in project design and confirmation. Confirmation bodies shall refer to this document immediately prior to uploading any Confirmation Statement to assure all issues are properly addressed and incorporated into confirmation activities.

If you have any questions about the updates or clarifications in this document, please contact the Reserve team at [info@climateforward.org](mailto:info@climateforward.org) or (213) 891-1444.

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<sup>1</sup> See the policy memo dated June 6, 2023, or the Climate Forward Program Manual for an explanation of the Reserve's policies on methodology errata and clarifications. For document management and program implementation purposes, both errata and clarifications are contained in this single document.

*Please ensure that you are using the latest version of this document.*

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## Errata and Clarifications (arranged by methodology section)

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## Section 5

### 1. Equation for Calculating Emission Reductions by Project Batch (CLARIFICATION - 3/1/24)

**Section:** 5 Quantifying GHG Emissions Reductions: Equation 5.2. Calculating Emission Reductions by Project Batch

**Context:** When the methodology was updated from Version 1.0 to 2.0 the equation for calculating emission reductions by project batch was updated to include emission factors for CO<sub>2</sub> emissions from non-renewable woody biomass that is substituted or reduced (CO<sub>2</sub>-EF<sub>NRB</sub>) and non-CO<sub>2</sub> (methane and nitrous oxide) emissions from renewable woody biomass that is substituted or reduced (Non-CO<sub>2</sub>-EF<sub>NRB</sub>). There was an error in the equation multiplying these two emissions factors together instead of adding them together which would result in over-crediting.

**Correction:** Equation 5.2. Calculating Emission Reductions by Project Batch shall now read as follows (highlighted text indicating corrected text):

**Equation 5.1.** Calculating Emission Reductions by Project Batch<sup>12</sup>

$ER_{y,i,j} = B_{y,savings,i,j} \times N_{y,i,j} \times \mu_y \times f_{NRB,y} \times NCV_{biomass} \times (CO_2-EF_{NRB} + Non - CO_2-EF_{NRB}) \times NTG_{leakage}$		
<i>Where,</i>		
$ER_{y,i,j}$	= Emission reductions by project device of type <i>i</i> and batch <i>j</i> during year <i>y</i>	<u>Units</u> tCO <sub>2e</sub>
$B_{y,savings,i,j}$	= Quantity of woody biomass that is saved per project device of type <i>i</i> and batch <i>j</i> during year <i>y</i> (defined in Equation 5.3)	t
$N_{y,i,j}$	= Number of project devices of type <i>i</i> and batch <i>j</i> operating during year <i>y</i> , as reported in project documentation	Number
$\mu_y$	= Adjustment to account for any continued use of pre-project devices during the year <i>y</i>	Fraction
$f_{NRB,y}$	= Fraction of woody biomass that can be established as non-renewable biomass	Fraction
$NCV_{NRB}$	= Energy value of “air-dried” firewood replaced or substituted	TJ/t
$CO_2-EF_{NRB}$	= CO <sub>2</sub> Emission factor of the non-renewable woody biomass that is substituted or reduced (IPCC default for wood fuel)	tCO <sub>2</sub> /TJ
$Non-CO_2-EF_{NRB}$	= Non-CO <sub>2</sub> (methane and nitrous oxide) Emission factor of the non-renewable woody biomass that is substituted or reduced (IPCC default for wood fuel)	tCO <sub>2e</sub> /TJ
$NTG_{leakage}$	= Net to gross adjustment factor to account for leakage	Fraction

<sup>12</sup> The value for all parameters used in this equation which are not project-specific can be found in the Improved Cook Stove Project Forecast Methodology Parameters document. The most current version may be downloaded from <https://climateforward.org/program/methodologies/improved-cook-stoves/>.