Gold Standard for the Global Goals

TEMPLATE

KEY PROJECT INFORMATION & VPA DESIGN DOCUMENT (PDD)

PUBLICATION DATE **04.05.2022**

VERSION **v. 2.0**

RELATED SUPPORT - Programme of Activity requirements

This document contains the following Sections

KEY PROJECT INFORMATION

Type of VPA	☒ Real case VPA ☐ Regular VPA
Scale of VPA Note that a VPA can be of one scale. Please select applicable scale accordingly.	☐Microscale ☒Small scale ☐Large scale
Title of corresponding real case VPA (if applicable)	GS11324 - VPA003 - Congo (DRC) Improved Cook Stoves-Ngaliema
GS ID of real case VPA (if applicable)	GS11327
GS ID of VPA	GS11327
Title of VPA	GS11324 - VPA003 - Congo (DRC) Improved Cook Stoves-Ngaliema
Time of First Submission Date	09/12/2021
Date of Design Certification	27/04/2023
Version number of the VPA-DD	2.2
Completion date of version	06/05/2023
Coordinating/managing entity	Vitol SA
VPA Implementer (s)	WESD Capital Sprl
Project Participants and any communities involved	Vitol SA
Host Country (ies)	Democratic Republic of the Congo (DRC)
GS ID and Title of applicable Design Certified VPA	N/A
GS ID and Title of applicable Performance Certified VPA	N/A
Activity Requirements applied	☒ Community Services Activities ☐ Renewable Energy Activities ☐ Land Use and Forestry Activities/Risks & Capacities ☐ N/A

Other Requirements applied	N/A
Methodology (ies) applied and version number	Technologies and Practices to Displace Decentralized Thermal Energy Consumption, Version 4.0
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A
VPA Cycle:	☐ Regular ☒ Retroactive

Table 1 – Estimated Sustainable Development Contributions

Sustainable Development Goals Targeted	SDG Impact (defined in B.6)	Estimated Annual Average	Units or Products
SDG 1 No poverty	Perceived monetary savings on charcoal spending	91%	End users in % perceiving fuel spending saving
SDG 3 Good health and well-being	Perceived health conditions improved by the ICS users	81%	End users in % perceiving improved health conditions
SDG 7 Ensure access to affordable, reliable, sustainable and modern energy for all	Number of the efficient cookstoves disseminated	14,400[1]	-
SDG 8 Decent work and economic growth	Number of person (male and female) hired	10(female 7, male 3)[2]	-
SDG 13 Climate Action	Emissions Reductions	28,829	GS VERs

[1] In the first year, 14,400 efficient cookstoves are sold, and no additional cookstoves would be distributed in the next year during the crediting period.
[2] At beginning of VPA003, 10 employment jobs are created, and the number would keep stable during the crediting period.

SECTION A. DESCRIPTION OF PROJECT

A.1. Purpose and general description of project

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The goal of Congo (DRC) Improved Cook Stoves Programme is to distribute improved cookstoves ("ICS") in the households throughout Democratic Republic of the Congo (DRC). The proposed "GS11324 - VPA003 - Congo (DRC) Improved Cook Stoves-Ngaliema", hereafter referred to as "VPA003" will be carried out in the neighborhoods of Ngaliema, a commune of Kinshasa city. From 28 April 2021 to 10 June 2021, 14,400 stoves have been sold to the end users. 1,513 and 10,036 and 2,851 stoves were sold accordingly in April, May and June 2021. These 14,400 stoves are all the stoves distributed in this VPA till the end of the crediting period, and no additional stoves would be distributed based on the current plan. There are 2 types of stoves, with 3 different sizes separately, the number of type A Jiko Mamu is 8643, i.e., MM (4176), ML (4324), MX (143), and the number of type B Jiko Kitoko is 5757, i.e.KM (3169), KL (2442) and KX (146). The VPA Implementer sold the ICS in an orderly manner, and the discounted price of the ICS is affordable to the local persons to encourage the removal of the old cookstoves.

Compared to the currently used traditional stoves, the efficient stoves sold under this VPA are cooking equipment allowing quicker heating-up, longer cooking and heat retaining with less woody biomass fuel as well as lower combustion fumes. It results in significant savings of charcoal and associated expenses, thanks to, inter alia, advanced-material combustion chamber, overconsumption-restricting design, etc.

The VPA boundary is the physical, geographical site of the efficient devices that burn biomass, which is located in Ngaliema commune in Kinshasa City, the capital of Congo (DRC). The coordinates of the four typical locations are (4°19'02"S 15°15'51"E), (4°20'44"S 15°12'23"E), (4°19'49"S 15°16'52"E) and (4°26'01"S 15°15'28"E).

In Ngaliema commune, the traditional stoves have been used in most households in the boundary of the project since a very long time ago, and in the absence of the VPA003, the inefficient traditional stove would have been used for cooking, and this is the baseline scenario.

The project ICS combust biomass fuels more efficiently, reducing the greenhouse gas (GHG) emissions and Particulate Matter (PM) emissions, thus improving the indoor air quality in project households. Due to the higher thermal efficiency of the ICS relative to the traditional/baseline stoves, the ICS reduce the amount of non-renewable biomass fuel required for meeting similar thermal energy needs.

In addition to curbing deforestation and generating real and measurable reductions in carbon dioxide emissions, the VPA003 will cut carbon monoxide and other harmful particles related to incomplete and/or indoor solid fuels combustion. The social and environmental benefits of improved cooking stoves are multiple by reducing indoor air pollution, they can reduce the risk of respiratory diseases, especially for women and children. They also reduce expenses from woody biomass purchase, which can represent a substantial amount of the revenue of the majority of the population in DRC whereby the poverty phenomenon impacts most of the population.

Thus, it will improve users' financial capacity to better provide to other basic needs. Moreover, the VPA003 will foster employment for local communities (marketing campaigns, sales network) throughout its lifecycle. They will also contribute to the sustainable development of the country through transfer of clean technology and know-how. Last, the PoA and VPA003 objective is to set an example and GS reference for local stakeholders who expect to implement similar technologies on the territory and in the sub-region vicinities, by offering an operational framework to join. The project relies on the sales of the Improved Cook Stoves and the sale of the carbon credits, which guarantees its financial sustainability.

A.1.1. Eligibility of the VPA under approved PoA

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Table 2 Eligibility for VPA inclusion as per PoA requirements

No.	Eligibility Criterion	Description/ Required condition	Description of the VPA in relation to the criteria, Means of Verification and Supporting evidence for inclusion
1	Geographic Boundary and target area	Each VPA shall involve installation of ICS within the geographical boundary of PoA.	all VPA units (ICS) installed within Congo (DRC). The address of end users in the Monitoring

			database, listing the region of ICS, is within DRC. The coordinates of the four typical locations are (4°19'02"S 15°15'51"E), (4°20'44"S 15°12'23"E), (4°19'49"S 15°16'52"E) and (4°26'01"S 15°15'28"E) within DRC.
2	No Double Counting	Each VPA shall be added to the monitoring database with a unique set of sales data.	Monitoring database with unique end-user data, including: unique serial number and unique phone number (as available) and location etc. to make sure each end-user is identified. CME signed the no double counting declaration for PoA, and VPAI also signed no double counting declaration.
3	Exclusiveness of VPA	The VPAs are neither registered as project activities with other offset Schemes, included in other registered PoAs, nor the project activities that have been deregistered.	VPA003 has signed no double counting declaration. Confirmation by website search for carbon credit development projects in DRC: 1. The VPA is not registered as an individual project activity. 2. The VPA is also not part of another registered PoA. Also, the proposed VPA is not a VPA that has been excluded from a registered PoA as a result of erroneous inclusion of VPAs.
4	Specifications of Technology /Measure	The VPA will promote dissemination of improved biomass ICS in PoA. The project ICS combust biomass fuels more efficiently. Due to the higher thermal efficiency of the ICS relative to the traditional/baseline stoves, the ICS reduce the amount of non-renewable biomass fuel required for meeting	Based on the efficiency test results certified by CEREK, the thermal efficiency of the product ranges Jiko Mamu and Jiko Kitoko cookstoves are rated at 29.7% and 33.6% respectively, both above the minimum requirement of 20%.

		similar thermal energy needs. The rated thermal efficiency shall be at least 20%	
5	Start Date	Date on which the first ICS unit was implemented under the VPA. The start date of the proposed VPA will be on or after the start date of the PoA, and the time of first submission of the required documents of the proposed VPA to GS is within one year of the project start date.	The start date of the VPA is the start date of implementation of the ICS 28/04/2021, and the time of first submission to GS is 09/12/2021 within one year of the project start date.
6	Applicability of the methodologies	VPA must follow TPDDTEC version 4.0, and the condition include: a. The rated thermal efficiency shall be at least 20%. b. The technology shall have continuous useful energy output of less than 150kW per unit, etc. c. The individual households and institutions may be represented collectively by community organizations, etc., but do not individually act as project participants. d. The project developer must design incentive mechanism(s), which should be effective as fast as possible, for the elimination of inefficient baseline stoves that are replaced by the project cooking devices. e. To avoid double counting or double claiming. i. clearly communicate its ownership rights and intention of claiming the emission reductions to following parties by	All the condition of the applicability has been checked. a. The ICS Specification show that the rated thermal efficiency is 29.7% and 33.6%. b. The ICS Specification show that the energy output is 1.2kW per unit. c. The sales record from the individual households show they will not individually act as project participants d. The project developer has designed the incentive mechanism for the elimination of the replaced and inefficient baseline stoves. The VPA implementor gave some discount to the end users when they bought the ICS if the inefficient baseline stoves replaced can be taken away by the implementor. e. i. The implementer signed cook stoves purchase contract with the manufacturer on 2 Oct 2020, in which the manufacturer waived the carbon credit rights of the cookstoves. There are no retailers involved

	contract or clear written assertions in the transaction paperwork: all other project participants; project technology manufacturers; and retailers of the project technology or the renewable fuel in use; and ii. inform and notify the end users that they cannot claim emission reductions from the project, and iii. exclude from the project activity, cooking devices included in any other voluntary market or CDM project activity/PoA, and strive not to displace the cooking device of another CDM or voluntary project/PoA. See data and parameters not monitored, Avoidance of double counting or double claiming with other mitigation actions, for details on this demonstration. f. Project activities making use of solid fossil fuel in the project scenario or other improved fossil fuel cookstoves meeting certain conditions described in the footnote to Table 1 (e.g., switch from three-stone fire biomass stoves to LPG stoves) may only claim emission reductions for energy efficiency improvement aspect and shall assume the same baseline and project fuel for emission reduction calculations.	in VPA003 as the implementor directly purchased wholesale cookstoves from the manufacturer and distributed them to the end users. ii. In the cookstove sale records where end-users declare to give up carbon rights related to the ICS. On 18/05/2021 in the local stakeholder meeting the VPA003 has also informed the end users and other parties that they cannot claim emission reductions from the project, and has excluded from the project activity, and the other cooking devices project activity in the city of Kinshasa, included in any other voluntary market or CDM project activity/PoA has be identified and the similar project listed: , Congo (DRC) Improved Cook Stoves CPA001 - Kimbanseke 1; Congo (DRC) Improved Cook Stoves CPA002 - N'Djili So the VPA does not belong to the other project in any voluntary market or CDM project. f. Not applied g. Not applied h. VPA003 has the evidence including the certified test result, which credibly reflect the baseline and project scenarios in respect of indoor air pollution, and this comparative field tests evidence of shows that the particulate

		g. Project activities making use of a new solid biomass feedstock in the project situation (e.g., switch to green charcoal or renewable biomass briquettes) must comply with relevant specific requirements for biomass related project activities, as defined in the latest version of the Community Services Activity Requirements. The specific requirements apply to both plantations established for the project activity and/or existing plantations that will supply biomass feedstock. h. Adequate evidence is supplied to demonstrate that indoor air pollution (IAP) levels are not worsened compared to the baseline.	matter from the using of stoves in VPA003 is 70% lower compared to the baseline stoves.
7	Additionality	According to the section 4.1.9 of COMMUNITY SERVICES ACTIVITY REQUIREMENTS (Version 1.2), projects that meet any of the following criteria are considered as deemed additional and therefore are not required to prove financial additionality at the time of design certification: (a) Positive list (Annex B of this document) (b) Projects located in LDC, SIDS, LLDC4 (c) Microscale projects	The geographic boundary and VPA003 units (ICS) installed are within Congo (DRC). Congo (DRC) is in the List of Least Developed Countries, and the VPA is considered as deemed additional as long as it is in Congo (DRC).
8	LSC and EIA	The LSC is conducted at the PoA level and VPA level.	SCR of VPA003 prove LSC is conducted at VPA level
9	Public Funding	Affirmation that funding from Annex I Parties, if	Declaration from CME that no funds for official

		any, does not result in a diversion of official development assistance	development assistance will be used for program implementation
10	Target Group and Distribution Mechanism	Target Group: Households	The ICS by virtue of their size, output and design are usable only in households. The monitoring database and sales record will be used to confirm sales to households.
11	Sampling	VPAs under the program will adhere to all requirements as mentioned in TPDDEC (version 4.0): as per the relevant requirements for sampling in the latest version of the CDM Standard for sampling and surveys for CDM project activities and programme of activities (Version 09.0, 27 May 2021)	VPA003 will following sampling plan in section B.7.2 which satisfied the requirements of applied methodology and CDM Standard for sampling and surveys for CDM project activities and programme of activities (Version 09.0, 27 May 2021).
12	SSC Threshold	VPAs meet the small-scale thresholds and remain within those thresholds throughout the crediting period. For project activities that improve thermal energy efficiency, small-scale thresholds, the maximum energy saving of 60 GWh(e) per year is equivalent to 180 GWh(th) per year saving.	The ICSs annual energy savings of VPA003 is 51,253MWh(th) less than 180,000MWh(th), calculated in the section of A.4, due to the efficiency increase of the ICS compared to the traditional/baseline stoves.
13	Eligible technology	Technologies in VPAs are eligible (refer to A.3 above)	It is checked by the evidence including the database, the specification of the stove, certified test result, and literature survey, etc., provided in VPA003, from the evidence above it can be identified that the technology used in the VPA003 is improved cook stoves technology with the efficiency of 29.7% and 33.6%, higher than 20%.

14	SDG outcomes	Conditions to be met by each VPA regarding SDG outcomes assessment	B.6. Sustainable Development Goals (SDG) outcomes has demonstrated that the VPA meets the required condition of SDG outcomes.
15	Safeguarding principles	Conditions to be met by each VPA regarding safeguarding principles	APPENDIX 1 - SAFEGUARDING PRINCIPLES ASSESSMENT has demonstrated that the VPA meets the required condition of safeguarding principles.
16	Retroactive VPA	The time of first submission is within one year of the VPA start date.	VPA003 is retroactive VPA, and the time of first submission was 09/12/2021, within one year of the VPA start date, 28/04/2021.

A.1.2. Legal ownership of products generated by the VPA and legal rights to alter use of resources required to service the project

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For each ICS distributed under the VPA, the project beneficiaries sign the agreement and confirm that at the time of distribution of ICS that, in return for receiving an ICS, the ownership of emissions reductions and VERs transfer to CME.

Furthermore, during local stakeholder consultations，it has been demonstrated transparently that such ownership is transferred from project beneficiaries to CME.

A.2. Location of VPA

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The VPA003 is carried out in the neighborhoods of Ngaliema, in the north part of Kinshasa City of Congo (DRC). Ngaliema commune has a population of more than 683,135 people[3]. The coordinates of the four typical locations are (4°19'02"S 15°15'51"E), (4°20'44"S 15°12'23"E), (4°19'49"S 15°16'52"E) and (4°26'01"S 15°15'28"E).

[3]https://en.wikipedia.org/wiki/Ngaliema

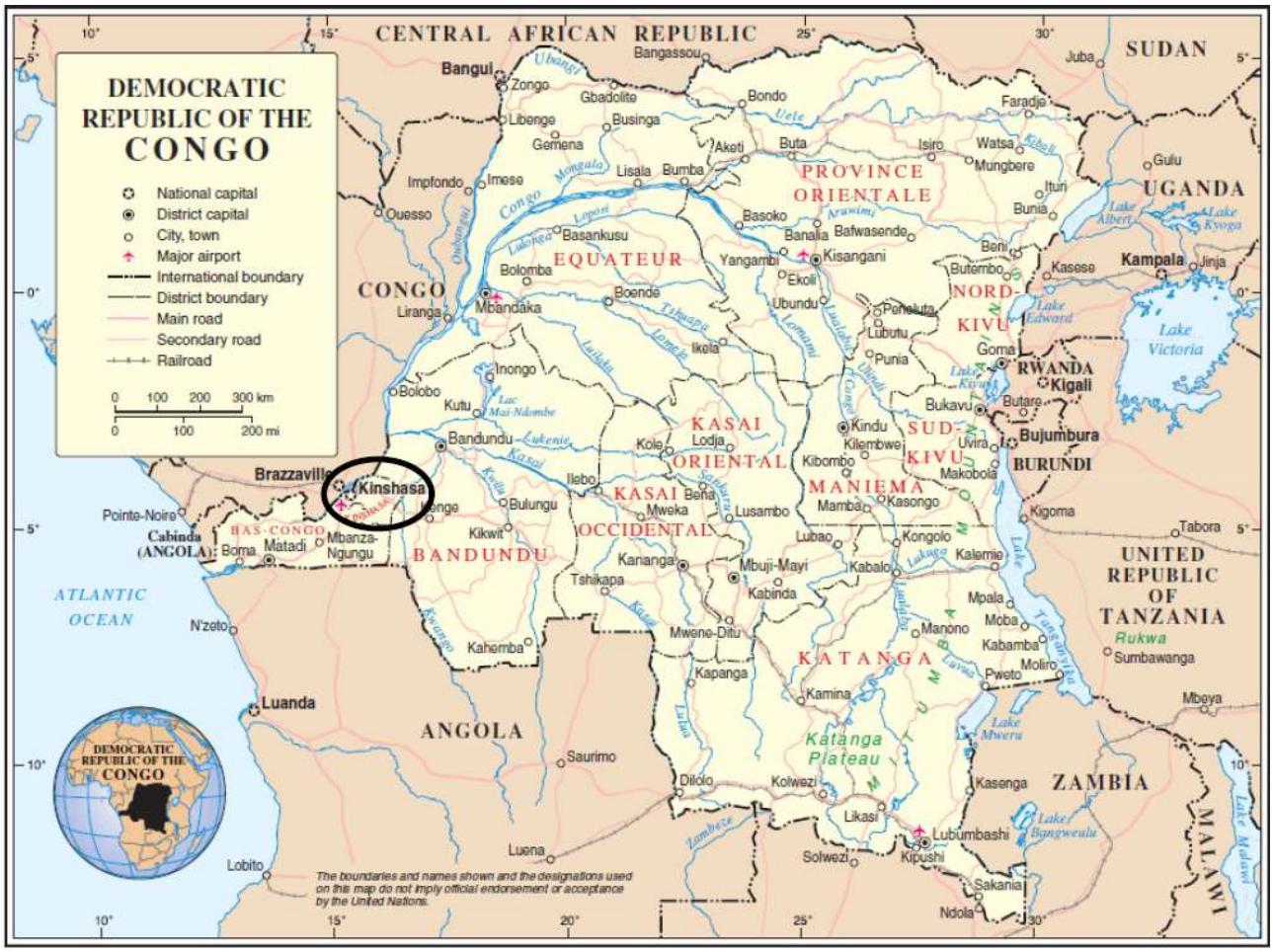

Fig 1: Map of Congo (DRC)

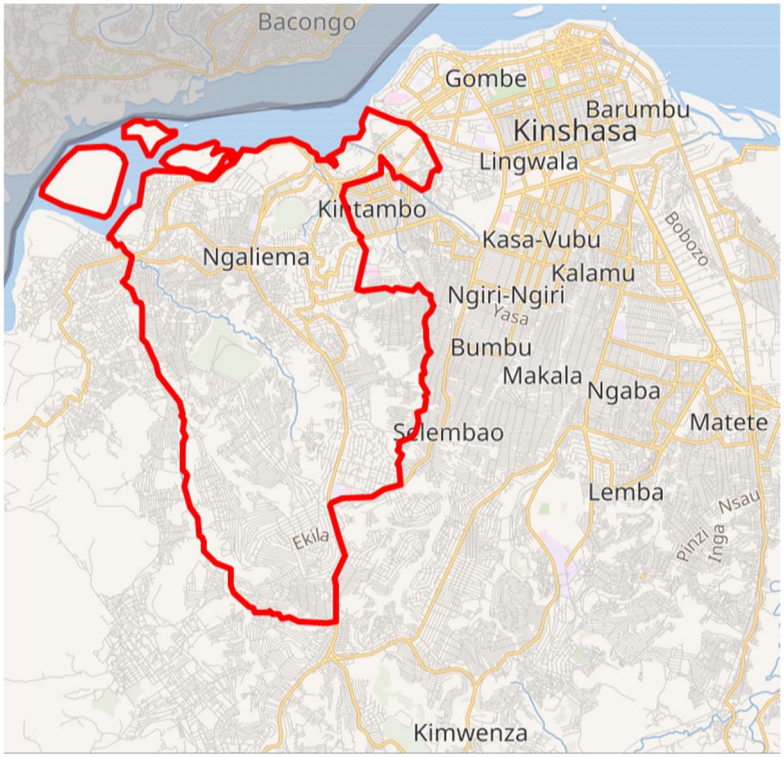

Fig 2: Map of the Ngaliema commune in Kinshasa City

A.3. Technologies and/or measures

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Compared to the currently used traditional stoves, the efficient stoves sold under this VPA are cooking equipment allowing quicker heating-up, longer cooking and heat retaining with less woody biomass fuel as well as lower combustion fumes. It results in significant savings of charcoal and associated expenses, thanks to, inter alia, advanced-material combustion chamber, overconsumption-restricting design, etc.

The project activity does however not consist in fuel switch, in so far as charcoal user will keep consuming charcoal, only more efficiently.

The technology will result in displacement of high GHG-emitting woody biomass as cooking fuel in the low-income households and commercial spaces. In absence of implementation of the proposed VPA, the households would have continued to use unimproved cookstoves consuming charcoal, for cooking purpose which is also the existing pre-project scenario.

The technology and know-how being applied by the project activity is environmentally safe and sound since it will positively curb deforestation currently endangering natural forests by promoting sane and sustainable practices in the targeted areas of DRC; indeed, the mass introduction of woody biomass fuel saving cookstoves will diminish the currently non-renewable collect and supply of the project population, thus slowing down forest degradation. It is made possible by highly efficient stoves technology transfer to the Host party under the benefits of carbon mechanism, since the devices to be implemented are state-of-the art imported cookstoves to be locally assembled with a mid-term view of internalizing the manufacturing unit.

The detailed specification is as follows, and the improved cook stoves employed are some types including type A and B:

Fig 3: Picture of the example of proposed Jiko cookstoves

Table 2 Specification of the example of proposed Jiko cookstoves[4]

Type	A: Jiko Mamu	B: Jiko Kitoko
Efficiency	29.7%	33.6%
Type of fuel	Charcoal	Charcoal
Capacity (kW)	1.2	1.2
Adoption	Traditional cooking style & posture	Traditional cooking style & posture
Durability	7 years	7 years

A.4. Scale of the VPA

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[4] From the specification of cookstoves and the efficiency test report

Chosen in compliance with the small-scale limit with regard to annual energy savings of the stoves, the ICSs annual energy saving of VPA003 is calculated as below:

$SFS_{b,p,y*}$ $N_{b,p,y*}$ $NCV_{b,fuel}$ *(1000/3.6)MWh(th)/TJ=

0.00119(ton/household/day) *14,400*365 (household*day) * 0.0295 TJ/ton*1000/3.6(MWh(th)/TJ) =51,253MWh(th)=51.25GWh(th)< 180GWh(th) (the small-scale thresholds)

So, the VPA is a small-scale VPA.

A.5. Funding sources of VPA

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No public funding is involved in VPA003.

DRC is place on the OECD Development Assistance Committee's ODA recipient list, and the ODA Declaration from VPA003 implementer has been provided.

SECTION B. APPLICATION OF APPROVED GOLD STANDARD METHODOLOGY (IES) AND/OR DEMONSTRATION OF SDG CONTRIBUTIONS

B.1. Reference of approved methodology (ies)

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The VPAs under the PoA will introduce energy-efficient, biomass fuel-based cookstoves (technology/measure) compatible with the requirements of the applied methodology "REDUCED EMISSIONS FROM COOKING AND HEATING: Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC)", Version 4.0 – Published Oct 2021.

https://www.goldstandard.org/project-developers/standard-documents

The methodology refers to the tools and guidelines below:

1. CDM Tool 30 - Calculation of the fraction of non-renewable biomass (Version 03.0) https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-30-v3.0.pdf
2. Sampling and surveys for CDM project activities and programmes of activities (Version 09.0) https://cdm.unfccc.int/filestorage/e/x/t/extfile-20210531160756474-Meth_Stan05.pdf/Meth_Stan05.pdf?t=M3d8cmllN3Z0fDBwSNbMwRTqqgI0dr299S5q
3. Requirements and Guidelines: Usage Rate Monitoring (Version 2.0) https://globalgoals.goldstandard.org/407g-ee-ics-tpddtec-usage-guidelines/

B.2. Applicability of methodology (ies)

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Applied methodology: Technologies and Practices to Displace Decentralized Thermal Energy Consumption, version 4.0, Oct 2021.

According to the TEMPLATE GUIDE of KEY PROJECT INFORMATION & VPA DESIGN DOCUMENT (PDD) –v. 2.0, the inclusion criteria are used to demonstrate methodology applicability, so make reference to section A.1.1.

B.3. VPA boundary

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The project boundary is the physical, geographical sites of the project technologies/practices. Thus, the project boundary of VPA003 includes all individual households who receive ICSs. The target area consists of households residing in Ngaliema commune in Kinshasa city. The fuel collection and production area is considered to be included in the project boundary.

Source		GHGs	Included?	Justification/Explanation
Baseline scenario	Delivery of thermal energy	CO_2	Yes	Main source of emissions when charcoal is burned.
		CH_4	Yes	Important source of emissions released during partial or incomplete combustion of charcoal during domestic cooking.
		N_2O	Yes	Important source of emissions released during partial or incomplete combustion of charcoal during domestic cooking.
	Production of fuel,	CO_2	Yes	Important source of emissions
		CH_4	Yes	Important source of emissions
		N_2O	Yes	Important source of emissions
	Transport of fuel	CO_2	No	Omitted for simplification and is conservative
		CH_4	No	Omitted for simplification and is conservative
		N_2O	No	Omitted for simplification and is conservative
Project scenario	Delivery of thermal energy	CO_2	Yes	Main source of emissions when charcoal is burned.
		CH_4	Yes	Important source of emissions released during partial or incomplete combustion of charcoal during domestic cooking.
		N_2O	Yes	Important source of emissions released during partial or incomplete combustion of charcoal during domestic cooking.
	Production of fuel	CO_2	Yes	Important source of emissions
		CH_4	Yes	Important source of emissions
		N_2O	Yes	Important source of emissions
	Transport of fuel	CO_2	No	No increase of fuel transportation compared to the baseline
		CH_4	No	No increase of fuel transportation compared to the baseline
		N_2O	No	No increase of fuel transportation compared to the baseline

B.4. Establishment and description of baseline scenario

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In the project scenario, two types of improved cook stoves that burn charcoals are distributed to households for cooking in commune Ngaliema. These two types cook stoves are based on the same fundamental combustion technology and the respective efficiencies are 29.7% and 33.6%, which do not differ by more than +/- 5%. So, the project has a single project scenario according to the 3.7.3 of the applied methodology.

As per the applied methodology TPDDTEC, the baseline scenario is the existing baseline technology/practice use and fuel consumption patterns for the type of service provided by the project technology in the population targeted for adopting the new project technology, i.e., "target population". Target population in VPA003 are the households in commune Ngaliema who use thermal energy for cooking.

As per the applied methodology 3.4.2, the selection and description of the baseline scenario must be informed by the Baseline Scenario Survey. A baseline scenario survey was conducted from 22 March 2021 to 28 April 2021 in commune Ngaliema according to the requirements of applied methodology 4.3 "baseline scenario survey". The survey was carried out in person interviews with a sample of end uses without using ICSs in the Ngaliema commune. 100 households were surveyed by random and more than 1Km distance from each household was demanded to ensure a certain geographic representativeness. Before the survey, three staffs of VPA003 implementer have been trained by CME carbon consultant. The questionnaire was also designed according to the applied methodology to collect surveyors' name, address, telephone number, age, gender, education background, household size, present cookstove type, fuels type price and consumption.

The baseline survey shows that the low-efficiency simple braseros are used in all 100 households interviewed and 100% of 100 interviewees cook by using charcoal. The average household size is 4.98 persons per household and the average charcoal consumption is 2.34Kg/day/household. In this way the baseline scenario of VPA003 has been identify by doing baseline survey.

The concept of suppressed demand is not applied.

B.5. Demonstration of additionality

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Specify the methodology, activity requirement or product requirement that establishes deemed additionality for the proposed project (including the version number and the specific paragraph, if applicable).	As per GS4GG Community services activity requirements, Version 1.2, Para 4.1.9, Projects that meet any of the following criteria are considered as deemed additional and therefore are not

	required to prove Financial Additionality at the time of design certification: (a) Positive list (Annex B of this document) (b) Projects located in LDC, SIDS, LLDC (c) Microscale projects
Describe how the proposed project meets the criteria for deemed additionality.	Congo (DRC) is in the List of Least Developed Countries (as of 11/02/2021), so the VPA003 is considered as deemed additional.

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B.5.1. Prior Consideration

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The VPA is a retroactive project, so it needs to demonstrate that the carbon credits revenues were seriously considered in the decision to implement the Project.

Timelines of the project prior consideration

No.	Date	Actions
1	01/10/2020	Contracts between CME and Implementer
2	28/04/2021	Start date of the project (first cookstove was distributed)
3	09/12/2021	Time of first submission (preliminary review)

CME signed emission reduction purchase agreement with the implementer on 01/10/2020. After then, the first cookstove was distributed on 28/04/2021. It is demonstrated that the revenues from carbon credits were seriously considered before implementing the project. Design documents were submitted to the Gold Standard on 09/12/2021 within one year of the project start date (28/04/2021).

B.5.2. Ongoing Financial Need

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N/A

B.6. Sustainable Development Goals (SDG) outcomes

Relevant Target/Indicator for each of the five SDGs

Sustainable Development Goals Targeted	Most relevant SDG Target	SDG Impact Indicator (Proposed or SDG Indicator)
Goal 1 No poverty	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.	Relevance: The VPA results in less poverty by reducing costs on charcoal consumption. Nsav: Fraction of ICS users perceiving money saving on charcoal spending
Goal 3 Good health and well-being	3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.	Relevance: Using ICS results in reduction of health problems associated with charcoal burning. N_{health}: Fraction of ICS users perceiving health conditions improved after using ICSs
Goal 7 Ensure access to affordable, reliable, sustainable and modern energy for all	7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	Relevance: The VPA involves dissemination of clean, modern technology for cooking, by using available energy sources more efficiently. Number of the efficient cookstoves disseminated
Goal 8 Decent work and economic growth	8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.	Relevance: The VPA results in generating employment for marketing /sales and distribution/ technical employees. the number of person (male and female) hired.
Goal 13 Climate Action	13.2 Integrate climate change measures into national policies, strategies and planning	Emissions Reductions

B.6.1. Explanation of methodological choices/approaches for estimating the SDG Impact

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SDG 1

Less charcoal is needed for household cooking task due to the using of improved cookstoves, which results to less money spending on charcoal. It is expected that 91% of the ICS users perceive money saving on charcoal spending[5]. The actual percentage would be surveyed by sampling according to the monitoring plan.

It is expressed by parameter N_{sav}: fraction of ICS users perceiving money saving on charcoal spending.

SDG 3

Improved cookstoves used in the VPA003 save charcoal consumption in household, which means less air pollution emission. Hence using high-efficiency cookstoves improves the health conditions in household. It is expected that 81% of the ICS users perceive improved health conditions after using ICSs[6]. The actual percentage would be surveyed by sampling according to the monitoring plan.

It is expressed by parameter N_{health}: fraction of ICS users perceiving health conditions improved after using ICSs.

SDG 7, Affordable and clean energy

The contributed of VPA003 to SDG 7 is confirmed by the number of efficient cookstoves disseminated. It is expressed by parameter NICS. In baseline scenario, there is no efficient cookstoves applied, while the distributed 14,400 efficient cookstoves in VPA003 are disseminated and thus the charcoal consumption, the GHGs and particulate matter emission are reduced. The net impact of VPA003 to SDG7 is 14,400 efficient cookstoves disseminated.

SDG 8, Decent work and economic growth

In baseline scenario, there is no new job created. while in VPA003, 10 employees (7 females and 3 males) are hired including administrative, sales and management

[5] Three similar improved cookstove distribution projects in Africa which has completed the performance verification are referred, including GS5391, GS2094 and GS10886. The lowest value of SDG1 indicator is 91% in their monitoring report.
[6] Three similar improved cookstove distribution projects in Africa which has completed the performance verification are referred, including GS5391, GS2094 and GS10886. The lowest value of SDG3 indicator is 81% in their monitoring report.

positions. The contribution of VPA003 to SDG 8 is confirmed by the number of person (male and female) hired.

It is expressed by parameter N_{em}, number of person (male and female) hired in VPA003.

SDG 13, Climate Action

The baseline is considered by-default fixed until the end of the cookstoves (introduced in the project activity) useful life or the registered crediting period, whichever occurs earlier. If the project cookstove is replaced with a cookstove of similar efficiency prior to the end of the crediting period, the original baseline shall be applicable till the end of the replaced cookstoves useful life or the registered crediting period, whichever occurs earlier.

Only one project scenario is considered. The project scenario is the adoption of the efficient cookstove by end users in commune Ngaliema. 14,400 efficient cookstoves have been sold to end users from 28/04/2021 to 10/06/2021.

Calculation of the emission reductions

The applied methodology provides three methods to calculate emission reductions.

a. Method 1. Baseline and project fuel(s) are identical and emission reductions are exclusively from improved efficiency

b. Method 2. Baseline and project fuel(s) are identical and emission reductions are exclusively from improved efficiency, and the default baseline fuel consumption is applied

c. Method 3. Baseline and project fuel(s) are not identical and emission reductions are from fuel switch and efficiency gains

In VPA003, the baseline and project have the same fuel type (charcoal), and the baseline fuel consumption come from the baseline scenario survey, therefore the method 2 and method 3 is not applicable and the method 1 is adopted in VPA003.

The methodology directly provides equation for emission reductions (without separate

baseline, projector leakage emission reduction equations). The emission reductions are calculated using the following equation:

$$ER_y = N_{b,p,y} \times U_{p,y} \times SFS_{p,b,y} \times NCV_{b,fuel} \times (f_{NRB,b,y} \times EF_{b,f,CO2} + EF_{b,f,nonCO2}) - LE_{p,y}$$

Where:

ER_y, Emission reduction for total project activity in year y (tCO_2e/yr)

$N_{b,p,y}$, Number of project technology-days included in the project database for baseline b/project p pair in year y (days)

$U_{p,y}$, Cumulative Usage rate for technologies in project scenario p in year y (fraction)

$SFS_{p,b,y}$, Specific fuel savings for an individual project technology of baseline b/project p pair in year y (mass or volume units/technology*day)

$f_{NRB,b,y}$, Fractional non-renewability status of woody biomass fuel during year y

$NCV_{b,fuel}$, Net calorific value of the fuel(s) that is substituted or reduced in baseline b (TJ/ton)

$EF_{b,f,CO2}$, CO_2 emission factor from use of fuel f (tCO_2/TJ)

$EF_{b,f,nonCO2}$, Non-CO_2 emission factor arising from use of fuel f, when the baseline fuel f is biomass or charcoal (tCO_2e/TJ)

$LE_{p,y}$ Leakage for project scenario p in year y (tCO_2e/yr)

$$ER_y = N_{b,p,y} \times U_{p,y} \times SFS_{p,b,y} \times NCV_{b,fuel} \times (f_{NRB,b,y} \times EF_{b,f,CO2} + EF_{b,f,nonCO2}) - LE_{p,y}$$

ER_y =14,400×365 day/annual×90%× (0.00234 Ton/household-day - 0.00115 Ton/household-day)×0.0295 TJ/Ton×(83.1%×165.22 tCO2/TJ +44.83 tCO2/TJ) ×0.95 = 28,829 tCO_2e

B.6.2. Data and parameters fixed ex ante

SDG 7, 8, 13

Data/parameter ID	**ICS 1**
Data/parameter	Baseline scenario survey results
Unit	NA
Description	Report of the results of the baseline scenario survey
Source of data	The report presents the results of the Baseline Scenario Survey, relevant for the baseline scenario definition.
Value(s) applied	NA
Choice of data or Measurement methods and procedures	NA
Purpose of data	Evaluation of SDG outcomes
Additional comment	Undertake at the start of the first crediting period

Data/parameter ID	**ICS 2**
Data/parameter	Project technology description
Unit	NA
Description	The detailed description of the project technology:

	- Manufacturer name: BISO NA BINO SARL - product name：Jiko cookstoves - technology type：cooking equipment allowing quicker heating-up, longer cooking and heat retaining with less woody biomass fuel as well as lower combustion fumes. - capacity characteristics：1.2kw - rated thermal efficiency: type A 29.7% and type B 33.6%.
Source of data	Manufacturer specifications Test result of the efficient cookstoves
Value(s) applied	NA
Choice of data or Measurement methods and procedures	NA
Purpose of data	Evaluation of SDG outcomes
Additional comment	Project developer shall provide this information to verifying VVB before completion of verification report. No issuance shall be requested for project technologies for which the project technology details are not verified by the verifying VVB prior to completion of verification report.

Data/parameter ID	**ICS 3**
Data/parameter	Expected technical life of project technology
Unit	Years
Description	The expected technical life of an individual project technology shall be defined in the VPA-DD.
Source of data	Fixed and recorded at the time of registration or distribution The source is used: - Manufacturer specifications
Value(s) applied	7
Choice of data or Measurement methods and procedures	NA
Purpose of data	Evaluation of SDG outcomes
Additional comment	The end users will be provided replacement technology of comparable or higher quality at the end of the technical life, by either - replacing with comparable or better technology, or

	- retrofitting essential parts with performance guarantee. Units are replaced or retrofitted at the end of their technical life within a crediting period to continue claiming emission reductions. However, a new project or programme will not be registered for replacement/retrofitted project devices.

Data/parameter ID	**ICS 5**
Data/parameter	Avoidance of double counting or double claiming among project participants
Unit	NA
Description	Evidence of avoidance of double counting or double Claiming with other parties directly involved with the project or programme.
Source of data	Written assertions with the project developer of the ownership rights and intention of selling the emission reductions resulting from the project activity directed at or signed with all the applicable parties of the following: - Agreement between CME and VPA003 Implementer; - contract between Implementer and ICS producers; and - sale records between VPA003 implementer and end users.
Value(s) applied	VPA003 avoid of double counting or double claiming among project participants by providing documentations above.
Choice of data or Measurement methods and procedures	NA
Purpose of data	Evaluation of SDG outcomes
Additional comment	-

Data/parameter ID	**ICS 6**
Data/parameter	Avoidance of double counting or double claiming with other mitigation actions
Unit	NA
Description	Review and analysis of mitigation actions in other voluntary market or UNFCCC/compliance mechanisms
Source of data	Using publicly available information from Gold Standard and other voluntary standards, at a minimum Verra and

	any recognized national or regional standards in the project location, and UNFCCC CDM project & PoA database.
Value(s) applied	Avoidance of double counting or double claiming with other mitigation actions by analyzing data source above.
Choice of data or Measurement methods and procedures	NA
Purpose of data	Evaluation of SDG outcomes
Additional comment	Undertake at the time of project design review and VPA inclusion review.

Data/parameter ID	**ICS 7**
Data/parameter	Regulatory framework for provision of thermal energy services
Unit	NA
Description	Evidence that the project does not undermine or conflict with any national, sub-national or local regulations or guidance for thermal energy supply/devices or fuel supply or use
Source of data	Wood fuel policies and practices in selected countries in Sub-Saharan Africa - a critical review https://www.cifor.org/knowledge/publication/7293/ World Development Perspectives, https://www.sciencedirect.com/science/article/pii/S2452292922000091 Research has been conducted and found no policies or regulations in DRC that conflicts with the adoption of the efficiency-improved charcoal cookstove. Charcoal is still currently the primary energy source in DRC, with the increase in population, it suggests the DRC's dependence on charcoal will likely remain high in the coming decades, banning wood fuel will not be realistic and will lead to unintended negative consequences. This project distributes more energy cookstove to households, reduces overall charcoal needs which also limits deforestation. It does not undermine or conflict with any regulations on thermal energy use in the hosting country.
Value(s) applied	There is no evidence that the project undermines or conflict with any national, sub-national or local regulations or guidance of thermal devices or fuel supply or use.

Choice of data or Measurement methods and procedures	NA
Purpose of data	Evaluation of SDG outcomes

SDG 13

Data/parameter ID	**ICS 8**
Data/parameter	$EF_{b,f,CO2}$
Unit	tCO_2/TJ
Description	CO_2 emission factor arising from use of fuels in baseline scenario
Source of data	Methodology default for charcoal
Value(s) applied	165.22 tCO_2/TJ (includes charcoal production emissions)
Choice of data or Measurement methods and procedures	N/A
Purpose of data	Calculation of emission reductions
Additional comment	N/A

Data/parameter ID	**ICS 9**
Data/parameter	$EF_{b,f,nonCO2}$
Unit	tCO_2/TJ
Description	Non-CO_2 emission factor arising from use of fuels in baseline scenario
Source of data	Methodology default for charcoal
Value(s) applied	44.83tCO_2e/TJ (Includes charcoal production emissions)
Choice of data or Measurement methods and procedures	N/A
Purpose of data	Calculation of emission reductions

Additional comment	N/A

Data/parameter ID	**ICS 12**
Data / Parameter	$NCV_{b,fuel}$
Unit	TJ/ton
Description	Net calorific value of the fuels used in the baseline
Source of data	Charcoal: Methodology default
Value(s) applied	Charcoal: Methodology default, 0.0295 TJ/ton
Choice of data or Measurement methods and procedures	N/A
Purpose of data	Calculation of emission reductions
Additional comment	N/A

Data/parameter ID	**ICS 17**
Data / Parameter	$f_{NRB,i,y}$
Unit	percentage
Description	Fractional non-renewability status of woody biomass fuel during year y, in case the baseline fuel is biomass or charcoal
Source of data	Determined by following the CDM TOOL30, Calculation of the fraction of non-renewable biomass
Value(s) applied	83.1%[7]
Choice of data or Measurement methods and procedures	Requirements of the CDM TOOL30
Purpose of data	Calculation of emission reductions

[7] It is calculated in a separate excel spreadsheet.

Additional comment	Project developers applying for a renewal of the crediting period must reassess the NRB based on most recent information available.

Ex ante estimation of SDG Impact

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Ex-ante calculations related to the outcomes of SDG 7

In the baseline scenario, there is no efficient cookstoves applied, while in VPA003, 14,400 efficient cookstoves has been sold to end users, which provide affordable and clean energy, and therefore the SDG 7 Impact indicator of VPA003 N_{ICS} is 14,400.

Ex-ante calculations related to the outcomes of SDG 8

In the baseline scenario, there is no additional job created, While in VPA003, 10 employees have been hired including 7 females and 3 males, and therefore the SDG 8 Impact indicator of VPA003 N_{em} is 10.

Ex-ante calculations related to the outcome for SDG 13

For data/parameters available at the time of design certification, values contained in section B.6.2 and for data/parameters only available after monitoring the estimates contained in section B.7.1 have been used.

$$ER_y = N_{b,p,y} \times U_{p,y} \times SFS_{p,b,y} \times NCV_{b,fuel} \times (f_{NRB,b,y} \times EF_{b,f,CO2} + EF_{b,f,nonCO2}) - LE_{p,y}$$

Where:

$N_{b,p,y}$ = Number of project technology-days included in the project database for baseline b/project p pair in year y (days)

$U_{p,y}$ = Cumulative Usage rate for technologies in project scenario p in year y (fraction)

$SFS_{p,b,y}$ = Specific fuel savings for and individual project technology of baseline b/project p pair in year y (mass or volume units/technology*day)

$NCV_{b,fuel}$ = Net calorific value of the fuel(s) that is substituted or reduced in baseline b (TJ/mass or volume units)

$f_{NRB,b,y}$ = Fractional non-renewability status of woody biomass fuel during year y (fraction). For biomass, it is the fraction of woody biomass that can be established as non-renewable.

$EF_{b,f,CO2}$ = CO_2 emission factor from use of fuel f (tCO_2/TJ)

$EF_{b,f,nonCO2}$ = Non-CO_2 emission factor arising from use of fuel f, when the baseline fuel f is biomass or charcoal (tCO_2e/TJ). This parameter is omitted when f is a fossil fuel.

$LE_{p,y}$ = Leakage for project scenario p in year y (tCO_2e/yr)

$$ER_y = N_{b,p,y} \times U_{p,y} \times SFS_{p,b,y} \times NCV_{b,fuel} \times (f_{NRB,b,y} \times EF_{b,f,CO2} + EF_{b,f,nonCO2}) - LE_{p,y}$$

ER_y =14,400×365 day/annual×90%×(0.00234 Ton/household-day - 0.00115 Ton/household-day)×0.0295 TJ/Ton×(83.1%×165.22 tCO_2/TJ +44.83 tCO_2/TJ) × 0.95 = 28,829 tCO_2

B.6.3. Summary of ex ante estimates of each SDG outcome

SDG 1

Indicator: N_{sav}: fraction of ICS users perceiving money saving on charcoal spending

Year	Baseline estimate	Project estimate	Net benefit
Year 1	0	91%	91%
Year 2	0	91%	91%
Year 3	0	91%	91%
Year 4	0	91%	91%
Year 5	0	91%	91%
Total	**0**	**91%**	**91%**
Total number of crediting years	5		
Annual average over the crediting period	0	91%	91%

SDG 3

Indicator: N_{health}: fraction of ICS users perceiving health conditions improved after using ICSs

Year	Baseline estimate	Project estimate	Net benefit
Year 1	0	81%	81%
Year 2	0	81%	81%
Year 3	0	81%	81%
Year 4	0	81%	81%
Year 5	0	81%	81%
Total	**0**	**81%**	**81%**

Total number of crediting years	**5**		
Annual average over the crediting period	**0**	81%	81%

SDG 7

Indicator: N_{ICS} Number of the efficient cookstoves disseminated

Year	Baseline estimate	Project estimate	Net benefit
Year 1	0	14,400	14,400
Year 2	0	14,400	14,400
Year 3	0	14,400	14,400
Year 4	0	14,400	14,400
Year 5	0	14,400	14,400
Total	**0**	**14,400**[8]	**14,400**
Total number of crediting years	5		
Annual average over the crediting period	0	14,400	14,400

SDG 8

Indicator: N_{em} the number of person (male and female) hired

Year	Baseline estimate	Project estimate	Net benefit
Year 1	0	10(F7,M3)	10(F7,M3)
Year 2	0	10(F7,M3)	10(F7,M3)
Year 3	0	10(F7,M3)	10(F7,M3)
Year 4	0	10(F7,M3)	10(F7,M3)
Year 5	0	10(F7,M3)	10(F7,M3)

[8] In the first year, 14,400 efficient cookstoves are sold, and no additional cookstoves would be distributed in the next year during the crediting period.

Total	0	10(F7,M3)[9]	10(F7,M3)
Total number of crediting years	5		
Annual average over the crediting period	0	10 (F7, M3)	10(F7, M3)

SDG 13

Indicator: emission reductions of CO_2

Year	Baseline estimate	Project estimate	Net benefit
Year 1	0	28,829	28,829
Year 2	0	28,829	28,829
Year 3	0	28,829	28,829
Year 4	0	28,829	28,829
Year 5	0	28,829	28,829
Total	**0**	**144,145**	**144,145**
Total number of crediting years	**5**		
Annual average over the crediting period	**0**	**28,829**	**28,829**

B.7. Monitoring plan

B.7.1. Data and parameters to be monitored

SDG 1

Data / Parameter	N_{sav}

[9] At beginning of VPA003, 10 employment jobs are created, and the number would keep stable during the crediting period.

Unit	Fraction
Description	Fraction of ICS users perceiving money saving on charcoal spending
Source of data	Surveys
Value(s) applied	91%. Three similar improved cookstove distribution projects in Africa which has completed the performance verification are referred, including GS5391, GS2094 and GS10886. The lowest value of SDG1 indicator is 91% in their monitoring report.
Measurement methods and procedures	End-users of ICS in Ngaliema commune are surveyed whether the household spendings on charcoal purchase is less than before using ICSs
Monitoring frequency	Annually
QA/QC procedures	Sampling is done according to the Methodology requirements
Purpose of data	Calculation of parameter N_{sav}
Additional comment	N/A

SDG 3

Data / Parameter	N_{health}
Unit	Fraction
Description	Fraction of ICS users perceiving health conditions improved after using ICSs
Source of data	Surveys
Value(s) applied	81%. Three similar improved cookstove distribution projects in Africa which has completed the performance verification are referred, including GS5391, GS2094 and GS10886. The lowest value of SDG3 indicator is 81% in their monitoring report.
Measurement methods and procedures	End-users of ICS in Ngaliema commune are surveyed the influence of ICS using on their health conditions
Monitoring frequency	Annually

QA/QC procedures	Sampling is done according to the Methodology requirements
Purpose of data	Calculation of parameter N_{health}
Additional comment	N/A

SDG 7

Data / Parameter	N_{ICS}
Unit	Number
Description	Number of the efficient cookstoves disseminated
Source of data	Project database
Value(s) applied	14,400
Measurement methods and procedures	The project monitoring database provides a list of end-users with number of the efficient cookstoves per end-user.
Monitoring frequency	Continuous
QA/QC procedures	Sale records for cross-check
Purpose of data	Calculation of the parameter "Number of the efficient cookstoves disseminated"
Additional comment	N/A

SDG 8

Data / Parameter	N_{em}
Unit	Number
Description	Number of person (male and female) hired
Source of data	Employees list
Value(s) applied	10 (Female 7 and Male 3)
Measurement methods and procedures	Recording the number of employ (male and female) hired es (male / female) in the project under administrative, sales and management positions
Monitoring frequency	Continuous
QA/QC procedures	Labor contracts by cross-check

Purpose of data	-
Additional comment	N/A

SDG 13

Data/parameter	**ICS 15**
Data / Parameter	Avoidance of double counting or double claiming among project technology end users
Unit	NA
Description	Evidence of Avoidance of double counting or double claiming among project technology end users
Source of data	Sales record where end-users declare to give up carbon rights related to the ICS use.
Value(s) applied	NA
Measurement methods and procedures	NA
Monitoring frequency	Monitored whenever project technology is sold
QA/QC procedures	Cross check using general internet search and search of public records of Gold Standard and other voluntary market and UNFCCC mechanisms
Purpose of data	NA
Additional comment	-

Data/parameter ID	**ICS 16**
Data / Parameter	Presence of stove stacking
Unit	NA
Description	Descriptive statistics of the presence and usage practices of baseline- and other non-project-technology by project technology end users
Source of data	Usage survey- use of other stoves, to capture cooking habits and stove usage of households in the region, including quantification of use of baseline device, by formulating questions and/or collecting evidence to determine the frequency of usage of both the project devices and baseline devices, or monitoring surveys to capture the number of meals cooked.

	The surveys will be integrated with the usage survey.
Value(s) applied	NA
Measurement methods and procedures	NA
Monitoring frequency	Annually
QA/QC procedures	The calculation of $SFS_{p,b,y}$ shall be cross-checked with the observed presence of stove stacking. Ensure any stove stacking is considered so that emission reductions are calculated only from real reduction of, or replacement of, baseline fuel use.
Purpose of data	NA
Additional comment	-Whether or not the existing baseline technology is surrendered, when an old technology remains in use in parallel with the improved technology, or another technology is put in use in parallel, the corresponding emission must be accounted for so that emission reductions are not overestimated.

Data/parameter ID	**ICS 18**
Data / Parameter	$P_{b,y}$
Unit	ton/household-day
Description	Quantity of fuel that is consumed in baseline scenario b during year y
Source of data	Baseline performance field tests
Value(s) applied	0.00234, from Baseline scenario survey
Measurement methods and procedures	Baseline field test (BFT)
Monitoring frequency	At the start of crediting period (fixed for on crediting period)
QA/QC procedures	Compliance with the general requirements for sampling (Section 4.4), general requirements for QA/QC (Section

	4.5) and Annex 2 Kitchen performance test.
Purpose of data	Used to calculate SFS under method 1
Additional comment	Applicable adjustment factors may be applied.

Data/parameter ID	**ICS 19**
Data / Parameter	$P_{p,y}$
Unit	ton/household-day
Description	Quantity of fuel that is consumed in project scenario p during year y
Source of data	Project performance field tests
Value(s) applied	0.00115, calculated according to cookstove efficiency[10]
Measurement methods and procedures	Project field test (PFT) of fuel consumption
Monitoring frequency	Updated every two years, or more frequently The KPT values are valid for two years and may be applied for before or after period, however the gap between start date of first KPTs and second KPTs shall not be more than two years.
QA/QC procedures	Compliance with the general requirements for sampling (Section 4.4), general requirements for QA/QC (Section 4.5) and Annex 2 Kitchen performance test.
Purpose of data	Used to calculate SFS under method 1
Additional comment	Applicable adjustment factors may be applied.

Data/parameter ID	**ICS 20**
Data / Parameter	$SFS_{b,p,y}$
Unit	ton/household-day
Description	Specific fuel savings for an individual project technology

[10] 0.0022 ton/day-household ×15.5%/31.65% = 0.00108 ton/day-household

	of baseline b/project p pair in year y
Source of data	Calculated from $P_{b,y}$, $P_{p,y}$
Value(s) applied	0.00119
Measurement methods and procedures	$P_{b,y}$- $P_{p,y}$
Monitoring frequency	Updated every two years, or more frequently
QA/QC procedures	The calculation method, inputs and their sources shall be described in detail in the VPA-DD and monitoring report. Cross-check with proportional efficiency of baseline and project technology.
Purpose of data	-Calculation of emission reduction
Additional comment	-The baseline and project field test data must be analysed in combination to estimate the average fuel savings per technology unit. Whenever the baseline fuel and project fuel are the same, the statistical analysis can be conducted with respect to fuel savings per technology unit.

Data/parameter ID	**ICS 26**
Data / Parameter	$U_{p,y}$
Unit	Percentage
Description	Weighted average usage rate in project scenario p during year y
Source of data	Usage survey, following the description in section 4.1. Usage survey The survey result must provide the statistically valid proportion of users actively using the project technology for each project technology age cohort. From the annual usage survey results, calculate the weighted average percent of users actively using the project technology, where the weighting is by the quantity of project technologies of each age cohort being credited in a given project scenario.
Value(s) applied	90%, for the good practice in the "Requirements and Guidelines: Usage Rate Monitoring"
Measurement methods and procedures	The measurement of the usage rate is based on qualitative information collected in the usage survey. A

	question concerning the current use of the technology is asked to each end user of the sample and is validated by the observation of the surveyor in order to determine the usage rate of each technology age category.
Monitoring frequency	At least annually
QA/QC procedures	Compliance with the general requirements for sampling (Section 4.4) and general requirements for QA/QC (Section 4.5)
Purpose of data	Calculation of emission reductions
Additional comment	Please refer to the requirements and Guidelines: Usage Rate Monitoring for carrying out usage surveys for projects implementing improved cooking devices.

Data/parameter ID	**ICS 27**
Data / Parameter:	$N_{b,p,y}$
Unit	days
Description	Number of project technology-days included in the project database for baseline b/project p pair in year y
Source of data	Calculated from the Project database as the sum of the number of project technology units times the calendar days during the year y that they were present at the end user locations
Value(s) applied	14,400*365=5,256,000
Measurement methods and procedures	-
Monitoring frequency	Calculated annually
QA/QC procedures	Cross check the results of the usage survey with the contents of the project database to confirm whether the project technology units surveyed are present at end user locations as expected, or not. If there is discrepancy, this must be explained or corrected.
Purpose of data	-
Additional comment	-

Data/parameter ID	ICS 28
Data/Parameter	$LE_{p,y}$
Unit	t_CO_2e per year
Description	Leakage in project scenario p during year y
Source of data	Sources established by following section 2.4.A Leakage emissions
Value(s) applied	Default discount value of 0.95
Measurement methods and procedures	NA
Monitoring frequency	Default discount value of 0.95 applied to emission reductions
QA/QC procedures	Compliance with the general requirements for sampling (Section 3.1) and general requirements for QA/QC (Section 3.2)
Purpose of data	For leakage emissions
Additional comment	NA

B.7.2. Sampling plan

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The purpose of sampling is to obtain: (a) unbiased and (b) reliable estimates of the mean value of parameters used in the calculations of GHG emission reductions.

The VPA shall follow the following sampling plan:

Parameters monitoring by sampling

As per the applied methodology, the project survey includes the usage survey (ICS26, $U_{p,y}$), the baseline and project performance field tests (ICS18, $P_{b,y}$ and ICS19 $P_{p,y}$).

The project surveys have the same sample sizing and data collection guidelines as the baseline scenario survey. Refer to section 4.3 in the applied methodology.

The minimum sample size is 100 for group size that is more than 1,000, hence in VPA003, the sample size is 100 in project survey.

ICS26, $U_{p,y}$ Sampling

The objective of the usage survey is to provide a single usage parameter that is weighted based on the age distribution for project technologies in the project database. The usage survey determines the usage proportion for each age cohort of technologies being credited for each project scenario p, so the sample size is defined for each age cohort following the general requirements for sampling with a minimum of 30 samples for project technologies of each age cohort being credited.
The usage survey must be conducted in line with the requirements and guidelines of Requirements and Guidelines: Usage Rate Monitoring for further details and example.

ICS18, $P_{b,y}$ and ICS19 $P_{p,y}$ for Field Tests

The baseline and project performance field tests (BFT and PFT) measure real, observed technology performance in the field.
In VPA003, method 1 is applied to calculate emission reduction, and a field test is carried out both for baseline and project scenarios, by testing an independent sample (different subjects for baseline and project scenarios).
The approach taken to conduct the performance tests must be such that:

- It is transparent and can easily be replicated,
- It is evidently conservative,
- The sample is randomly selected so as to not introduce a material bias,
- And the impact of daily and seasonal variations on the expected average fuel consumption saving is accounted for.

The following requirements apply for selecting the end user locations of the Baseline Performance Field Tests (BFT):

- The BFT must reflect the average household size with in the projects area.
- In VPA003, 14,400 improved cookstoves have been sold, so the BFT is performed in households in the vicinity of the project target area that exhibit the same socio-economic circumstances as the households in commune Ngaliema and are operating devices that are similar to the baseline technology in VPA003.

The baseline and project performance field tests (BFT and PFT) completely comply with all requirements of applied methodology and its annex -2 “complementary guidelines for kitchen and performance testing”.
For statistical analysis, 90/30 rule is applied. When the sample sizes are large enough to satisfy the “90/30 rule”, i.e the endpoints of the 90% confidence interval lie within

+/-30% of the estimated mean, overall emission reductions can be calculated on the basis of the estimated MEAN fuel annual savings per unit.

B.7.3. Other elements of monitoring plan

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1. Monitoring organization and responsibility

Overall responsibility for monitoring and carrying out the monitoring lies with the CME (Vitol SA). The CME monitoring manager is the head of VPA003 monitoring.

Implementer (WESD Capital Sprl) does the specific monitoring works under the supervising of CME monitoring manager, including collecting all monitoring data in the field, signing sale records with end users, registering data to monitoring database and keep hardcopies, and so on.

2.QA/QC

The CME is responsible for accurate and transparent record keeping, monitoring and evaluation. All supporting documentation and records for the project must be easily accessible for spot checking and cross referencing by a third-party auditor.

Contact information in the monitoring database must allow a project auditor to easily contact and visit end users.

An auditor must also be able to cross reference pertinent project documentation, which must include archives such as financial accounts and sales records.

3.Monitoring training

Training will be provided to all the monitoring staffs before the commencement of monitoring works to ensure their abilities to implement the described monitoring plan, and the training records will be kept for third-party auditor.

4.Internal audit

The raw data of monitoring parameters collected by the implementer will be supplied to CME and be used to calculate SDG impacts (N_{ICS}, N_{em} and emission reductions) after auditing and permission from the monitoring manager.

5. Data management and archive

All data collected during the monitoring are archived and kept at least for 2 years after the end of the last crediting period by the CME.

6.Emergency procedure

If some data with flaws are founded during the monitoring and internal auditing, which may undermine the data accuracy and completeness, the relevant SDG impacts will be waived to keep conservative.

SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1. Start date of VPA

>>

As per GS4GG Principle 4, the project start date is the earliest date on which the project developer has committed to expenditures related to the implementation of the project. For distributed technology projects, the start date is the date of implementation of the first unit under the project.

For this VPA, the start date is 28/04/2021, the date registered in project database, on which the first efficient cookstove has been implemented in the project activity.

As per GS4GG Principle, the VPA is retroactive projects, for which the stakeholder consultation (1st round) was conducted on 18/05/2021, after the project start date.

C.1.2. Expected operational lifetime of VPA

>>

15 years 0 month

C.2. Crediting period of project

C.2.1. Start date of crediting period

>>

28/04/2021

C.2.2. Total length of crediting period

>>

5 years, the crediting period may be renewed twice in line with the Community Services Activity Requirements.

SECTION D. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT

D.1. Safeguarding Principles that will be monitored

A completed Safeguarding Principles Assessment is in Appendix 1, ongoing monitoring is summarized below.

Principles	Mitigation Measures added to the Monitoring Plan
Principle x.y	N/A

D.2. Assessment that project complies with GS4GG Gender Sensitive requirements

Question 1 - Explain how the project reflects the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy?	The VPA003 takes into account gender roles and the abilities of women and men to participate in the decision/designs of the project activities. For example, the stakeholder consultation made in the project design phase will include both women and men participating in the consultation meeting. Moreover, for example, the future public awareness sessions and trainings for the construction of efficient cookstoves will be planned and organized in the way to avoid any discrimination of women or other marginalized groups. In fact, the women's participation will be essential for guaranteeing the success in the dissemination of the efficient cookstoves. In fact, the reduction of the woody biomass consumption will significantly reduce women's workload related to collection of fuel. It can be further

	expected that sexual harassment and violence happening during fuel collection may be reduced. Hence, largely women will benefit from the project activity.
Question 2 - Explain how the project aligns with existing country policies, strategies and best practices	The Constitution of country recognizes that the promotion of gender is a factor in achieving equality between men and women in DRC. The vision entails the construction of "a society free of all forms of inequality and inequities of gender, and which ensures, for all its citizens, the necessary safeguards for their social, cultural, political and economic development. It will be ensured that the project is committed to equal gender rights following the National Gender Policy[11].
Question 3 - Is an Expert required for the Gender Safeguarding Principles & Requirements?	No expert is required to assess the Gender Safeguarding Principles & Requirements as gender has been adequately assessed in the Safeguarding Principles Assessment.
Question 4 - Is an Expert required to assist with Gender issues at the Stakeholder Consultation?	No expert is required to assist with gender issues at the stakeholder consultation as gender has been adequately assessed in the Safeguarding Principles Assessment.

[11] https://www.wikigender.org/wiki/africa-for-womens-rights-republic-of-congo/

SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

The below is a summary of the 2 step GS4GG Consultation for monitoring purposes. Please refer to the separate Stakeholder Consultation Report for a complete report on the initial consultation and stakeholder feedback round.

E.1. Summary of stakeholder mitigation measures

>>

CME and VPA implementor invited all relevant (local, affected and interested) stakeholders for consultations and comments, including local people, community representative, local policymakers, national government officials, local non-governmental organizations (NGOs), Gold Standard representative and relevant international Gold Standard NGO supporters more than 1 month early before the meeting.

For this retroactive VPA, the physical meeting was integrated with the stakeholder feedback round. The physical meeting conducted with the stakeholder feedback round followed all requirements listed in the document 'Stakeholder Consultation and Engagement Requirements'.

As for the stakeholder feedback round (SFR), documents regarding the project information and feedback tables were included in the three batches of emails to the stakeholders, with the first batch sent out on the 15th April 2021, one month prior to the stakeholder consultation meeting (in May, 2021), and the feedback had been requested. An example email is provided in the stakeholder consultation report. In this case, stakeholders had enough time to review the documents and thus were able to give their feedback during the meeting. This made up an integrated stakeholder feedback round with the physical meeting. On the other hand, stakeholders could also raise their feedback by sending back the feedback table via email to the CME at any time before the submission of the preliminary review on 17th August, 2021. The online SFR stakeholder feedback process lasted for over three months between 15th April 2021 - 17th Aug 2021, no comments or feedback were received from the stakeholders.

As for the physical meeting, a local consultation meeting has been conducted in Salle Saint Dominique, 13ème rue, Commune de Kinshasa, quartier résidentiel, DRC on 18 May 2021. Several means were used to invite people. Individuals, who couldn't attend the local stakeholder consultation meeting, were able to comment on the non-technical summary of the program via mail, email or telephone. The stakeholders who didn't reply to the invitation were reminded on the meeting via telephone.

19 persons attended the physical meeting, and some of the consultations were completed through house-to-house communication, the other 30 persons filled in the evaluation form.

All the questions raised by the stakeholders during the consultation have been discussed with the participants and project developers and answered. Stakeholders were satisfied with the explanation. As no major negative comment has been suggested, no stakeholder mitigation measures have been reported. The stakeholder's comments did not lead to major changes in the project design; this is probably because the project has been designed in partnership with the local communities from the beginning.

Assessment of main questions from all consultations is as below:

Gender of Stakeholder	Stakeholder comment	Was comment taken into account (Yes/ No)?	Explanation (Why? How?)
Female	What are the guarantees that these cookstoves actually have all of these qualities such as durability, saving charcoal, no smoke emission, etc.?	Yes	These cookstoves are certified by the CERERK (Center d'Etude et de Recherches sur les Energies Renouvelable Kitsisa khonde) in Kinshasa, and have undergone tests that meet international standards, including the durability test, the boiling test, etc. In addition, the manufactory is part of the ACFCA (Congolese Alliance for improved cookstoves and fuels)
Female	How can we be sure that we are buying a cookstove from BISO NA BINO SARL and not another because we don't really see a difference	Yes	Our cookstoves are labeled with a unique serial number for each cookstove. This allows us to ensure the cookstoves are genuine, this also allows proper monitoring our cookstoves and possibly

	with these cookstoves of the competition.		deal with complaints and warranty services.
Female	Fireplaces should be protected from moisture	Yes	The exterior of the cookstove has a protective coating to metals to counteract corrosion, which ensures the lifespan of the cookstove. The cookstoves this project chooses to implement are BINO NA BINO SAL most popular product ranges, and its design is widely adopted by projects of similar kinds. Its insulated combustion chamber not only minimizes loss of heat to the surroundings, it also prevents water from accidently getting into the chamber. For end users who cook outside, they can cover the cookstove with a lid when not using it.

E.2. Final continuous input / grievance mechanism

Method	Include all details of Chosen Method (s) so that they may be understood and, where relevant, used by readers.
Continuous Input / Grievance Expression Process Book (mandatory)	Input and/or grievances are written on-site in an expression book, available at the office of WESD Capital Sprl DR Congo 4 avenue de la Justice, C/Gombe, Kinshasa
GS Contact (mandatory)	help@goldstandard.org
Other	0243 843 892 970
Internet/email access (optional)	georges@novoholding.net

The project developer declares the information above and the final methods were indicated for and agreed with stakeholders during the stakeholder consultation process. The project will setup a formal input, feedback and grievance mechanism with the purpose of providing stakeholders with an opportunity to submit any feedback or raise grievances during the entire project life.

SECTION F. **Eligibility and inclusion criteria for VPAs inclusion**

>>

No.	Eligibility Criterion	Description/ Required condition	Description of the VPA in relation to the criteria, means of Verification/Supporting evidence for inclusion
1	Geographic Boundary and target area	Associated regular VPAs should be within the geographical boundary of the real case VPA003.	Associated regular VPAs shall distribute project technology within Ngaliema Community in Kinshasa city, Congo (DRC). The address of end users in the Monitoring database should be located within this region.
2	No Double Counting	Associated regular VPAs shall provide a unique set of sales data and add to the monitoring database proving no double counting.	Monitoring database with unique end-user data, including: unique serial number and unique phone number (as available) and location etc. to make sure each end-user is identified. CME sign no double counting declaration for regular VPAs.
3	Exclusiveness of regular VPAs	Associated regular VPAs should neither have been registered as project activities with other offset Schemes.	Associated regular VPAs sign no double counting declaration. Confirmation by website search of carbon credit development projects in Ngaliema commune of DRC: 1. The regular VPA is not registered as an individual project activity. 2. The regular VPA is also not part of another registered VPA or PoA. Also, the proposed regular VPA is not a VPA that has been excluded from a registered PoA as a result of erroneous inclusion of VPAs.
4	Specifications of Technology /Measure	Associated regular VPAs shall promote dissemination of improved biomass ICS in real case VPA003. The project ICS combust biomass fuels more efficiently. Due to the higher thermal efficiency of the ICS relative to the traditional/baseline stoves,	Regular VPAs provide certified test results to prove the thermal efficiency of the project cookstoves offer thermal efficiency above the minimum requirement of 20%.

		the ICS reduce the amount of non-renewable biomass fuel required for meeting similar thermal energy needs. The rated thermal efficiency shall be at least 20%	
5	Start Date	Date on which the first ICS unit was implemented under the VPA. The start date of the associated regular VPAs shall be on or after the start date of the real case VPA003.	The start date of implementing ICS of the regular VPAs should be on or after 28/04/2021.
6	Applicability of the methodologies	Associated regular VPAs must follow TPDDTEC version 4.0, and the conditions include: a. The rated thermal efficiency shall be at least 20%. b. The technology shall have continuous useful energy output of less than 150kW per unit, etc. c. The individual households and institutions may be represented collectively by community organizations, etc., but do not individually act as project participants. d. The project developer must design incentive mechanism(s), which should be effective as fast as possible, for the elimination of inefficient baseline stoves that are replaced by the project cooking devices. e. To avoid double counting or double claiming. i. clearly communicate its ownership rights and intention of claiming the emission reductions to following parties by contract or clear written assertions in the transaction paperwork: all other project participants; project technology manufacturers; and retailers of the project technology or the renewable fuel in use; and	All the condition of the applicability should be provided to satisfy: a. the rated thermal efficiency is above 20% b. The ICS Specification show that the energy output is less than 150kw. c. The sales record from the individual households show they will not individually act as project participants d. The project developer has designed the incentive mechanism for the elimination of the replaced and inefficient baseline stoves. e. i. The implementer signs cook stoves purchase contract with the manufacturer, in which the manufacturer waived the carbon credit rights of the cookstoves. ii. end-users have been informed and declared to give up carbon rights related to the ICS in written forms. iii. regular VPAs do not belong to the other project in any voluntary market or CDM project. h. Regular VPAs have evidence that credibly reflect the baseline and project scenarios in respect of indoor air pollution have improved or not worsened.

		ii. inform and notify the end users that they cannot claim emission reductions from the project, and iii. exclude from the project activity, cooking devices included in any other voluntary market or CDM project activity/PoA, and strive not to displace the cooking device of another CDM or voluntary project/PoA. See data and parameters not monitored, Avoidance of double counting or double claiming with other mitigation actions, for details on this demonstration. h. Adequate evidence is supplied to demonstrate that indoor air pollution (IAP) levels are not worsened compared to the baseline.	
10	Target Group and Distribution Mechanism	Target Group: Households	Associated regular VPAs provide monitoring database and sales record to confirm ICS are distributed to residential customers.
12	SSC Threshold	Associated regular VPAs meet the small-scale thresholds and remain within those thresholds throughout the crediting period.	The regular VPAs provide evidences to confirm project ICSs annual energy savings is less than 180,000MWh(th).
13	Safeguarding assessment	Safeguarding assessment should be conduct at the real case VPA level.	Regular VPAs correspond to the real case VPA003 are not required to conduct Safeguarding assessment as it only needs to be conducted once for VPA that uses the same methodology, technology and have the same host country.
14	SDG outcomes	SDG impact assessment shall be conducted at each regular VPA level.	Regular VPAs correspond to the real case VPA003 should demonstrate meeting the required conditions of SDG outcomes.

15	Stakeholder consultation	Stakeholder consultation shall be conducted at the each regular VPA level	Regular VPAs correspond to the real case VPA003 should conduct SDG stakeholder consultation as required for VPAs

APPENDIX 1 - SAFEGUARDING PRINCIPLES ASSESSMENT

Complete the Assessment below and copy all Mitigation Measures for each Principle into SECTION D above. Please refer to the instructions in the Guide to Completing this Form below.

Assessment Questions/ Requirements	Justification of Relevance (Yes/potentially/no)	How Project will achieve Requirements through design, management or risk mitigation.	Mitigation Measures added to the Monitoring Plan (if required)
Principle 1. Human Rights			
1. The Project Developer and the Project shall respect internationally proclaimed human rights and shall not be complicit in violence or human rights abuses of	N/A	The VPA implementer will work in full respect of human rights and follow the laws of the Republic of Congo (DRC)[12]. The VPA003 will respect internationally proclaimed human rights and will not be complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights. The VPA003 will not discriminate with regards to participation and inclusion. The VPA003 will respect internationally proclaimed human rights and will not be complicit in violence or human rights abuses of any	N/A

[12] https://www.state.gov/reports/2019-country-reports-on-human-rights-practices/republic-of-the-congo/

any kind as defined in the Universal Declaration of Human Rights 2. The Project shall not discriminate with regards to participation and inclusion		kind as defined in the Universal Declaration of Human Rights. The VPA003 will not discriminate with regards to participation and inclusion. The project will not discriminate with regards to participation and inclusion as the ICS can be purchased and use by everybody within the project boundary willing to participate. DRC have also ratified many UN Human Rights Conventions and have made binding international commitments to adhere to the standards laid down in these universal human rights documents[13]. The project adhere to DRC law which prohibits discrimination in employment and occupation based on race, gender, language, or social status.	
Principle 2. Gender Equality			
1. The Project shall not directly or	N/A	The hiring process is performed in equal conditions for both men and women. Out of the 10 employment positions this project	N/A

[13] http://www.claiminghumanrights.org/drcongo.html
https://www.privacyshield.gov/article?id=Congo-Democratic-Republic-Labor-Policies-Practices
http://www.claiminghumanrights.org/drcongo.html

indirectly lead to/contribute to adverse impacts on gender equality and/or the situation of women 2. Projects shall apply the principles of non-discrimination, equal treatment, and equal pay for equal work 3. The Project shall refer to the country's national gender strategy or equivalent national commitment to aid in assessing gender risks 4. (where required) Summary of opinions and recommendations of an Expert Stakeholder(s)		created, 7 are filled by women. The project also ensures employees receive equal treatment and pay for equal value of work, regardless of their gender. Employment contracts are written and signed following this principle. The project implementation in communities consist in providing the community improved cookstoves, which will allow to improve the livelihoods of the families of the participant households. The women of such families will be direct beneficiaries by means of the use of the improved cookstoves, nonetheless this does not represent social isolation for men. Since cooking and cooking fuel collection usually are performed by women in DRC, the VPA003 on the contrary diminish the work load of women. Using ICS compares to the traditional cookstove result in 51% energy efficiency improvement. The time that is saved in cooking and cooking fuel collection can be invested in activities that generate an additional income for the families. The project is not involved in any activity that leads to slavery, imprisonment, physical and mental drudgery, punishment or coercion of women and girls. The project has a gender focus that aims towards guaranteeing the rights of women and socially-vulnerable groups. None of the project activities restrict women's rights to access economic or material resources. The project activities do not limit the access to men neither women, on the contrary, it provides direct and indirect employment opportunities. The participation in the project is voluntary. In VPA003, there is no Expert Stakeholder needed.	

Principle 3. Community Health, Safety and Working Conditions			
1. The Project shall avoid community exposure to increased health risks and shall not adversely affect the health of the workers and the community	N/A	The VPA will reduce exposure to indoor air pollutants and smoke levels, further reducing incidence of respiratory illness compared to cooking on traditional biomass stoves using solid biomass fuel.	N/A
Principle 4.1 Sites of Cultural and Historical Heritage			
Does the Project Area include sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture?	No.	The Project Area will not include sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture.	N/A
>>			
Principle 4.2 Forced Eviction and Displacement			
Does the Project require or cause the physical or economic relocation of peoples (temporary or permanent, full or partial)?	No.	VPA will not cause the physical or economic relocation of peoples.	N/A

>>			
Principle 4.3 Land Tenure and Other Rights			
a. Does the Project require any change, or have any uncertainties related to land tenure arrangements and/or access rights, usage rights or land ownership? b. For Projects involving land use tenure, are there any uncertainties with regards to land tenure, access rights, usage rights or land ownership?	No.	Don't involve land tenure.	N/A
>>			
Principle 4.4 - Indigenous people			
Are indigenous peoples present in or within the area of influence of the Project and/or is the Project located on land/territory claimed by indigenous peoples?	No.	No indigenous peoples present in the project boundary or are influenced by the project.	N/A
>>			
Principle 5. Corruption			

1. The Project shall not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt Projects	N/A	VPA will be run under the laws of Congo (DRC). Implementer employees follow a very strict code of conduct which discourage corrupt acts. The VPA does not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt Projects. The CME does not promote / or is complicit in direct or indirect corruption.	N/A
Principle 6.1 Labour Rights			
1. The Project Developer shall ensure that all employment is in compliance with national labour occupational health and safety laws and with the principles and standards embodied in the	N/A	The VPA will not involve any forced labour and the CME/VPA Implementer ensures that all employment is in compliance with local labour occupational health and safety laws and with the principles and standards laid down in the ILO fundamental conventions laws[14]. The CME's policies and employment contracts are documented in written form and compliant to the requirements specified under this section, including but not limited to: minimum wages; no constraints on employees to form or join a union; maximum working hours; health insurance; annual leave entitlement etc. The CME will not promote / or is complicit in any form of forced labour or child labour.	N/A

[14] https://www.ilo.org/dyn/natlex/natlex4.countrySubjects?p_lang=en&p_country=COG

ILO fundamental conventions 2. Workers shall be able to establish and join labour organisations 3. Working agreements with all individual workers shall be documented and implemented and include: a) Working hours (must not exceed 48 hours per week on a regular basis), AND b) Duties and tasks, AND c) Remuneration (must include provision for payment of overtime), AND d) Modalities on health insurance, AND		Labour conditions for workers are safe. All the works will be performed using appropriate equipment, and training is provided to workers before undertaking a task. Protocols have been set up to ensure reporting of accidents and incidents, and emergency preparedness and response measures.	

e) Modalities on termination of the contract with provision for voluntary resignation by employee, AND f) Provision for annual leave of not less than 10 days per year, not including sick and casual leave. 4. No child labour is allowed (Exceptions for children working on their families' property requires an Expert Stakeholder opinion) 5. The Project Developer shall ensure the use of appropriate equipment, training of			

workers, documentation and reporting of accidents and incidents, and emergency preparedness and response measures			
Principle 6.2 Negative Economic Consequences			
1. Does the project cause negative economic consequences during and after project implementation?	No.	The use of the efficient cookstoves is accessible to everybody and therefore the project benefits can be considered socially-inclusive. The project will not impose negative economic consequences to the communities and families that are involved. On the contrary, they will have additional financial savings related to the reduction of the biomass consumption, time reduction in cooking and fuel collection. The families can trade in their old traditional stove for purchasing the ICS, it acts as an economic incentive to encourage usage of the new stove as well as reduce the cost to replace the cooking stove. Project activity related costs are covered by the sales of the Improved Cook Stoves and the sale of the carbon credits, which guarantees its financial sustainability. Hence, the project causes no negative economic consequences.	N/A
>>			
Principle 7.1 Emissions			
Will the Project increase greenhouse gas	No.	The VPA will reduce GHG emissions relative to baseline scenario.	N/A

emissions over the Baseline Scenario? >>			
Principle 7.2 Energy Supply			
Will the Project use energy from a local grid or power supply (i.e., not connected to a national or regional grid) or fuel resource (such as woody biomass) that provides for other local users? >>	No.	Due to the higher thermal efficiency of the ICS relative to the traditional/baseline stoves, the ICS reduce the amount of non-renewable biomass fuel required for meeting similar thermal energy needs. In the absence of the VPA, inefficient traditional would have been used for cooking. Thus, replacement of the baseline inefficient stoves with project ICS shall reduce non-renewable biomass fuel consumption. The VPA will not affect the availability and reliability of energy supply to other users.	N/A
Principle 8.1 Impact on Natural Water Patterns/Flows			
Will the Project affect the natural or pre-existing pattern of watercourses, ground-water and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?	No.	The VPA will have no negative impact on natural water patterns or flows. The installation of cookstoves cannot affect watercourses, ground-water and/or the watershed(s). In addition, the preservation forest areas due to the reduced demand on woody biomass-based combustible could even have a positive impact on the quality of surface water.	N/A

>>			
Principle 8.2 Erosion and/or Water Body Instability			
a. Could the Project directly or indirectly cause additional erosion and/or water body instability or disrupt the natural pattern of erosion? b. Is the Project's area of influence susceptible to excessive erosion and/or water body instability?	No.	The project has nothing to do with erosion and/or water body instability.	N/A
>>			
Principle 9.1 Landscape Modification and Soil			
Does the Project involve the use of land and soil for production of crops or other products?	No.	The VPA does not involve the use of land and soil.	N/A
>>			
Principle 9.2 Vulnerability to Natural Disaster			
Will the Project be susceptible to or lead to increased vulnerability	No.	The project will not be susceptible to or lead to increased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions	N/A

to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions?			
>>			
Principle 9.3 Genetic Resources			
Could the Project be negatively impacted by or involve genetically modified organisms or GMOs (e.g., contamination, collection and/or harvesting, commercial development, or take place in facilities or farms that include GMOs in their processes and production)?	No.	The Project will not be negatively impacted by or involve genetically modified organisms or GMOs	N/A
>>			
Principle 9.4 Release of pollutants			

Could the Project potentially result in the release of pollutants to the environment?	No.	The project ICS combust biomass fuels more efficiently, reducing Particulate Matter (PM) emissions, thus improving the indoor air quality in project households.	N/A
>>			
Principle 9.5 Hazardous and Non-hazardous Waste			
Will the Project involve the manufacture, trade, release, and/ or use of hazardous and non-hazardous chemicals and/or materials?	Potentially.	This VPA does not involve using or releasing hazardous materials. But it may unavoidably generate non-hazardous rubbish like iron, steel or ceramics. These are materials used to make those cookstoves; if they break and cannot be recovered, we anticipate they will be disposed by end users households or the manufacturer in a manner that is appropriate to local waste collection system. No emissions should be generated from disposing those waste materials.	N/A
>>			
Principle 9.6 Pesticides & Fertilisers			
Will the Project involve the application of pesticides and/or fertilisers?	No.	The VPA does not involve the application of pesticides and/or fertilisers	N/A
>>			
Principle 9.7 Harvesting of Forests			
Will the Project involve the harvesting of forests?	No.	The VPA does not involve harvesting of forests.	N/A
>>			

Principle 9.8 Food			
Does the Project modify the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	No.	The project does not modify the quantity or nutritional quality of food available. The quality of the food is increased using ICS because the emitted particulate matter generated by charcoal consumption in the kitchen is reduced, therefore the number of ashes and other particles from inefficient combustion have a less likely to enter in contact with the food, and consequently be inhaled and/or ingested.	N/A
>>			
Principle 9.9 Animal husbandry			
Will the Project involve animal husbandry?	No.	This project does not involve animal husbandry.	N/A
>>			
Principle 9.10 High Conservation Value Areas and Critical Habitats			
Does the Project physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified?	No.	This does not apply to the VPA.	N/A
>>			
Principle 9.11 Endangered Species			

a. Are there any endangered species identified as potentially being present within the Project boundary (including those that may route through the area)? b. Does the Project potentially impact other areas where endangered species may be present through transboundary affects?	No.	VPA does not involve in activities that may impact endangered species.	N/A
>>			

APPENDIX 2- CONTACT INFORMATION OF VPA IMPLEMENTER

Organization name	WESD Capital Sprl
Registration number with relevant authority	-
Street/P.O. Box	4 avenue de la Justice, C/Gombe,
Building	2nd floor DGDP Building
City	Kinshasa
State/Region	-
Postcode	-
Country	Democratic Republic of the Congo
Telephone	00243 843 892 970
E-mail	gbakaly@wesdcapital.cd
Website	-
Contact person	Georges Bakaly Sembé
Title	Representative
Salutation	Mr.
Last name	Sembé
Middle name	Bakaly
First name	Georges
Department	-
Mobile	-
Direct tel.	-
Personal e-mail	bsembe79@gmail.com

APPENDIX 3- LUF ADDITIONAL INFORMATION

Risk of change to the Project Area during Project Certification Period:	N/A
Risk of change to the Project activities during Project Certification Period:	N/A
Land-use history and current status of Project Area:	N/A
Socio-Economic history:	N/A
Forest management applied (past and future)	N/A
Forest characteristics (including main tree species planted)	N/A
Main social impacts (risks and benefits)	N/A
Main environmental impacts (risks and benefits)	N/A
Financial structure	N/A
Infrastructure (roads/houses etc):	N/A
Water bodies:	N/A
Sites with special significance for indigenous people and local communities - resulting from the Stakeholder Consultation:	N/A
Where indigenous people and local communities are situated:	N/A
Where indigenous people and local communities have legal rights, customary rights or sites with special cultural, ecological, economic, religious or spiritual significance:	N/A

APPENDIX 4-SUMMARY OF APPROVED DESIGN CHANGES

Please refer to Design Changes Requirements for more information on procedures governing Design Changes

Revision History

Version	Date	Remarks
2.0	4 May 2022	
1.1	7 October 2020	Hyperlinked section summary to enable quick access to key sections Improved clarity on Key Project Information Inclusion criteria table added Gender sensitive requirements added Prior consideration (1 yr rule) and Ongoing Financial Need added Safeguard Principles Assessment as annex and a new section to include applicable safeguards for clarity Improved Clarity on SDG contribution/SDG Impact term used throughout Clarity on Stakeholder Consultation information required Provision of an accompanying Guide to help the user understand detailed rules and requirements
1.0	10 July 2017	Initial adoption