Gold Standard®

Gold Standard for the Global Goals
Transition Annex
(To be used by all GS CDM/VER stand alone projects and PoAs, Micro Scale stand alone projects and Micro PoAs)

Version 1 – September 2017

Gold Standard

KEY PROJECT INFORMATION

Title of Project/PoA/Activity:	Sustainable Energy for Development Programme of Activities
GS ID of the project/PoA/activity:	GS 1205
GS Version:	2.1
Brief description of Project:	The PoA aims at promoting technologies that will improved the well-being of poor population. The activities under the proposed PoA will promote Improved Cook-Stoves (ICS) that result in reduced fuel consumption due to cooking and water heating in homes. The ICS used in this PoA have characteristics that improve the efficiency of combustion and thermal transfer to the pot compared with a traditional pot support or three-stone fire.
Project type: Energy/Land Use	Energy
For Renewable Energy Projects – intention to apply RECs Labels (y/n)	No
GS Stream (CDM/VER):	GS VER
Scale (large/scale/micro):	Micro-scale
GS Registration Date:	25/07/2016
GS Crediting period start date:	01/08/2014
CDM Registration Date:	-
CDM Crediting period start date:	-
Project Developer:	Initiative Developpement (ID)
Project Representative:	Initiative Developpement (ID)
Project Participants and any communities involved:	-
Host Country/Location:	Mali, Benin, Togo, Madagascar, Comoros, Chad, Republic of Congo (Brazzaville), Haiti.
Methodologies applied:	
SDG Impacts:	SDG 3 – Good health and well-being SDG7 – Access to sustainable energy SDG 8 – Decent work and economic growth SDG 13 – Climate Action
Estimated amount of SDG Impact (GSVERs and others)	SDG 13 – 10,000 VER'/year

SECTION A Sustainable Development Goals (SDG) outcomes

A.1 Relevant target for each of the three SDGs

The following SDG contributions were identified for the programme activity (PoA DD). They will be monitored and reported for each of the included VPA in the registered VPA, during each verification period of the project activity.

- **SDG 3** : Ensure healthy lives and promote well-being for all at all ages
  - By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
    - SDG Indicator - 3.9.1 Mortality rate attributed to household and ambient air pollution

- **SDG 7:** Ensure access to affordable, reliable, sustainable and modern energy for all
  - By 2030, ensure universal access to affordable, reliable and modern energy services
    - SDG Indicator - 7.1.2 Proportion of population with primary reliance on clean fuels and technology (improved cookstoves).

- **SDG 8** – Decent work and economic growth
  - Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services services
    - SDG Indicator - 8.3.1 Proportion of informal employment in non-agriculture employment, by sex

- **SDG 13** – Take urgent action to combat climate change and its impacts
  - Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
    - SDG Indicator – total CO_2 emission reductions

A.2 Explanation of methodological choices/approaches for estimating the SDG outcome

For the SDG 13 : a step by step approach has been explained in the registered PoA document, please refer the document 'GS1205_PoADD_Sustainable_Energy_for_Development_2014_02_23', page 24. For each VPA, the calculations for the SDG 13 will be provided in each respective monitoring report.

For the remaining SDG's related to the VPA's included in the present PoA, the approach for calculated the project outcome are explained the the section C.1 below.

A.3 Data and parameters fixed ex ante for monitoring contribution to each of the three SDGs

(Include a compilation of information on the data and parameters that are not monitored during the crediting period but are determined before the design certification and remain fixed throughout the crediting period like IPCC defaults and other methodology defaults. Copy this table for each piece of data and parameter.)

Relevant SDG Indicator	SDG 13
Data/parameter	**EF_{b,CO_2}**
Unit	tCO2/TJ or tCO2/t_fuel
Description	CO2emission factor arising from use of fuels in baseline scenario
Source of data	IPCC 2006 Vol2 Chap1 Table 1.4
Value(s) applied	$EF_{firewood,CO_2}$= 112 tCO2/TJ ; EF_{coal, CO_2}= 94.6 tCO2/TJ ; $EF_{charcoal}$ = 487.2 tCO2/TJ
Choice of data or Measurement methods and procedures	For firewood and coal, the IPCC 2006 (Vol 2, Chap 1, Table 1.4) data have been applied. For charcoal, in accordance with the methodology, the value has been estimated by multiplying the firewood Emission Factor a default charcoal to firewood ratio of 4.35 kg of firewood/kg of charcoal (derived from FOA data). Whenever possible a firewood/charcoal ration from a local credible source should be used instead of this default value.
Purpose of data	Emission reduction calculations
Additional comment	If EF is in units of tCO2/t_fuel, remove NCV term from emission calculations. Term can include a combination of emission factors from fuel production, transport, and use.

Relevant SDG Indicator	SDG 13
Data/parameter	**$EF_{b,nonCO_2}$**
Unit	tCO2/TJ or tCO2/t_fuel
Description	Non-CO2 emission factor arising from use of fuels in baseline scenario
Source of data	IPCC 2006 Vol2 Chap 2 Table 2.9 and latest GWP of CH_4 and N2O
Value(s) applied	$EF_{fw,nonCO_2}$= 34.0 tCO2/TJ ; $EF_{coal,nonCO_2}$= 36.5 tCO2/TJ $EF_{charcoal,nonCO_2}$ = 147.7 tCO2/TJ
Choice of data or Measurement methods and procedures	For firewood and coal, the IPCC 2006 (Vol 2, Chap 2, Table 2.9) data have been applied and multiplied by latest GWP data (GWPCH_4= 25 and GWP N2O= 298) For charcoal, in accordance with the methodology, the value has been estimated by multiplying the firewood Emission Factor a default charcoal to firewood ratio of 4.35 kg of firewood/kg of charcoal (derived from FOA data). Whenever possible a firewood/charcoal ration from a local credible source should be used instead of this default value.
Purpose of data	Emission reduction calculations

Additional comment	If EF is in units of tCO_2/t_fuel, remove NCV term from emission calculations. Term can include a combination of emission factors from fuel production, transport, and use.

Relevant SDG Indicator	SDG 13
Data/parameter	**$EF_{p,CO2}$**
Unit	tCO2/TJ or tCO2/t_fuel
Description	CO2 emission factor arising from use of fuels in project scenario
Source of data	IPCC 2006 Vol2 Chap1 Table 1.4
Value(s) applied	$EF_{firewood,CO2}$= 112 tCO2/TJ ; $EF_{coal,CO2}$= 94.6 tCO2/TJ ; $EF_{charcoal}$ = 501 tCO2/TJ
Choice of data or Measurement methods and procedures	For firewood and coal, the IPCC 2006 (Vol 2, Chap 1, Table 1.4) data have been applied. For charcoal, in accordance with the methodology, the value has been estimated by multiplying the firewood Emission Factor a default charcoal to firewood ratio of 4.48 kg of firewood/kg of charcoal (derived from FOA data). Whenever possible a firewood/charcoal ration from a local credible source should be used instead of this default value.
Purpose of data	Emission reduction calculations
Additional comment	If EF is in units of tCO_2/t_fuel, remove NCV term from emission calculations. Term can include a combination of emission factors from fuel production, transport, and use.

Relevant SDG Indicator	SDG 13
Data/parameter	**$EF_{p,\ nonCO2}$**
Unit	tCO2/TJ or tCO2/t_fuel
Description	Non-CO2 emission factor arising from use of fuels in project scenario
Source of data	IPCC 2006 Vol2 Chap 2 Table 2.9 and latest GWP of CH4 and N2O (WGI AR5 2013 Table 8A.1 p.8-88)
Value(s) applied	$EF_{fw,nonCO2}$= 37 tCO2/TJ ; $EF_{coal,nonCO2}$= 41 tCO2/TJ $EF_{charcoal,nonCO2}$ = 162.1 tCO2/TJ
Choice of data or Measurement methods and procedures	For firewood and coal, the IPCC 2006 (Vol 2, Chap 2, Table 2.9) data have been applied and multiplied by latest GWP data (GWPCH4= 28 and GWP N2O= 265) For charcoal, in accordance with the methodology, the value has been estimated by multiplying the firewood Emission Factor a default charcoal to firewood ratio of 4.35 kg of firewood/kg of charcoal (derived from FOA data). Whenever possible a firewood/charcoal ration from a local credible source should be used instead of this default value.
Purpose of data	Emission reduction calculations

Additional comment	Term can include a combination of emission factors from fuel production, transport, and use.

Relevant SDG Indicator	SDG 13
Data/parameter	**NCV_b**
Unit	TJ/ton
Description	Net calorific value of the fuels used in the baseline
Source of data	IPCC 2006 Vol 2, Chap 1, Table 1.2
Value(s) applied	NCV_{fw} = 0.0156 TJ/ton ; NCV_{coal} = 0.0267 TJ/ton ; $NCV_{charcoal}$ = 0.039.5 TJ/ton
Choice of data or Measurement methods and procedures	These values are taken from IPCC Guidelines 2006 Vol 2, Chap 1, Table 1.2
Purpose of data	Emission reduction calculations
Additional comment	If EF is in units of tCO2/t_fuel, remove NCV term from emission calculations.

Relevant SDG Indicator	SDG 13
Data/parameter	**NCV_p**
Unit	TJ/ton
Description	Net calorific value of the fuels used in the project
Source of data	IPCC 2006 Vol 2, Chap 1, Table 1.2
Value(s) applied	NCV_{fw} = 0.0156 TJ/ton ; NCV_{coal} = 0.0267 TJ/ton ; $NCV_{charcoal}$ = 0.039.5 TJ/ton
Choice of data or Measurement methods and procedures	These values are taken from IPCC Guidelines 2006 Vol 2, Chap 1, Table 1.2
Purpose of data	Emission reduction calculations
Additional comment	If EF is in units of tCO2/t_fuel, remove NCV term from emission calculations.

SECTION B Safeguarding Principles Assessment

B.1 Analysis of social, economic and environmental impacts

Safeguarding principles	Assessment questions	Assessment of relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)
3.2 Gender Equality and Women's Rights	a. Is there a possibility that the Project might reduce or put at risk women's access to or control of resources, entitlements and benefits?	No	a. The proposed project activity does not put at risk women's access to or control of resources, entitlements and benefits. This project promotes the use of the improved cookstoves replacing the inefficient traditional biomass/charcoal stoves.	None
	b. Is there a possibility that the Project can adversely affect men and women in marginalised or vulnerable communities (e.g., potential increased burden on women or social isolation of men)?		b. No, the project does not adversely affect neither men nor women in the marginalised or vulnerable situation. On the contrary, the project promotes improved cookstoves, and also ensures decent work opportunities (improved cookstoves manufacturing) for marginalized people.	
	c. Is there a possibility that the Project might not take into account gender roles and the abilities of women or men to participate in the decisions/designs of the project's activities? d. Does the Project take into account gender		c. The project does not involve discrimination based on gender , since the project employees are hired with no consideration over the gender. d. The project includes both men and women as part of	

	roles and the abilities of women or men to benefit from the Project's activities (e.g., Does the project criteria ensure that it includes minority groups or landless peoples)?		the staff members of the project. The project does not exclude any minority groups or landless people. On the other end, due to the project, skilled jobs are also created for such minority groups, who already have expertise to manufacture the project improved stoves.	
	e. Does the Project design contribute to an increase in women's workload that adds to their care responsibilities or that prevents them from engaging in other activities?		e. The project has led to job creations and women also take part in promoting the improved cookstoves through various local women groups. This project contributes to empower women.	
	f. Would the Project potentially reproduce or further deepen discrimination against women based on gender, for instance, regarding their full participation in design and implementation or access to opportunities and benefits?		f. No, the project does not produce any kind of discrimination against the women based on gender. The project team management are composed of both men and women.	
	g. Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and priorities of women and men in accessing and managing environmental goods and services?		g. The project doesn't involve exploitation of natural ressources.	
	h. Is there a likelihood that the proposed		h. The project does include any kind of activity that would	

	Project would expose women and girls to further risks or hazards?		expose women and girls to any kind of risks or hazards.	
3.4.3 Land Tenure and Other Rights	a. Does the Project require any change to land tenure arrangements and/or other rights?	No	No the project activity does not require any change to land tenure agreements or other rights.	None
3.6.2 Negative Economic Consequences	1. The Project Developer shall demonstrate the financial sustainability of the Projects implemented, also including those that will occur beyond the Project Certification period. 2. The Projects shall consider economic impacts and demonstrate a consideration of potential risks to the local economy and how these have been taken into account in Project design, implementation, operation and after the Project. Particular focus shall be given to vulnerable and marginalised social groups in targeted communities and that benefits are socially-inclusive and sustainable.	No	The project activity has been financed through donations, grants and carbon revenues. Also, the local artisans are trained through the project to manufacture the improved stoves. Therefore, the project will continue to be produced by the local artisans beyond the project certification period. The project will contribute to the local economy. It will have positive impact on local employment since local artisans are trained through the project to manufacture the improved stoves, creating local employment and which will eventually lead to economic positive impacts.	None
4.1.1 Emissions	Will the Project increase greenhouse gas emissions over the Baseline Scenario?	No	No the project will not increase the GHG's emissions, infact due to the use of the improved cookstoves, it will	None

			decrease the wood/charcoal demand for daily cooking needs.	
4.1.2 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 wood, biomass) that provides for other local users?	No	The project activity does not involves energy use from a local grid, therefore will not affect the local users connected on the same grid.	None
4.2.1 Impact on natural water patterns and flow	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 project is not related to existing pattern of watercourses.	None
4.2.1 Erosion and/or water body stability	Could the Project directly or indirectly cause additional erosion and/or water body instability or disrupt the natural pattern of erosion? If 'Yes' or 'Potentially' proceed to question 2. 2. Is the Project's area of influence susceptible to excessive erosion and/or water body instability?	No	The project is not related directly or indirectly to any activity which would cause additional erosion and/or water body instability or disrupt the natural pattern of erosion.	None
4.2.3 Landscapte modification and soil	Does the Project involve the use of land and soil for production of crops or other products?	No	No, the project does not involve the use of land and soil for production of crops.	None
4.3.2 Vulnerability to Natural Disaster	Will the Project be susceptible to or lead to increased vulnerability to wind, earthquakes, subsidence, landslides,	No	No, the Project does have involve any activity that would be susceptible to or lead to increased vulnerability to wind, earthquakes,	None

	erosion, flooding, drought or other extreme climatic conditions?		subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions.	
4.3.3 Genetic Resources	Could the Project be negatively impacted by the use of genetically modified organisms or GMOs (e.g., contamination, collection and/or harvesting, commercial development)?	No	The project doesn't involve the use of genetically modified organisms or GMOs.	None
4.3.4 Release of pollutants	Could the Project potentially result in the release of pollutants to the environment?	No	The project doesn't involve in the release of pollutants to the environment	None
4.3.5 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?	No	The project doesn't involve a the manufacture, trade, release, and/ or use of hazardous and non-hazardous chemicals and/or materials	None
4.3.6 Pesticides and fertilizers	Will the Project involve the application of pesticides and/or fertilisers?	No	The project does not involve the application of pesticides and / or checmical fertilisers.	None
4.3.7 Harvesting of forests	Will the Project involve the harvesting of forests?	NO	The project does not involve any kind of harvesting of forests.	None
4.3.8 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 such as through crop regime alteration or export or economic incentives.	None
4.3.9 Animal Husbandry	Will the Project involve animal husbandry?	NO	No animals are involved in the project.	None

SECTION C Monitoring plan

C.1 Data and parameters to be monitored

Relevant SDG Indicator/Safeguarding Principle	**SDG 3 –** Ensure healthy lives and promote well-being for all at all ages 3.9.1 Mortality rate attributed to household and ambient air pollution
Data / Parameter	Reduction in household air pollution
Unit	%
Description	The project activity will provide the proportion of the project households using the improved cookstoves and therefore benefiting from a clean indoor environment while cooking and reduction in fire related accidents while cooking.
Source of data	Project Database
Value(s) applied	-
Measurement methods and procedures	The data related to the above parameter will be provided with the reponses received from each household participating in the annual monitoring surveys. This indicator will be assessed by asking each project beneficiary if they have less respiratory and other health problems due to the use the improved cookstoves.
Monitoring frequency	Annualy
QA/QC procedures	The monitoring data will be cross-checked by the project manager to assure that there are data errors while recording the beneficiary responses.
Purpose of data	Monitoring SDG net benefits
Additional comment	The project database is continuously updated with each new sale of the improved cookstove.

Relevant SDG Indicator/Safeguarding Principle	**SDG 7 –** Ensure access to affordable, reliable, sustainable and modern energy for all 7.1.2 Proportion of population with primary reliance on clean fuels and technology (improved cookstoves).
Data / Parameter	Number of households
Unit	%
Description	The project activity will provide the proportion of the project households using the improved cookstoves and therefore having access to the improved cookstoves technology.
Source of data	Project Database
Value(s) applied	-
Measurement methods and procedures	The ID team has established a detailed sales record database. Each improved cook-stove has been allocated a unique identification number to avoid double counting. In accordance with the methodology monitoring requirements the sales record database is maintained and continuously updated with the relevant information such : sale date, place, name of customer, stove serial number, receipt number, size of the stove sold, intended usage (domestic/commercial).
Monitoring frequency	Annualy

QA/QC procedures	The database is cross-checked by the ID Country manager to assure that no stove is double counted. The sales receipt with incomplete are not taken into account in the emission reduction calculations
Purpose of data	Monitoring SDG net benefits
Additional comment	The project database is continuously updated with each new sale of the improved cookstove.

Relevant SDG Indicator/Safeguarding Principle	**SDG 8 – Decent work and economic growth** 8.3.1 Proportion of informal employment in non-agriculture employment
Data / Parameter	Number
Unit	Total number of employement created by the project activity
Description	The project activity has provided local jobs, both the full time staff and part-time staff required for the project surveys
Source of data	Employement contracts
Value(s) applied	-
Measurement methods and procedures	Work contracts, project database etc
Monitoring frequency	Annually
QA/QC procedures	The ID team has established a detailed database,with details like the total number of people employed due to the project activity.
Purpose of data	Monitoring SDG net benefits
Additional comment	The project database is continuously updated each year.

Relevant SDG Indicator/Safeguarding Principle	SDG 13 – Climate Action
Data / Parameter	$f_{NRB,i,y}$
Unit	Fractional non-renewability
Description	Non-renewability status of woody biomass fuel in scenario i during year y
Source of data	Applicable NRB data
Value(s) applied	
Measurement methods and procedures	Fixed by baseline study for a given crediting period, updated if necessary as specified in the methodology
Monitoring frequency	Rechecked and updated regularly
QA/QC procedures	Transparent data analysis and reporting
Purpose of data	Emission reduction calculations
Additional comment	

Relevant SDG Indicator/Safeguarding Principle	SDG 13 – Climate Action

Data / Parameter	**$P_{b,y}$**
Unit	kg/household-day, kg/person-meal, etc.
Description	Quantity of fuel that is consumed in baseline scenario b during year y
Source of data	Baseline FT, baseline FT updates, and any applicable adjustment factors
Value(s) applied	
Measurement methods and procedures	Updated every two years, or more frequently
Monitoring frequency	In this section the project participants shall provide description of equipment used for measurement, if applicable, and its accuracy class.
QA/QC procedures	Transparent data analysis and reporting
Purpose of data	Emission reduction calculations
Additional comment	A single baseline fuel consumption parameter is weighted to be representative of baseline technologies being compared for project crediting

Relevant SDG Indicator/Safeguarding Principle	SDG 13 – Climate Action
Data / Parameter	**$P_{p,y}$**
Unit	kg/household-day, kg/person-meal, etc.
Description	Quantity of fuel that is consumed in project scenario p during year y
Source of data	Total sales record, Project FT, project FT updates, and any applicable adjustment factors
Value(s) applied	
Measurement methods and procedures	Updated every two years, or more frequently
Monitoring frequency	In this section the project participants shall provide description of equipment used for measurement, if applicable, and its accuracy class.
QA/QC procedures	Transparent data analysis and reporting
Purpose of data	Emission reduction calculations
Additional comment	A single project fuel consumption parameter is weighted to be representative of the quantity of project technologies of each age being credited in a given project scenario

Relevant SDG Indicator/Safeguarding Principle	SDG 13 – Climate Action
Data / Parameter	**$U_{p,y}$**
Unit	Percentage
Description	Usage rate in project scenario p during year y
Source of data	Annual usage survey
Value(s) applied	

Measurement methods and procedures	Annual or more frequently, in all cases on time for any request for issuance
Monitoring frequency	In this section the project participants shall provide description of equipment used for measurement, if applicable, and its accuracy class.
QA/QC procedures	Transparent data analysis and reporting
Purpose of data	Emission reduction calculations
Additional comment	A single usage parameter is weighted to be representative of the quantity of project technologies of each age being credited in a given project scenario.

Relevant SDG Indicator/Safeguarding Principle	SDG 13 – Climate Action
Data / Parameter	$N_{p,y}$
Unit	Project technologies credited (units)
Description	Technologies in the project database for project scenario p through year y
Source of data	Total sales record
Value(s) applied	
Measurement methods and procedures	Continuous
Monitoring frequency	In this section the project participants shall provide description of equipment used for measurement, if applicable, and its accuracy class.
QA/QC procedures	Transparent data analysis and reporting
Purpose of data	Emission reduction calculations
Additional comment	The total sales record is divided based on project scenario to create the project database

C.1.1 Other elements of monitoring plan (if applicable)

>>

SECTION D Duration and crediting period

D.1 Duration of project

D.1.1 Start date of project

01/04/2011 (Registered PoA)

D.1.2 Expected operational lifetime of project

28 years (length of the PoA)

D.1 GS Crediting period of the project/activity

D.2.1 Start date of the ongoing GS crediting period

01/01/2017

D.2.3 End date of the ongoing GS crediting period

31/12/2018

D.2.3 Total length of the GS crediting periods

10 years

SECTION E Stacking of new assets

>> (If project is looking to stack new assets over GSVERs the required information to demonstrate compliance to the relevant methodology, product specification and additionality shall be presented in the new PDD template launched with GS4GG)

Appendix 1. Contact information of project participants

Organization name	Initiative Developpement
Registration number with relevant authority	
Street/P.O. Box	29 Rue Ladmirault
Building	
City	Poitiers
State/Region	
Postcode	86000
Country	France
Telephone	+33 (0)5 49 60 32 21
Fax	
E-mail	carbone@id-ong.org; g.coudray@id-ong.org
Website	http://www.id-ong.org/
Contact person	
Title	Director - Finance
Salutation	Mr
Last name	COUDRAY
Middle name	
First name	Guillaume
Department	Finance
Mobile	+33 (0)5 49 60 32 21
Direct fax	
Direct tel.	+33 (0)5 49 60 32 21
Personal e-mail	g.coudray@id-ong.org