

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

KEY PROJECT INFORMATION

Title of Project/PoA/Activity:	Fuel Efficient Stoves for North Darfur Women
GS ID of the project/PoA/activity:	GS 2896

GS Version:	Version 2.2.
Brief description of Project:	The main objective of the Fuel-Efficient Stoves for North Darfur Women project is to reduce net anthropogenic greenhouse gas emissions (GHG) by decreasing the use of non-renewable biomass as a cooking fuel by households in North Darfur State (El Fashir and El Kuma localities) of Sudan. This is achieved by providing improved cookstoves with increased heat transfer efficiency to displace less efficient traditional cookstoves used in the business-as-usual scenario. A total of 4,974 stoves, with potential of increasing in future within the GS Simplified methodology's threshold, have been delivered to beneficiary households since the project started in April 2014. The project is displacing non-renewable biomass, resulting in anticipated greenhouse gas emission reductions of around 41,674 tCO₂e over the 7 years (first) crediting period.
Project type: Energy/Land Use	Energy Efficiency-Domestic
For Renewable Energy Projects – intention to apply RECs Labels (y/n)	N
GS Stream (CDM/VER):	VER
Scale (large/scale/micro):	Micro
GS Registration Date:	11/04/2017
GS Crediting period start date:	11/04/2015
CDM Registration Date:	N/A
CDM Crediting period start date:	N/A
Project Developer:	Haggar Co. Ltd
Project Representative:	Muna M. E. Merghani
Project Participants and any communities involved:	Haggar Co. Ltd; and Women Development Association Network (WDAN)
Host Country/Location:	Republic of Sudan / North Darfur
Methodologies applied:	The Gold Standard simplified methodology for efficient cook stoves (version 2013)
SDG Impacts:	1 – SDG 1: Poverty 2 – SDG 5: Gender 3 – SDG 13: Climate
Estimated amount of SDG Impact (GSVERs and others)	1 – SDG 1: 10,171,134 SDG of saving (2nd MP) 2 – SDG 5: 312 hours freer (2nd MP) 3 – SDG 13: 41,674 tCO ₂ e (over the 7 years - PDD)

SECTION A Sustainable Development Goals (SDG) outcomes

A.1 Relevant target for each of the three SDGs

Table below presents the relevant SDG target(s) for each of the three SDGs addressed by the project.

SDGs	Targets	Justification
Goal 1. No poverty	1.4. By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to <u>economic resources</u>, as well as access to <u>basic services</u>, ownership and control over land and other forms of property, inheritance, natural resources, <u>appropriate new technology and financial services</u>, including micro-finance.	The project enables poor women to access to better technology through cost-effective and subsidising financial mechanisms. These in essence, provide them with a better access to economic good and service. Energy access can be considered as a basic service and the project improves the quality of this access through devices consuming less fuel.
Goal 5. Gender Equality	- Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate. - Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life	- The Project alleviates the strain of domestic work. By reducing the amount of fuel required for energy, it reduces the amount of time required to purchase or fetch it and free up women's time who usually have fuel collection as one of their duty. - The project has been designed to benefit women and is run by women for their own community. The provision of trainings as well as women-self determination, through the management of this project, contributes to their ability to make decision and enhance their economic independence.
Goal 13. Climate Action	Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities	The project will contribute to this goal by enabling a net reduction in CO₂e emissions.

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

These parameters have been quantified using the second Monitoring Period data.

SDG 1 (No Poverty)

SDG 1 impacts will not be certified as 'Certified Impact Statements' and therefore no specific methodologies for estimation and monitoring will be applied.

The impacts will be assessed thorough the cumulated saving from all households using the project cookstoves in year y ($S_{p,y}$)

Indicator

$$S_{p,y} = N_p \times U_{p,y} \times S_{pi,y}$$

Where:

N_p = number of households who have received or acquired a new improved stove.

$U_{p,y}$ = usage rate in project scenario p during year y

$S_{pi,y}$ = yearly cumulated money saving made by an average representative household in year y

$$N_p = 4,974$$

$$U_{p,2018} = 98.5\%$$

$$S_{pi,2017-19} = 173 \text{ SDG (Sudanese Pounds)} \times 12 \text{ months}$$

$S_{p,y}$ would amount to around 10,171,134 SDG (~213,677 USD or 43 USD) per household per year as of April 2019.

SDG 5 (Gender equality)

SDG 5 impacts will not be certified as 'Certified Impact Statements' and therefore no specific methodologies for estimation and monitoring will be applied.

The impacts will be assessed thorough the estimated yearly time saved cooking with the new stove (ST_y).

Indicator

$$ST_y = 6 \text{ hours} \times 52 \text{ weeks}$$

As of the date of this report, the average amount of time saved on cooking and collecting/purchasing fuel per household is 312 hours per year.

SDG 13 (Climate Action)

The SDG 13 outcome will be quantified as CO₂e emission reductions and certified as 'Certified SDG 13 Impact Statement' allowing the generation of carbon credits (VERs).

For the calculations and estimation of emission reductions, the Gold Standard simplified methodology for efficient Cookstoves (version 2013) has been adopted. Calculation and estimation was carried out using the Gold Standard's Emissions Reduction Calculation Tool for the Simplified Methodology for Efficient Cookstoves.

Indicator

As per the methodology the below formula was applied to determine the emission reduction values.

$$ER_y = \sum_{t=0}^{t_{toy}} N_{p,y} * P_y * U_{p,y} * (f_{NRB,y} * EF_{b,fuel,CO2} + EF_{b,fuel,non_CO2}) * (1 - DF_{b,Stove,y})$$

$N_{p,y}$ = Number of project cookstoves of each age group operational in the year y

P_y = Quantity of firewood that is saved in the year y (tonnes per household in year y)

$U_{p,y}$ = Usage rate for project cookstoves in year y , based on adoption rate and drop off rate revealed by usage surveys (fraction)

$f_{NRB,b,y}$ = Fraction of non-renewable biomass, used in year y for baseline scenario.

$EF_{b,fuel,CO2}$ = CO₂ emission factor of firewood that is substituted or reduced.

$EF_{b,fuel,non_CO2}$ = Non-CO₂ emission factor of firewood that is substituted or reduced.
 $DF_{b,Stove,y}$ = Usage of baseline cookstove during the year y (fraction) in project scenario
 x = $y - 1$
 y = Year of the crediting period

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 (emission reductions from all beneficiaries)
Data/parameter	$EF_{b,fuel,CO2}$
Unit	tCO ₂ /tonne of firewood
Description	CO ₂ emission factor arising from use of firewood in baseline scenario
Source of data	Section 4 of The Gold Standard Simplified Methodology for Efficient Cookstoves
Value(s) applied	1.747 tCO ₂ /ton of firewood
Choice of data or Measurement methods and procedures	Factor recommended by the methodology.
Purpose of data	Deriving the greenhouse gas emission released by non-renewable biomass saved.
Additional comment	-

Relevant SDG Indicator	SDG 13 (emission reductions from all beneficiaries)
Data/parameter	$EF_{b,fuel,non-CO2}$
Unit	tCO ₂ /tonne of firewood
Description	Non-CO ₂ emission factor arising from use of firewood in baseline scenario
Source of data	Section 4 of The Gold Standard Simplified Methodology for Efficient Cookstoves
Value(s) applied	0.455 tCO ₂ /ton of firewood
Choice of data or Measurement methods and procedures	Factor recommended by the methodology.
Purpose of data	Deriving the greenhouse gas emission released by non-renewable biomass saved.
Additional comment	-

Relevant SDG Indicator	SDG 13 (emission reductions from all beneficiaries)
Data/parameter	η_b
Unit	Fraction
Description	Efficiency of the cookstove being used in the baseline scenario
Source of data	Default value
Value(s) applied	10%

Choice of data or Measurement methods and procedures	Default factor as suggested by the methodology.
Purpose of data	Feeding the calculation for quantity of firewood that is saved in year y .
Additional comment	-

Relevant SDG Indicator	SDG 13 (emission reductions from all beneficiaries)
Data/parameter	η_p
Unit	Fraction
Description	Efficiency of the cookstove being used in the project scenario
Source of data	Ezystove manufacturing and tests specifications
Value(s) applied	27.8%
Choice of data or Measurement methods and procedures	Manufacturer tests and specifications as the most reliable source of information.
Purpose of data	Feeding the calculation for quantity of firewood that is saved in year y .
Additional comment	-

Relevant SDG Indicator	SDG 13 (emission reductions from all beneficiaries)
Data/parameter	f_{NRB}
Unit	Fraction
Description	Fraction of non-renewable biomass
Source of data	Default value as approved by the UNFCCC in December 2014: https://cdm.unfccc.int/DNA/fNRB/index.html
Value(s) applied	85%
Choice of data or Measurement methods and procedures	Default factor approved by the host country as the most reliable source of information.
Purpose of data	Considering only the non-renewable portion of biomass as subject to emission reductions.
Additional comment	-

Relevant SDG Indicator	SDG 13 (emission reductions from all beneficiaries)
Data/parameter	$B_{b,y}$
Unit	tonnes firewood per household per year
Description	Firewood consumption for cooking in baseline
Source of data	Derived from the minimum service level (MSL) or KPT
Value(s) applied	MSL: 0.5 tonnes per capita per year (MSL method) KPT: 1.129 t/household per year
Choice of data or Measurement methods and procedures	Baseline Field Tests (BFT) and Project Field Tests (PFT) were completed during a survey conducted in 2014. For MSL, the household size is assessed during the usage survey carried out on a yearly basis.
Purpose of data	Feeding the calculation for quantity of firewood that is saved in year y .

Additional comment	-
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Relevant SDG Indicator	SDG 13 (emission reductions from all beneficiaries)
Data/parameter	L_y
Unit	Fraction
Description	Leakage adjustment factor period y
Source of data	Default value
Value(s) applied	-
Choice of data or Measurement methods and procedures	According to GS Simplified methodology leakage related to NRB saved by project activity is not considered for micro-scale project activities.
Purpose of data	Taking into account potential additional emission being emitted as a side effect from the project.
Additional comment	-

SECTION B Safeguarding Principles Assessment

B.1 Analysis of social, economic and environmental impacts

The below assessment of following Safeguarding Principles Assessment is required to be carried out by GS Version 2.0, 2.1 and 2.2 projects.

Safeguarding principles	Assessment questions	Relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)	Gap analysis - Covered in the DO Not Harm assessment
Social & Economic Safeguarding Principles					
1. Human Rights	1. The Project Developer and the Project shall respect internationally proclaimed human rights and shall not be complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights.	No	The project is implemented by the Women Development Association Network. This network is made of 100+ women-only associations and work mostly on a voluntary basis. This network has been set to serve local women communities and work against gender discrimination. The project is co-developed by Haggard, one of the most respected and known company with a unique CSR. The project developers take care that the project respect internationally proclaimed human rights and is no complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights.	N/A	Yes

Safeguarding principles	Assessment questions	Relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)	Gap analysis - Covered in the DO Not Harm assessment
	2. The Project shall not discriminate with regards to participation and inclusion.	No	The project technology is mostly made for women who in Sudan hold the cooking responsibility. It is also administered by them. Nevertheless, it can also be used or purchased by men who would make the request.	N/A	No
2. Gender Equality and Women's Rights <i>Requirement 1</i>	1. The Project shall complete the following gender assessment questions in order to inform Requirements 2-4, below: 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	The project has been designed / selected and is administered by a group of women that represents thousands of women through local associations. Consequently, the project has actually been designed to increase women's access to a better economic good and service and increase enhance their benefits from cooking with a more efficient technology.	N/A	No
	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)?	No	Most women who benefit from the projects have none or low income and are poor. Some of them can be considered as vulnerable. However, the project will enable to improve their condition and may increase their social inclusion through their involvement within their local association.	N/A	No
	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 (such as lack of time, child care duties, low literacy or educational levels, or societal discrimination)?	No	As per before, the Project is aimed at benefiting women mostly and is accordingly managed by women. These women have opted for this project. As a result, they are the one benefiting from it. Women administering the project are those willing to do so, meaning those with either more time or more careful about their community. Nevertheless, these associations are very open as they are meant to benefit its members. While the project has mostly been designed by women, men would possibly have a say	N/A	No

Safeguarding principles	Assessment questions	Relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)	Gap analysis - Covered in the DO Not Harm assessment
			about the project when talking to their wives and relatives.		
	Does the Project take into account gender 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)?	No	While the project has mostly been designed to benefit women, men have also occurred to purchase stoves for their household and would possibly have a say about the project when talking to their wives and relatives. The only eligibility criteria is the ability of the beneficiary to repay the non-subsidized share of their stove. Accordingly, the project is open to any and does not favour exclusion.	N/A	No
	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?	No	The project distributed energy efficient stoves. This means that whether the fuel is being collected by hand from roaming for hours or purchased off the market, the decreased consumption of fuel free up time for beneficiary to undertake other activities. Hence, the Project design does not contribute to an increase in women's workload.	N/A	No
	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?	No	The project has been designed to be administered and benefit women. Hence, it is not foreseen to reproduce or depend discrimination against women.	N/A	No
	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	No	The project is not foreseen to limit women's ability to use, develop and protect natural resources. Instead the project gives an easy access to a more efficient technology and which should ultimately enhance the conservation of trees.	N/A	No

Safeguarding principles	Assessment questions	Relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)	Gap analysis - Covered in the DO Not Harm assessment
Requirement 2	and services?				
	Is there a likelihood that the proposed Project would expose women and girls to further risks or hazards?	No	It's not either likely that the project activity would expose women or girls to further risks or hazards as the project provides a technology, they seem to be safer than the baseline 3 stones fires. Risks of burning are more likely to be less frequent.	N/A	No
	2. The Project shall not directly or indirectly lead to/contribute to adverse impacts on gender equality and/or the situation of women. Specifically, this shall include (not exhaustive): Sexual harassment and/or any forms of violence against women - address the multiple risks of gender-based violence, including sexual exploitation or human trafficking.	No	The Project will not directly or indirectly lead or contribute to adverse impacts on gender equality or the situation of women. The access to a technology that reduces the need to collect firewood, could reduce the risks of women being harassed while doing so.	N/A	No
	Slavery, imprisonment, physical and mental drudgery, punishment or coercion of women and girls.	No	The Project will not directly or indirectly lead or contribute to adverse impacts on gender equality or the situation of women. In fact, the access to more efficient stoves is foreseen to improve the general conditions of women.	N/A	No
	Restriction of women's rights or access to resources (natural or economic).	No	The Project will not directly or indirectly lead or contribute to adverse impacts on gender equality or the situation of women. Consequently, the project has actually been designed to increase women's access to a better economic good and service and increase enhance their benefits from cooking with a more efficient technology.	N/A	No

Safeguarding principles	Assessment questions	Relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)	Gap analysis - Covered in the DO Not Harm assessment
Requirement 3	Recognise women's ownership rights regardless of marital status – adopt project measures where possible to support to women's access to inherit and own land, homes, and other assets or natural resources.	No	The Project will not have any impact on women's ownership rights to inherit and own land, homes and other assets.	N/A	No
	3. Projects shall apply the principles of non-discrimination, equal treatment, and equal pay for equal work, specifically: Where appropriate for the implementation of a Project, paid, volunteer work or community contributions will be organised to provide the conditions for equitable participation of men and women in the identified tasks/activities.	No	The Project applies the principles of non-discrimination and equal treatment. Nevertheless, this project is administered by a network of women-led associations and is by essence only functions through women. While no men work for the project, they cannot be considered as excluded or discriminated from it.	N/A	No
	Introduce conditions that ensure the participation of women or men in Project activities and benefits based on pregnancy, maternity/paternity leave, or marital status.	No	For tasks than can be carried out by both men and women, the principle of the equal pay for equal work will be applied and organized in way to provide the conditions for equitable participation of men and women.	N/A	No
	Ensure that these conditions do not limit the access of women or men, as the case may be, to Project participation and benefits.	No	There are no limitations on participation or benefiting from the Project depending on the pregnancy, maternity/paternity leave or marital status.	N/A	No
Requirement 4	4. The Project shall refer to the country's national gender strategy or equivalent national commitment to aid in assessing	No	Currently, Sudan has yet to sign or ratify Convention on the Elimination of all Forms of Discrimination Against Women, one of very few nations to not do so. Whilst the governing	N/A	No

Safeguarding principles	Assessment questions	Relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)	Gap analysis - Covered in the DO Not Harm assessment
Requirement 5	gender risks.		policies regarding gender equality are weak, this project focuses on increasing female empowerment through ownership of technology, increased health and increased spare time.		
	5. Based on the Preliminary Review assessment of Requirement 1, above, Gold Standard may require that the Project seek the input of an Expert Stakeholder and to include their recommendations in the Project design.	No	Not applicable.	N/A	No
3. Community Health, Safety and Working Conditions	1. The Project shall avoid community exposure to increased health risks and shall not adversely affect the health of the workers and the community.	No	The project activity does not expose the community to increased health risks and is not adversely affecting the health of workers and the community. For example, the workers participating in the project activity are not exposed to unsafe or unhealthy work environments as the distribution of stoves or the monitoring activities of the project do not include any hazardous chemicals or other hazardous material.	N/A	Partially
4. Cultural Heritage, Indigenous Peoples, Displacement and Resettlement	<u>Sites of Cultural and Historical Heritage</u> Does the Project Area include sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g., knowledge, innovations, or practices)?	No	The project activity does not include sites, structures or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture.	N/A	No
	<u>Forced Eviction and Displacement</u> Does the Project require or cause the physical or	No	The project activity distributes efficient cookstoves and therefore no physical or economic relocation of people	N/A	Yes

Safeguarding principles	Assessment questions	Relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)	Gap analysis - Covered in the DO Not Harm assessment
	economic relocation of peoples (temporary or permanent, full or partial)?		is involved.		
	<u>Land Tenure and Other Rights</u> 1. Does the Project require any change to land tenure arrangements and/or other rights? 2. For Projects involving land-use tenure, are there any uncertainties with regards land tenure, access rights, usage rights or land ownership?	No	1. The project does not require any change to land tenure arrangements and/or other rights. 2. N/A	N/A N/A	No No
	<u>Indigenous Peoples</u> Are indigenous peoples present in or within the area of influence of the Project and/or is the Project located on land/territory claimed by indigenous peoples?	No	There are no indigenous people present within the area of influence nor the project is located on territory claimed by indigenous people.	N/A	No
5. Corruption	1. The Project shall not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt Projects.	No	The Project does not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt Projects. The stove supply chain is short and transparent. The price and cost of stoves is documented.	N/A	Yes
6. Economic Impacts	<u>Labour rights</u> 1. The Project Developer shall ensure that there is no forced labour and that all employment is in compliance with national labour and occupational health and safety laws, with obligations under international law, and consistency with the principles and	No	1. The project is implemented by the Women Development Association Network, a network of voluntary and women-led associations. The Project only employs a small team who knows and respect each other's highly. Forced labour would not hold in the context of the type of work these women do. Most of them are free to prioritise their	N/A	Yes

Safeguarding principles	Assessment questions	Relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)	Gap analysis - Covered in the DO Not Harm assessment
	standards embodied in the International Labour Organization (ILO) fundamental conventions. Where these are contradictory and a breach of one or other cannot be avoided, then guidance shall be sought from Gold Standard.		personal activities when required. Sudan has ratified most of the fundamental ILO Conventions (7 out of 8) ¹ All employees and contractors will work voluntarily for the project, no forced labour is used and all employment is in compliance with national laws and consistence with the principles and standards of the ILO conventions.		
	2. Workers shall be able to establish and join labour organisations.	No	2. The Project only employs a small set of employees hired by international and local NGOs. Most employees are part of the community the project serves and are free to do anything, including joining union, even though they would not appeal or apply the women implementing the project, due to their willingness to contribute to the local community welfare.	N/A	No
	3. Working agreements with all individual workers shall be documented and implemented. These shall at minimum comprise: (a) Working hours (must not exceed 48 hours per week on a regular basis), AND (b) Duties and tasks, AND (c) Remuneration (must include provision for payment of overtime), AND (d) Modalities on health insurance, AND (e) Modalities on	No	3. The working agreements with the individual worker follows the local labour laws.	N/A	No

¹ https://www.ilo.org/dyn/normlex/en/?p=1000:11200:7983315056791:::P11200_INSTRUMENT_SORT:4

Safeguarding principles	Assessment questions	Relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)	Gap analysis - Covered in the DO Not Harm assessment
	termination of the contract with provision for voluntary resignation by employee, AND (f) Provision for annual leave of not less than 10 days per year, not including sick and casual leave. 4. The Project Developer shall justify that the employment model applied is locally and culturally appropriate. 5. Child labour, as defined by the ILO Minimum Age Convention is not allowed. The Project Developer shall use adequate and verifiable mechanisms for age verification in recruitment procedures. Exceptions are children for work on their families' property as long as: (a) Their compulsory schooling (minimum of 6 schooling years) is not hindered, AND (b) The tasks they perform do not harm their physical and mental development, AND (c) The opinions and recommendations of an Expert Stakeholder shall be sought and demonstrated as being included in the Project design. 6. The Project Developer shall ensure the use of appropriate equipment, training of workers,	No No No	4. The employment model applied is also locally and culturally appropriate. 5. All possible staff hired have a minimum age of 18. 6. All the work will be made by using appropriate equipment, training of workers, documentation and reporting	N/A N/A N/A	No Yes No

Safeguarding principles	Assessment questions	Relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)	Gap analysis - Covered in the DO Not Harm assessment
	documentation and reporting of accidents and incidents, and emergency preparedness and response measures.		of accidents and incidents. Considering the nature of the project, the project will not need emergency preparedness and response measures.		
	<u>Negative Economic Consequence</u> 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	No No	Part of the project activities related costs, like e.g. stove import, transport, half of their costs has been covered by Hagggar. The other half of the cost of stoves and local transportation are borne by beneficiaries. The proceed of the sale of carbon offsets will be equally shared among Hagggar and the WDAN. This means that Hagggar will have funding to reinvest into a second round of stoves and that WDAN will have incomes it could use to set a micro-fund and sustain the project over a long period of time. At the end of the credit period, the WDAN should have enough fund to import stoves themselves or choose to distribute a locally manufactured stove and replicate the model in a sustainable fashion. The project enhances the local economy, by hiring local staff and reducing household's expenditure on fuel that is reallocated on other essential items. While two third of households purchased their fuel from the market in the baseline, considering the size of the project, it is unlikely it will affect the livelihood of retailers who have seen the price of the commodity skyrocketing over the past 10 years.	N/A N/A	No No

Safeguarding principles	Assessment questions	Relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)	Gap analysis - Covered in the DO Not Harm assessment
	groups in targeted communities and that benefits are socially-inclusive and sustainable.				
Environmental & Ecological Safeguarding Principles					
1 – Climate and Energy	<u>Emissions</u> Will the Project increase greenhouse gas emissions over the Baseline Scenario?	No	The project will reduce GHG emissions as demonstrated by the monitoring reports.	N/A N/A	Yes
	<u>Energy Supply</u> 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 involves stand-alone devices that do not consume electricity from a local grid or power supply but will consume fuel resource in smaller quantities than in the baseline and should in essence release the pressure on this resource.	N/A	No
2. Water	<u>Impact on Natural Water Patterns/Flows</u> 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 does not affect the natural or pre-existing pattern of watercourses, ground-water and/or the watershed(s).	N/A	No
	<u>Erosion and/or Water Body Instability</u> 1. 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	No N/A	1. The project will not cause additional erosion and/or water body instability or disrupt the natural pattern of erosion. Since the project reduces the consumption of firewood, it will have a positive impact on biomass, which should have a positive impact on soil. N/A	N/A N/A	No

Safeguarding principles	Assessment questions	Relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)	Gap analysis - Covered in the DO Not Harm assessment
	and/or water body instability?				
3 – Environment, ecology and land use	<u>Landscape Modification and Soil</u> Does the Project involve the use of land and soil for production of crops or other products?	No	The Project does not involve the use of land and soil for production of crops or other projects.	N/A	No
	<u>Vulnerability to Natural Disaster</u> Will the Project be susceptible to or lead to increased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions?	No	The Project provides efficient cookstoves and is not susceptible to increase vulnerability to any extreme climatic conditions.	N/A	No
	<u>Genetic Resources</u> 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 does not involve or may not be negatively impacted by the use of genetically modified organisms or GMOs.	N/A	No
	<u>Release of pollutants</u> Could the Project potentially result in the release of pollutants to the environment?	No	The Project is not potentially resulting in release of pollutants to the environment.	N/A	No
	<u>Hazardous and Non-hazardous Waste</u> Will the Project involve the manufacture, trade, release, and/or use of hazardous and non-hazardous chemicals and/or materials?	No	The Project does not involve the manufacture, trade, release, and/or use of hazardous chemicals and or materials.	N/A	No
	<u>Pesticides & Fertilisers</u>				

Safeguarding principles	Assessment questions	Relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)	Gap analysis - Covered in the DO Not Harm assessment
	Will the Project involve the application of pesticides and/or fertilisers?	No	The Project does not involve the application of pesticides and/or fertilisers.	N/A	No
	<u>Harvesting of Forest</u> Will the Project involve the harvesting of forests?	No	The Project does not involve harvesting of forests.	N/A	No
	<u>Food</u> 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.	N/A	No
	<u>Animal husbandry</u> Will the Project involve animal husbandry?	No	The Project does not involve animal husbandry.	N/A	No
	<u>High Conservation Value Areas and Critical Habitats</u> Does the Project physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified?	No	The project is not located within a high conservation value area or within critical natural habitats. Moreover, the aim of the project is to reduce the quantity of firewood consumption in the project area with the intent to preserve save the natural resources.	N/A	Yes
	<u>Endangered Species</u> 1. Are there any endangered species identified as potentially being present within the Project boundary (including those that may route through the area)? 2. Does the Project potentially impact other areas where endangered species may be present through transboundary	No No	The project boundary is the physical location of beneficiaries. They live in deserted areas with no endangered species identified as potentially being present. The efficient technology is not expected to impact other areas where endangered species may be present through transboundary affects.	N/A N/A	Yes No

Safeguarding principles	Assessment questions	Relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)	Gap analysis - Covered in the DO Not Harm assessment
	affects?				

SECTION C Monitoring plan

C.1 Data and parameters to be monitored

Relevant SDG Indicator/Safeguarding Principle	SDG 13 (emission reductions from all beneficiaries) SDG 1 (cumulated saving from all beneficiaries) – Target 1.4.
Data / Parameter	$U_{p,y}$
Unit	Fraction
Description	Usage rate in project scenario p during year y
Source of data	Usage Surveys
Value(s) applied	Around 98.5%
Measurement methods and procedures	Usage Surveys
Monitoring frequency	Annual
QA/QC procedures	Gathered data is cross-checked with sales record for user identification and stove installation date. During the usage surveys, qualitative checks on the physical condition of stoves are performed to cross-check with information provided by the user and potentially flag premature stove failure. All information gathered during the survey was analysed by staff of WDAN, Haggard and reviewed by an external consultant.
Purpose of data	Calculating NRB saved and calculating SDG 1 impacts.
Additional comment	-

Relevant SDG Indicator/Safeguarding Principle	SDG 13 (emission reductions from all beneficiaries) SDG 1 (cumulated saving from all beneficiaries) – Target 1.4.
Data / Parameter	$N_{p,y}$
Unit	Number
Description	Number of project cookstoves installed
Source of data	Sales records
Value(s) applied	4,974
Measurement methods and procedures	Contracts signed and entered into the sales records
Monitoring frequency	Continuous
QA/QC procedures	Checks that contracts contains all information required, once information is entered into the spreadsheet, checks that information match over a 10% sample.
Purpose of data	Calculating NRB saved.
Additional comment	All 4,974 stoves were installed within 6 months so have not been categorized under different age groups.

Relevant SDG Indicator/Safeguarding Principle	SDG 13 (emission reductions from all beneficiaries)
Data / Parameter	DF_{η}
Unit	Fraction
Description	Discount factor to account for efficiency loss of project cookstoves
Source of data	Methodology recommendations
Value(s) applied	Default value: 0.95-0.97 i.e., 1% efficiency loss per year
Measurement methods and procedures	N/A
Monitoring frequency	Annual
QA/QC procedures	N/A
Purpose of data	Calculating NRB saved.
Additional comment	-

Relevant SDG Indicator/Safeguarding Principle	SDG 13 (emission reductions from all beneficiaries)
Data/parameter	$DF_{b, stove, y}$
Unit	Fraction
Description	Discount factor to account for usage of baseline cookstove during the year y in project scenario
Source of data	Usage Surveys
Value(s) applied	36.1%
Measurement methods and procedures	Calculated. Average number of daily meals cooked with the baseline stove / Average number of daily meals cooked
Monitoring frequency	Annual
QA/QC procedures	Gathered data is cross-checked with sales record for user identification and stove installation date. All information gathered during the survey was analysed by staff of WDAN, Hagggar and reviewed by an external consultant.
Purpose of data	Calculating NRB saved.
Additional comment	-

Relevant SDG Indicator/Safeguarding Principle	SDG 1 (cumulated saving from all beneficiaries) – Target 1.4.
Data / Parameter	$S_{p, y}$
Unit	SDG / year
Description	Cumulated saving from an average household using the project cookstoves in year y
Source of data	Usage surveys
Value(s) applied	10,171,134

Measurement methods and procedures	Calculated. $S_{p,y} = N_p \times U_{p,y} \times S_{pi,y}$ Where: $U_{p,y}$ = usage rate in project scenario p during year y $S_{pi,y}$ = yearly cumulated money saving made by an average representative household in year y
Monitoring frequency	Annual
QA/QC procedures	Gathered data is cross-checked with sales record for user identification and stove installation date. All information gathered during the survey was analysed by staff of WDAN, Hagggar and reviewed by an external consultant.
Purpose of data	Calculating SDG 1 impacts
Additional comment	-

Relevant SDG Indicator/Safeguarding Principle	SDG 5 (estimated yearly time saved cooking with the new stove for all beneficiaries)
Data / Parameter	ST_y
Unit	hours / year
Description	Estimated time saved cooking with project stove
Source of data	Usage Surveys
Value(s) applied	312
Measurement methods and procedures	Calculated. Estimated weekly hours saved x 52 weeks
Monitoring frequency	Annual
QA/QC procedures	Gathered data is cross-checked with sales record for user identification and stove installation date. All information gathered during the survey was analysed by staff of WDAN, Hagggar and reviewed by an external consultant.
Purpose of data	Calculating SDG 5 impacts
Additional comment	-

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

The project has completed its first monitoring period and verification (11 April 2015 to 31 October 2017) and has produced 12,681 VERs. The second monitoring period is covering the period going from 1 November 2017 to 30 April 2019 and is expected to produce 14,955 VERs.

SECTION D Duration and crediting period

D.1 Duration of project

D.1.1 Start date of project

11/04/2014 (first stove distributed)

D.1.2 Expected operational lifetime of project

The expected operational lifetime of the project activity is around 10 years but it may varies according to funding available.

D.2 GS Crediting period of the project/activity

D.2.1 Start date of the ongoing GS crediting period

11/04/2015 (2 years after registration date)

D.2.3 End date of the ongoing GS crediting period

10/04/2022 (as of the date of the end of the second crediting period, there remain around 3 years on the current crediting period).

D.2.3 Total length of the GS crediting periods

7 years twice renewable.

SECTION E Stacking of new assets

Not applicable.

Appendix 1. Contact information of project participants

Organization name	Haggar Co. Ltd
Registration number with relevant authority	R.O.NO 8168218
Street/P.O. Box	Sinaat Road, P.O. Box 236
Building	Pasiganos for Food and Beverages (Factory Building)
City	Khartoum North
State/Region	Khartoum State
Postcode	11111
Country	Sudan
Telephone	+249-185335937
Fax	
E-mail	mme@haggargroup.ae
Website	www.haggargroup.ae
Contact person	Muna M. E. Merghani
Title	Chief Human Resources Officer (CHRO)
Salutation	Ms.
Last name	Merghani
Middle name	-
First name	Muna
Department	Corporate Social Responsibility
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Direct fax	
Direct tel.	
Personal e-mail	