



**OUTLINE FOR THE INITIAL REPORT AND UPDATED INITIAL
REPORT REFERRED TO IN DECISION 2/CMA.3, ANNEX, CHAPTER
IV.A (INITIAL REPORT)^{1 2 3}
(Version 02.0)**

[English only]

Party	Republic of Madagascar
NDC period	2021 – 2030
Report number for the NDC period^a	1
Report type: Initial report Updated initial report	☐ ☒
Updated initial report number	1.0
Version^b	1.0
Date	31/07/2026
Name(s) of cooperative approach(es) included in this report <i>(Include a line for each additional cooperative approach)</i>	- KCM Madagascar Clean Cookstove Project - VCS3239/Madagascar Fahatokiana Improved Cookstove Program - VCS3096/Uplifting of Malagasy communities by distributing efficient cooking appliance - VCS2707/ICS distribution for Improving life style of Malagasy Community

^a Ascribe sequential number for updated initial reports. The number '1' is reserved for the initial report.

^b Ascribe version number as follows: decimal increase for minor revisions (typos, corrections) and digit increase for content changes.

Note: For updated initial report fill in only section IV. Information on each cooperative approach (para. 18(g–i), para. 19 of the annex to decision 2/CMA.3).

¹ This template has been developed based on the outline adopted by decision 6/CMA.4. Para 36 of decision 6/CMA.4 further encourages participating Parties to prepare their initial report, updated initial report and annex 4 to the biennial transparency report (Regular information) in accordance with the outlines contained in annexes V and VI respectively, as referred to in decision 2/CMA.3, annex, chapter IV.A (Initial report) and IV.C (Regular information); Supplementary elements of information have been added as per decision 4/CMA.6, annex 1.

² The list of the acronyms and abbreviations used in this template are available in decision 6/CMA.4: <https://unfccc.int/documents/624474>.

³ References to chapters and paragraphs in the outline are to chapters and paragraphs in the annex to decision 2/CMA.3, unless stated otherwise. "Article" refers to an Article of the Paris Agreement.

I. PARTICIPATION RESPONSIBILITIES (PARA. 18(A))
A: INFORMATION ON HOW THE PARTY ENSURES THAT IT IS A PARTY TO THE PARIS AGREEMENT (PARA. 21(A), PARA. 4(A), UPDATE TO PARA. 18(A))
Madagascar ratified the Paris Agreement on 21 September, 2016 ⁴ and is a Party to the Paris Agreement thereupon.
B. INFORMATION ON HOW THE PARTY ENSURES THAT IT HAS PREPARED, COMMUNICATED AND IS MAINTAINING AN NDC IN ACCORDANCE WITH ARTICLE 4, PARAGRAPH 2 (PARA. 18(A), PARA. 4(B), TO BE UPDATED BY PARA. 21(A))
Madagascar submitted its 2 nd NDC to the UNFCCC on 29 January 2024 which is available on the NDC registry. ⁵
C. INFORMATION ON HOW THE PARTY ENSURES IT HAS ARRANGEMENTS IN PLACE FOR AUTHORIZING THE USE OF ITMOs TOWARDS ACHIEVEMENT OF NDCs PURSUANT TO ARTICLE 6, PARAGRAPH 3 (PARA. 18(A), PARA. 4(C), TO BE UPDATED BY PARA. 21(A))
The competent authority in Madagascar for authorizing the use of ITMOs is the National Designated Authority for the Carbon Market, established within the Ministry of the Environment through the Office in charge of Climate Change. The ANDMC was set up by Decree No. 14683/2025 reforming the ANDMC. The ANDMC is structured around three bodies: the Steering Committee, the Technical Committee, and the Secretariat. The ANDMC Steering Committee issues authorizations for the use of ITMOs. The decision is formally adopted by the Coordinator of the Office in charge of Climate Change and/or by the DNA 6.4 in case of impediment or necessity.
D. INFORMATION ON HOW THE PARTY ENSURES IT HAS ARRANGEMENTS IN PLACE THAT ARE CONSISTENT WITH THE ARTICLE 6, PARAGRAPH 2, GUIDANCE AND RELEVANT DECISIONS OF THE CMA FOR TRACKING ITMOs (PARA. 18(A), PARA. 4(D), TO BE UPDATED BY PARA. 21(A))
Madagascar has established an interim tracking registry that aligns with the requirements of article 6, paragraph 2, guidance and relevant decisions of the CMA for tracking ITMOs. This system will draw upon information provided through independent international carbon crediting registries (including e.g., the Verra VCS Registry, where all ITMOs from this cooperative approach are generated and authorised by Madagascar, are registered) and by project proponents directly. This Article 6 ITMO tracking registry will be expanded throughout 2026 as additional cooperative approaches and ITMOs are authorized. In the longer term, Madagascar intends to use the international registry to be established and operated by the UNFCCC Secretariat (as referred to in para. 30 of decision 2/cma.3). Madagascar also intends to develop a larger national registry that can house article 6.2 tracking activities, as well as other domestic emission reduction tracking and reporting activities.
E. INFORMATION ON WHETHER THE MOST RECENT NATIONAL INVENTORY REPORT REQUIRED IN ACCORDANCE WITH DECISION 18/CMA.1 HAS BEEN PROVIDED (PARA. 18(A), PARA. 4(E), TO BE UPDATED BY PARA. 21(A))
Madagascar submitted its Third National Communication in 2017, its first BTR in March 2026 including updated national GHG inventory information

⁴ https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsq_no=XXVII-7-d&chapter=27&clang=en

⁵ <https://unfccc.int/sites/default/files/NDC/2024-01/NDC%202%20MADAGASCAR.pdf>

F. INFORMATION ON HOW THE PARTY ENSURES PARTICIPATION CONTRIBUTES TO THE IMPLEMENTATION OF ITS NDC AND LONG-TERM LOW-EMISSION DEVELOPMENT STRATEGY, IF IT HAS SUBMITTED ONE, AND THE LONG-TERM GOALS OF THE PARIS AGREEMENT (PARA. 18(A), PARA. 4(F), TO BE UPDATED BY PARA. 21(A))

Madagascar's updated NDC includes targets and actions to strengthen the nation's environmental integrity and secure the ecosystem services essential to its sustainable and equitable development. Furthermore, the government of Madagascar is aware that current global efforts to reduce greenhouse gases are largely insufficient and are causing losses and damage, particularly for the most vulnerable countries including African and island nations. The Republic of Madagascar is therefore making its contribution to limiting the global temperature increase to 1.5°C by 2100 through the actions set out in its NDC.

In recognition of its status as an LDC, Madagascar's NDC recognises the need for international financing to support achievement of the NDC. As set out in the NDC, Madagascar anticipates that 3-4% of its NDC will be financed through internal sources, with the remaining 96 – 97% funded through external (i.e. international) sources. Madagascar has indicated its intention to access international financing through cooperative mechanisms facilitated by article 6 to support access to climate-smart technologies and sustainable development.

Engagement in this mechanism will be directed towards the achievement of Madagascar's NDC by facilitating access to climate-smart technologies and sustainable development opportunities, with the aim to fund the generation of mitigation outcomes that go beyond the NDC targets and contribute to global mitigation efforts and the long-term goals of the Paris Agreement.

The cooperative approach included in this initial report supports the achievement of this aim through the distribution of improved cookstoves that will reduce the amount of woody biomass consumed by Malagasy households. It is anticipated that the cooperative approach referred to hereunder will produce mitigation outcomes significantly beyond this target, and Madagascar has considered the mitigation potential of the cooperative approach and its NDC needs in its authorization process.

II. DESCRIPTION OF THE PARTY'S NDC, AS REFERRED TO IN DECISION 18/CMA.1, ANNEX, PARAGRAPH 64, WHERE A PARTICIPATING PARTY HAS NOT YET SUBMITTED A BIENNIAL TRANSPARENCY REPORT (PARA. 18(B), TO BE UPDATED BY PARA. 21(B))

A. TARGET(S) AND DESCRIPTION, INCLUDING TARGET TYPE(S) (DECISION 18/CMA.1, ANNEX, PARA. 64(A))

Overall emission reduction target:

Madagascar aims to reduce its greenhouse gas (GHG) emissions by 28% by 2030 compared to the business-as-usual (BAU) scenario. This single-year reduction target focuses on achieving a balance of 48,403 ggCO₂-e emissions by the target year.

Sectoral targets:

- **Agriculture:** emissions reductions focus on cultivated soils and rice production. Mitigation efforts include promoting sustainable agricultural practices, climate-smart agriculture, and enhancing resilience.
- **Energy:** the energy sector's goal is to transition to an energy mix with 80% renewables by 2030, aiming for a reduction in ghg emissions by 28,030 ggCO₂-e.
- **Land use, land-use change, and forestry (LULUCF):** the target is to enhance carbon absorption capacity by about 20%, which corresponds to avoiding emissions and strengthening carbon sinks by around 37,809 ggCO₂-e By 2030.
- **Waste management:** the goal is a 51.4% reduction in emissions from the sector, bringing down emissions to 1,072 ggCO₂-e from a projected 2,083 ggCO₂-e in the BAU scenario.
- **Industrial processes and product use (IPPU):** the target is to reduce emissions by 125 ggCO₂-e through measures such as replacing clinker with alternative materials in cement production.

Transportation: emissions reductions focus on cable transport, trams, improved urban mobility, support for biodiesel production as a substitute (sustainable fuel), gradual development of rechargeable vehicle fleets (electric and hybrid) and related charging infrastructure.

Target type:

The targets are absolute emission reductions compared to a baseline BAU scenario for the year 2030. This approach allows Madagascar to set clear, measurable goals aligned with international climate agreements.

B. TARGET YEAR(S) OR PERIOD(S), AND WHETHER THEY ARE SINGLE-YEAR OR MULTI-YEAR TARGET(S) (DECISION 18/CMA.1, ANNEX, PARA. 64(B))
The target year for Madagascar's second NDC is set as 2030. This is a single-year target, meaning that the emission reductions and other goals are specifically aimed to be achieved by the year 2030. The NDC outlines specific emission reduction targets and goals for sectors such as energy, agriculture, forestry, and waste management to be realized by this target year.
C. REFERENCE POINT(S), LEVEL(S), BASELINE(S), BASE YEAR(S) OR STARTING POINT(S), AND THEIR RESPECTIVE VALUE(S) (DECISION 18/CMA.1, ANNEX, PARA. 64(C))
1. Base year: the base year for Madagascar's emissions is 2010. This year coincides with the latest greenhouse gas inventory published in Madagascar's third national communication, which was revised during the preparation of its first nationally determined contribution (NDC1). 2. Baseline/reference scenario: the baseline scenario used for mitigation targets is a BAU scenario for the year 2030. This BAU scenario projects a net balance of emissions and removals at 22,578 ggCO₂-e by 2030. 3. Emission reduction target: Madagascar aims to reduce its emissions by 28% by 2030 compared to this BAU scenario. This reduction corresponds to achieving emissions of 48,403 ggCO₂-e by 2030. 4. Absorption targets: in addition to reducing emissions, Madagascar plans to enhance its greenhouse gas absorption capacity by around 20%, contributing to an additional sequestration of 37,809 ggCO₂-e by 2030.
D. TIME FRAME(S) AND/OR PERIODS FOR IMPLEMENTATION (DECISION 18/CMA.1, ANNEX, PARA. 64(D))
The time frame for the implementation of Madagascar's second NDC is set from the submission of the NDC until 2030. This period includes ongoing and future actions that align with the goals of the NDC. Specifically: • Start date: activities under the NDC began from 2021, following the initial progress made under Madagascar's first NDC. • End date: the primary target year for achieving the set goals is 2030. This is a single-period target, meaning that all planned actions and strategies are to be completed and the goals achieved by 2030.

E. SCOPE AND COVERAGE, INCLUDING, AS RELEVANT, SECTORS, CATEGORIES, ACTIVITIES, SOURCES AND SINKS, POOLS AND GASES (DECISION 18/CMA.1, ANNEX, PARA. 64(E))

The scope and coverage of Madagascar's second NDC includes the following sectors, categories, activities, sources, sinks, pools, and gases:

Sectors and categories

- **Energy:** this includes emissions from energy industries, residential energy use including wood energy from biomass, and transport.
- **Agriculture:** key sources include enteric fermentation, rice growing, agricultural soils, prescribed burning of savannas, and burning of agricultural residues.
- **Land use, land use change, and forestry (LULUCF):** this sector covers forests, grasslands, croplands, wetlands, and settlements. Activities include deforestation, forest degradation, and efforts to strengthen and maintain carbon stocks.
- **Waste:** emissions from solid waste landfills and wastewater treatment are considered.
- **Industrial processes and product use (IPPU):** this sector focuses on emissions from cement production and similar industrial processes.

Target gases

The target gases for Madagascar's mitigation efforts are:

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)
- Hydrofluorocarbons (HFC)
- Perfluorocarbons (PFC)
- Sulfur Hexafluorocarbons (SF₆)

These gases have been selected based on their global warming potential as per the revised 1996 IPCC guidelines.

Methodological approaches

The national greenhouse gas inventories for these sectors are based on the revised 1996 IPCC guidelines, supported by IPCC Good Practice Guidance (GPG 2000 and GPG 2003) for national inventories. Madagascar is currently preparing its first Biennial Update Report and its fourth National Communication, which will help update emissions and absorption estimates.

F. INTENTION TO USE COOPERATIVE APPROACHES THAT INVOLVE THE USE OF INTERNATIONALLY TRANSFERRED MITIGATION OUTCOMES UNDER ARTICLE 6 TOWARDS NDCs UNDER ARTICLE 4 OF THE PARIS AGREEMENT (DECISION 18/CMA.1, ANNEX, PARA. 64(F))

Madagascar's Second NDC indicates an intention to develop national frameworks to benefit from the voluntary cooperation mechanisms under Article 6 of the Paris Agreement. This includes:

1. **Strengthening National Capacities:** Madagascar plans to enhance its national capacities to facilitate access to climate-smart technologies and ensure equitable benefit-sharing from mitigation activities. This will involve improving scientific, technical, and institutional capacities for accounting emissions and reductions.
2. **Developing Accounting Systems:** The country aims to develop and progressively improve its systems for accounting for emissions and emission reductions. This is essential for accurately tracking progress and ensuring transparency in using internationally transferred mitigation outcomes.
3. **Focus on Sustainable Development:** Madagascar intends to use these cooperative approaches to support sustainable development, ensuring that mitigation activities contribute to broader socio-economic goals.

This approach aligns with Madagascar's broader strategy to leverage international cooperation to meet its climate targets while promoting sustainable development.

G. ANY UPDATES OR CLARIFICATIONS OF PREVIOUSLY REPORTED INFORMATION (E.G. RECALCULATION OF PREVIOUSLY REPORTED INVENTORY DATA, OR GREATER DETAIL ON METHODOLOGIES OR USE OF COOPERATIVE APPROACHES) (DECISION 18/CMA.1, ANNEX, PARA. 64(G))

Madagascar's Second NDC includes the following updates and clarifications of previously reported information:

1. **Recalculation and Update of Emission Data:**
 - Madagascar is currently preparing its first Biennial Update Report and its Fourth National Communication by using IPCC 2006. The results from these inventories will update greenhouse gas emission estimates, which will be used to revise the NDC from 2025 onwards. This reflects a commitment to continually refining data accuracy and ensuring that the latest information is used to guide climate action.
2. **Sectoral Expansion:**
 - Compared to the First NDC, the Second NDC includes additional sectors, such as Industrial Processes and Product Use (PIUP), which were not fully covered before. This expansion reflects increased ambition and a broader scope in addressing greenhouse gas emissions across the economy.

III. INFORMATION ON ITMO METRICS, METHOD FOR APPLYING CORRESPONDING ADJUSTMENTS AND METHOD FOR QUANTIFICATION OF THE NDC (PARA. 18(C–F))

A. ITMO METRICS (PARA. 18(c))

Mitigation outcomes from the cooperative approach are measured in metric tonnes of carbon dioxide equivalent (tCO₂eq).

B. METHOD FOR APPLYING CORRESPONDING ADJUSTMENTS AS PER CHAPTER III.B (APPLICATION OF CORRESPONDING ADJUSTMENTS) (PARA. 18(c))

1. Description of the method for applying corresponding adjustment for multi- or single year NDCs that will be applied consistently throughout the period of NDC implementation, if applicable (para. 18(c))

Madagascar will apply corresponding adjustments by using the averaging method specified in decision 2/CMA.3, annex, paragraph 7 (a)(ii). Madagascar reserves the right to change the applicable method of corresponding adjustments, which will be applied consistently throughout the NDC period, in

	consideration of further guidance in relation to corresponding adjustments.
2. Description of the method for applying corresponding adjustments where the method is a multi-year emissions trajectory, trajectories or budget, if applicable (para. 18(c))	Not Applicable.
3. <i>Description of how the method for applying corresponding adjustments aligns with decision 2/CMA.3, annex, paragraph 7 (para. 18(c)) supplemented by decision 4/CMA.6, annex 1) - Supplementary element of information to be provided by Parties as relevant⁶</i>	Madagascar ensures that its method for applying corresponding adjustments meets the principles of transparency, accuracy, completeness, comparability, and consistency. • Transparency & Accuracy: Madagascar applies the averaging method under decision 2/CMA.3, annex para. 7, documented in this Initial Report and national registry protocols. Once developed, Madagascar's National Registry will provide visibility on the ITMOs that have been first transferred and when adjustments are applied. Adjustments are based on verified emissions inventory data and records of ITMO transactions in independent third-party registries (e.g., Verra) that follow strict integrity standards, including independent verification and safeguards against double counting. • Completeness & Consistency: Project proponents seeking ITMO authorization must regularly report issuance, first transfer, and use of units in approved registries. Madagascar cross-checks this information with registry records, conducts annual reconciliation, and applies corresponding adjustments for all ITMOs that are first transferred. The same approach is applied consistently throughout the NDC implementation period, subject to further CMA guidance. • Comparability: Madagascar's approach follows CMA accounting guidance and will be updated to remain consistent with other Parties' methods. To prevent a net increase in emissions, Madagascar annually reconciles ITMO transactions in third-party registries with its national registry to confirm that all first transfers are matched with reported adjustments. The Biennial Transparency Report (BTR) will provide comprehensive details on

⁶ Decision 4/CMA.6 para. 18 requests each participating Party to incorporate the elements contained in annex I when providing information in its initial report and any updated initial reports, as referred to in decision 2/CMA.3, annex, paragraphs 18–19, as relevant. These elements are supplementary elements of information. These elements are referred to across the template as supplementary elements and are written in italic to differentiate them from the initial elements of the outline of the initial and updated initial reports.

	all ITMOs authorized, transferred, or used, along with the application of corresponding adjustments. To ensure that the corresponding adjustments are representative and consistent with Madagascar's NDC implementation and achievement, each corresponding adjustment is applied to the same indicator (absolute GHG emissions in tCO ₂ e) used to track NDC progress under decision 18/CMA.1.
4. Description of the methods used for establishing the indicative trajectory, trajectories or budget and the resulting trajectory, trajectories or budget and their relationship to the indicators referred to in decision 18/CMA.1, annex, paragraph 65, to which corresponding adjustments will be applied (para. 18(c) supplemented by decision 4/CMA.6, annex 1) - Supplementary element of information to be provided by Parties as relevant ⁷	Not applicable as Madagascar is using the averaging method for applying corresponding adjustments.
C. QUANTIFICATION OF THE PARTY'S MITIGATION INFORMATION IN ITS NDC IN T CO₂ EQ, INCLUDING THE SECTORS, SOURCES, GHGS AND TIME PERIODS COVERED BY THE NDC, THE REFERENCE LEVEL OF EMISSIONS AND REMOVALS FOR THE RELEVANT YEAR OR PERIOD, AND THE TARGET LEVEL FOR ITS NDC OR, WHERE THIS IS NOT POSSIBLE, THE METHODOLOGY FOR THE QUANTIFICATION OF THE NDC IN T CO₂ EQ (PARA. 18(D)).	
See II.A above.	
D. QUANTIFICATION OF THE PARTY'S NDC, OR THE PORTION IN THE RELEVANT NON-GHG INDICATOR, IN A NON-GHG METRIC DETERMINED BY EACH PARTICIPATING PARTY, IF APPLICABLE (PARA. 18(E))	
Not Applicable.	
E. FOR A FIRST OR FIRST UPDATED NDC CONSISTING OF POLICIES AND MEASURES THAT IS NOT QUANTIFIED, INFORMATION ON QUANTIFICATION OF THE PARTY'S EMISSION LEVEL RESULTING FROM THE POLICIES AND MEASURES THAT ARE RELEVANT TO THE IMPLEMENTATION OF THE COOPERATIVE APPROACH AND ITS MITIGATION ACTIVITIES FOR THE CATEGORIES OF ANTHROPOGENIC EMISSIONS BY SOURCES AND REMOVALS BY SINKS, AS IDENTIFIED BY THE FIRST TRANSFERRING PARTY PURSUANT TO PARAGRAPH 10, AND THE TIME PERIODS COVERED BY THE NDC (PARA. 18(F))	
Madagascar's NDC includes an emissions reduction target for the energy sector. One of the mitigation actions identified in Madagascar's NDC to achieve this target is the scaling up of improved cookstove initiatives. Madagascar anticipates that reducing wood-energy consumption (including through the scaling up of improved cookstove initiatives) would lead to a reduction in emissions of around 1,000 ggCO ₂ -e by 2030, according to the National Wood-Energy Supply Strategy.	

⁷ Ibid.

IV. COOPERATIVE APPROACH 1: KCM MADAGASCAR CLEAN COOKSTOVE PROJECT

Note: For the initial report and the updated initial report, chapters A–H below should be repeated for each cooperative approach. For each further cooperative approach, each participating Party shall submit the information referred to in para. 18(g–i) of the annex to decision 2/CMA.3 in an updated initial report (decision 2/CMA.3, annex, para. 19)

A. COPY OF THE AUTHORIZATION BY THE PARTICIPATING PARTY (PARA. 18(g))

This cooperative approach is called the KCM Madagascar Clean Cookstove Project (The Project). The Project was initially registered in 2018 as the Madagascar Improved Cookstove Project by KCM, under the UNFCCC Clean Development Mechanism (CDM) as a 'Program of Activities' (PoA10443). This programmatic approach included an umbrella project and multiple 'Component Project Activities' (CPA) underneath.

Following conclusion of the CDM, the program underwent a 'gap validation' process, where each of the CPAs were validated, verified, and registered as individual project activities under Verra's Verified Carbon Standard (VCS). This ongoing cooperative approach is known as the KCM Madagascar Clean Cookstove Project, and now consists of one improved cookstove manufacturing, distribution and monitoring operation, with specific regional activities registered separately underneath the Verra VCS. Initial approval for these project activities to receive authorization for corresponding adjustment was provided in a 'Letter of Authorization of Mitigation Activity' (LAMA), designated as Letter of Authorization (LoA)

Confirmation of corresponding adjustments applied to authorised credits after the first transfer condition has been met was provided in a 'Letter of Authorization of Mitigation Outcomes' (LAMO). Links to LoA (LAMA) and LAMO documents issued to all cooperative approach project activities can be viewed online via the ANDMC Article 6 Registry Information hub at <https://andmc-registry.com>.

B. DESCRIPTION OF THE COOPERATIVE APPROACH (PARA. 18(G))

The KCM Madagascar Clean Cookstove Project reduces greenhouse gases by replacing energy intensive traditional cooking devices with energy efficient 'improved cookstoves' (ICS) that reduce the amount of non-renewable biomass (e.g. wood or charcoal) burned as fuel. Distribution of ICS devices at scale across the project area significantly reduces local firewood consumption, which subsequently helps to reduce the rate of deforestation in the host country.

The cooperative approach methodology measures improved fuel use and emissions from clean cookstoves, against the baseline fuel use and emissions from traditional cooking devices in the ongoing 'pre-project' scenario.

Portable and fixed cookstoves used in this project replace inefficient traditional cooking methods, and are manufactured in Fianarantsoa, using local clay and other materials. The portable stoves are made with a clay form and an outer metal casing, designed to increase efficiency and reduce the amount of fuel needed for cooking. The fixed cookstoves are built into the walls of the home using locally-made bricks, with a chimney taking residual smoke outside through the wall.

Both portable and fixed cookstove models allow for significant savings of firewood compared to traditional stoves and are especially suitable for the cooking habits of participating communities. The designs used ensure efficient combustion of fuel and cleaner fire and therefore uses considerably less fuel as compared to traditional stoves. This means faster cooking, time and fuel savings, cleaner pans and kitchen walls, improved indoor air quality, and better health outcomes for families – particularly women and children.

In addition to its environmental benefits, the project works with local women's groups and NGO Tandavanala, supporting Madagascar's social and economic development by creating more than 700 local jobs since 2018 in stove manufacturing, distribution, monitoring and community engagement, and administration. The project also reduces the time and labour required for household firewood collection, and lowers fuel costs for households – enabling families to allocate more money to other requirements like food, clothing, health and education. The project aligns with national goals related to environmental conservation and poverty reduction, and it has received approval from the Designated National Authority (DNA) of Madagascar.

As outlined in section B, this cooperative approach includes multiple registered activities, all at different stages of implementation, noting that regional distribution of cookstoves is done in a staggered manner. The registered activities and their statuses are included below:

Project ID#	Crediting Standard	Registration Status	Implementation Status	Credit Issuance Status
2311	Verra VCS	Registered	Commissioned	Credits Issued
2312	Verra VCS	Registered	Commissioned	Credits Issued
2313	Verra VCS	Registered	Commissioned	Credits Issued
2314	Verra VCS	Registered	Commissioned	Credits Issued
2315	Verra VCS	Registered	Commissioned	Credits Issued
2825	Verra VCS	Registered	Commissioned	Credits Issued
2826	Verra VCS	Registered	Commissioned	Credits Issued
2827	Verra VCS	Registered	Commissioned	Credits Issued
2685	Verra VCS	Registered	Commissioned	Credits Issued
2687	Verra VCS	Registered	Commissioned	Credits Issued
2688	Verra VCS	Registered	Commissioned	Credits Issued
2689	Verra VCS	Registered	Commissioned	Credits Issued
2690	Verra VCS	Registered	Commissioned	Credits Issued
2772	Verra VCS	Registered	Commissioned	Credits Issued
2773	Verra VCS	Registered	Commissioned	Credits Issued
2774	Verra VCS	Registered	Commissioned	Credits Issued
2775	Verra VCS	Registered	Commissioned	Credits Issued

2776	Verra VCS	Registered	Commissioned	Credits Issued
2777	Verra VCS	Registered	Commissioned	Credits Issued
2778	Verra VCS	Registered	Commissioned	Credits Issued
2779	Verra VCS	Registered	Commissioned	Credits Issued
2780	Verra VCS	Registered	Commissioned	Credits Issued
2781	Verra VCS	Under Development	Not Yet Commissioned	N/A
2782	Verra VCS	Under Development	Not Yet Commissioned	N/A
2784	Verra VCS	Under Development	Not Yet Commissioned	N/A
2785	Verra VCS	Under Development	Not Yet Commissioned	N/A
2786	Verra VCS	Under Development	Not Yet Commissioned	N/A
2787	Verra VCS	Under Development	Not Yet Commissioned	N/A
2788	Verra VCS	Under Development	Not Yet Commissioned	N/A
2794	Verra VCS	Under Development	Commissioned	Credits Issued
2798	Verra VCS	Under Development	Not Yet Commissioned	N/A
2800	Verra VCS	Under Development	Not Yet Commissioned	N/A
2802	Verra VCS	Under Development	Not Yet Commissioned	N/A
2804	Verra VCS	Under Development	Not Yet Commissioned	N/A
2806	Verra VCS	Under Development	Not Yet Commissioned	N/A
2808	Verra VCS	Under Development	Not Yet Commissioned	N/A
2810	Verra VCS	Under Development	Not Yet Commissioned	N/A
2811	Verra VCS	Under Development	Not Yet Commissioned	N/A
2812	Verra VCS	Under Development	Not Yet Commissioned	N/A
2813	Verra VCS	Under Development	Not Yet Commissioned	N/A
2814	Verra VCS	Under Development	Not Yet Commissioned	N/A
2815	Verra VCS	Under Development	Not Yet Commissioned	N/A
2816	Verra VCS	Under Development	Not Yet Commissioned	N/A
2817	Verra VCS	Under Development	Not Yet Commissioned	N/A
2818	Verra VCS	Under Development	Not Yet Commissioned	N/A
2819	Verra VCS	Under Development	Not Yet Commissioned	N/A
2820	Verra VCS	Under Development	Not Yet Commissioned	N/A
2821	Verra VCS	Under Development	Not Yet Commissioned	N/A
2823	Verra VCS	Under Development	Not Yet Commissioned	N/A
2824	Verra VCS	Under Development	Not Yet Commissioned	N/A

More information about this cooperative approach can be found online at <https://weact.com.au/project/madagascar-clean-cookstoves/>.

C. DURATION OF THE COOPERATIVE APPROACH (PARA. 18(G))

The overall project began on October 9, 2018 and registered activities will continue to be implemented over the next decade. Each individual registered activity has a 10-year crediting period, which will be implemented regionally in a staggered manner, meaning the duration of the cooperative approach will continue beyond 2030.

D. EXPECTED MITIGATION FOR EACH YEAR OF THE DURATION OF THE COOPERATIVE APPROACH (PARA. 18(G))

Based on the nearly 450,000 fixed and portable cookstoves already distributed within the multiple registered activities, the project is expected to generate approximately 1,120,000tCO₂-e per year across existing 10-year crediting periods.

Including those registered activities that are yet to receive device distributions, the overall collaborative approach is intended to generate approximately 2,300,000 tCO₂-e per year across current and future 10-year crediting periods.

It is noted that all registered activities noted above are implemented in a staggered manner, and so actual emission reductions will change annually depending on the number of registered activities operational and reducing emissions in any 12-month period.

E. PARTICIPATING PARTIES INVOLVED IN THE COOPERATIVE APPROACH (PARA. 18(G))
Republic of Madagascar (transferring participating Party)
F. AUTHORIZED ENTITIES (PARA. 18(G))
Korea Carbon Management Ltd is the project proponent for this Verified Carbon Standard project. The project is implemented with project partner WeAct Pty Ltd, and local operations managed by Malagasy NGO Tandavanala.
G. DESCRIPTION OF ANY ARRANGEMENTS FOR AUTHORIZING USING PARTICIPATING PARTIES AND AUTHORIZED ENTITIES, IF APPLICABLE (PARA. 18(G)) SUPPLEMENTED BY DECISION 4/CMA.6, ANNEX 1) - SUPPLEMENTARY ELEMENT OF INFORMATION TO BE PROVIDED BY PARTIES AS RELEVANT⁸
Madagascar is currently in the process of developing a decree to establish rules, procedures, and modalities for the development and implementation of greenhouse gas emission reduction activities that are eligible for carbon market mechanisms in Madagascar, including those provided for by Article 6 of the Paris Agreement. under Article 6.2 of the Paris Agreement. In the meantime, an Arrêté regulatory framework has been adopted to govern the authorization of entities and ITMOs. The Arrêté will continue to be implemented under the forthcoming decree once it is completed. Under the Arrêté, the Ministry of Environment and Sustainable Development, acting through the Designated National Authority for carbon Market (ANDMC), is responsible for granting and overseeing authorizations. Under the Arrêté, entities seeking authorization submit applications to the DNAMC, which is supported by a Secretariat and reviews requests through its Technical and Steering Committees. The Technical Committee evaluates projects against national sustainable development objectives, environmental and social safeguards, contribution to the implementation of the NDC, and carbon market priorities, and provides recommendations. The Steering Committee deliberates on these recommendations and formally adopts authorization decisions. For the purposes of this Initial Report, Madagascar confirms that the ANDMC has authorised Korea Carbon Management Ltd. (KCM) to develop and transfer ITMOs generated from this cooperative approach. The authorization was granted following review by the DNA to ensure consistency with Madagascar's NDC, alignment with national sustainable development priorities, and compliance with domestic environmental and social safeguards.
H. TYPE OF COOPERATIVE APPROACH, IF APPLICABLE (PARA. 18(G)) SUPPLEMENTED BY DECISION 4/CMA.6, ANNEX 1) - SUPPLEMENTARY ELEMENT OF INFORMATION TO BE PROVIDED BY PARTIES AS RELEVANT⁹
Authorization of a non-government entity to generate and transfer ITMOs for use towards other NDCs, as well as for other international mitigation purposes (NDC and OIMP).
IV. COOPERATIVE APPROACH 2: VCS3239/MADAGASCAR FAHATOKIANA IMPROVED COOKSTOVE PROGRAM
<i>Note: For the initial report and the updated initial report, chapters A–H below should be repeated for each cooperative approach. For each further cooperative approach, each participating Party shall submit the information referred to in para. 18(g–i) of the annex to decision 2/CMA.3 in an updated initial report (decision 2/CMA.3, annex, para. 19)</i>
A. COPY OF THE AUTHORIZATION BY THE PARTICIPATING PARTY (PARA. 18(G))
Links to LAMO (letter of authorization of MO) documents issued to all cooperative approach project activities can be viewed online via the ANDMC Article 6 Registry Information hub at https://andmc-registry.com

⁸ Ibid.

⁹ Ibid.

B. DESCRIPTION OF THE COOPERATIVE APPROACH (PARA. 18(G))

Project ID#	Crediting Standard	Registration Status	Implementation Status	Credit Issuance Status								
VCS3239	Verified Carbon Standard (VCS)	Registered	Implemented	The following carbon credits have been issued: <table><tr><th>Vintage</th><th>Volume (tCO₂e)</th></tr><tr><td>2022</td><td>28,949</td></tr><tr><td>2023</td><td>79,142</td></tr><tr><td>2024</td><td>54,053</td></tr></table>	Vintage	Volume (tCO ₂ e)	2022	28,949	2023	79,142	2024	54,053
Vintage	Volume (tCO ₂ e)											
2022	28,949											
2023	79,142											
2024	54,053											

The cooperative approach involves distribution of 100,000 fuel-efficient Fahatokiana improved cookstoves (hereinafter referred to as "ICSs") in the Republic of Madagascar. The ICSs disseminated through this project replace the old low efficient baseline cookstoves in rural area of Madagascar. The ICSs are produced by local factories. Before the implementation of the project, local people mostly used traditional solid-fuel cooking solutions such as open fire or three-stone fires. They spent plenty of time to collect firewood every day due to low combustion efficiency of baseline cooking devices. The ICSs burn wood more efficiently thereby improve thermal transfer to pots and save firewood. The cooperative approach reduces the GHG emission by less non-renewable firewood combustion as well as slowing the rapidly progressing deforestation in Madagascar. More information about this cooperative approach can be found online at : <https://registry.verra.org/app/projectDetail/VCS/3239>

C. DURATION OF THE COOPERATIVE APPROACH (PARA. 18(G))

10 years fixed crediting period from 06/08/2022 to 05/08/2032.

D. EXPECTED MITIGATION FOR EACH YEAR OF THE DURATION OF THE COOPERATIVE APPROACH (PARA. 18(G))

Year	Estimated GHG emission reductions or removals (tCO ₂ e)
Year 2022	28,949
Year 2023	79,142
Year 2024	80,000
Year 2025	80,000
Year 2026	161,909
Year 2027	150,000
Year 2028	150,000
Year 2029	150,000
Year 2030	150,000
Year 2031	150,000
Year 2032	120,000
Total estimated ERs	1,300,000

E. PARTICIPATING PARTIES INVOLVED IN THE COOPERATIVE APPROACH (PARA. 18(G))

Republic of Madagascar (transferring participating Party)

F. AUTHORIZED ENTITIES (PARA. 18(G))

Organization name	Guangzhou Iceberg Environmental Consulting Services Co., Ltd.
Contact person	Ji BAO
Title	General Manager
Address	No.106 Fengze East Road, Nansha District, Guangzhou, China
Telephone	+8613560420840
Email	baoji@icebergchina.com; hanjin@icebergchina.com

**G. DESCRIPTION OF ANY ARRANGEMENTS FOR AUTHORIZING USING PARTICIPATING PARTIES AND AUTHORIZED ENTITIES, IF APPLICABLE (PARA. 18(G) SUPPLEMENTED BY DECISION 4/CMA.6, ANNEX 1)
- SUPPLEMENTARY ELEMENT OF INFORMATION TO BE PROVIDED BY PARTIES AS RELEVANT¹⁰**

Not applicable.

**H. TYPE OF COOPERATIVE APPROACH, IF APPLICABLE (PARA. 18(G) SUPPLEMENTED BY DECISION 4/CMA.6, ANNEX 1)
- SUPPLEMENTARY ELEMENT OF INFORMATION TO BE PROVIDED BY PARTIES AS RELEVANT¹¹**

Madagascar intends to engage in voluntary cooperative approaches under Article 6 of the Paris Agreement to support the implementation of its NDC2. The primary focus will be on Article 6.2 cooperative approaches, involving bilateral or multilateral agreements for the international transfer of mitigation outcomes (ITMOs)

The country also recognizes the potential of Article 6.4 mechanism for generating certified emission reductions from specific mitigation activities, such as the cooperative approach and other forestry (REDD+) and renewable energy projects, which could be used toward its national contribution.

Madagascar is currently developing its national framework and institutional arrangements to participate in these cooperative mechanisms, in line with its national legislation and the requirements of Decision 4/CMA.6.

¹⁰Ibid.

¹¹Ibid.

IV. COOPERATIVE APPROACH 3 : VCS3096/UPLIFTING OF MALAGASY COMMUNITIES BY DISTRIBUTING EFFICIENT COOKING APPLIANCE

Note: For the initial report and the updated initial report, chapters A–H below should be repeated for each cooperative approach. For each further cooperative approach, each participating Party shall submit the information referred to in para. 18(g–i) of the annex to decision 2/CMA.3 in an updated initial report (decision 2/CMA.3, annex, para. 19)

A. COPY OF THE AUTHORIZATION BY THE PARTICIPATING PARTY (PARA. 18(G))

Links to LAMO documents issued to all cooperative approach project activities can be viewed online via the ANDMC Article 6 Registry Information hub at <https://andmc-registry.com>.

B. DESCRIPTION OF THE COOPERATIVE APPROACH (PARA. 18(G))

Stoves disseminated under this grouped project activity target rural and semi-urban households using traditional, unimproved cookstoves (in case of charcoal) and open fires for cooking. The projects under the grouped project will distribute improved wood cookstove to households, a portable improved-efficiency stove manufactured in Madagascar.

The implementation of the project activity replace the low efficiency traditional cookstoves with high thermal efficiency, low greenhouse gas emitting cookstoves known as portable Improved cookstoves ("ICS"). The implementation of project activity mark for a decrease in greenhouse gas emission due to less amount of firewood required for the cooking as well as deforestation leading to climate mitigation in a sustainable manner.

The existing traditional stoves used in the baseline are simple structures made from clay or having stone or metal tripods with poor combustion air supply or flue gas ventilation system i.e. without a grate or a chimney. These stoves use non-renewable biomass (firewood). A baseline survey was undertaken to confirm the baseline technology, it was confirmed that three stone was the baseline practice along with a conventional device with no improved combustion air supply or flue gas ventilation, that is without a grate or a chimney. The baseline survey was undertaken by complying the requirements of applied approved methodology VMR0006. Through the baseline survey, annual quantity of woody biomass that would have been used in the household in the absence of the project activity to generate useful thermal energy equivalent to that provided by the project devices is measured. By using the efficiency of the cookstove, the reduction in the amount of wood resulting in the net GHG emission reduction is calculated in accordance with the methodology taking into account potential leakages using adjustment factor and collecting data through usage surveys. The project contributes to the sustainable development goals of the country meeting NDC2.

Project Implementation and Scale

The project will distribute 250,000 ICSs to targeted households within Madagascar as a boundary.

Estimated GHG Emissions Reductions

The estimated annual average GHG ERs for the project are 328,229 tCO₂eq/annum.

Project ID#	Crediting Standard	Registration Status	Implementation Status	Credit Issuance Status
3096	VCS	Registered	Implemented one instance	Credit issued 111,351

More information about this cooperative approach can be found online at <https://registry.terra.org/app/projectdetail/vcs/3096>

C. DURATION OF THE COOPERATIVE APPROACH (PARA. 18(G))

Cooperative Approach 'Uplifting of Malagasy communities by distributing efficient cooking appliance, VCS 3096': 10 years from 20/05/2022 to 19/05/2032.

D. EXPECTED MITIGATION FOR EACH YEAR OF THE DURATION OF THE COOPERATIVE APPROACH (PARA. 18(G))

Year	Emission Reduction (tCO ₂ e)	Remarks
20-May-2022 to 19-May-2023	61001	VMR0006
20-May-2023 to 19-May-2024	61001	VMR0006
20-May-2024 to 19-May-2025	61001	VMR0006
20-May-2025 to 19-May-2026	361755	VMR0006
20-May-2026 to 19-May-2027	384254	VM0050
20-May-2027 to 19-May-2028	379740	VM0050A
20-May-2028 to 19-May-2029	361651	VM0050
20-May-2029 to 19-May-2030	651071	VM0050
20-May-2030 to 19-May-2031	651071	VM0050
20-May-2031 to 19-May-2032	651071	VM0050
Total Emission reduction tCO ₂ e	3282286	VM0050
Annual Average emission reduction tCO ₂ e	328229	

E. PARTICIPATING PARTIES INVOLVED IN THE COOPERATIVE APPROACH (PARA. 18(G))

Republic of Madagascar (transferring participating Party)

F. AUTHORIZED ENTITIES (PARA. 18(G))

Entity Name: GSG Cleantech Private Limited
Country of Registration: India

G. DESCRIPTION OF ANY ARRANGEMENTS FOR AUTHORIZING USING PARTICIPATING PARTIES AND AUTHORIZED ENTITIES, IF APPLICABLE (PARA. 18(G)) SUPPLEMENTED BY DECISION 4/CMA.6, ANNEX 1)
- SUPPLEMENTARY ELEMENT OF INFORMATION TO BE PROVIDED BY PARTIES AS RELEVANT¹²

¹²Ibid.

Madagascar is currently in the process of developing a decree to establish rules, procedures, and modalities for the development and implementation of greenhouse gas emission reduction activities that are eligible for carbon market mechanisms in Madagascar, including those provided for by Article 6 of the Paris Agreement. under Article 6.2 of the Paris Agreement. In the meantime, an Arrêté regulatory framework has been adopted to govern the authorization of entities and ITMOs. The Arrêté will continue to be implemented under the forthcoming decree once it is completed. Under the Arrêté, the Ministry of Environment and Sustainable Development, acting through the Designated National Authority for carbon Market (ANDMC), is responsible for granting and overseeing authorizations. Under the Arrêté, entities seeking authorization submit applications to the DNAMC, which is supported by a Secretariat and reviews requests through its Technical and Steering Committees. The Technical Committee evaluates projects against national sustainable development objectives, environmental and social safeguards, contribution to the implementation of the NDC, and carbon market priorities, and provides recommendations. The Steering Committee deliberates on these recommendations and formally adopts authorization decisions.

For the purposes of this Initial Report, Madagascar confirms that the ANDMC has authorised GSG cleantech Private Limited to develop and transfer ITMOs generated from this cooperative approach. The authorization was granted following review by the DNA to ensure consistency with Madagascar's NDC, alignment with national sustainable development priorities, and compliance with domestic environmental and social safeguards.

H. TYPE OF COOPERATIVE APPROACH, IF APPLICABLE (PARA. 18(G) SUPPLEMENTED BY DECISION 4/CMA.6, ANNEX 1)
- SUPPLEMENTARY ELEMENT OF INFORMATION TO BE PROVIDED BY PARTIES AS RELEVANT¹³

Authorization of a non-government entity to generate and transfer ITMOs for use towards other NDCs, as well as for other international mitigation purposes (NDC and OIMP).

¹³ Ibid.

IV. COOPERATIVE APPROACH 4: VCS2707/ICS DISTRIBUTION FOR IMPROVING LIFE STYLE OF MALAGASY COMMUNITY

Note: For the initial report and the updated initial report, chapters A–H below should be repeated for each cooperative approach. For each further cooperative approach, each participating Party shall submit the information referred to in para. 18(g–i) of the annex to decision 2/CMA.3 in an updated initial report (decision 2/CMA.3, annex, para. 19)

A. COPY OF THE AUTHORIZATION BY THE PARTICIPATING PARTY (PARA. 18(G))

Links to LAMO documents issued to all cooperative approach project activities can be viewed online via the ANDMC Article 6 Registry Information hub at <https://andmc-registry.com>.

B. DESCRIPTION OF THE COOPERATIVE APPROACH (PARA. 18(G))

The project activity aims to reduce greenhouse gas emissions by distributing fuel-efficient Improved Cookstoves in various districts of Analamanga region of Madagascar. Most of the people living in region are dependent on firewood and charcoal as source of cooking fuel. Forest provides around 92% of energy requirements in the form of firewood and charcoal. People in the rural areas collect firewood to meet the cooking energy needs nationwide. Most of the households in the city and some in rural area purchase their cooking fuel from the market. Burning firewood or charcoal not only leads to significant greenhouse gas emission but also leads to increased expenditure for buying the fuel and also increased time spent on collecting the firewood. In addition to this, firewood collection and charcoal production leads to increased deforestation and environmental degradation.

With the implementation of the project activity the old low efficiency traditional cookstoves will be replaced with new high thermal efficiency, low greenhouse gas emitting cookstoves known as Improved cookstoves ("ICS"). The implementation of project activity will mark for a decrease in greenhouse gas emission as well as deforestation leading to climate mitigation in a sustainable manner.

The current distribution done of single pot/single model i.e. Tsinjoharena improved Cookstove in various commune of Ankazobe district of Madagascar. These stoves are also portable, allowing households the flexibility of usage. From 30th August 2022 till 15th October 2022 total 10,000 Tsinjoharena improved cookstoves distributed to individual households in first phase. The remaining 90,000 stoves are to be distributed in next 2 years.

The distribution of ICS is performed by our partner ONG Tandavanala. The distribution team uses an app developed in-house to record user data, unique ID along with end user agreement, which can be accessed and verified as and when needed. The staff were trained well to execute the distribution plan including data collection, training to end users on proper usage of improved cookstove. The end users also provided with contact details of concern person to connect for any complaint and feedback.

Project ID#	Crediting Standard	Registration Status	Implementation Status	Credit Issuance Status
VCS 2707	Verified Carbon Standard	Registered	Partially Implemented	118,655 credits issued

More information about this cooperative approach can be found online at <https://registry.verra.org/app/search/VCS?programType=ISSUANCE&exactResId=2707>
<https://registry.verra.org/app/projectDetail/VCS/2707>

C. DURATION OF THE COOPERATIVE APPROACH (PARA. 18(G))

30-August-2022 to 29-August-2032
10 years fixed crediting period

D. EXPECTED MITIGATION FOR EACH YEAR OF THE DURATION OF THE COOPERATIVE APPROACH (PARA. 18(G))

The issuance of credit until June 2026 will be done using applied approved methodology VMR006 used for registration of the project and onwards estimation are done using approved methodology VM0050 and default fNRB as 36%, in case any change in fNRB the estimated number may change for credits July 2026 onwards.

Calendar year of crediting period	Estimated GHG emission reductions or removals (tCO ₂ e)	Achieved/expected and methodology
30-Aug-2022 to 31-Dec-2022	15,996	Achieved
01-Jan-2023 to 31-Dec-2023	61,180	Achieved
01-Jan-2024 to 31-Aug-2024	41,479	Achieved
30-Sep-2024 to 31-Dec-2024	20,500	Expected
01-Jan-2025 to 31-Dec-2025	59,500	Expected
01-Jan-2026 to 31-Dec-2026	48,000	Expected
01-Jan-2027 to 31-Dec-2027	89,756	Expected
01-Jan-2028 to 31-Dec-2028	139,823	Expected
01-Jan-2029 to 31-Dec-2029	86,071	Expected
01-Jan-2030 to 31-Dec-2030	73,959	Expected
01-Jan-2031 to 31-Dec-2031	56,198	Expected
01-Jan-2032 to 29-Aug-2032	16,653	Expected
Total estimated ERRs during the first or fixed crediting period	710,115	

E. PARTICIPATING PARTIES INVOLVED IN THE COOPERATIVE APPROACH (PARA. 18(G))

Republic of Madagascar (transferring participating Party)

F. AUTHORIZED ENTITIES (PARA. 18(G))

Entity Name: **PA Research & Consultants Pvt. Ltd.**
Country of Registration: **India**

G. DESCRIPTION OF ANY ARRANGEMENTS FOR AUTHORIZING USING PARTICIPATING PARTIES AND AUTHORIZED ENTITIES, IF APPLICABLE (PARA. 18(G)) SUPPLEMENTED BY DECISION 4/CMA.6, ANNEX 1)
- SUPPLEMENTARY ELEMENT OF INFORMATION TO BE PROVIDED BY PARTIES AS RELEVANT¹⁴

Madagascar is currently in the process of developing a decree to establish rules, procedures, and modalities for the development and implementation of greenhouse gas emission reduction activities that are eligible for carbon market mechanisms in Madagascar, including those provided for by Article 6 of the Paris Agreement. under Article 6.2 of the Paris Agreement. In the meantime, an Arrêté regulatory framework has been adopted to govern the authorization of entities and ITMOs. The Arrêté will continue to be implemented under the forthcoming decree once it is completed. Under the Arrêté, the Ministry of Environment and Sustainable Development, acting through the Designated National Authority for carbon Market (ANDMC), is responsible for granting and overseeing authorizations. Under the Arrêté, entities seeking authorization submit applications to the DNAMC, which is supported by a Secretariat and reviews requests through its Technical and Steering Committees. The Technical Committee evaluates projects against national sustainable development objectives, environmental and

social safeguards, contribution to the implementation of the NDC, and carbon market priorities, and provides recommendations. The Steering Committee deliberates on these recommendations and formally adopts authorization decisions.

For the purposes of this Initial Report, Madagascar confirms that the ANDMC has authorised **PA Research & Consultants Pvt. Ltd.** to develop and transfer ITMOs generated from this cooperative approach. The authorization was granted following review by the DNA to ensure consistency with Madagascar's NDC, alignment with national sustainable development priorities, and compliance with domestic environmental and social safeguards.

***H. TYPE OF COOPERATIVE APPROACH, IF APPLICABLE (PARA. 18(G) SUPPLEMENTED BY DECISION 4/CMA.6, ANNEX 1)
- SUPPLEMENTARY ELEMENT OF INFORMATION TO BE PROVIDED BY PARTIES AS RELEVANT¹⁵***

Authorization of a non-government entity to generate and transfer ITMOs for use towards other NDCs, as well as for other international mitigation purposes (NDC and OIMP).

I. DESCRIPTION OF HOW THE COOPERATIVE APPROACH ENSURES ENVIRONMENTAL INTEGRITY (PARA. 18(H), TO BE UPDATED BY PARA. 22(B))

1. Description of how the cooperative approach ensures that there is no net increase in global emissions within and between NDC implementation periods (para. 18(h)(i), to be updated by para. 22(b)(i))

These approaches ensures that there is no net increase in global emissions by directly addressing the primary source of emissions in the targeted households: the traditional use of firewood in inefficient, open-fire cooking methods. By distributing energy-efficient cookstoves, the project reduces the amount of firewood required for cooking, which in turn lowers the emissions of CO₂ and other greenhouse gases that would have been released through traditional cooking practices.

These project currently uses a methodology under Verified Carbon Standard (VCS), which mandates rigorous monitoring and validation processes to quantify the actual reduction in greenhouse gas emissions. The improved cookstoves are designed to ensure that the same cooking needs are met with less fuel, thus not only reducing local emissions but also contributing to global emission reduction targets.

Moreover, the project adheres to a methodology that includes measures to prevent leakage, meaning it accounts for and minimizes any potential increase in emissions outside the project boundary that could result from the project's implementation. For example, the project does not involve the displacement or transfer of used cookstoves from outside the project area, which could otherwise contribute to emissions elsewhere. Additionally, the project applies a conservative adjustment factor to account for any uncertainties, further ensuring that the calculated

¹⁴ Ibid.

¹⁵ Ibid.

	emission reductions are reliable and do not overestimate the benefits. The VCS has required that all existing cookstove projects must transition to its newly released methodology VM0050 'Energy Efficiency and Fuel-Switch Measures in Cookstoves' (v1.0), by 2027 at the latest. The project proponent is currently undertaking this methodology transition for all activities included within this cooperative approach, and all activities will be transitioned by the 2027 deadline. This transition process does not impact the authorization of this cooperative approach, which remains compliant with Madagascar's authorization frameworks and processes.
<i>2. Description of how the cooperative approach avoids locking in emission levels, technologies or practices that are inconsistent with achieving the long-term goals of the Paris Agreement (para. 18(h)(i) supplemented by decision 4/CMA.6, annex 1) - Supplementary element of information to be provided by Parties as relevant¹⁶</i>	The primary activity of these cooperative approaches delivers on Madagascar's NDC and long-term low emission development strategy by scaling up the distribution and use of improved cookstove devices that directly reduce wood-energy consumption and related emissions This approach directly reduces household energy emissions in a manner that is consistent with Madagascar's NDC, therefore the cooperative approach does not lock in emission levels, technologies or practices that are inconsistent with achieving the long-term goals of the Paris Agreement. Furthermore, the mitigations activities take a 'continuous improvement' approach to emission reduction, including looking at how more energy-efficient cookstove devices can be employed in future project distributions, and considering how digital MRV systems can be incorporated into the cooperative approach to increase accuracy of emissions measurement. These improvements over time are part of the Verra project and method update cycle that these mitigation activities are currently undergoing.
<i>3. Description of how the mitigation outcomes from the cooperative approach are shared between the participating Parties (para. 18(h)(i) supplemented by decision 4/CMA.6, annex 1) - Supplementary element of information to be provided by Parties as relevant</i>	The mitigation outcomes from these cooperative approaches are not shared between parties, as the related authorizations are not part of a 6.2 bilateral arrangement between two Parties, Rather, mitigation outcomes from this cooperative approach are issued as Verified Carbon Units (VCUs) to authorized entities under the Verified Carbon Standard (VCS). For VCS volumes from each projects that are requested for authorization :

¹⁶Ibid.

	• 10% of the credits are reserved (not authorised) for use by the Government of Madagascar towards its NDC; and • 90% of the credits are authorised for use towards other international mitigation purposes (e.g. CORSIA) In this way the mitigation outcomes are shared between the host (authorising) party and the project proponent.
<i>4. Description of how it is ensured that decision-making processes in an underlying policy or regulatory framework, and relevant activities, are transparent and inclusive, and whether they include opportunities for public participation and scrutiny, including the standards and procedures for conducting stakeholder consultation, including with civil society organizations, Indigenous Peoples and local communities (para. 18(h)(i) supplemented by decision 4/CMA.6, annex 1) - Supplementary element of information to be provided by Parties as relevant</i>	This cooperative approach and its resulting mitigation outcomes are implemented under a formal regulatory framework (Arrêté No. 14683 / 2025). At a jurisdictional level, Article 7 of the Arrêté gives effect to the appointment of a Technical Committee, whose responsibilities include to: • Issue letters of no objection certifying the eligibility of projects and activities proposed under the carbon market mechanisms and their contribution to the sustainable development objectives of Madagascar; and • Approve non-mandatory measures and encourage public or private entities to participate in them, confirming their contribution to the implementation of Madagascar's Nationally Determined Contribution, provided that these actions do not harm the environment, the economy or health, and that they respect human rights, including those of Indigenous Peoples, local communities of migrants, children, persons with disabilities and vulnerable persons. as well as gender equality, women's empowerment and intergenerational equity. At a project-level, this cooperative approach is implemented under the Verified Carbon Standard, which sets out clear requirements for how projects must consult and engage with stakeholders in a meaningful way. Section 3.18 <i>Stakeholder Engagement</i> of the Verified Carbon Standard, requires that project proponents must engage and consult with stakeholders during project design and implementation, including: • undertaking initial/ongoing stakeholder engagement and consultation; • seeking Free, Prior, and Informed Consent (FPIC); and • subjecting all projects and initial pre-registration documentation to a 30-day public review and comment period. These VCS requirements ensure that all stakeholders, including Indigenous Peoples, local communities,

	customary rights holders, and other stakeholder groups are mapped and included in such engagement and consultation. The cooperative approach's implementation of these requirements are independently verified by expert auditors, and reviewed by the VCS technical teams, ensuring that only compliant projects are registered, monitored and can issue mitigation outcomes. The requirements set out in this regard under the VCS ensure that the cooperative approach's stakeholder engagement and consultation processes are transparent and inclusive, and meet the requirements set out in decision 4/CMA.6.
<i>5. Description of how participation in the cooperative approach and the combination of all cooperative approaches in which the Party participates contributes to the implementation of the Party's nationally determined contribution and long-term low-emission development strategy, if it has submitted one, and the long-term goals of the Paris Agreement (para. 18(h)(i) supplemented by decision 4/CMA.6, annex 1) - Supplementary element of information to be provided by Parties as relevant</i>	These cooperative approaches directly contributes to energy sector targets within Madagascar's NDC. Madagascar's National Wood-Energy Supply Strategy specifically notes that reducing wood-energy consumption (including through scaling up of improved cookstove use) would lead to a reduction in emissions of around 1,000 Gg CO₂ eq. by 2030. These cooperative approaches therefore delivers on Madagascar's NDC and long-term low emission development strategy by scaling up the distribution and use of improved cookstove devices that directly reduce wood-energy consumption and related emissions. Delivery against these domestic emission reduction goals are also aligned with the long-term goals of the Paris Agreement to reduce emissions and combat climate change.
6. Description of how the cooperative approach ensures environmental integrity through robust, transparent governance and the quality of mitigation outcomes, including through conservative reference levels and baselines set in a conservative way and below 'business as usual' emission projections (including by taking into account all existing policies and addressing uncertainties in quantification and potential leakage) (para. 18 (h)(ii), to be updated by para. 22(b)(ii))	These cooperative approaches ensures environmental integrity through a combination of robust, transparent governance and a focus on the quality of mitigation outcomes. This is achieved by setting conservative reference levels and baselines, which are designed to be below "business as usual" emission projections, and by rigorously addressing uncertainties in quantification and potential leakage. The project adheres to the Verified Carbon Standard (VCS) methodologies, which require comprehensive and transparent documentation of all project activities. The baselines used to measure the project's impact are established conservatively, reflecting the actual emissions scenario before the project began. Baselines (including fNRB and device emissions factors) are established using independently verified locality and region-specific data. This means that the baseline assumptions used, more accurately quantify the continuation of traditional cooking methods, which are highly inefficient and produce significant emissions. By setting these baselines independently and conservatively, the project ensures that reported

	emission reductions are genuine and not overestimated. To ensure the integrity of these baselines, the project carefully considers all existing policies and socio-economic conditions in Madagascar. This includes acknowledging the lack of mandatory regulations promoting improved cookstoves, which reinforces the conservative nature of the project's baseline scenario. Additionally, the project uses a rigorous continuous monitoring system to track the actual distribution and usage of the improved cookstoves, taking advantage of local manufacturing and repair operations, and valuable partnerships with local women's groups and agents that have regular ongoing contact with project participant communities. This continuous engagement through existing local networks ensure that the reductions in fuelwood consumption and resulting emissions are regularly and accurately quantified. The project also takes into account potential leakage, which refers to the possibility that emission reductions in the project area could lead to increased emissions elsewhere. To mitigate this risk, the project includes measures such as applying a conservative adjustment factor (typically a net-to-gross adjustment) to account for any uncertainties or unanticipated changes that could affect the project's outcomes.
<i>7. Description of how any baseline or reference levels have been established, including how the participating Party has taken into account its nationally determined contribution and long-term low-emission development strategy, if it has submitted one, as well as any relevant climate policies, laws, regulations or targets (para. 18(h)(ii) supplemented by decision 4/CMA.6, annex 1) - Supplementary element of information to be provided by Parties as relevant</i>	Cooperative approach 1: KCM Madagascar Clean Cookstove Project Whilst the cooperative approach's is aligned with the goals of the NDC and Madagascar's National Wood-Energy Supply Strategy, baselines have been set independently, following a strict baseline calculation process as required by the Verified Carbon Standard and method AMS-II.G in order to generate VCUs. Initial cookstove efficiency measurements are undertaken by independent technical experts, and local fuel-wood energy consumption and emissions data (including fNRB) used in baseline scenarios are provided by independent third-party Malagasy universities, who have provided accurate local and regional fNRB values, rather than using country-level average values. Independent research/testing to inform baselines were undertaken by Madagascar's Aprovecho National Industrial and Technical Research Centre (Aprovecho). ○ Baselines were extrapolated through on-ground, regional assessment surveys; and energy efficiency rates of portable and fixed cookstove devices determined primarily through water boiling tests and controlled cooking tests. ○ Baseline values and reports, (including the fNRB value) were reviewed and approved by the

Madagascar host country Designated National Authority (DNA).

- When undertaking gap validation (for registration under the Verified Carbon Standard) baseline values for this project were required to be updated and independently validated so as to remain as accurate as possible.
- the fraction of non-renewable biomass (fNRB) value used in the baseline case that underpin critical emissions reduction calculations were derived from local surveys and research undertaken by Aprovecho, rather than taking usual jurisdictional (country-wide) values already available. This data also takes into account the variation in fuel types and drivers of deforestation from region to region, and overall helps to inform much more accurate baselines.

Cooperative Approach 2: VCS3239/Madagascar Fahatokiana Improved Cookstove Program

Madagascar establishes baselines and reference levels for cooperative approaches by integrating its national climate policy framework, including its Nationally Determined Contribution (NDC2) and its long-term low-emission development strategy (under development). The process ensures alignment with national priorities and environmental integrity.

In establishing these baselines, Madagascar explicitly considers its NDC targets and relevant domestic policies, such as the Revised National Climate Change Policy (PNLCCr), the National Adaptation Plan (PNA), and the Energy Policy Letter 2015–2030. This ensures that mitigation activities under cooperative approaches contribute to—rather than conflict with—national climate objectives and do not claim reductions that would occur under existing policies.

Furthermore, baseline methodologies are designed to account for uncertainties and potential leakage, applying conservative adjustment factors and ensuring that emission reductions are real, measurable, and permanent. This approach strengthens the credibility of mitigation outcomes and supports Madagascar's progression toward its long-term low-emission development goals.

Cooperative approach 3: VCS3096/Uplifting of Malagasy communities by distributing efficient cooking appliance

The projects are validated and verified in compliance to VCS Methodology VMR0006 by VVBs in adherence to the principles laid down in ISO 14065 and ISO 17029 which ensures the environmental integrity through robust, transparent governance and the quality of mitigation outcomes, including through conservative

	reference levels and baseline set in a conservative way and below 'business as usual' emission projections. The project meets the additionality criteria and has been validated and verified. Potential leakage is accounted in the baseline emission as 5% in accordance with the methodology. Baseline emission level has been established using a baseline survey to confirm the baseline technology, complying the requirements of VCS methodology VMR0006. It was confirmed that three stone was the baseline practice along with a conventional device with no improved combustion air supply or flue gas ventilation, that is without a grate or a chimney. This led to poor combustion and hence more amount of firewood required. The cooperative approach leads to reduction in the amount of firewood required in the baseline, this contributes to substantial saving in the energy demand and is in line with the long-term low emission development strategy of the country Approche coopérative 4: VCS2707/ICS distribution for Improving life style of Malagasy Community Baselines values were established as per survey in various region on different type of cooking devices and energy efficiency rates of portable and fixed cookstove devices determined primarily through water boiling tests and controlled cooking tests. No specific programs or policies exist or are planned in-country that might duplicate the activities of this project. Though, Madagascar's first Nationally Determined Contribution (2016) sets a goal for 50% of households with clean cookstoves by 2030, there are no measures in place that provide a means to implement this project.
8. Description of how baseline and reference levels are established ensure they are conservative and below 'business as usual' emission projections, and information on what assumptions have been made (para. 18(h)(ii) supplemented by decision 4/CMA.6, annex 1) - Supplementary element of information to be provided by Parties as relevant	Cooperative Approach 1: KCM Madagascar Clean Cookstove Project Baseline and reference levels have been set as per the methodology requirements which are noted in the project description documents, monitoring reports and emission calculations. VM0050 VCS Method Assessments The baseline reassessment under the new VM0050 method include the above activities as set out under methodology requirements, but expanding to including sampling via Kitchen Performance Tests (KPTs). KPT results are based on real time assessment of cooking practices (including fuel consumption, cooking time as above), measured in the home by independent auditors over 3 consecutive days (auditors present for cooking of the three daily meals each day). KPT results were very comparable to earlier-established baselines, therefore reinforcing that conservative baselines and

reference levels have been used across the life of the cooperative approach to date. Assessments under VCS methodology and standards have resulted in conservative baseline and reference levels that have been validated, verified and approved by third parties throughout the life of the project. This therefore confirms that this cooperative approach is conservative and is delivering below 'business and usual' emission projections.

Cooperative Approach 2: VCS3239/Madagascar Fahatokiana Improved Cookstove Program

Madagascar establishes conservative baselines below business-as-usual (BAU) levels by using historical emissions data, current sector trends, and existing national policies—such as the Revised National Climate Change Policy and the National Adaptation Plan—to avoid over-crediting. Assumptions include the use of IPCC default values for parameters like stove efficiency, application of leakage deductions (e.g., 5%), and incorporation of uncertainty adjustments to ensure that emission reductions are additional, measurable, and aligned with Madagascar's NDC and long-term low-carbon development goals.

Cooperative Approach 3: VCS3096/Uplifting of Malagasy communities by distributing efficient cooking appliance

The projects is validated and verified in compliance to VCS Methodology VMR0006 ensuring that the baseline and reference levels used are conservative and below 'business as usual' emission projections. The project meets the additionality criteria and has been validated and verified. Potential leakage is accounted in the baseline emission as 5% in accordance with the methodology.

Cooperative Approach 4: VCS2707/ICS distribution for Improving life style of Malagasy Community

Baselines values were established as per survey in various region on different type of cooking devices and energy efficiency rates of portable and fixed cookstove devices determined primarily through water boiling tests and controlled cooking tests. Baseline values and reports, were reviewed and in line with values established by number of projects in host country as accepted by different GHG registries. Further, the project is validated and verified in compliance to VCS Methodology VMR0006 by VVB in adherence to the principles laid down in ISO 14065 and ISO 17029 which

	ensures the environmental integrity through robust, transparent governance and the quality of mitigation outcomes, including through conservative reference levels and baseline set in a conservative way and below 'business as usual' emission projections
9. Description of the methodological approaches used for quantifying the mitigation outcomes derived from the cooperative approach (para. 18(h)(ii) supplemented by decision 4/CMA.6, annex 1) - Supplementary element of information to be provided by Parties as relevant	The projects quantifies mitigation outcomes from cooperative approaches using approved methodologies such as VMR0006 and VM0050 for improved cookstove projects. Emission reductions are calculated based on monitored reductions in non-renewable biomass consumption, using conservative baseline values, IPCC default emission factors, and leakage deductions (e.g., 5%). Project-specific parameters are determined through field surveys and aligned with national data. All calculations follow independent verification, and are reported transparently to ensure environmental integrity and support NDC implementation The method measures the improved fuel use and emissions from implemented clean cookstoves, against the baseline fuel use and emissions from traditional cooking devices in the ongoing 'pre-project' scenario. The reduced emissions from clean cookstove implementation are calculated using a range of data points, including the volume of CO₂ emitted from burning fuelwood, and the proportion of annual cooking time that is spent using the clean cookstove vs traditional cooking devices. Cookstove energy efficiency is measured through: • Kitchen Performance Test: measuring fuel used to cook a meal in a real-world household; • Water Boiling Test: measuring fuel used to boil a pot of water; and • Controlled Cooking Test: measuring fuel used to cook food (e.g. pot of rice). The clean cookstove emissions are then subtracted from the emissions measured in the pre-project scenario, which gives the total emission reduced. The method also sets specific requirements about the types of fuel and cookstove models that are eligible for use in the project and assumes distribution of one cookstove per household.
10. Description of how uncertainties in the quantification of emission reductions and removals are assessed and how such uncertainties are taken into account (para. 18(h)(ii) supplemented by decision 4/CMA.6, annex 1) - Supplementary element of information to be provided by Parties as relevant	Material project calculation uncertainties quantified under include: • leakage factor uncertainty; managed by the use of a conservative 0.95 leakage factor. • fNRB value uncertainty • Device reliability, which have both been addressed in initial baseline and subsequent verification surveys, including through:

	○ Device performance uncertainty, managed through KPTs undertaken in real-time and re-verified by project auditors during audit processes; ○ Device stacking uncertainty, managed through independent on-ground re-testing and checking of stacking values used by project auditors; Project management-level uncertainties are managed through continuous engagement and monitoring throughout the project, which include regular site visits, spot checks and surveys, training and capacity building, and database management reviews. All these activities ensure that uncertainty is minimised – and that data collected and project operations are undertaken in a conservative, accurate and transparent manner.
11. Description of how the risk of leakage is assessed, and prevented or minimized, and how any remaining leakage will be quantified and deducted in the quantification of mitigation outcomes (para. 18(h)(ii) supplemented by decision 4/CMA.6, annex 1) - Supplementary element of information to be provided by Parties as relevant	The method allows factoring in a chosen level of potential leakage to mitigate concerns throughout the life of the project (namely that reduction in fuel consumption would shift elsewhere outside the project area). This project has chosen to factor in a conservative leakage default value of 0.95. Given that the majority of fuel users most purchase fuel wood, there is a moderate risk of fuel being shifted elsewhere by suppliers. However, the localised, subsistence-level nature of firewood collection and energy consumption means this impact is limited. Additionally, project monitoring requires collection of leakage-related data – including the amount of woody biomass (fuel wood) saved under the project activity that is used by non-project households/users.
12. Description of how the cooperative approach is minimizing the risk of non-permanence of mitigation across several NDC periods and how, when reversals of emission reductions or removals occur, the cooperative approach will ensure that these are addressed in full (para. 18(h)(iii), to be updated by para. 22(b)(iii))	These Cooperative approaches are designed to minimize the risk of non-permanence of mitigation across several Nationally Determined Contribution (NDC) periods by implementing several key strategies. These strategies ensure that any potential reversals of emission reductions or removals are promptly and fully addressed, maintaining the long-term integrity of the project's climate benefits. Firstly, the project emphasizes the distribution of durable, high-quality portable cookstoves that are designed to have a lifespan of at least 5 years, and installation of fixed cookstoves with an estimated 15-year lifespan. To ensure devices continue to operate within the required efficiency range, portable stoves are replaced after five years (two five-year stoves within a 10 year crediting period), and fixed cookstoves are checked and maintained on a multi-year cycle

	throughout the 10-year crediting period. By ensuring the longevity and effectiveness of the cookstoves, the project reduces the risk that users will revert to traditional, higher-emission cooking methods over time. This durability is crucial for maintaining the continuity of emission reductions across multiple NDC periods. Secondly, the project includes a comprehensive, continuous monitoring and maintenance program. This program takes advantage of local manufacturing, repair and distribution operations, and regional monitoring teams track the performance and condition of the distributed cookstoves and provide necessary repairs or replacements to ensure that they continue to function effectively. By maintaining the operational integrity of the cookstoves in real time, the project minimizes the risk of emission reductions being reversed due to stove failure or degradation. In the event that reversals of emission reductions or removals do occur, the cooperative approach has mechanisms in place to address them in full. The project operates under the Verified Carbon Standard (VCS) require that any detected reversals be compensated for. This compensation can involve implementing additional mitigation activities to offset the lost reductions or, in some cases, purchasing additional carbon credits to cover the shortfall. Moreover, the project employs a conservative approach to baseline setting and emission reduction calculations, which includes buffers or reserves to account for potential uncertainties and risks, including non-permanence. These buffers act as a safeguard, ensuring that even if some emission reductions are reversed, the overall climate impact of the project remains positive.
<i>13. Description of how the risk of non-permanence is assessed under the cooperative approach and minimized across several nationally determined contribution periods, including the frequency and timing of risk assessments, the methodological approaches used for those assessments, the types of risk identified, the likelihood, scale and potential impacts of such risks, and the time-horizons considered (para. 18(h)(iii) supplemented by decision 4/CMA.6, annex 1) - Supplementary element of information to be provided by Parties as relevant</i>	These cooperative approaches reduces emissions through the reduction in fuelwood burned and device-based emissions released. As such the emissions reduced from using a more efficient device can be considered permanent. By using efficient cookstoves, households also indirectly help to preserve forest carbon stocks, but whilst the cooperative approach doesn't measure and account for the additional carbon stored in forests, these carbon stocks are at risk of reversal (through other deforestation, fire or land degradation activities). To assist with the prevention against these possible reversals, the cooperative approach supports ongoing community education about climate change, forest protection and responsible forest use, noting this is incorporated as a community benefit rather than a measurable outcome.

14. Description of how reversals are monitored and quantified, and when they occur, how they are addressed in full, including which methodological approaches are used to address reversals, how the responsibility for addressing reversals is assigned, the duration and frequency of monitoring for reversals, and the measures envisaged in case of failures in monitoring (para. 18(h)(iii) supplemented by decision 4/CMA.6, annex 1) - Supplementary element of information to be provided by Parties as relevant	Though we recognise that the risk of reversal differs between activity types and it may not be practicable in all cases to address non-permanence/reversal risk, particularly in the context of cookstove projects. This cooperative approach is based on non-AFOLU cookstove-related activities that reduce emissions at a point in time (rather than measuring sequestration of additional carbon stocks). Through the device's reduction of emission reductions, there is negligible risk of non-permanence and consequently reversals and buffers are not applicable under the mitigation activity method. However, for the avoidance of doubt, the project includes conservative measures to ensure that project activities represent real and verified emission reductions. These measures include: • regular household checks to confirm improved cookstoves are used continuously and that no other inefficient devices are in use (no backsliding and emissions increases); • ongoing participant training and device maintenance to ensure changing cooking practice behaviours are permanent. • Implementation of strong grievance mechanism for any/all stakeholders to raise concerns and provide feedback. This includes periodic project data collection surveys by local agents, followed by on-site auditor checks during each project monitoring period. It is noted that through these continuous engagement and integrity mechanisms, no material issues or project failures were identified by project teams, participants or independent auditors, that would result in reversals or emissions increases. Similarly the mitigation activity includes ongoing community engagement and education about climate change, forest protection and responsible forest use. These activities can indirectly have a positive impact on the preservation of existing carbon stocks (including those not deforested for fuel collection), however the extent of this is not measured as part of the cooperative approach and is seen as a community cobenefits only.
J. ADDITIONAL DESCRIPTION OF THE COOPERATIVE APPROACH (PARA. 18(I))	
1. Description of how the cooperative approach minimizes and, where possible, avoids negative environmental, economic and social impacts (para. 18(i)(i), to be updated by para. 22(f))	These Cooperative Approach minimizes and avoids negative environmental, economic, and social impacts by promoting energy-efficient cookstoves that reduce firewood consumption, thus conserving forests and improving air quality.

	The project provides cookstoves to households that lower household fuel costs and create local jobs in manufacturing and maintenance, which boosts the local economy. Socially, it alleviates the burden of firewood collection, particularly for women and children, freeing up time for education and work, and promotes gender equality. The project engages with local communities to ensure that it aligns with their needs and cultural practices, fostering social cohesion and preventing conflicts over resources. Through careful planning and stakeholder involvement, the project ensures positive, sustainable outcomes while mitigating any potential adverse effects. The mitigation activities are implemented in accordance with the applicable law of Madagascar.
2. Description of how the cooperative approach reflects the eleventh preambular paragraph of the Paris Agreement, acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity (para. 18(i)(ii), to be updated by para. 22(g))	These cooperative approach aligns with the eleventh preambular paragraph of the Paris Agreement by addressing climate change while respecting and promoting human rights, health, and the rights of vulnerable groups. The project improves community health outcomes and reduces emissions by providing energy-efficient cookstoves, benefiting local communities and protecting their right to development. It empowers women by reducing the time spent on firewood collection and cooking, and supports gender equality. The project also considers intergenerational equity by promoting sustainable resource use, ensuring a healthier environment for future generations. Overall, it addresses climate change inclusively and equitably, in line with the principles of the Paris Agreement. ITMOs will not be recognized in case of evidence for violation of human rights during the implementation of the activity.
3. Description of how the cooperative approach is consistent with the sustainable development objectives of the Party, noting national prerogatives (para. 18(i)(iii), to be updated by para. 22(h))	The project activities actively contributes its part in sustainable development targets of host country. The following sustainable development benefits are envisaged from the project activity: SDG 1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance Indicator 1.4.1: Proportion of population living in households with access to basic services, Household expenditures on purchased cooking fuel will get

reduced with usage of project ICS owing to its increased efficiency. Thus, project ICS shall result in money savings in beneficiary households.

The project distributes ICS in Madagascar and lead to reduction of poverty in the beneficiary households. Average monthly household savings due to decrease in expenditure on basic services such as purchased fuel after shifting to project technology.

SDG 3.9.1: Mortality rate attributed to household and ambient air pollution

Mortality rate attributed to HH and ambient pollution will decrease for those HHs using the improved cookstove. The improved design specifications of the project ICS model(s) ensure there is very less pollution in the households, total 450,000 individuals will be benefited by the VCS project. The percentage users reporting reduction in smoke due to ICS usage in project will be determined through sample survey.

SDG 5.1.1 Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex

The project activity promotes and provide opportunity for women employment, the number of women employees will be recorded as evidence through survey and employment records.

SDG 5.4.1 Proportion of time spent on unpaid domestic and care work, by sex, age and location

The project will reduce the proportion of time women spend on unpaid domestic work related to collection of firewood, and cooking meals on inefficient traditional cookstoves, around 100,000 households will be benefited. The average time saving associated with cooking and fuel collection time due to adoption of project technology / measures will be established through sample survey.

SDG 8.3.1 Proportion of informal employment in total employment, by sector and sex

The implementation of VCS project will lead to generation of short term and longterm employment opportunities during distribution and operation of the project

SDG13.0 Tonnes of greenhouse gas emissions avoided or removed

The project will reduce the total fuelwood usage in the project area, thereby resulting emission reductions.

	The emission reduction will be calculated as per actual ICS usage
4. Description of how the cooperative approach applies any safeguards and limits set out in further guidance from the CMA pursuant to chapter III.D (para. 18(i)(iv), to be updated by para. 22(i))	Not Applicable.
5. Description of how the cooperative approach contributes resources for adaptation pursuant to chapter VII (Ambition in mitigation and adaptation actions), if applicable (para. 18(i)(v), to be updated by para. 22(j))	Not Applicable.
6. Description of how the cooperative approach delivers overall mitigation in global emissions pursuant to chapter VII (Ambition in mitigation and adaptation actions), if applicable (para. 18(i)(vi), to be updated by para. 22(k))	Not Applicable.

- - - - -

Template version history

<i>Version</i>	<i>Date of issuance</i>	<i>Description</i>
02.0	15 April 2025	Revision to include the supplementary elements of information in initial report and any updated initial report as per decision 4/CMA.6, annex I.
01.1	10 May 2023	Extension of the head table containing the details of the submission.
01.0	31 January 2023	Initial publication of the template.

Mechanism: Article 6.2 of the Paris Agreement

Mandate: Decision 2/CMA.3, annex, chapter IV.A (initial report); Decision 6/CMA.4, annex V (Outline of the initial report and updated initial report); Decision 4/CMA.6, annex I.

Function: Reporting

Process: Party submission of initial and updated initial report

Document Type: Template

Keywords: Article 6.2 of Paris Agreement, CARP, ITMO cooperative approaches