

PILOT – DECISION SUMMARY

Decision Summary – Q1 2025

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CONTACT DETAILS

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SUMMARY

This document outlines the assessment and approval decisions for three innovative dMRV (digital Monitoring, Reporting, and Verification) pilot projects submitted in Q4-2024 – Q1 2025 (end of January). The pilots represent diverse applications of digital technology in carbon credit verification, spanning electric cooking solutions, biomass cooking systems, and sustainable rice cultivation practices. Each project has been evaluated for its likely conformance with Gold Standard requirements. The decision includes specific conditions and forward actions required for each pilot before their first verification, ensuring robust implementation of dMRV solutions while maintaining data integrity and verification standards.

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1| PILOT 1 - ELECTRIC COOKING PROGRAM BY ATEC

1.1 | **Project Information**

Project Title: Electric Cooking Program by ATEC

GS ID: PoA - GS11815, VPAs - GS 11817, 11816

*Any new VPA real/regular Case VPA may be included provided the VPA demonstrate conformance with the GS4GG requirements, and any conditions outlined below.

Project Developer: ATEC Australia-International Pty Ltd

Submission Date: 13/12/2024 Approval date: 15/02/2025

1.2 | Methodology:

Methodology for metered & measured energy cooking devices, Version 1.2 **Deviation from methodology requirements:** None

1.3 | dMRV solution overview

ATEC's dMRV (digital Monitoring, Reporting, and Verification) solution represents a comprehensive digital infrastructure for carbon credit verification. The core system utilizes patented IoT technology that enables complete digital measurement of device usage and key data points, integrated with a metered methodology for 100% digitization of verification and carbon assets.

The scope of the solution focuses on automating data collection, ensuring 100% dataauditability of carbon credits, and enabling ultimate beneficiary traceability. The dMRV application encompasses four main components: project registration, validation, verification, and impact tracking. Data collection occurs through IoT SIM cards on each device, providing complete traceability. The collected data is transmitted via API directly to VVB servers for processing and verification. The latest version (Stove V3, February 2025) features enhanced security with encrypted and digitally signed data transmission.

The technological infrastructure includes IoT SIM cards for data collection without sampling, VVB-managed data processing tools, blockchain integration through Guardian Hedera ledger, and cloud computing utilizing AWS for ATEC and Envision Blockchain servers for Guardian. This comprehensive approach ensures data integrity, transparency, and efficient carbon credit verification.

1.4 | Decision

• Final Assessment: Approved

1.5 | Conditions (if any):

The following Forward Actions to be completed before the first verification

- 1. FAR 1: The developer shall estimate the energy usage attributable to the use of digital monitoring and reporting infrastructure attributable to the project activity in a conservative manner and account these emissions as project emissions to estimate the net emission reductions from the project.
- 2. FAR 2: The developer shall document data security protocols:
 - Detail user authentication and authorization frameworks
 - Compliance with GDPR and local data protection regulations
- 3. The VVB shall follow the requirements outlined in **dMRV Validation and verification requirements** for further assessment.

1.6 | Next Steps:

- 1. The project developer shall update status of dMRV implementation at minimum within months
- The project developer may submit the request for validation/verification following the requirements outlined in **Application of GS4GG** requirements with dMRV solution

2| PILOT 2- FAIR CLIMATE PROGRAMME FOR ADVANCED BIOMASS COOKING SOLUTIONS

2.1 | Project Information

Project Title: Fair Climate Programme for Advanced Biomass Cooking Solutions (PoA)

GS ID: PoA - <u>GS11506</u>, VPAs - GS11507 **Project Developer:** FairClimateFund **Submission Date:** 13/12/2024 **Approval date:** 15/02/2025

2.2 | Methodology:

Methodology for metered & measured energy cooking devices, Version 1.0 Deviation from methodology requirements: **None**

2.3 | dMRV solution overview

The proposed dMRV solution will digitize project data from end to end, connecting user and sales information to carbon credit issuances. Being developed by FairClimateFund (FCF) and Notilyze, the platform will launch in Q2 2025. It will automatically collect data from user systems for emission reduction (ER) calculations, which will primarily use pellet sales data following GS MECD methodology. The platform features outlier analysis to spot data inconsistencies and ensure verification accuracy. External VVBs will have dedicated access to review data and calculations independently. A user-friendly dashboard will display key metrics including emission reductions, cash-backs, premiums, and SDG impacts. The system prioritizes data security through role-based access controls, restricting sensitive information to authorized users only.

2.4 | Decision

• Final Assessment: Approved

2.5 | Conditions (if any):

The following Forward Actions to be completed before the first verification

- 1. FAR 1: Enable IoT integration with Mimi Moto stoves:
 - $_{\odot}$ $\,$ Implement secure data transmission protocols for stove usage metrics with further elaboration on
 - Define data collection frequency and storage requirements
- 2. FAR 2: The developer shall document data security protocols:
 - o Detail user authentication and authorization frameworks

- Compliance with GDPR and local data protection regulations
- 3. FAR 3: The developer shall implement robust data recovery system:
 - Create automated backup schedule with specified retention periods
 - Document failover procedures and emergency response protocols
- 4. FAR 4: The developer shall establish system performance metrics:
 - Define maximum concurrent user thresholds
- 5. The VVB shall follow the requirements outlined in **dMRV Validation and verification requirements** for further assessment.

2.6 | Next Steps:

- 1. The project developer shall update status of dMRV implementation at minimum within months
- 2. The project developer may submit the request for validation/verification following the requirements outlined in **Application of GS4GG requirements with dMRV solution**.

3| PILOT 3- PRO-CLIMATE PADDY CULTIVATION FOR REDUCING METHANE EMISSION AND SAVING WATER

3.1 | Project Information

Project Title: Pro-climate paddy cultivation for reducing methane emission and saving water (PoA)

GS ID: PoA: GS 13121, VPA: GS 13122

Project Developer: Partners in Prosperity & CarbonFarm Technology SAS

Submission Date: 06/01/2025

Approval date: 15/02/2025

3.2 | Methodology

Methodology for Methane Emission Reduction by Adjusted water management practice in Rice cultivation Version 1.0

Deviation from methodology requirements: Refer to Section FAR below

3.3 | dMRV solution overview

The proposed digital MRV (Monitoring, Reporting, and Verification) system for rice cultivation is a solution that combines multiple technologies and methodologies. At its core, the system focuses on precise tracking of AWD (Alternate Wetting and Drying) practices, delivering real-time data on methane emissions reduction, water usage optimization, and environmental impact assessment.

The system employs three key technologies: Satellite Technology using SAR (Synthetic Aperture Radar) for monitoring water regimes and plant development; Mobile Applications that enable technicians to collect field data during farmer interviews; and IoT Integration through sensors on water-pipes for water level measurement and remote sensing validation.

The monitoring process encompasses several crucial steps, including field delineation using satellite imagery and AI, rice mapping and seasonal monitoring, straw burning verification, and comprehensive water management monitoring with frequent observations. To ensure data integrity, the system implements robust validation and security measures through secured database storage, digital farmer attestations with e-signatures, and geolocated documentation of farmer interviews.

For visualization and reporting purposes, the system utilizes a GIS-based platform that offers dynamic mapping of dMRV activities, provides access to raw data for auditing, and features a comprehensive parameter monitoring dashboard. This integrated approach ensures efficient monitoring, accurate reporting, and reliable verification of rice cultivation practices.

3.4 | Decision

Final Assessment: Approved

3.5 | Conditions (if any):

The following Forward Actions to be completed before the first verification

- 1. FAR 1: The project developer shall confirm the accuracy level achieved with the remote sensing technology. The developer should refer to requirements and guidelines modelling based approaches. (To be issued by Gold Standard)
- 2. FAR 2: The developer shall document data security protocols:
 - o Detail user authentication and authorization frameworks
 - Compliance with GDPR and local data protection regulations
- 3. FAR 3: The developer shall implement robust data recovery system:
 - Create automated backup schedule with specified retention periods
 - Document failover procedures and emergency response protocols
- 4. FAR 4: The developer shall document and justify any deviations from the methodology's monitoring requirements in both the Project Design Document and Monitoring Report, where applicable. The VVB shall validate these deviations and include its opinion in the validation report. Should the project developer or VVB need further guidance, they may request clarification as needed during the validation of project and dMRV system.
- The VVB shall follow the requirements outlined in **dMRV Validation and** verification requirements for further assessment.

3.6 | Next Steps:

- 1. The project developer shall update status of dMRV implementation at minimum within months
- 2. The project developer may submit the request for validation/verification following the requirements outlined in **Application of GS4GG requirements with dMRV solution**

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