

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

**ANNEX AO – THE GOLD STANDARD MICRO-PROGRAMME ACTIVITY DESIGN
DOCUMENT TEMPLATE (VPA-DD)**

GS 1220 Ecological Stoves for Better Living – Microscale PoA – VPA1 Bolivia

GS1221: VPA1 Rocket Bolivia I



CONTENTS

- A. General description of micro-programme activity (VPA)
- B. Eligibility of VPA and Estimation of Emission Reductions
- C. Stakeholder comments

Annexes

Annex 1: Contact information on entity/individual responsible for the VPA

Annex 2: Information regarding public funding

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

SECTION A. General description of micro-programme activity (VPA)

A.1. Title of the micro-scale VPA:

GS 1220 Ecological Stoves for Better Living – Microscale PoA – VPA 1 Bolivia

A.2. Description of the micro-scale VPA:

This micro-scale VPA (GS 1221) in Bolivia is the first activity of the ‘Ecological Stoves for Better Living – Micro Scale PoA’ (GS 1220) in Bolivia and Paraguay. The main objective of the program is *holistic environmental well-being*¹. In keeping with that concept; this VPA concerns the distribution of high efficient rocket stoves in Bolivia. This activity is designed to generate GS VERs during a fixed 10-year Gold Standard (GS) crediting life cycle by installing and monitoring around **2,500 domestic stoves and 200 institutional/commercial rocket stoves** in areas designated as qualified² populations in the country of Bolivia by the Coordination Managing Entity (CME) CEDESOL. Without carbon finance obtained in association with Foundation *myclimate* our beneficiaries would not be able to access the program and receive the education and cooking devices.

Due to the current practices, almost negligible voluntary uptake of improved cooking devices³ and high number of households, institutions and business using inefficient technology⁴ (almost all wood cook stoves currently in use in Bolivia are highly inefficient) the scale of change will be significant.

The project will replace traditional inefficient stoves with efficient designs, in the areas of the population most in need, e.g. communities with wood as a primary fuel. The activity includes the use of the stoves for domestic, commercial and institutional purposes. This means that all of CEDESOLs’

¹ Our program of holistic well being meets the “first of its kind” guideline, as described in EB 69 REPORT annex 7, GUIDELINES ON ADDITIONALITY OF FIRST-OF-ITS-KIND PROJECT ACTIVITIES (Version 02.0) for project activities and is actually a first of its kind in concept as well since we will work to equally give our beneficiaries educational as well as technological tools that they can use to make continually better decisions about their lives. We incorporate empowerment of women as part of our value chain and support that, by attitude change in conjunction with technological interventions we can achieve a “lasting impact”, especially considering propagation of the better attitudes and knowledge through the “kitchen classroom” most children unconsciously learn in.

² Beneficiaries are qualified through a participative group diagnostic where it is established that wood fuel is their primary fuel, that the potential beneficiaries believe the intervention will improve their living standards, that the beneficiaries will become active members of the Environmental Well-being Squads (EWBS), will provide usage information, allow monitoring and will assign their rights to emissions reduction credits to CEDESOL in exchange for participation in the subsidized program and acquiring the improved cooking devices via subsidized prices. They must also accept paying a % of the cost of the devices (usually around 50%) and cannot receive the devices for free.

³ According to the Global Alliance for Clean Cookstoves’ (GACC) Adoption Indicators, the % of Population using improved biomass cookstoves in Bolivia (0.687) is less than 1%, which demonstrates that without this intervention improved cookstoves are NOT being taken up voluntarily by the population. <http://www.cleancookstoves.org/countries/america/bolivia.html>

⁴ In rural areas the supply of hydrocarbons is very low. The main energy source in these scattered and remote areas is biomass (especially wood), which on average covers 80% of the total rural energy demand (there are some areas where this resource covers up to 97% of this demand, a situation that has not changed in recent years). Instead, the use of Liquefied Petroleum Gas (LPG), widespread in urban, is only present in major rural centers. In the rest of the country there simply is no availability of the fuel, said the report. <http://plataformaenergetica.org/content/3308>

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

rocket stove sizes described in the PoA-DD can be delivered according to the needs identified by the beneficiary, along with their participation in the Environmental Well Being Squads (EWBS).

Detailed technical descriptions of the stoves, showing construction plans and materials used are confidentially available for validation in separate documents.



CEDESOL Rocket stove for domestic application



CEDESOL Rocket stove for institutional and commercial application.

The use of ecological cookers and improved practices will directly reduce the amount of fuel (wood fire or LPG) that is being burned therefore avoiding the release of *GHG* that are being emitted due to current practices⁵. It is expected that during the first 3 years of the life of the VPA the projected number of stoves will be installed and a significant impact from the educational component as a behavioral change agent will be apparent. During the 10 year crediting period, the educational component shall achieve lasting behavior change in use, especially through incorporation of the retained heat practices and peer monitored stove maintenance which will assist in more stoves staying on line longer, proved by biannual monitoring.

There is a noted lack of national/local policies being instituted to promote a shift to other fuels. Additionally, there is limited economical and technical capacity to change the common practice as evidenced by:

⁵ Bolivia, with a population of approximately 10.4 million inhabitants, is considered one of the poorest countries in Latin America. While urban areas such as La Paz and Santa Cruz are modern cities with a relatively good supply of modern energy services, the majority of Bolivia's rural areas are still experiencing a lack of most basic services, including reliable and affordable access to electricity and improved biomass cooking stoves. https://energypedia.info/wiki/Bolivia_Country_Situation

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

Table 1-A.2⁶

INDICATOR	BOLIVIA
Population size	9,009,045
Number of people affected by HAP*	3,099,111
Number of households affected by HAP	737,884
% of population using solid fuels for cooking	34%
% of Rural population using solid fuels	75.4 %
% of Urban population using solid fuels	6%
Percentage of Rural population	33.5%
Cook stove adoption indicators: Population using improved biomass cook stoves	0.687%

**HAP is the new designation for Indoor Air pollution (IAP), meaning Household Air Pollution as defined by the Global alliance for Clean Cookstoves.*

Table 1-A.2 documents the existing common practice scenario as well as reveals how extremely important this VPA activity is to our project, where fully more than 700,000 **households** use solid fuels for cooking. In Bolivia, 34% of the population (3,099,111 people) still use solid fuels for cooking.

A.3. Entity/individual responsible for the micro-scale VPA:

This VPA is coordinated by the Coordination Managing Entity (CME) of the PoA, Centre for Development with Solar Energy “CEDESOL”; a social and non-profit organization responsible for developing and disseminating new alternative technologies that reduce environmental and health impacts of people caused by the use of traditional inefficient stoves. CEDESOL has been working in this field more than 10 years.

A.4. Technical description of the micro-scale VPA:

A.4.1. Identification of the micro--scale VPA:

A.4.1.1. Host Party:

Bolivia

⁶ This table was developed from information obtained from the Global Alliance for Clean Cookstoves, in which they cited as their Source: Food and Agriculture Organization, United Nations Development Programme, World Bank World Economic Forum, and World Health Organization - <http://www.cleancookstoves.org/countries/america/bolivia.html>

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

A.4.1.2. Geographic reference or other means of identification allowing the unique identification of the micro--scale VPA (maximum one page):

This VPA 1 is developed inside the country of Bolivia. The distribution of stoves depends on the beneficiaries being *qualified* through the eligibility criteria for this VPA and on market demand.



Map of Bolivia with its departments.

The first 720 stoves were delivered in Chuquisaca, Municipio Yamparáez. Below it shows the List of communities and the amounts already delivered to date.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

Nº	Departament.	Municipality	Community	Nº Contracts	Rocket Stoves Delivered
2	Chuquisaca	Yamparaez	Katana	53	53
3	Chuquisaca	Yamparaez	Mara Pampa	15	15
4	Chuquisaca	Yamparaez	La Mendoza	81	81
5	Chuquisaca	Yamparaez	Guadalupe	19	19
6	Chuquisaca	Yamparaez	Pata Llanta	13	13
7	Chuquisaca	Yamparaez	Sajpaya	10	10
8	Chuquisaca	Yamparaez	Molle Punku	11	11
9	Chuquisaca	Yamparaez	Sorojchi	12	12
10	Chuquisaca	Yamparaez	Lavadero	20	20
11	Chuquisaca	Yamparaez	Quirawani	20	15
12	Chuquisaca	Yamparáez	Pulqui Avaroa	25	25
13	Chuquisaca	Yamparáez	Wasa Cancha	15	15
14	Chuquisaca	Yamparáez	Era Pampa	29	29
15	Chuquisaca	Yamparáez	Escana	49	49
16	Chuquisaca	Yamparáez	San José de Molles	47	47
17	Chuquisaca	Yamparáez	Sotomayor	73	73
18	Chuquisaca	Yamparáez	Acharani	19	19
19	Chuquisaca	Yamparáez	Eje Central	13	13
20	Chuquisaca	Yamparáez	Sauce Pampa	30	30
21	Chuquisaca	Yamparáez	Kompuko	26	26
22	Chuquisaca	Yamparáez	Tala Lanka	5	5
23	Chuquisaca	Yamparáez	Carama	67	67
24	Chuquisaca	Yamparáez	Alcantari	16	16
Total				720	720

A small amount of stoves have also been delivered in the Department of Cochabamba.

CEDESOL distributed stoves in Municipalities within the department of Cochabamba particularly Tiquipaya, Tarata, and Anzaldo, with future operations scheduled in Totora and Toro Toro.

In these three municipalities 65 stoves were delivered. Specifically 15 stoves in Tiquipaya, 26 stoves in Tarata and 24 institutional stoves in Anzaldo. And it is projected deliver in the same departament 80 Rocket Stoves in Totora and Toro-Toro.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

A.4.2. Duration of the micro--scale VPA:

A.4.2.1. Starting date of the micro--scale VPA:

1st July 2011 or two years before program registration, whatever is the later.

(as written as commissioning date in LSC Report from 15 July 2011, LSC Meeting took place on 27 April 2011, distribution of first stoves under this VPA started in June 2011).

A.4.2.2. Expected operational lifetime of the micro--scale VPA:

More than 10 years.

CEDESOL and external engineers designed the Rocket Stoves currently being implemented in early 2006. We have stoves in continued use, since then and we do not know of any stoves that have “burned out” in that period of time. Besides efficiency in combustion and heat transfer, an important design parameter was longevity. For this reason CEDESOL stoves are designed and constructed so that, with proper use, they should last 15 or more years. The exterior metal parts are 26 gauge galvanized steel or thicker and wherever galvanized is not used they are painted to prevent corrosion. The stove top and cooking surface is 2 mm cold rolled steel reinforced with angle iron and 4 mm x 4 mm steel bar. The combustion chambers are fabricated of refractory ceramic reinforced with aluminum silicate to enhance expansion and contraction. The 6” diameter chimneys are made of 28 gauge galvanized steel. It is recognized that due to differing usage patters, certain parts may become damaged or used up over time. For this reason replacement parts are available and the Innovative leaders are part of our distribution system in every community. However we believe prevention is the best cure to insure that the stoves are on line and functioning optimally. This is one of the reasons for our emphasis on education and stove maintenance during the 18 month Environmental training period. We know that part of the key to longevity is correct usage and stove up keep and our program focuses on this.

A.4.3. Choice of the crediting period and related information:

Fixed Crediting period

A.4.3.1. Starting date of the crediting period:

1st July 2011 or two years before program registration, whatever is the later.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

A.4.3.2. Length of the crediting period, first crediting period if the choice is renewable CP:

10 year fixed crediting period.

A.4.4. Estimated amount of emission reductions over the chosen crediting period:

Since project registration is foreseen for December 2013, we put the ex-ante start date of the crediting period on 1.1.2012 (two years before registration).

Project Year	Leakage (tCO ₂ e)	ERy domestic (tCO ₂ e)	ERy inst./com. (tCO ₂ e)	ERy VPA1 (tCO ₂ e)
2012	0	1003	199	1202
2013	0	3931	844	4775
2014	0	7622	1887	9509
2015	0	9026	2384	10000
2016	0	8524	2252	10000
2017	0	8023	2119	10000
2018	0	7521	1987	9508
2019	0	7020	1854	8874
2020	0	6519	1722	8240
2021	0	6017	1589	7607
Average	0	6521	1684	7972
Total	0	65206	16838	79715

It is understood that any ERs produced above 10,000 tons per year cannot be counted in this crediting scheme. If any Monitoring Report from any vintage shows results above 10'000 ERs it will be capped to the said threshold.

A.4.5. Public funding of the VPA:

Not applicable. Please see ODA Declaration in Annex 2.

A.4.6. Confirmation that micro--scale VPA is neither registered as an individual GS project activity or with any other standard or is part of another Registered PoA:

This VPA is neither registered as an individual GS project activity nor with any other standard nor is part of another registered PoA.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

SECTION B. Eligibility of micro--scale VPA and Estimation of emissions reductions

B.1. Title and reference of the Registered PoA to which micro--scale VPA is added; title of baseline and monitoring methodology applicable to the VPA:

Gold Standard 1220 'Ecological Stoves for Better Living' Micro- scale PoA

This micro-scale VPA applies the approved Gold Standard Methodology:

- For Institutional and Commercial Cookstoves:
'Technologies and Practices to Displace Decentralized Thermal Energy Consumption' version 1 from 11/04/2011 as it is the only methodology eligible under this PoA.

B.2. Justification of why the micro--scale VPA is eligible to be included in the Registered PoA:

This VPA 1 is eligible to be included in the mentioned PoA because it fulfills all the following criteria described in the framework of the programme (PoA DD).

Furthermore this VPA is eligible as a project under the GS since it applies an eligible projects type: 'End-use Energy Efficiency' as explained in Annex C of GS Toolkit.

All distributed devices must fulfill the following eligibility criteria:

Eligibility Criteria	Fulfilled	Comments
• Beneficiaries cook with an unimproved stove and whose primary fuel is wood fuel, before participation in the project.	yes	Proved with sales record. A copy of the sales record form is included in annex 3 of the PoA-DD. This form helps us establish the existing baseline condition and the principal qualifier, which is that the beneficiary's pre-acquisition condition is as a primary wood fuel user.
• Distributed devices do reduce fuel consumption more than 35%.	yes	Proved with field tests or lab tests.
• Distributed devices must reduce indoor air pollution.	yes	More than 75% of the beneficiaries must confirm within field survey to have air quality improved.
• All stoves used indoors have a chimney installed.	yes	The distributed type of a rocket stove always has a chimney installed.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

		Proved with production data sheets.
<ul style="list-style-type: none"> At least 90% of the whole production of the devices must be in Bolivia. 	yes	Proved with production papers (our aim is that the this project also improves local economy)
<ul style="list-style-type: none"> Devices must be sold to beneficiaries and cannot be distributed for free; however they can be subsidised if not affordable for the beneficiaries. 	yes	Proved with sales record.
<ul style="list-style-type: none"> Beneficiaries assign their emission reduction rights to CEDESOL. 	yes	Proved with sales record.
<ul style="list-style-type: none"> The distribution is a voluntary action managed by CEDESOL. 	yes	Proved by the CME.
<ul style="list-style-type: none"> The distribution is accompanied with CEDESOLs' education component. 	yes	Proved by the CME, see MET documentation.
<ul style="list-style-type: none"> The activities correspond to sustainable development. 	yes	Proved on stakeholder consultations and Gold Standard Passport.
<ul style="list-style-type: none"> Sustainable Development Assessment and VPA inclusion have been done. 	yes	In process of GS Validation.
<ul style="list-style-type: none"> The project activity is inside the PoA boundary. 	yes	This VPA will only take place in Bolivia and is thus inside the PoA boundary (Bolivia and Paraguay).
<ul style="list-style-type: none"> Each distributed stove or equipment has a thermal output below 150 kW per unit proved by Lab Tests. 	yes	Proved with Lab tests.
<ul style="list-style-type: none"> All implementing project partners have signed the Gold Standard 'Do Not Harm Declaration' Form. 	yes	CEDESOL the CME is the only project implementer in this VPA and has accepted the 'Do no harm assessment' (see GS Passport).
<ul style="list-style-type: none"> All implementing project partners have signed the Gold Standard ODA Declaration Form. 	yes	CEDESOL the CME is the only project implementer in this VPA and has

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

		signed the form (see below Annex 2).
<ul style="list-style-type: none"> All implementing project partners shall implement the same monitoring plan as described in this document if not performed by CEDESOL. 	yes	CEDESOL the CME is the only project implementer in this VPA and applies the monitoring plan as described in the PoA-DD.
<ul style="list-style-type: none"> The devices utilized, such as Rocket and Solar must be certified and tested in the Test Center recognized as the authority for this purpose in La Paz Centro de Pruebas de Cocinas (CPC) or other similar authority acceptable to CEDESOL. 	yes	Utilized stoves have been tested in the lab in La Paz Centro de Pruebas de Cocinas (CPC) (see test protocols).
<ul style="list-style-type: none"> The devices utilized, such as Rocket and Solar must not be transferred from other PoA's or Carbon Activities 	yes	Proved by sales records. The devices shall be accounted for via sales records containing serial numbered devices assigned to specific beneficiaries, cross checked with field surveys to prevent and assure against double counting in each VPA. This is further defined in PoA DD A.4.2.
<ul style="list-style-type: none"> The VPA is open to all people living in the project boundary (when cooking with an unimproved stove and using wood as primary fuel before joining the project). The target population is not limited to any social, economic or demographic criteria. 	yes	Beneficiaries do cook with an unimproved stove using wood as a primary fuel before the this VPA. Proved with Sales Record.

B.3. Assessment and demonstration of additionality of the micro--scale VPA:

B.3.1 Description of how the anthropogenic emissions of GHG by sources are reduced as per the eligibility criteria defined in the registered micro-programme (*when Additionality is demonstrated at the micro- programme level*):

The additionality of the 'Ecological Stoves for Better Living Micro- scale PoA' is demonstrated at the mico programme level (see PoA-DD Section A.4.3).

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

This VPA can be seen as additional following the guidance of the GS Micro Scale Scheme and the eligibility criteria defined in the PoA DD, since the following criteria are met:

- Bolivia, the target region, is part of the UN list of Land Locked Developing Countries.
- Each delivered stove has a thermal output below 150kW per unit as proved by laboratory tests⁷.
- CEDESOL as the managing entity confirms that this VPA is fully a voluntary action.
- All in the PoA_DD defined eligibility criteria is met, see above B.2.

There is no government agency or law in Bolivia which forces or requires a person to uptake this technology. Additionally, beneficiaries must pay an important percentage of the program cost which underscores their participation as a voluntary action. Each beneficiary choses the technology they acquire.

B.3.2 Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered micro-scale project activity (*when Additionality is demonstrated at the activity level*):

Not applicable, since additionality is demonstrated at the micro programme level for all of its activities.

B.4. Description of the sources and gases included in the project boundary and proof that the micro--scale VPA is located within the geographical boundary of the registered PoA.

The greenhouse gases considered under this PoA and all its VPAs are the three gases considered by the GS TPDDTEC Meth V.01: CO₂, CH₄ and N₂O emissions. For each VPA the same conditions are met as for the whole PoA described below.

	Source	Gas	Included?	Justification / Explanation
Baseline	Cooking	CO ₂	Yes	Important source of emission. IPCC values will be applied.
		CH ₄	Yes	Significant source of emission. IPCC values will be applied.
		N ₂ O	Yes	Significant source of emission. IPCC values will be applied.
	Transport of fuel	CO ₂	No	To have a conservative approach, emissions from transport of fuel are excluded in the Baseline.
		CH ₄	No	

⁷ Lab tests note

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

	Production of fuel	N2O	No	To have a conservative approach, emissions from production of fuel are excluded in the Baseline	
		CO2	No		
		CH4	No		
	Transport of raw material	N2O	No		To have a conservative approach, emissions from transport of raw material to build the old stoves are excluded in the Baseline.
		CO2	No		
		CH4	No		

	Source	Gas	Included?	Justification / Explanation
Project Scenario	Cooking	CO2	Yes	Important source of emission. IPCC values will be applied.
		CH4	Yes	Significant source of emission. IPCC values will be applied.
		N2O	Yes	Significant source of emission. IPCC values will be applied.
	Transport of fuel	CO2	No	Excluded as in the Baseline. Conservative approach, because less fuel is used in the project scenario.
		CH4	No	
		N2O	No	
	Production of fuel	CO2	No	Excluded as in the Baseline. Conservative approach, because less fuel is used in the project scenario.
		CH4	No	
		N2O	No	
	Transport of raw material	CO2	No	Excluded, since negligible.
		CH4	No	
		N2O	No	

B.5. Emission reductions:

B.5.1. Data and parameters that are available at validation:

Data / Parameter:	f_{NRB, Bolivia}
Data unit:	
Description:	Fraction of biomass used in year y for baseline scenario b that can be established as non-renewable biomass.
Source of data used:	CDM Small Scale Working group, meeting 37 annex 14, ssc_37_an14.pdf
Value applied:	84%
Justification of the	To justify this value a national governmental proof (by DNA) is needed

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

choice of data or description of measurement methods and procedures actually applied :	according Gold Standard rules. CEDESOL tried to get this confirmation. However, for Bolivia the chance for governmental approval is very low, since the country does not accept the CDM and does not have an operating DNA. Thus, Gold Standard proposed to have the value revised by stakeholders: CEDESOL discusses this issue during Stakeholder Consultation Feedback round on PoA Design Level. This includes a renewed contacting of both DNA.
Any comment:	

Data / Parameter:	NCV_{b,wood}
Data unit:	TJ/ton
Description:	Net calorific value of woody biomass
Source of data used:	GS TPDDTEC Meth.
Value applied:	0.015
Justification of the choice of data or description of measurement methods and procedures actually applied :	Value from applied Methodology.
Any comment:	

Data / Parameter:	EF_{b,wood,CO2}
Data unit:	tCO ₂ /TJ
Description:	CO ₂ emission factor for Wood
Source of data used:	GS TPDDTEC Meth.
Value applied:	112
Justification of the choice of data or description of measurement methods and procedures actually applied :	Value from applied Methodology.
Any comment:	

Data / Parameter:	EF_{b,wood,nonCO2}
Data unit:	tCO ₂ /TJ
Description:	Non_ CO ₂ emission factor of the fuel that is reduced.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

Source of data used:	2006 IPCC Guidelines for National Greenhouse Gas Inventories, Vol.2 Energy, Chapter 2, Stationary Combustion, Table 2.5
Value applied:	9.592
Justification of the choice of data or description of measurement methods and procedures actually applied :	Default IPCC values for CH ₄ and N ₂ O emissions for wood / wood waste, are applied. The following GWP100 are applied: 25 for CH ₄ , 298 for N ₂ O EF_wood_CH ₄ = 0.3tCH ₄ /TJ EF_wood_N ₂ O = 0.004tN ₂ O/TJ
Any comment:	

B.5.2. Ex-ante calculation of emission reductions:

For the Ex-ante calculation of emission reductions all parameters that will be monitored during the project lifetime (no exact value available at the moment) are anticipated prior validation with results from Field Surveys, Lab Tests and Project Planning.

Parameters for Ex-ante calculation:

Data / Parameter:	$N_{r-d,y}$
Data unit:	Days
Description:	Cumulative number of project technology-days included in the project database for project scenario r-d (rocket domestic) in year y
Source of data used:	2012 figures from sales record and planning for future years.
Value of data applied for the purpose of calculating expected emission reductions	See relevant ER calculation spread sheet For y = 2012: 91'000 2013: 364'000 2014: 728'000 2015: 910'000 2016: 910'000 2017: 910'000 2018: 910'000 2019: 910'000 2020: 910'000 2021: 910'000
Any comment:	

Data / Parameter:	$N_{r-ic,y}$
Data unit:	Days
Description:	Cumulative number of project technology-days included in the project database for project scenario r-ic (rocket institutional/commercial) in

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

	year y.
Source of data used:	2012 figures from sales record and planning for future years.
Value of data applied for the purpose of calculating expected emission reductions	See relevant ER calculation spread sheet. For y = 2012: 5'460 2013: 23'660 2014: 54'600 2015: 72'800 2016: 72'800 2017: 72'800 2018: 72'800 2019: 72'800 2020: 72'800 2021: 72'800
Any comment:	

Data / Parameter:	U_{r-d,y}
Data unit:	Fraction
Description:	Cumulative usage rate for technologies in project scenario r-d (rocket domestic) in year y, based on first linear assumption.
Source of data used:	First assumption based on CMEs experience.
Value of data applied for the purpose of calculating expected emission reductions	See relevant ER calculation spread sheet. For y = 2012: 1 2013: 0.98 2014: 0.95 2015: 0.9 2016: 0.85 2017: 0.8 2018: 0.75 2019: 0.7 2020: 0.65 2021: 0.6
Any comment:	

Data / Parameter:	U_{r-ic,y}
Data unit:	
Description:	Cumulative usage rate for technologies in project scenario r-ic (rocket institutional/commercial) in year y, based on first linear assumption.
Source of data used:	First assumption based on CMEs experience.
Value of data applied for the purpose of	See relevant ER calculation spread sheet. For y =

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

calculating expected emission reductions	2012: 1 2013: 0.98 2014: 0.95 2015: 0.9 2016: 0.85 2017: 0.8 2018: 0.75 2019: 0.7 2020: 0.65 2021: 0.6
Any comment:	

Data / Parameter:	$P_{r-d,d,y}$
Data unit:	tons/day
Description:	Specific fuel savings for domestic rocket stoves in Bolivia of project scenario r-d (rocket domestic) against the baseline scenario d (domestic) in year y, as derived from the statistical analysis of the data collected from the field survey. Verified with Lab test results.
Source of data used:	Relevant Field Survey, verified with Lab test results (Centro de Pruebas de Cocinas, CPC, La Paz 2013) See relevant KS spread sheet.
Value of data applied for the purpose of calculating expected emission reductions	0.0071
Any comment:	

Data / Parameter:	$P_{r-ic,ic,y}$
Data unit:	tons/day
Description:	Specific fuel savings for institutional/commercial rocket stoves in Bolivia of project scenario r-ic (rocket institutional/commercial) against the baseline ic (institutional/commercial) in year y, as derived from the statistical analysis of the data collected from the baseline field survey and the lab test.
Source of data used:	Baseline survey and thermal efficiency of project stove from lab test (Centro de Pruebas de Cocinas, CPC, La Paz 2013). See relevant KS spread sheet
Value of data applied for the purpose of calculating expected emission reductions	0.0234

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

Any comment:	For Verification, Baseline and Project Values will be derived from Field Tests, potentially leading to higher ER values.
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Data / Parameter:	LE _{p,y}
Data unit:	tCO ₂ e/yr
Description:	Leakage for project scenario p in year y
Source of data used:	Leakage assessment on VPA Level, see below.
Value of data applied for the purpose of calculating expected emission reductions	0
Any comment:	

Applied scenarios

As explained above, in this VPA we apply two technologies (domestic and institutional/commercial efficient rocket stoves).

The following four scenarios apply under this VPA:

- baseline scenario domestic (BL d)
data for ex-ante ER calculation derived from baseline field survey.
- baseline scenario institutional/commercial (BL ic)
data for ex-ante ER calculation derived from baseline field survey.
- project scenario rocket domestic (PS r-d)
data for ex-ante ER calculation derived from project field survey, verified with lab results.
- project scenario rocket institutional/commercial (PS r-ic)
data for ex-ante ER calculation derived from lab results.

Additional remark: Baseline scenarios BL d and BL ic are the same for other technologies in Bolivia and thus can be applied in other VPAs, e.g. for solar stoves, under this PoA.

Fuel savings P

Fuel savings per household P_{p,b,y} are calculated, when subtracting the relevant project scenario fuel consumption from the relevant baseline scenario fuel consumption.

For domestic rocket stoves:

$$Fuel\ Savings = Fuel\ Consumption\ (Baseline\ scenario\ domestic\ (d) - Project\ scenario\ rocket\ domestic\ (r-d))$$

For institutional and commercial rocket stoves:

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

Fuel Savings = Fuel Consumption (Baseline scenario institutional/commercial (ic) - Project scenario rocket institutional/commercial (ic))

Project technology days N

If we assume 364 days per year and 182 average days (half a year) per year for a new installed stove in its first year, we can estimate the project technology days with planned stove numbers for every project year.

For domestic rocket stoves:

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total
Implemented stoves per year	500	1000	1000	0	0	0	0	0	0	0	2500
Cumulated stoves	500	1500	2500	2500	2500	2500	2500	2500	2500	2500	2500
Project technology days N r-d,y	91000	364000	728000	910000	910000	910000	910000	910000	910000	910000	4823000

For institutional/commercial rocket stoves:

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total
Implemented stoves per year	30	70	100	0	0	0	0	0	0	0	200
Cumulated stoves	30	100	200	200	200	200	200	200	200	200	90
Project technology days N r-ic,y	5460	23660	54600	72800	72800	72800	72800	72800	72800	72800	374920

Usage rate U

For the usage rate we estimate a decrease of 2.5% in the first years (during stove distribution) and 5% for every following project year for the ex-ante emission calculation for all technologies applied under this VPA. This includes drop off rates and any decrease in stove efficiency.

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimated Usage rate U r-ic,y	1	0.98	0.95	0.9	0.85	0.8	0.75	0.7	0.65	0.6

Leakage Assessment LE

As defined on PoA Level and as described in the TPDDTEC meth., every VPA must discuss the following potential sources of leakage:

L1) The displaced baseline technologies are reused outside the project boundary in place of lower emitting technology or in a manner suggesting more usage than would have occurred in the absence of the project.

→ Not possible: the base line kitchen equipment needs to be destroyed before it can be removed (fixed installation of adobe bricks or three stone fire).

L1 = 0

L2) The non-renewable biomass or fossil fuels saved under the project activity are used by non-project users who previously used lower emitting energy sources.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

→ Not reasonable: Similar baseline for neighboring families, so no fuel switch is possible due to the project.

L2 = 0

L3) The project significantly impacts the NRB fraction within an area, where other CDM or VER project activities account for NRB fraction in their baseline scenario.

→ Not realistic: The project boundary is too big to have influence on the NRB fraction on a national scale. However, locally some variations are expected.

L3 = 0

L4) The project population compensates for loss of the space heating effect of inefficient technology by adopting some other form of heating or by retaining some use of inefficient technology.

→ Negligible. In the project region, stoves are mainly integrated in the kitchen and not in the living room. Based on CEDESOL experience beneficiaries don't use stoves as a heating device. Furthermore as an outcome of the first Kitchen Survey for VPA1 it could be demonstrated that only 2.2% of the beneficiaries used their old stove for heating purposes.

L4 = 0

L5) By virtue of promotion and marketing of a new technology with high efficiency, the project stimulates substitution within households who commonly used a technology with relatively lower emissions, in cases where such a trend is not eligible as an evolving baseline

→ Not possible: As described under D.4.1 the existing Baseline Scenario is inefficient kitchen equipment. There is currently almost no technology used that is more efficient than the stoves distributed by the project.

L5 = 0

The result of the leakage assessment is that no potential source of leakage could be found at PoA Level that would lead to significant emissions. Therefore:

$$L = \sum L_i = 0$$

Procedure for old Baseline stove

Beneficiaries will be asked to but not be forced to destroy their old stoves when purchasing a new more efficient one. We think it is not in our position to do so. However families will be trained about the benefits of the new technology and its positive impacts on health, energetic consumption, smoke and more in CEDESOLs environmental programme (see MET program description in PoA DD). So the goal of the programme is that participants disclaim the old technology on a voluntary base. Anyway, if old stoves are still in use during the project this will be included in the Field Tests and thus accounted in the Emission Reduction calculation.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

Ex ante Emission Reduction Calculation:

For the Ex-ante Emission Reduction Calculation we apply the relevant formula from the applied methodology explained in the PoA-DD in section D 6.2.

$$ER_y = N_{r-d,y} * U_{r-d,y} * P_{r-d,y} * NCV_{b,wood} * (f_{NRB, Bolivia} * EF_{wood, CO2} + EF_{wood, nonCO2}) + N_{r-ic,y} * U_{r-ic,y} * P_{r-ic,y} * NCV_{b,wood} * (f_{NRB, Bolivia} * EF_{wood, CO2} + EF_{wood, nonCO2})$$

Applied values for the Ex-ante Emission Reduction Calculation are listed above in the parameter sections B.5.1 and B.5.2. See also detailed calculation in relevant ER calculation spread sheet.

B.5.3. Summary of the ex-ante estimation of emission reductions:

Project Year	Leakage (tCO2e)	ERy domestic (tCO2e)	ERy inst./com. (tCO2e)	ERy VPA1 (tCO2e)
2012	0	1003	199	1202
2013	0	3931	844	4775
2014	0	7622	1887	9509
2015	0	9026	2384	10000
2016	0	8524	2252	10000
2017	0	8023	2119	10000
2018	0	7521	1987	9508
2019	0	7020	1854	8874
2020	0	6519	1722	8240
2021	0	6017	1589	7607
Average	0	6521	1684	7972
Total	0	65206	16838	79715

Since project registration is foreseen for December 2013, we put the ex-ante start date of the crediting period on 1.1.2012 (two years before registration).

B.6. Application of the monitoring methodology and description of the monitoring plan:

B.6.1. Description of the monitoring plan:

The monitoring plan for this VPA follows the guidelines of the Monitoring Methodology in Section III of the applied GS TPDDTEC Meth. as described in the PoA-DD in section D.7.2.1.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

Sales record

A sales form is filled out for every delivered rocket stove. Besides required personal data as explained in the TPDDTEC Meth. on page 22 further data in terms of fuel consumption is collected already at this stage to get a first impression of the specific behavior. A total sales record and project database are maintained continuously. The project database is derived from the total sales record with project technologies differentiated by different project scenarios (rocket domestic, rocket institutional/commercial) leading to the two parameters project technology days $N_{r-d,y}$ and $N_{r-ic,y}$.

Prior to first Verification – Field Tests - $P_{r-ic,y}$

Prior to first Verification a project Filed Survey for the institutional-commercial scenario will be performed. Afterwards a Baseline Field Test and a Project Field Test will be conducted for the Baseline Scenarios (Domestic and Institutional/Commercial) and for the two Project Scenarios (Rocket Domestic and Rocket Institutional/Commercial) to define the average fuel savings for every distributed stove based on real field measurements. Paired sampling shall be applied whenever possible but this is not mandatory.

Ongoing Monitoring Studies

The following on-going monitoring studies are conducted for both project scenarios of this VPA (rocket domestic, rocket institutional/commercial) following first verification of the associated initial ex-ante project studies. These monitoring studies investigate and define parameters that could not be determined at the time of the initial project studies or that change with time.

1a) Monitoring Survey (including Usage Survey) –

Completed annually, beginning 1 year after project registration.

The monitoring survey investigates changes over time in every project scenario (and in a baseline scenario in case renewal of crediting period), by surveying end users with improved stoves on an annual basis. It provides critical information on year-to-year trends in end user characteristics such as technology use, fuel consumption and seasonal variations.

Monitoring Survey Representativeness:

End users from a given project scenario are selected using representative sampling techniques to ensure adequate representation of users with technologies of different ages. Common sampling approaches such as clustered random sampling are allowed and geographic distribution should be factored into selection criteria. End users can be surveyed at any time throughout the year with care taken to collect information pertaining to seasonal variations in technology and fuel use patterns.

Monitoring Survey sample sizing:

- Project Scenario Rocket Domestic:
Minimum sample size 100 if more than 1000 stoves are distributed in total, else 10% of group size.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

- Project Scenario Rocket Institutional/Commercial:
Minimum sample size 30 or population size, whichever is smaller.

1b) Usage Survey (part of Monitoring Survey) – $U_{r-d,y}$, $U_{r-ic,y}$

The usage survey provides a single usage parameter $U_{r-d,y}$ and $U_{r-ic,y}$ for the two project scenarios of this VPA that is weighted based on drop off rates that are representative of the age distribution for project technologies in the total sales record.

A usage parameter must be established to account for drop off rates as project technologies age and are replaced. Prior to a verification, a usage parameter is required that is weighted to be representative of the quantity of project technologies of each age being credited in a given project scenario. For example, if only technologies in the first year of use (age0-1) are being credited, a usage parameter must be established through a usage survey for technologies age0-1. If an equal number of technologies in the first year of use (age0-1) and second year of use (age1-2) are credited, a usage parameter is required that is weighted to be equally representative of drop off rates for technologies age0-1 and age1-2.

The minimum total sample size is 100 (or population size, whichever is smaller), with at least 30 samples for project technologies of each age being credited. The majority of interviews are conducted in person and include expert observation by the interviewer within the kitchen in question in combination with the Monitoring Survey, while some remainder may be conducted via telephone by the same interviewers on condition that in kitchen observational interviews are first concluded and analysed such that typical circumstances are well understood by the telephone interviewers.

2) Project Field Test (PFT) Update –

Completed every other year, or more frequently.

The PFT update is an extension of the project PFT and provides a fuel consumption assessment representative of project technologies currently in use every two years. Hence the PFT update accounts for changes in the project scenario over time as project technologies age and new customers are added, also as new models and designs are introduced. It is legitimate to apply an Age Test instead of a PFT, to project technologies, which remain materially the same year after year.

3) Baseline FT Update –

In this VPA a fixed baseline is adopted. Baseline Field Test do not have to be updated because it's a fixed ten years crediting period.

4) Leakage Re-Assessment –

Leakage is assessed on VPA Level. Leakage will be reassessed every two years.

5) Non-Renewable Biomass Assessment Update

Completed annually, if new CDM default values are published.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

Sustainable Development Monitoring Plan

The SD monitoring is discussed inside the GS approved GS Passport from 10 November 2011 for this programme (including a discussion with Stakeholders, that goes beyond the GS requirements for Micro Scale Programs). The 'Do no harm assessment' and the 'Sustainable Development Assessment' are still the same for this Micro Scale PoA as they were before for the Standard GS VER Project.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

SECTION C. Stakeholders' comments

C.1. Brief description how comments by local stakeholders have been invited and compiled:

The stakeholder consultation process was planned in a way that guaranteed the participation of numerous organizations, institutions, government representatives and the affected populations' officials. As such, our invitations were extended to all NGOs involved with the project, all representatives of communities, OTBs and municipalities considered as potential beneficiaries of the project. Also, informative notes and publications such as an open invitation to interested members of the public were published in the newspaper as well as radio and TV interviews. The following virtual and physical consultations took place:

1. Main Local Stakeholder Consultation (LSC): A full physical LSC including Sustainable Development Assessment for first VPA1 and VPA2 was held on April 27th 2011 in Cochabamba, Bolivia (see Local Stakeholder Consultation Report).
2. The first Feedback Round was initiated on the 24th of September 2011.
3. A virtual electronic local stakeholder consultation (LSC) for Bolivia was done at PoA level in 2012.
4. Several additional local public consultations and demonstration workshops were held in presence of the beneficiaries during 2012 in the departments of Chuquisaca and Cochabamba.
5. A second feedback round for VPA1 and VPA2 will be performed as soon as the project has been submitted for Validation by CME in summer 2013.

Main Local Stakeholder Consultation

The local public consultation, a full physical meeting, was held on April 27, 2011 at 9:00am in Bohio in Cochabamba, Bolivia, a venue used for various events and meetings. It was performed based on the Gold Standard guidelines v2.1 available at this time for standard GS VER projects including a Sustainable Development Assessment (SDA) and not based on micro PoA rules. A LSC report has been written, uploaded to GS registry and approved by GS in June 2011. An electronic Feedback Round was performed in September 2011. This LSC is used as VPA 1 and VPA 2 LSC. For all detail see the corresponding LSC report.

On the whole, 34 participants attended the consultation. The principal means of invitation were;

a) Via email b) By phone c) Through publications in local newspapers and d) Through radio and TV interviews in both urban and rural areas

Local Public Consultation

Several additional local public consultations and demonstration workshops were held in presence of the beneficiaries during 2012 in the departments of Chuquisaca and Cochabamba.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

C.2. Summary of the comments received:

Questions/comments	Responses
<p>Indicators should be measurable and must take into account the type of effect (whether direct, secondary, etc) and should be given some value. Greater precision is needed in determining the indicators that will be evaluated.</p>	<p>We agree that indicators must be assessed but we follow the format required by the Gold Standard — it is they who determine the indicators, not us. It may be possible to take another approach to measure the impact made on each indicator. For example, the tonnage of CO₂ that is not emitted into the atmosphere could be translated into a quantity of wood that is saved in square meters of forest, etc.</p> <p>More precise measurement of reduction in deforestation is not economically feasible and beyond the scope of this project.</p> <p>We are not a reforestation project so we can not account for any trees replanted although we agree that replanting trees is desirable.</p> <p>It is also beyond the scope of this project to measure the health benefits with more precise indicators. Our indicator is reduction in indoor air pollution as reported by the beneficiary. In actuality we use reduction in fuel usage as measured in scientifically conducted field tests against similar previous baseline tests as the principal indicator for a series of conditions. We can calculate a conservative number for CO₂, and reduced fuel use also translates into reduced time to collect it, reduced pressure on forest resources, and reduced cost for fuel. Reduction in fuel use coupled with exhausting wood smoke particles has been shown to improve health and is our best indicator with in the real of and economics of this project.</p>
<p>How many people currently use solar stoves?</p> <p>Do you do some maintenance, monitoring or evaluation of the use of the stoves?</p>	<p>The stoves are now used by 9000 families⁸; families for which we have monitored the use of the stoves, and this is why we will have people in the communities in charge of follow ups. We don't want to just deliver stoves, we also want people to be trained and people in the community to be permanently qualified to provide information and knowledge for the rest of the people.</p>
<p>If we consider that the neediest populations are the ones</p>	<p>Our point of view is that the people should not be building</p>

⁸ From 2000 to 2010 CEDESOL and Sobre la Roca introduced different types of ecological stoves and solar cookers under varying conditions and with a variety of partners. This experience helped establish our organizations as experts and proficient in dissemination of this technology. Lessons learned from the successes and failures during that period impressed upon us that any lasting effects can only be brought about during this stage of cultural evolution through a continuity program combining environmental, health, nutrition and resource management with care and maintenance of the new technology. We clarify here that none of the stoves or cookers from previous projects are eligible to be counted in this PoA and any of its VPAs. This is one reason we have gone to great effort to develop a sales survey and data base to insure only those stoves whose serial numbers are assigned to this project will be counted.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

<p>who are going to benefit the most (because it is precisely those who have no resources) from this project, what mechanisms are there for them to be trained so that they can build and adopt these technologies. Have you thought of using local materials?</p>	<p>the stoves themselves. Consequently, we would not be using local materials and would not want to make stoves made of materials such as mud. We will use the stoves that we have presented before, which are made of wood, glass and metal that is obtained in the Bolivian economy so we consider that “local materials”. If you mean using mixtures of mud we do not work with mud stoves, as we want to help people have cleaner kitchens and better self-esteem, especially the women. We choose not to work with other stoves because their characteristics may be altered by their users, while solar stoves and metallic rocket stoves are not so easily altered (thus ensuring their function and efficiency throughout their lifespan). However, there would be parts that would wear out and thus, replacement parts would be subsidized to ensure that the stoves operate correctly.</p>
<p>How do we proceed if a family is in need of a stove? Are you going to sell it? Is it going to be 100% subsidized? Under what economic terms?</p>	<p>Fifty percent of the cost of the stoves should be subsidized. Given the last point, we are looking for other partners (such as municipalities and other organizations with a budget) to increase the grant or to provide transportation. For example; a family that is looking to buy a 900 Bs stove will only pay 450 Bs for said stove. Also to be noted, should a stove have a very low price, it should not be subsidized.</p>
<p>Are you presenting a definite number of stoves? Are these 54,000 going to be a combination of both technologies? How are they going to be installed and in what timeframe?</p>	<p>In the first year we plan to distribute 3,000 stoves from July 2011 to April 2012⁹. The second year; 5,000, the third; 7,000 and for the fourth, fifth, sixth and seventh years; 10,000. We may have to revise these numbers at a later date. But for the first year, our main concern will be conducting necessary studies on stove use, which will demand a heavy investment on our part. We do not want to bite off more than we can chew. As for our manufacturing capacity, Sobre la Roca would not have a monopoly on the production but will rather be working in conjunction with other smaller companies in order to spur competition and stimulate the local economy. For instance, we have a project in the El Abra Prison where we are expanding our work capacity since there is a secure and available labour source located there. This last point indicates how much we should always be willing and able to work with other organizations when needed. We should always bear in mind that none of these projects would be</p>

⁹ In April of 2011 the LSC was made under the GS rules in effect at the time. The Project started as a regular cycle Project and was listed as GS 1050. For that reason, in the original time projections spoken about in the question and answer period of the LSC, an earlier start date was stated and different stove amounts were projected. In Nov. of 2011 rules permitting micro scale Program of Activities were published and after careful study and consultation with GS representatives, it was agreed that our Project would be better classified as a Program of Activities. It was further agreed that the LSC held in April of 2011 would serve as the physical meeting for this VPA. As we had already reported the LSC to GS and received feedback from GS and that report was allowed to be listed, we feel it necessary to keep the comments as they were recorded in that meeting so that we were not varying from the truth. Therefore there is no contradiction between the information reported in section C and the actual starting date of January 2012. All stove implementation projections have been modified and comply with the schedule included in this VPA, so once again there is no contradictions between what is reported and were our historical projections at the time of the LSC, with what our production and dissemination projections are now.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

	possible without training the people involved.
As for the educational training, are you going to conduct it with the mothers, the whole family or women's organizations? How many sessions are there going to be? When you enter a municipality are you going to make agreements? How do you choose the participating families in the municipalities and communities?	<p>We believe that life truly turns around the kitchen table, women are the one that mainly work there, and therefore it is important that they be well trained. We do not reject the idea of working with men, but we want the training to go where it will most likely have the greatest impact. Also to be planned is an environmental health committee. It is a revolutionary vision. We would equip leaders; women/men and conduct a regular training program for them so that each individual may train in his/her community. The end goal will be better hygiene and sanitation but also an increase in women's self-esteem by stressing their importance.</p> <p>Just as we are raising the activity of cooking from an open fire on the ground to an advanced stove, so too do we want to raise their level of human development. In other words; we want to provide them the tools to alleviate their own human development. This is how one's habits are changed.</p>
Have you thought about implementing these stoves in semi-urban areas of Cochabamba, mainly where there is a GLP deficiency?	<p>There is a financial institution called FIE where people from semi-urban areas can go to borrow money and buy their own stoves. They typically have more access to liquidity than do people in rural areas.</p> <p>But the reality of this project is that anyone in any area of the country may be served IF they qualify as using biomass fuel as their principal fuel, regardless of urban, rural etc.</p>
Are you going to train people in the maintenance of the stoves?	There will be training for everyone who receives one of our stoves, in its use and maintenance. As previously mentioned, we are also planning Environmental Health Committees, wherein we would teach the team that would conduct regular training and transmission of knowledge in rural areas.
To what departments have you planed to work in for this project?	Santa Cruz, Beni and Cochabamba. Also, we have received a request from a municipality in Chuquisaca and also in the Chaco in Tarija.
Would you consider working with smaller communities?	We did not plan on entering one place with all of the stoves. If anything, we were looking for groups of communities of about 100 families that want to participate in the project. It could have be a geographic area that includes several communities in order to reach the desired number of families.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

C.3. Report on how due account was taken of any comments received and on measures taken to address concerns raised:

Stakeholder Comment	Was comment taken into account? (Yes/No)	Explanation (Why? How?)
<p>While one way to eliminate CO2 is by reducing the amount of wood burnt, another way to eliminate harmful emissions is through reforestation. This project should work toward integrating reforestation with the solar stoves project.</p> <p>Anticipate reforestation to replace the wood used in construction of the stoves</p>	No. Reforestation is beyond the scope of our ecological stove project, however we have included reforestation justifications in the environmental education portion of our project.	The government already has a program of reforestation with strong ambitions that we support. Our project does not include the aspect of reforestation but we hope that our environmental training will create a desire for reforestation and that the people will turn to the authorities in charge of these types of projects.
In Santa Cruz there are 2 million habitants. This project of alternative development is urgent since we have problems mainly in the kitchen because we don't have wood. We have poultry and pigs and we really need this technology.	Yes	The man that made this comment comes from a community from Santa Cruz that is known to be one of the poorest, and the people there suffer because of wood deficiency. Additionally, that region has a very delicate ecosystem, and it would be a great candidate to receive the benefits of solar stoves.
It's important to analyze the base material used in the construction of the stoves since these materials are expose to the heat. The daily use of these materials must be taken into account and their effects on health.	Yes	We have determined that there is no waste entering the food from the aluminium since no chemical exchange occurs.
Ensure the working condition of the builders of the stoves.	Yes	The owner of the company manufacturing the stoves spoke to this issue ensuring working conditions were in accordance with Bolivian law.
Find some more productive activities for the time that has been saved.	No	Our educational component will encourage other productive activities, but we hesitate to impose them upon the beneficiaries.
Perform collateral programs that are favorable to the livelihoods of the poor	No	While this request is essentially beyond the scope of our project, we will be suggesting activities towards sustainability that beneficiaries may take advantage of, introduced through our continuous training programs,

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

		such as intensive gardening.
Enhance sustainability in the use and maintenance of the stoves.	Yes	Our project already takes this issue into account. We see it as a serious issue that should be addressed in every stove project, and our training and continuous educational components provide for this.
Care for the correct identification of the beneficiary population	No	The term “correct” is very subjective. Our program is not discriminatory and allows for participatory decisions. We seek to introduce the devices in areas which demonstrate the greatest wood fuel use and where the beneficiaries decide they want to use them.
Grant increase to 75%	No	We are posturing so the cost to the end user only represents approximately 30% of the total project cost. Further reduction could reduce the perceived worth beyond sustainability and therefore reduce the perceived value of the stoves to the beneficiary.
Strengthen local organizations in the use and maintenance of the stoves, train a multidisciplinary team and incorporate intercultural dialogue	Yes	This is already a component of our program.
Use of competitive tendering for the establishment of micro enterprises	No	We have licensed our technology to reputable manufacturers to ensure control of quality as well as cost benefits.
It should be included in the environmental training the use of organic waste for product compost.	Yes	This is already a component of the program.

C.4. Report on the Continuous input mechanism selection:

	Method Chosen (include all known details e.g. location of book, phone, number, identity of mediator)	Justification
Continuous Input / Grievance Expression Process Book	Different open continuous input process books will be placed. One at CEDESOLS’	

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

	Office in Cochabamba, others in every region participating the project.	
Telephone access	A telephone line is installed for questions and claims. Nr. 591 4 4412787	
Internet/email access	A specific page on CEDESOLs' Homepage will be installed, where users can fill out a form for questions and claims. http://www.CEDESOL.org/ In addition a specific email address has been established to directly contact CEDESOL in terms of the project. reclamos@cedesol.org	

C.5. Report on stakeholder consultation feedback round:

First Feedback Round

The first Feedback Round was initiated on the 24th of September 2011. This complied with the FBR related to the physical LSC. In May of 2012 we conducted a virtual meeting (see PoA) and included everyone who was invited to the physical meeting plus about 150 more and combined the meeting for first time participants and ones who had previous participation. Once all issues have been rectified pertaining to the PoA and VPA1, a further virtual SFR will be undertaken to allow and encourage input on the project as it has developed as well as solicit once more feedback from Bolivian DNA authorities where we will also include discussion about Continuous Inputs/Grievance Mechanism, revised VPA-DD and updated such as part of the micro-programme.

We published the Local Stakeholder Consultation report on our website in both English and Spanish and on that date we sent the link to all stakeholders invited for participation in the Consultation so that they can send us their feedback. We contacted the stakeholders who have no email, by phone, encouraging them to come to CEDESOL to read the report and make their comments.

Additionally we will publish the Passport and PDD on our web site for public comment.

The email with the link contained the following information:

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

CEDESOL solicita su opinión!

Los invitamos cordialmente a visitar nuestra página web en la cual se tienen los links para descargar el informe de la Consulta Local Pública de Interesados que se realizó el 27 de abril de este año para la presentación de nuestro proyecto “Cocinas Ecológicas para el buen vivir”. Para los que participaron en la consulta el descargar este documento les permitirá saber cómo fueron tomados en cuenta sus comentarios y preguntas.

Las personas que no asistieron a dicha consulta podrán enterarse, a través de este reporte, de las características del proyecto y de la opinión de los interesados.

Para CEDESOL sería de mucha utilidad conocer su criterio respecto a este documento y al proyecto en sí ya que formará parte de la ronda de retroalimentación, por eso les rogamos hacernos llegar cualquier comentario, pregunta y/o sugerencia que puedan tener. ¡Su opinión es muy valiosa para nosotros!

Por favor responde a feedbackround@cedesol.org

Link (español): <http://cedesol.org/spanish/gold-standard/solar-cookers-for-a-better-life>

CEDESOL asks for your opinion!

We invite you cordially to visit our website in which you will find the links to download the Local Stakeholder Consultation Report held (on April 27 2011) to present our project “Ecological Stoves for Better Living”. For those who participated in the consultation this document will let them know how their comments and questions were taken into account

For those who did not attend the consultation it will be a way of learning about the characteristics of the project and the views of stakeholders.

It would be really useful to CEDESOL to know your criteria relating to this report and to the project itself as part of the feedback round. Please send us any comments, questions and/or suggestions you might have. Your opinion is very valuable to us!

Please write to: feedbackround@cedesol.org

Link (english): <http://cedesol.org/gold-standard/solar-cookers-for-a-better-life>

*David E. Whitfield V.
Executive Director
CEDESOL
www.cedesol.org
skype – CEDESOL2*

Until the present day we only received one response:

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

Yo estoy de acuerdo con el proyecto de cocinas ecológicas para vivir bien, mi organización está de acuerdo para implementar esta actividad en dos comunidades del área protegida y estamos buscando fondos para su implementación de esta proyecto en el municipio Charazani, del Departamento de La Paz, para esto necesitamos un poco mas información o cursos de replica para el bien uso de estas cocinas.

Cualquier Actividad que tienen infórmennos para que estemos contacto.

Gracias por escribirme.

Augusto Cuila B.

I agree with the Ecological Stoves for Better Living Project, my organization is in agreement to implement this activity in two communities of the protected area and we are looking for funds for the implementation of this project in the municipality Charazani, Department of La Paz, for this we need a bit more information or replica curses for the correct use of the stoves.

Please let us know about any activity you may have.

Thanks for writing me.

Augusto Cuila B.

Second Feedback Round

A Second Feedback Round was performed on the 27th of August 2013. We sent the final version of the PoA and de VPA1 to all stakeholders invited for participation in the Consultation so that they can send us their feedback with any comment or suggestions about the Project.

The email contained the following information:

You are receiving this communication because you participated in previous virtual consultations concerning this project.

As you know CEDESOL Foundation and Myclimate Foundation of Switzerland, are developing the project "Ecological Stoves for Living Well". Our Program aims to improve quality of life of more than 50,000 families by combining technology with education, through the implementation of ecological stoves, jointly with environmental and well being training in Bolivia and Paraguay.

This project was first presented at the Local Stakeholders Consultation (LSC) held in Cochabamba on the 27.04.2011 under the Small-Scale Project. The first virtual consultation to inform about the LSC meeting and to review the design of the Project, held on the 26.07.2011.

We have used the default CDM non renewable biomass values because there is no public information to analyze in Bolivia or Paraguay, we have an agreement with the Gold Standard Evaluation Team that if

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

the Designated National Authorities (DNA) comment on our Project, their comments will be taken into consideration.

We are pleased to inform all concerned of the upgrade of our Project to the Validation Stage for which we need to conduct another virtual Stakeholder Feedback round and therefore we invite you to be part on it.

In the updated PoA we have included a continuous input process as well as Grievance mechanisms included in the POA on page 44. We invite you to read the PoA as well as VPA 1 and VPA2, included as attachments. If you need to read the document in spanish, notify us.

Please respond to us at: cedesol_feedbackround_poa@cedesol.org or

Call to: [+\(591\) 4-4412787](tel:+59144412787)

All your opinions, comments and ideas are welcome, but in order to be considered for the design review and to be formally included in the consultation report we submit to the Gold Standard please respond by September 10, 2013.

Thank you,

*David E. Whitfield V.
Executive Director
CEDESOL
www.cedesol.org
skype – CEDESOL2*

Usted está recibiendo esta comunicación, ya que participó en la anterior consulta virtual anterior, relativa a este proyecto.

Como usted sabe, tanto como la Fundación CEDESOL y Myclimate de Suiza, están desarrollando el proyecto "Cocinas Ecológicas para Vivir Bien". Nuestro programa tiene como objetivo mejorar la calidad de vida de más de 50.000 familias mediante la combinación de la tecnología con la educación, a través de la implementación de cocinas ecológicas, para mejorar el medio ambiente y la calidad de vida en Bolivia y Paraguay.

Este proyecto fue presentado por primera vez en la Consulta Local de las partes interesadas (LSC su sigla en inglés), realizada en Cochabamba en fecha 27.04.2011 en el marco del proyecto de pequeña escala. La primera consulta virtual fue para informar sobre la reunión de LSC y revisar el diseño del proyecto y se realizo en fecha 26.07.2011.

Estamos utilizando los valores de biomasa no renovable MDL por defecto debido a que no existe información pública para analizarlos tanto en Bolivia como en Paraguay, tenemos un acuerdo con el Equipo de Evaluación de la Gold Standard, que si las Autoridades Nacionales Designadas (DNA) comentan sobre nuestro proyecto, sus comentarios se tomaran en cuenta.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

Tenemos el agrado de informar a todos los interesados del ascenso de nuestro proyecto a la etapa de Validación para lo cual se necesita llevar a cabo otra ronda de Consulta virtual, por lo que le invitamos cordialmente a ser parte de ella.

En el Programa de Acción actualizado, hemos incluido un proceso de entrada continua, así como los mecanismos de quejas incluido en el POA en la página 44. Le invitamos a leer el PoA y VPA 1 y VPA2, incluidos como anexos, si desearía leer los documentos en español, notificarnos a la brevedad posible.

Por favor háganos llegar su respuesta al correo: cedesol_feedbackround_poa@cedesol.org o

Llame al: [+ \(591\) 4-4412787](tel:+59144412787)

Todas sus opiniones, comentarios e ideas son bienvenidas, pero con el fin de ser considerados para la revisión del diseño y para ser incluidos formalmente en el informe de la Consulta a la Gold Standard, por favor responda hasta el 10 de Septiembre del 2013

Gracias,

David E. Whitfield V.

Director Ejecutivo

CEDESOL

www.cedesol.org

skype – CEDESOL2

To date we received five mails asking for translation of the PoA in Spanish from the following persons

Gracias sin embargo por favor si pudiera acceder al documento en cuestión en español quedare muy agradecido.

Atentamente,

Victor Colque

Thanks however please if you could access the present document in Spanish will stay very grateful.

Sincerely,

Victor Colque

Señores CEDESOL,

Solicito me puedan enviar el documento en idioma español.

Saludos cordiales,

Mauricio Iñiguez Berbety

Director del Departamento de Electromecánica

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

Universidad Privada del Valle

Srs. CEDESOL

I request you could send to me the document in Spanish.

Best regards,

Mauricio Iñiguez Berbety

Director del Departamento de Electromecánica

Universidad Privada del Valle

Interesada en participar en la consulta y obtener información de la aplicación de energías alternativas, solicito por favor los documentos en español

atentamente

Monica Torrico

Interested in participating in the consultation and obtaining information of the alternative energy application, please request documents in Spanish.

Best regards,

Monica Torrico

Buena tarde he leído el documento que envían y solicitaría mas información si es posible en español para poder apoyar en lo que esté a mi alcance,

Gracias.

Alberto Cárdenas C.

Coordinador Proyecto ECO Feria.

Fundación AGRECOL Andes

Good afternoon I read the document you sent and request more information if possible in Spanish in order to support as in my power,

Thank you.

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

Alberto Cárdenas C.

Coordinador Proyecto ECO Feria.

Fundación AGRECOL Andes

Estimados miembros de CEDESOL, ahora si en español me va a ser más fácil, leer y responder a esta consulta virtual,

Saludos cordiales

Maria Elena Ferrel

We haven't received any feedback and therefore we consider the Second Feedback Round closed. However in the future if there is any reply from the Designated National Authorities (DNA) from Paraguay or Bolivia, we will take into consideration in agreement with the Gold Standard Evaluation.

David Whitfield, CEDESOL, Cochabamba, October 2013

Martin Jenk, myclimate, Zürich, October 2013

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

Annex 1

CONTACT INFORMATION ON ENTITY/INDIVIDUAL RESPONSIBLE FOR THE MICRO--SCALE VPA

Organization:	Fundación CEDESOL
Street/P.O.Box:	Calle Illapa # 1870
Building:	
City:	Cochabamba
State/Region:	Cochabamba
Postfix/ZIP:	Calle Illapa # 1870
Country:	Bolivia
Telephone:	(591-4) 4028527
FAX:	
E-Mail:	info@cedesol.org
URL:	www.cedesol.org
Represented by:	David Whitfield
Title:	Executive Director
Salutation:	Mr.
Last Name:	Whitfield
Middle Name:	Eugene
First Name:	David
Department:	
Mobile:	591 77900868
Direct FAX:	
Direct tel:	
Personal E-Mail:	david@cedesol.org

Organization:	Foundation myclimate – The Climate Protection Partnership
Street/P.O.Box:	Sternenstrasse 12
Building:	
City:	Zürich
State/Region:	Zürich
Postfix/ZIP:	8002
Country:	Switzerland
Telephone:	+41 44 500 43 50
FAX:	+41 44 500 43 51
E-Mail:	projects@myclimate.org
URL:	www.myclimate.org
Represented by:	Martin Jenk
Title:	Project Manager
Salutation:	Mr
Last Name:	Jenk

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

Middle Name:	
First Name:	Martin
Department:	Climate Offset Projects
Mobile:	
Direct FAX:	
Direct tel:	
Personal E-Mail:	martin.jenk@myclimate.org

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

Annex 2

INFORMATION REGARDING PUBLIC FUNDING

Project Owner: CEDESOL

Cochabamba, 13 de marzo de 2012

Project reference: GS 1050- Ecological Stoves for a Better Living.

To: Gold Standard Foundation

Declaration of Non-Use of Official Development Assistance by Project Owner

CEDESOL:

As Project Owner of the above-referenced project, acting on behalf of all project participants, I now make the following representations:

David Whitfield, Executive Director of CEDESOL:

I hereby declare that I am duly and fully authorized by the project owner of the above-referenced project, acting on behalf of all project participants, to make the following representations on Project Proponent's behalf:

I. Gold Standard Documentation

I am familiar with the provisions of Gold Standard Documentation relevant to Official Development Assistance (ODA). I understand that the above-referenced project is not eligible for Gold Standard registration if the project receives or benefits from Official Development Assistance under the condition that some or all credits coming out of the project are transferred to the ODA donor country. I now expressly declare that no financing provided in connection with the above-referenced project has come from or will come from ODA that has been or will be provided under the condition, whether express or implied, that any or all of the credits [CERs, ERUs or VERs]

TITLE OF THE MICRO-PROGRAMME: GS 1220 Ecological Stoves for Better Living – Microscale PoA

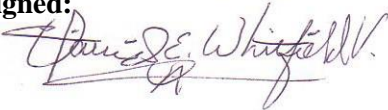
issued as a result of the project's operation will be transferred directly or indirectly to the country of origin of the ODA.

II. Duty to Notify Upon Discovery.

If I learn or if I am given any reason to believe at any stage of project design or implementation that ODA has been used to support the development or implementation of the project, or that an entity providing ODA to the host country may at some point in the future benefit directly or indirectly from the credits generated from the project as a condition of investment, I will make this known to the Gold Standard immediately.

III. Sanctions. I am fully aware that under Section 10 of the Gold Standard Terms and Conditions sanctions and damages may be incurred for the provision of false information related to Projects and/or Gold Standard credits.

Signed:



Name: David Whitfield

Title: Executive Director

On behalf of: CEDESOL