

ANNEX AK – POA DESIGN CONSULTATION REPORT TEMPLATE

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¹ This template can be used for micro-scale, small-scale and large-scale PoAs

SECTION A. PROGRAMME DESCRIPTION

A. 1. Name and purpose of the Programme

Name:

Household Energy Appliance Programme

Purpose:

The purpose of this Programme of Activities under Gold Standard and Clean Development Mechanism (CDM) is to deploy more than 130,000 solar lanterns, 100,000 solar home systems, 18,000 water filters and 18,000 improved cook stoves to households in Myanmar and Timor-Leste.

As the program involves dissemination of improved cook stoves as well as water filters to clearly identified end user households, the program is eligible to Gold Standard under the 'end-use energy efficiency improvement' category, defined as the reduction in the amount of energy required for delivering or producing non-energy physical goods or services.

As the program involves dissemination of solar lanterns and solar home systems to clearly identified end user households, the program is eligible to Gold Standard under the 'renewable energy supply' category, defined as the generation and delivery of energy services (e.g. mechanical work, electricity, heat) from non-fossil and non-depletable energy sources.

A. 2. Geographic boundary of the Programme

The geographical region within which all CPAs included in this PoA will be implemented is the Democratic Republic of Timor-Leste and Myanmar.

Town/Village: N/A

A. 3. Tentative start date of the Programme

Start date of the PoA is 02/12/2013, i.e. the date of notification of the intention to seek CDM status by the CME to the UNFCCC secretariat.

A. 4. Programme eligibility under The Gold Standard

- The program is a small scale program because, as a Type II (energy efficiency measures) program, the aggregated energy savings by a specific CPA under AMS-II.G “Energy efficiency measures in thermal applications of non-renewable biomass” will not exceed the equivalent of 60 GWh per year or 180 GWth per year in fuel output.
- The programme is a small scale programme because, as a Type I (energy generation) PoA, the maximum energy generation of the sum of all solar lights and solar home systems implemented under each specific CPA will not exceed capacity of all installed generating units of 15 MW/ year, as per the applied methodology AMS-I.A.
- The programme is a small scale programme because, as a Type III (other project activities) PoA, the maximum emission reductions saved in each specific CPA is less than 60 kilotonnes of carbon dioxide equivalent annually, as per the applied methodology AMS-III.AV.
- Timor-Leste and Myanmar have ratified the Kyoto Protocol, making the countries eligible to host Clean Development Mechanism (CDM) programs.
- The PoA is the energy efficiency category as it is an end use energy efficiency improvement program where the improved stoves being distributed will replace less efficient stoves.
- The PoA reduces CO₂, which is a greenhouse gas emission eligible under both the Kyoto Protocol and Gold Standard.
- CME confirms that public funding of the PoA, if any, will not result in diversion of ODA. Each CPA will declare any use of public funds in the CPA-DD and confirm that the public funding for the CPA does not result in a diversion of Official Development Assistance and is separate from and is not counted towards the donor country’s financial obligations as party included in Annex 1 countries.
- PoA activities involving a large amount of improved cook stoves, solar lanterns and solar home systems as well as water purifiers using renewable energy sources / renewable biomass shall provide the Gold Standard with a clear description of the transfer of credits ownership all along the investment chain, and with proof that end-users are aware of and willing to give up their rights on emission reductions: All buyers will sign a user agreement. In signing this agreement, users will certify a statement (also translated into the local language) such as: I agree not to claim any emission reductions for the use of the efficient cook stove, but cede the emission reductions the stove generates to the CME of the PoA.

A. 5. Current status of the Programme

The program is nearing the end of its preparation stage of planning and design.

Differ Cookstoves is in discussions with two different local partners in Timor-Leste, and one in Myanmar. National level testing of cook stoves in Timor-Leste is planned for end-May 2014. Transport and distribution of stoves and lanterns are being discussed (solar home systems are planned for introduction later).

Differ Cookstoves AS held the Local Stakeholder Consultation on May 7th 2014 to present the project to the stakeholders and receive their views and comments concerning the implementation of the project. The PoA-DD and first CPA-DD have been submitted for validation and are open for global stakeholder comments from 16 May 2014.

SECTION B. DESIGN OF STAKEHOLDER CONSULTATION PROCESS

B.1. Description of the consultation methods

The LSC report will be publically available on the Gold Standard website, as per Gold Standard requirements, as well as on the Differ Group website. All participants in the LSC will receive an email with a link to the report (or a hand delivered copy in case they do not have email access), and printed copies will be available at the DNA Secretariat office in Dili, Timor-Leste.

B. 2. Non-technical summary of the Programme

Differ AS was established in 2010 with a mission to spearhead the scale up of small-scale GHG emission reductions. This is done through early stage investments in technology providers and distributors within energy efficiency and renewable energy in developing countries, mainly in Sub-Saharan Africa and Southeast Asia. The proposed PoA by Differ will distribute solar lighting systems (lanterns, home systems), water filters and improved cook stoves to households in Myanmar and Timor-Leste. Differ's recently established subsidiary, Differ Cookstoves AS ("Differ Cookstoves"), will coordinate and manage the programme.

Households in Myanmar consumed 42,795 thousand cubic metres of fuelwood in 2010. Fuelwood and charcoal are also used in households in large quantities to boil water for drinking purposes. The implementation of clean technologies like solar lighting systems, water filters and improved cook stoves currently face various technological, institutional and financial barriers. The PoA seeks to alleviate these barriers through provision of revenue from sale of CERs generated by the PoA.

The distribution of efficient cook stoves and water purification technologies dramatically

reduces the fuelwood demand at the household level, contributing to the integrity of both the quality and quantity of biodiversity, soil and water.

Clean cook stoves and reduced reliance on inefficient combustion reduce carbon dioxide emissions and black carbon particulate pollution.

By bringing life-improving technologies and associated market infrastructure (sales kiosks, maintenance know-how, spare part supply chains, etc.) the PoA is delivering genuine community investment that has potential ripple effects into other important areas (education, etc.).

Solar lights distributed under the PoA offer ideal sources of productivity gains, educational improvement, and household monetary savings.

The distribution of clean cook stoves and water filters alleviates the domestic burden befalling women and young girls, ensuring greater workforce participation, educational acquisition, and improved respiratory health.

The PoA introduces new and/or improved technologies such as solar lighting systems, efficient cook stoves and water purifiers in the project region. It will mainly be financed by equity from Differ Cookstoves. CER revenues will be reinvested in scaling the PoA through investing in marketing and distribution, plus building a supply chain for sustainably harvested biomass fuel to be used in the distributed stoves.

B.3. Invitation tracking table

Category code	Organisation (if relevant)	Name of invitee	Method of invitation	Date of invitation	Confirmation received? Y/N
B	Ministry of Health	Isabel Maria Gomes	Hand	07.04.2014	Y
B	Ministry of Agriculture and Fishery	Januario Marceal	Hand	07.04.2014	Y
B	Secretary of State for Promotion and Equality	Ana Paula	Hand	07.04.2014	Y
B	Ministry of Social Solidarity	Francisco Franco Mendes do Rosario	Hand	07.04.2014	Y
B	Ministry of Commerce, Industry & Environment	Antonio da Concecao	Hand	07.04.2014	Y
C	Ministry of Commerce, Industry & Environment, State Secretariat for Environment (SEMA)	Mario Ximenes	Email	07.04.2014	Y
C	Ministry of Commerce, Industry & Environment	Adao Barbosa	Email	07.04.2014	Y
B	Forest Directorate	Manuel Mendes	Hand	07.04.2014	Y

Other	Dili Institute of Technology (DIT)	Lidio Inacio Freitas	Hand	07.04.2014	Y
Other	UNDP	Tommi Aarne Samuli Kajander	Email	09.04.2014	N
Other	UNDP	Niina Kylliainen	Email	09.04.2014	Y
Other	International Finance Corporation (IFC)	Ricardo Silva	Email	09.04.2014	N
Other	World Bank	Hans Anand Beck	Email	09.04.2014	Y
Other	World Bank	Gabriela Leite Soares	Hand	07.04.2014	Y
Other	Conservation International	Trudiann Dale	Email	07.04.2014	Y
F	Mercy Corps	Justin Odum	Hand	07.04.2014	Y
D	HABURAS	Virgilio Guterres	Hand	07.04.2014	Y
A	Fundasaun Esperanza Enclave Oecusse (FEEO)	Merita de Jesus	Email	07.04.2014	Y
A	Fundasaun Esperanza Enclave Oecusse (FEEO)	Lucia M. Ena	Email	07.04.2014	Y
A	Roman Luan	Avelino Pereira Fernandes	Phone	07.04.2014	Y
A	Move Forward (MF)	Osaias Soares	Phone	07.04.2014	Y
A	Move Forward (MF)	Olimpia Soares	Phone	07.04.2014	Y
Other	Timor Post	Otelio Ote	Email	14.04.2014	N
Other	Timor Post	Rita Almeida	Email	14.04.2014	N
Other	Suara Timor Lorosa'e	Salvador Saldanha	Email	14.04.2014	N
Other	Startec Enterprises	Kim Lium Tchia	Email	14.04.2014	Y
Other	Accenture	Ian Lobo	Email	09.04.2014	N
Other	Bairopite Clinic	Dr. Dan Murphy	Hand	07.04.2014	Y
D	OHM	Rince	Hand	07.04.2014	Y
D	HADER	Abel Pereira	Email	09.04.2014	N
D	Organizasaun Feto Ba Futuro	Eugenia Neves	Email	09.04.2014	N
Other	UNICEF	Min Yuan (Ms)	Email	09.04.2014	N
Other	WHO	Luis dos Reis	Email	09.04.2014	N
D	HASATIL	Gil Boavida	Hand	07.04.2014	Y
D	Yayasan HAK	Manuel Monteiro	Hand	07.04.2014	Y
B	Demetrio Amaral	Demetrio Amaral	Hand	07.04.2014	Y
D	PERMATIL	Ego Lemos	Hand	07.04.2014	Y
B	SEFOPE	Elidio da Costa Ximenes	Hand	07.04.2014	Y
Other	Sentru Bambu	Mario Freitas Ribeiro	Hand	07.04.2014	Y
D	Alola Foundation	Ilda da Cruz	Email	07.04.2014	Y
D	Alola Foundation	Jose Ximenes	Hand	07.04.2014	Y
B	Office of the President	H.E. Taur Matan Ruak	Hand	07.04.2014	Y

D	La'o Hamutuk	Charles Scheiner	Email	14.04.2014	Y
Other	Worley Parsons	Christopher Serjak	Hand	07.04.2014	Y
D	FOKUPERS	Marilia da Silva	Email	14.04.2014	N
D	BESIK (Bee, Saneamentu no Ijiene iha Komuidade)	Joanna Mott	Email	14.04.2014	N
Other	Felisbela Pires	Felisbela Pires	Email	14.04.2014	Y
F	HIVOS	Angelina Sarmento	Email	14.04.2014	N
F	World Vision	Samaresh Nayak (Mr)	Email	09.04.2014	N
F	World Vision	Domingos Lagos	Email	09.04.2014	N
Other	GIZ	Silvio Decurtins	Email	09.04.2014	Y
Other	GIZ	Cosme Ximenes	Email	09.04.2014	Y
F	CARE International	Geraldine Mary-Zwack	Email	14.04.2014	N
D	East Timor Development Agency (ETDA)	Palmira Pires	Email	09.04.2014	N
Other	Differ Cookstoves	Jørund Buen	Hand	07.04.2014	Y
D	Kopernik	Ewa Wojkowska	Hand	07.04.2014	Y

B.4. Level of consultation

No specific feedback was obtained from stakeholders on the level of consultation i.e. activity level LSC or Programme level LSC.

SECTION C. OUTCOME OF THE CONSULTATION PROCESS

C.1. Assessment of comments

Stakeholder comment	Was comment taken into account (Yes/ No)?	Explanation (Why? How?)
Merita de Jesus, FEEO Subsidising appliances is not a good idea, as people wonder whether appliances are cheaper for illegal reasons or that they are of lower quality. Also our NGO had experienced some difficulty locating	Yes	Ewa Wojkowska from Kopernik clarified Kopernik did provide subsidies in the project in Oecusse referred to by FEEO, but that it will not do so in future. Jørund Buen confirmed that Differ

<p>spare parts for d.lights</p>		<p>does not believe in subsidies to end users, as this threatens long-term market sustainability. He highlighted that the intention is instead to use carbon revenues to build a supply chain for sustainably harvested biomass fuel, and improve distribution and marketing.</p>
<p>Jose Ximenes, Alola Foundation There is a need to focus on user education, as well as maintenance and provision of spare parts</p>	<p>Yes</p>	<p>Jørund Buen confirmed that especially for the Prime stoves, user education and capacity building is very important, as using the stoves incorrectly will reduce their efficiency and lifetime, for example if users pour water over the stove in order to shut it off.</p>
<p>Cosma Ximenes, GIZ How monitoring is done, given that there are other efficient stoves available in Timor-Leste plus another entity planning activity (Carbon Exchange), and how we know how much each stove reduces</p>	<p>Yes</p>	<p>Jørund Buen from Differ Cookstoves explained the collection of sales records and linking of these with appliance serial numbers along with DOE verification of resulting data. Further, the DNA secretariat representatives confirmed that they are not aware of any other CDM project in Timor Leste.</p>
<p>Justin Odum, Mercy Corps Spare parts and maintenance is not really a problem with d.lights as they are very robust and have long duration. However, challenge is posed by:</p> <ul style="list-style-type: none"> the government's expansion of the grid: access is unstable and it is not clear whether it will last, due to lacking investments in infrastructure, but it has negative effect on sales, even in areas where there's no grid connection, as people think they have prospects of getting grid access. Grid access is initially for free, so people see no incentive to buy power-related products - but connection is unlikely to remain 	<p>Yes</p>	<p>Jørund Buen confirmed he was aware of grid expansion and the government handing out appliances for free, and agreed this could pose a threat to Differ's investment.</p>

<p>free</p> <ul style="list-style-type: none"> • free or subsidised distribution - by government and some NGOs - of d.lights and solar home systems also hurts sales 		
<p>Felisbela Pires, Independent consultant</p> <p>The presentation doesn't provide enough information to clarify whether we will induce positive social change. Will Differ limit local companies' involvement? How will they be involved? Will we sell to them so that they can retail? How will we ensure maintenance? Why would people buy products in the districts when they can buy them cheaper in Dili?</p>	<p>Yes</p>	<p>Jørund Buen clarified on the sustainable development aspects of the project and the proposed business plan for distribution of appliances. This includes establishing a company in Timor-Leste, with local management and employees. He also highlighted that using local distributors and retailers - both private sector and NGOs - is crucial for project success. He referred to similar projects Differ has taken part in starting in North Sumatra, Senegal and Zambia, where such partnerships are a core element.</p> <p>Kim Tchia from Startec explained how his company distributes d.lights and efficient stoves today, and how he differentiates pricing and other aspects of product packaging so that customers from the districts outside Dili use his local distributors instead of him.</p>
<p>Kim Tchia, Startec Enterprises</p> <p>The stove that you use here, because you use kerosene and the cost of kerosene is also not subsidized for the end users, have you worked out cost for that, and how much they are going to spend for the use of kerosene for cooking?</p>	<p>Yes</p>	<p>Jørund Buen clarified that the Prime stoves use biomass and not kerosene as fuel. He further explained that the user would save so substantial amount of money due to reduced fuel spending that the payback time on the purchase of the stove would be short.</p>
<p>Adao Barbosa, DNA Timor Leste</p> <p>Stove price should be reduced from the price of approx 30 USD highlighted in the presentation as this price is business as usual and CDM needs to go beyond business as usual, and because Differ gets revenues from both appliance sales</p>	<p>Yes</p>	<p>Jørund Buen responded that Differ would not be able to reduce the price, because BAU is that the stoves are not available commercially in Timor-Leste at all. Also, carbon is crucial for the decision to invest, and the payback time even with carbon benefits</p>

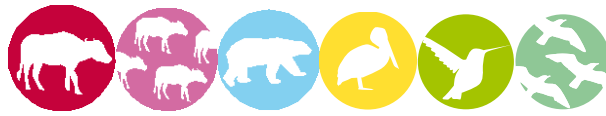
and carbon.		could be stretching beyond Differ Cookstove’s risk appetite.
Adao Barbosa, DNA Timor Leste What are the emission reductions per year of each appliance?	Yes	Jørund Buen provided the estimate of emission reductions for each appliance.
Jose Ximenes, Alola Foundation The cookstoves that were introduced by Mercy Corps use a little bit of kerosene. I see that Prime Cookstove uses briquettes. Will you be training the community in how to make briquettes?	Yes	Jørund Buen responded that the Prime cookstove does not only use briquettes. It also uses logs and most other types of biomass. He also referred to the intention to recycle the carbon revenues into manufacturing and distribution of sustainably harvested biomass fuel, and that one approach to this could be building a supply chain for briquettes or pellets.

C.2. Summary of changes to Programme design based on the stakeholder feedback provided

The stakeholder comments and remarks to the project design were discussed and answered. They are important in order to implement the PoA successfully and with the support of the local population. However, there is no need to alter the project documents due to the stakeholder comments as the PoA-DD already covers the requests from the stakeholders such as i) definition of responsibilities for maintenance, provision of spare parts, capacity building and training; ii) monitoring requirements; iii) technology specifications, including reference to fuels; iv) reference to employment; and v) the need for market infrastructure (rather than subsidies).

ANNEX R – PASSPORT TEMPLATE

CONTENTS



- A. Project title**
 - B. Project description**
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 - H. Additionality and conservativeness deviations**
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SECTION A. Project Title

[See Toolkit 1.6]

NAME /TITLE OF THE PoA:

Title: Household energy appliance programme

PoA Passport version: 1.0

25/03/2014

NAME /TITLE OF THE CPA:

001 Household appliance distribution in Timor-Leste

Unique ID Number: Differ-CPA-001

CPA Passport version: 1.0

25/03/2014

SECTION B. Project description

The project activity involves the distribution of improved cook stoves, solar home systems and solar lights to households in Timor-Leste by Differ Cookstoves AS (“Differ”).

Distribution of improved cook stoves would displace the use of non-renewable biomass to meet similar thermal energy needs for cooking in households. Further, the distribution of solar lighting systems would displace the use of kerosene in lamps to generate the equivalent quantity of lighting service in households. Thus, the project activity would result in a reduction of GHG emissions from the baseline scenario.

The project activity is being pursued as a component of the PoA “Household energy appliance programme” with Differ Cookstoves AS being the CME.

The project’s contributions to the sustainable development of the local area as well as the host country are as follows:

Entities involved in the CPA

The CME and CPA implementer of the proposed PoA is Differ Cookstoves AS (“Differ”).

Technology to be deployed

The proposed project activity will deploy efficient cook stoves in households and falls under Sectoral Scope 03: “Introduction of high efficiency biomass fired cook stoves in households”.

The CPA will involve the sale of about 18,500 Prime Square stoves, 100,000 d.light 300s solar lighting appliances and 100,000 fosera LSHS 4200 solar home systems to households in Timor-Leste. The technical specifications of the appliances are as follows¹:

Prime Square Stove

Stove body:	Galvanized plat, thickness 0.55 mm
Stove table:	Stainless steel, thickness 0.55 mm
Combustion chamber:	Stainless steel, thickness 0.6 mm
Stove dimension:	27 cm (diameter) x 37 cm (height)
Approx. weight:	3.1 kg
Fuel capacity:	maximum 1.5 kg of chopped wood, 2 kg of biomass briquette
Lifetime:	2 years
Turn down ratio:	2:1
Fuels:	Chopped wood, woodchip, wood briquettes. Corncob and cow dung can also be used
Water Boiling Test 4.2.2 results	
Thermal efficiency:	49%
Fuel to cook 5 L:	516.6g
CO to cook 5L:	17.3g
PM to boil 5L:	786.6g

¹ <http://www.primestoves.com/wp-content/uploads/2013/08/Prime-Prod-Spec.pdf>

d.light 300s solar lantern

Type	LED Solar Light
Operating time	<ul style="list-style-type: none"> • 4 Hours on High • 8 Hours on Medium • 16 Hours on Low • 100 Hours on Bed-Light
Time for full charge - Solar	8 Hours
Battery Output	3.2 V
Power Consumption	1 W
Lifetime	More than 5 years
Solar panel	Portable type with 4 metres outdoor cable
Buttons and indicators	<ul style="list-style-type: none"> • Battery Charge Level Indicator • Glow In the Dark On/Off Button
Product dimensions	14 cm (w) x 16 cm (h) x 15.5 cm (l); 1.082 kg

fosera LSHS 4200 solar home system

Operating time	Daily operation hours of one light (200 lumen): 15 hrs (fosera 200 12V lamp included)
Time for full charge	6 Hours
System voltage	12 V
System capacity	4,2 Ah
Warranty	2 years
Possible Loads	Phone charging, radio, TV, fans and more
Module peak power	10 W
Module current	0.58 A
Product dimensions	15 cm (w) x 22 cm (h) x 22 cm (l); 1.4 kg



Fig: Prime Square Stove



Fig: d.light 300s



Fig: fosera LSHS4200

In the absence of this project activity, non-renewable biomass (NRB) would have been used in inefficient existing cook stoves for cooking and kerosene in lamps for lighting, resulting in the emission of greenhouse gases.

The technology involved is environmentally safe and sound. The cookstoves have been developed and patented by an Indonesian professor, Muhammad Nurhuda. There is no technology transfer associated with the project activity.

Applicable Scenarios as defined in the PoA-DD:

The appliances distributed have household size. Therefore, only scenarios 1)-3) apply for this CPA.

Dissemination strategy

Appliance sales will take place through "tech agents" (local businessmen, women's groups etc), which buy our products upfront or in installments (retailer credit). If they return warranty card/carbon contracts documenting sales of X number of household appliances, they will obtain one appliance for

free. This should create a strong incentive to increase sales and contribute precise documentation for carbon monitoring purposes.

Hence, the CPA will allow tech agents to pay in installments, in effect providing a retailer credit. This may in turn enable them to be more flexible concerning upfront payments from end users.

The underlying project will establish a Timor-Leste branch of Ditana, the household energy appliance distribution company for Southeast Asia currently being established (and wholly owned) by Differ Cookstoves. This company will be responsible for training, procurement, operations, installation and dismounting of SHS, maintenance & repair of appliances, distribution and sales of appliances, daily QA and QC, and after sales service. It will also conduct onsite CDM-related monitoring work (sales contract documentation) and will invoice the project accordingly. Ditana Timor-Leste will also be responsible for attracting local organisations and establishing these as tech agents, and function as an “umbrella” for tech agents by providing them with business training, financing, technical support and marketing material.

In concrete, operational terms, the plan is to import appliance containers to Dili, and store them there. The initial project phase targets Dili, and subsequently Baucau. In a full-scale scenario, it is envisaged that smaller batches are transported by truck/sea freight to storage on Atauro, and in main cities Ermera, Aileu, Liquica, Maliapa (Bobonaro), Baucau, Viqueque, Lospalos (Lautem), Pante Macassar (Oecusse), Manatuto, Same (Manufahi), Ainaro and Suai (Covalima).

Agreement with households as receiver of appliances in the CPAs

The households will sign purchase contracts which contain at least the following information:

- Unique CPA identification number
- Appliance serial number
- Purchasing date
- Name, address, phone number, and email address of recipient
- Product model
- Waiver of ownership to financial and environmental benefits created by the use of the appliance and transfer of these to Differ Cookstoves AS
- Confirmation of most frequently used cooking method, and cooking fuel (if cookstoves)
- Confirmation of kerosene lamp use in household (if solar lighting system)
- Confirmation of lack of grid connection (if solar lighting system)

Monitoring

The monitoring plan for the CPA has been designed based on the requirements of the applied methodology. An electronic database for the project activity will be maintained by the CME. It will

be accessible to the CME, Differ and the verification DOE.

The project database will be populated during the distribution of appliances and will be updated based on subsequent replacements, as well as detailed data on the representative sample surveyed for monitoring purposes. The database will include at minimum the following general information:

- Unique CPA identification number
- Installation date of appliance
- Name of recipient
- Contact details of recipient
- Number of people in family
- Location of household (village, district and/or GPS coordinates)
- Date of replacement of appliance (if applicable)

It would also include the following information specific to technology deployed:

- *For solar lights and home systems under the CPA:*
 - Presence of grid connection
 - Displacement of kerosene lamp
 - Nominal lumen output of solar lighting system
- *For improved cook stoves under the CPA:*
 - Baseline cooking fuel source
 - Baseline stove type

When household equipment under the CPA is required to be repaired or replaced; the old equipment will be received from the recipient and sent to the local repair/replacement facility. New or repaired equipment would be issued to the recipient and their contact information along with date of re-issuance would be recorded in the electronic database.

The programme will conduct annual monitoring to find out the annual performance of the appliances installed by selecting representative samples of the installed and operated appliances in the specific monitoring period. For each type of appliance (cook stoves, solar home systems and solar lights) the sampling will be conducted separately.

The main variable that will be measured by the monitoring survey is the proportion of the respective appliances that have been operational and in use over the monitoring period and number of people serviced by the appliance in the household. Performance of the respective appliances installed will be monitored annually. The number of total installed appliances (per type of installed appliance) will be multiplied by the percent of respective operational appliances to get the actual number of operational appliances of each type (cook stoves, solar home systems and solar lights) in that monitoring period. Samples will be selected randomly from the electronic database. Operational appliances will be identified by asking the sample households if the appliance installed in his/her house is in use regularly or not.

Indicative non-binding implementation schedule for the CPA (in line with SSC limits)

Year	Baseline emissions (t CO ₂ e)	Project emissions (t CO ₂ e)	Leakage (t CO ₂ e)	Emission reductions (t CO ₂ e)
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Year 1	117,677	0	0	117,677
Year 2	117,677	0	0	117,677
Year 3	117,677	0	0	117,677
Year 4	117,677	0	0	117,677
Year 5	117,677	0	0	117,677
Year 6	117,677	0	0	117,677
Year 7	117,677	0	0	117,677
Total	823,739	0	0	823,739
Total number of crediting years	7²			
Annual average over the crediting period	117,677	0	0	117,677

Estimated project start date:

Start date of the CPA is the date of publication of the PoA-DD for global stakeholder consultation, 16/05/2014.






The CME hereby confirms that no appliances have been sold under this CPA before the start date of the PoA.

² Crediting period renewable twice.

SECTION C. Proof of project eligibility

C.1. Scale of the Project

Please tick where applicable:

Project Type	Large	Small
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

	<input type="checkbox"/>
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C.2. Host Country

Democratic Republic of Timor-Leste

C.3. Project Type

Please tick where applicable:

Project type	Yes	No
Does your project activity classify as a Renewable Energy project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Does your project activity classify as an End-use Energy Efficiency Improvement project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Does your project activity classify as waste handling and disposal project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Please justify the eligibility of your project activity:

- The CPA is a small scale CPA because, as a Type I (energy generation) CPA, the maximum energy generation of the sum of all solar lights and solar home systems in implemented under this specific CPA will not exceed capacity of all installed generating units of 15 MW/year, as per the applied methodology AMS-I.A.
- The CPA is a small scale CPA because, as a Type II (energy efficiency) CPA, the maximum energy savings of the sum of all improved cook stoves implemented under this specific CPA will not exceed thermal energy savings of 180 GWh/ year, as per the applied methodology AMS-II.G.
- The Timor-Leste has ratified the Kyoto Protocol, making it a country eligible to host Clean Development Mechanism (CDM) programmes.
- The CPA is in the End-use Energy Efficiency Improvement category and renewable energy project as it reduces the amount of energy required for delivering or producing non-energy physical goods or services and replaces fossil fuel consumption with renewable energy sources.
- The CPA reduces CO₂, which is a greenhouse gas emission eligible under both the Kyoto Protocol and Gold Standard.
- CME confirms that public funding of the PoA, if any, will not result in diversion of ODA. Each CPA will declare any use of public funds in the CPA-DD and confirm that the public funding for the CPA does not result in a diversion of Official Development Assistance and is separate from and is not counted towards the donor country's financial obligations as party included in Annex 1 countries.

- CPA activities involving a large amount of small, distributed heating, cooking or electricity generation devices using renewable energy sources shall provide the Gold Standard with a clear description of the transfer of credits ownership all along the investment chain, and with proof that end-users are aware of and willing to give up their rights on emission reductions: All buyers will sign a user agreement. In signing this agreement, users will certify a statement (also translated into the local language) such as: I agree not to claim any emission reductions for the use of the efficient cook stove, but cede the emission reductions the stove generates to the CME of the PoA.

Pre Announcement	Yes	No
Was your project previously announced?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Explain your statement on pre announcement</p> <p>This CPA is part of the PoA “Household energy appliance programme”. The program proponent attests that there has been no announcement made previously of the program going ahead without the revenues from carbon credits. There was no pre announcement made prior to the start of the program but an announcement was made prior to the registration of the program.</p>		

C.4. Greenhouse gas

Greenhouse Gas	
Carbon dioxide	<input checked="" type="checkbox"/>
Methane	<input type="checkbox"/>
Nitrous oxide	<input type="checkbox"/>

C.5. Project Registration Type

Project Registration Type	
Regular	<input checked="" type="checkbox"/>

Pre-feasibility assessment	Retroactive projects (T.2.5.1)	Preliminary evaluation (eg: Large Hydro or palm oil-related project) (T.2.5.2)	Rejected by UNFCCC (T2.5.3)
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If Retroactive, please indicate Start Date of project activity dd/mm/yyyy: _____

SECTION D. Unique project identification

D.1. GPS-coordinates of project location

	Coordinates
Latitude	125° 55' E
Longitude	008° 50' S



Explain given coordinates

http://www.mapsofworld.com/lat_long/timor-leste-lat-long.html

D.2. Map



SECTION E. Outcome stakeholder consultation process

E.1. Assessment of stakeholder comments

Stakeholder comment	Was comment taken into account (Yes/No)?	Explanation (Why? How?)
<p>Merita de Jesus, FEEO Subsidising appliances is not a good idea, as people wonder whether appliances are cheaper for illegal reasons or that they are of lower quality. Also our NGO had experienced some difficulty locating spare parts for d.lights.</p>	<p>Yes</p>	<p>Ewa Wojkowska from Kopernik clarified Kopernik did provide subsidies in the project in Oecusse referred to by FEEO, but that it will not do so in future.</p> <p>Jørund Buen confirmed that Differ does not believe in subsidies to end users, as this threatens long-term market</p>

		sustainability. He highlighted that the intention is instead to use carbon revenues to build a supply chain for sustainably harvested biomass fuel, and improve distribution and marketing.
<p>Jose Ximenes, Alola Foundation</p> <p>There is a need to focus on user education, as well as maintenance and provision of spare parts.</p>	Yes	Jørund Buen confirmed that especially for the Prime stoves, user education and capacity building is very important, as using the stoves incorrectly will reduce their efficiency and lifetime, for example if users pour water over the stove in order to shut it off.
<p>Cosma Ximenes, GIZ</p> <p>How is monitoring done, given that there are other efficient stoves available in Timor-Leste, plus another entity planning activity (Carbon Exchange)? How does Differ know how much each stove reduces?</p>	No	Jørund Buen from Differ explained the collection of sales records and linking of these with appliance serial numbers along with DOE verification of resulting data. Further, the DNA secretariat representatives confirmed that they know no other CDM project in Timor Leste.
<p>Justin Odum, Mercy Corps</p> <p>Spare parts and maintenance is not really a problem with d.lights as they are very robust and have long duration. However, challenges are posed by:</p> <ul style="list-style-type: none"> the government's expansion of the grid: access is unstable and it is not clear whether it will last, due to lacking investments in infrastructure, but it has negative effect on sales, even in areas where there's no grid connection, as people think they have prospects of getting grid access. Grid access is initially for free, so people see no incentive to buy power-related products - but connection is unlikely to remain free free or subsidised distribution - by government and some NGOs - of d.lights and solar home systems, as well as cookstoves, also hurts sales 	No	Jørund Buen confirmed he was aware of grid expansion and the government handing out appliances for free, and agreed this could pose a threat to Differ's investment.
<p>Felisbela Pires, Independent consultant</p> <p>The presentation doesn't provide enough information to clarify whether the project will induce positive social change, such as in terms of qualitative employment improvements. Will Differ limit local companies' involvement? How</p>	Yes	Jørund Buen clarified on the sustainable development aspects of the project and the proposed business plan for distribution of appliances. This includes establishing a company in Timor-Leste, with local management and employees.

<p>will they be involved? Will we sell to them so that they can retail? How will we ensure maintenance? Why would people buy products in the districts when they can buy them cheaper in Dili?</p>		<p>He also highlighted that using local distributors and retailers - both private sector and NGOs - is crucial for project success. He referred to similar projects Differ has taken part in starting in North Sumatra, Senegal and Zambia, where such partnerships are a core element.</p> <p>Kim Tchia from Startec explained how his company distributes d.lights and efficient stoves today, and how he differentiates pricing and other aspects of product packaging so that customers from the districts outside Dili use his local distributors instead of him.</p>
<p>Kim Tchia, Startec Enterprises The stove that you use here, because you use kerosene and the cost of kerosene is also not subsidized for the end users, have you worked out cost for that, and how much they are going to spend for the use of kerosene for cooking?</p>	<p>Yes</p>	<p>Jørund Buen clarified that the Prime stoves use biomass and not kerosene as fuel. He further explained that the user would save so substantial amount of money due to reduced fuel spending that the payback time on the purchase of the stove would be short.</p>
<p>Adao Barbosa, DNA Timor Leste Stove price should be reduced from the price of approx 30 USD highlighted in the presentation as this price is business as usual and CDM needs to go beyond business as usual, and because Differ gets revenues from both appliance sales and carbon.</p>	<p>No</p>	<p>Jørund Buen responded that Differ would not be able to reduce the price, because BAU is that the stoves are not available commercially in Timor-Leste at all. Also, carbon revenues are crucial for the decision to invest, and the payback time even with carbon benefits could be stretching beyond Differ Cookstoves risk appetite.</p>
<p>Adao Barbosa, DNA Timor Leste What are the emission reductions per year of each appliance?</p>	<p>No</p>	<p>Jørund Buen provided the estimate of emission reductions for each appliance.</p>
<p>Jose Ximenes, Alola Foundation The cookstoves that were introduced by Mercy Corps uses a little bit of kerosene. I see that Prime Cookstove uses briquettes. Will you be training the community in how to make briquettes?</p>		<p>Jørund Buen responded that the Prime cookstove does not only use briquettes. It also uses logs and most other types of biomass. He also referred to the intention to recycle the carbon revenues into manufacturing and distribution of sustainably harvested biomass fuel, and</p>

		that one approach to this could be building a supply chain for briquettes or pellets.
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E.2. Stakeholder Feedback Round

Please describe how the feedback round was organized, what the outcomes were and how you followed up on the feedback.

E. 3. Discussion on continuous input / grievance mechanism

[See Annex W]

Discuss the Continuous input / grievance mechanism expression method and details, as discussed with stakeholders.

	Method Chosen (include all known details e.g. location of book, phone, number, identity of mediator)	Justification
Continuous Input / Grievance Expression Process Book	Book will be available at the DNA Secretariat in Dili, Timor-Leste, and in the main office of the distribution company to be located in Timor-Leste (location to be decided)	The DNA office in the center of Dili is easily accessible and gives people located in the capital the possibility to comment. For each CPA, there will be a book in the project office located in one village/town in the CPA area.
Telephone access	+47 22170510 and +65 98582496	All stakeholders can be assumed to have access to a phone. The first phone number is the main landline number to Differ Cookstoves' office. The Gold Standard's South East Asia telephone number is provided, as per Gold Standard Toolkit 2.2. Annex W
Internet/email access	PoAgrievances@differgroup.com and ellen.reynes@goldstandard.org	Most of the invitees for the local stakeholder consultation, and almost all participants at the consultation, had email addresses. The Gold Standard's South East Asia email address is provided, as per Gold

		Standard Toolkit 2.2. Annex W
Nominated Independent Mediator (optional)		

All issues identified during the crediting period through any of the Methods shall have a mitigation measure in place. The identified issue should be discussed in the revised Passport and the corresponding mitigation measure should be added to sustainability monitoring plan in section G.

SECTION F. Outcome Sustainability assessment

F.1. 'Do no harm' Assessment

Do No Harm Assessment is done at PoA level. Please refer to the Section F.1. of the PoA Passport

F.2. Sustainable Development matrix

SD Assessment is done at PoA level. Please refer to the Section F.2 of the PoA Passport.

Inclusion check SD criteria (SD criteria as defined in Section H.3 of the PoA Passport)

SD indicator scored positive at frozen PoA SD matrix	Inclusion criteria to check compliance of CPA with SD indicator at time of inclusion
Livelihood of poor	<p>The technologies covered by the CPA are improved cook stoves, solar lanterns, and solar home systems. The relevant parameter is money and time saved due to reduced fossil and wood fuel consumption. Money and time saved will be determined in the household survey ex-post and are part of the monitoring and as such included in the monitoring plan.</p> <p>Hence, inclusion criteria to be checked at time of inclusion:</p> <ol style="list-style-type: none"> 1. Whether the technology of the CPA is an improved cook stove, a solar lantern or a solar home system; 2. Whether the monitoring plan of the CPA PP includes parameter money and time saved to be determined via household survey;
Access to affordable and clean energy services	<p>The technologies covered by the CPA are improved cook stoves, solar lanterns and solar home systems. The relevant parameter is number of disseminated appliances. Money saved due to reduced fossil fuel consumption and wood fuel consumption for the new appliances for the end user will be displayed as an</p>

	<p>incentive mechanism for the discontinued use of baseline appliances.</p> <p>Hence, inclusion criteria to be checked at time of inclusion:</p> <ol style="list-style-type: none"> 3. Whether the monitoring plan of the CPA PP includes a parameter on money saved due to reduced fossil fuel consumption and wood fuel consumption; 4. Whether the monitoring plan of the CPA PP includes a parameter on number of improved cook stoves, solar lanterns and solar home systems disseminated;
Quality of Employment	<p>The technology covered by the CPA are improved cook stoves, solar lanterns and solar home systems. The relevant parameter is number of jobs created through the programme.</p> <p>Hence, inclusion criteria to be checked at time of inclusion:</p> <ol style="list-style-type: none"> 5. Number of people in the communities employed and involved in the programme;

SECTION G. Sustainability Monitoring Plan

No	1
Indicator	Livelihood of the Poor
Mitigation measure	NA
Chosen parameter	Money and time saved due to reduced wood and fossil fuel consumption
Current situation of parameter	Households spend a significant amount of money on purchasing fuel, and furthermore in particular women and children currently spend a significant portion of their time acquiring fuel.
Estimation of baseline situation of parameter	See above
Future target for parameter	Savings from purchasing less fuel will increase the amount of disposable income available, and less time spent collecting fuel will increase opportunity for productive activity.

Way of monitoring	How	In the household survey, households that are part of the CDM monitoring sample group will be asked whether they think less money and time is spent acquiring fuel for cooking and other activities, in comparison to before joining the programme.
	When	Biennial but records continuously maintained until the end of the crediting period.
	By who	CPA Implementer

No	2	
Indicator	Access to affordable and clean energy services	
Mitigation measure	NA	
Chosen parameter	Number of appliances disseminated	
Current situation of parameter	Improved stoves, solar lanterns and solar home systems are currently either too expensive or not within reach for the households.	
Estimation of baseline situation of parameter	See above	
Future target for parameter	Appliances under this CPA will be available in the targeted areas.	
Way of monitoring	How	Number of appliances purchased.
	When	Biennial but records continuously maintained until the end of the crediting period.
	By who	CPA implementer

No	3
Indicator	Quality of employment
Mitigation measure	NA
Chosen parameter	Number of new jobs created
Current situation of parameter	65% of the population in Timor-Leste is engaged in the agricultural sector.
Estimation of baseline situation of parameter	See above

Future target for parameter		More people will be employed and find jobs outside the agricultural sector and daily income will increase.
Way of monitoring	How	Number of people in the communities employed and involved in the programme.
	When	Biennial
	By who	CPA implementer

Additional remarks monitoring

SECTION H. Additionality and conservativeness



This section is only applicable if the section on additionality and/or your choice of baseline does not follow Gold Standard guidance

H.1. Additionality

Not applicable

As per the Guidelines on the demonstration of additionality of small-scale project activities Version 9 para 2 (c), the CPA deploys equipment to households where the size of each unit is smaller than 5% of the small-scale CDM threshold i.e.

- Solar lighting systems (Type I): 750 kW
- Cook stove thermal saving (Type II): 9,000 MWhth per year

H.2. Conservativeness

Not applicable

As per the Guidelines on the demonstration of additionality of small-scale project activities Version 9 para 2 (c), the CPA deploys equipment to households where the size of each unit is smaller than 5% of the small-scale CDM threshold i.e.

- Solar lighting systems (Type I): 750 kW
- Cook stove thermal saving (Type II): 9,000 MWhth per year

ANNEX 1 ODA declaration

ODA Declaration has been uploaded.

ANNEX AM – POA PASSPORT TEMPLATE

CONTENTS

- A. Programme title**
- B. Programme description**
- C. Proof of programme eligibility**
- D. Stakeholder Consultation and Sustainability Assessment at PoA/CPA(VPA) level**
- E. Outcome of the stakeholder consultation process at PoA level**
- F. Outcome sustainability assessment**
- G. Sustainability monitoring plan**
- H. Additionality, conservativeness, inclusion criteria and other deviations**

Annex 1 ODA declarations

SECTION A. Programme Title

Title: Household energy appliance programme

Version: 01

Date: 24/02/2014

SECTION B. Programme description

Objective of the Programme and Proposed Activity

The proposed PoA by Differ will distribute solar lighting systems (lanterns, home systems), water filters and improved cook stoves to households in Myanmar and Timor-Leste. Differ's recently established subsidiary, Differ Cookstoves AS ("Differ Cookstoves"), will act as the Coordinating / Managing Entity (CME) for all the component project activities (CPAs) in the PoA.

The goal of the PoA is to deploy more than 1 million solar lanterns, solar home systems, water filters and improved cook stoves to households in Myanmar and Timor-Leste. The significant importance of revenues from sale of Certified Emission Reductions (CERs) to achieve this goal forms the basis of the implementation of this PoA.

Households in Myanmar consumed 42,795 thousand cubic metres of fuelwood¹ in the year 2010. Fuelwood and charcoal are also used in households in large quantities to boil water for drinking purposes. The implementation of clean technologies like solar lighting systems, water filters and improved cook stoves currently face various technological, institutional and financial barriers. The PoA seeks to alleviate these barriers through provision of revenue from sale of CERs generated by the PoA.

Differ Cookstoves shall provide a CDM PoA team for coordinating and managing all operational aspects related to the implementation of the PoA. The team would also be responsible for the management of records and data associated with each CPA. The team may also hire consultants, if deemed necessary, for this purpose.

The PoA is a voluntary action being coordinated and managed by Differ Cookstoves. There are no mandatory laws or regulations existing in Myanmar or Timor-Leste requiring Differ Cookstoves or any other party to develop a programme for distribution of solar lights, water filters or improved cook stoves.

Contribution to Sustainable Development and the Millennium Development Goals

Environment

¹ <http://data.un.org/Data.aspx?q=fuelwood&d=EDATA&f=cmID%3aFW>

- The distribution of efficient cook stoves and water purification technologies dramatically reduces the fuelwood demand at the household level, contributing to the integrity of both the quality and quantity of biodiversity, soil and water.
- Clean cook stoves and reduced reliance on inefficient combustion reduce carbon dioxide emissions and black carbon particulate pollution.

Socio-Economic

- By bringing life-improving technologies and associated market infrastructure (sales kiosks, maintenance know-how, spare part supply chains, etc.) the PoA is delivering genuine community investment that has potential ripple effects into other important areas (education, etc.).
- Solar lights distributed under the PoA offer ideal sources of productivity gains, educational improvement, and household monetary savings.
- The distribution of clean cook stoves and water filters alleviates the domestic burden befalling women and young girls, ensuring greater workforce participation, educational acquisition, and improved respiratory health.

Estimated start date of the program:

Start date of the PoA is 02/12/2013, i.e. the date of notification of the intention to seek CDM status by the CME to the UNFCCC secretariat.

SECTION C. Proof of programme eligibility

C.1. Location of the Programme of Activities (Physical/Geographical boundary)

The geographical region within which all CPAs included in this PoA will be implemented is the Democratic Republic of Timor-Leste and Myanmar.

C.2. Programme Type

Please tick where applicable²:

Programme type	Yes	No
Do the activities within the program, classify as a Renewable Energy project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Do the activities within the program classify as an End-use Energy Efficiency Improvement project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Do the activities within your program classify as a waste handling and disposal project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Please justify the eligibility of your programme:

- The program is a small scale program because, as a Type II (energy efficiency measures) program, the aggregated energy savings by a specific CPA under AMS-II.G “Energy efficiency measures in thermal applications of non-renewable biomass” will not exceed the equivalent of 60 GWh per year or 180 GWth per year in fuel output.
- The programme is a small scale programme because, as a Type I (energy generation) PoA, the maximum energy generation of the sum of all solar lights and solar home systems implemented under each specific CPA will not exceed

² In case your programme falls under all categories, please check all the ‘Yes’ boxes.

capacity of all installed generating units of 15 MW/ year, as per the applied methodology AMS-I.A.

- The programme is a small scale programme because, as a Type III (other project activities) PoA, the maximum emission reductions saved in each specific CPA is less than 60 kilotonnes of carbon dioxide equivalent annually, as per the applied methodology AMS-III.AV.
- Timor-Leste and Myanmar have ratified the Kyoto Protocol, making the countries eligible to host Clean Development Mechanism (CDM) programs.
- The PoA is the energy efficiency category as it is an end use energy efficiency improvement program where the improved stoves being distributed will replace less efficient stoves.
- The PoA reduces CO₂, which is a greenhouse gas emission eligible under both the Kyoto Protocol and Gold Standard.
- CME confirms that public funding of the PoA, if any, will not result in diversion of ODA. Each CPA will declare any use of public funds in the CPA-DD and confirm that the public funding for the CPA does not result in a diversion of Official Development Assistance and is separate from and is not counted towards the donor country's financial obligations as party included in Annex 1 countries.
- PoA activities involving a large amount of improved cook stoves, solar lanterns and solar home systems as well as water purifiers using renewable energy sources / renewable biomass shall provide the Gold Standard with a clear description of the transfer of credits ownership all along the investment chain, and with proof that end-users are aware of and willing to give up their rights on emission reductions: All buyers will sign a user agreement. In signing this agreement, users will certify a statement (also translated into the local language) such as: I agree not to claim any emission reductions for the use of the efficient cook stove, but cede the emission reductions the stove generates to the CME of the PoA.

Pre Announcement	Yes	No
Was your programme previously announced?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Explain your statement on pre announcement</p> <p>The program proponent attests that there has been no announcement made previously of the program going ahead without the revenues from carbon credits. There was no pre announcement made prior to the start of the program but an announcement was made prior to the registration of the program.</p>		

C.3. Greenhouse gas

Greenhouse Gas	
Carbon dioxide	<input checked="" type="checkbox"/>
Methane	<input type="checkbox"/>
Nitrous oxide	<input type="checkbox"/>

SECTION D. Stakeholder Consultation and Sustainability Assessment at PoA/ CPA (VPA) level

	PoA	CPA/VPA
At what level is the LSC done?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
At what level is the SD assessment done?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
At what level is the DNH assessment done?	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Provide justification if the LSC/SD/DNH assessment is done only at PoA level.

SD/DNH: Justification: Environmental analysis and DNH assessment is done at PoA level as the environmental impact does not depend on the specific geographical location where the devices are used.

The CPAs consist of the distribution of solar lighting systems that will displace use of kerosene in lamps, efficient cook stoves and water purifiers that will displace the use of fossil fuels and / or non-renewable biomass. The environmental impacts of reduced kerosene / fossil fuel / NRB consumption are consistent throughout Myanmar and Timor-Leste and therefore, conducting the Environmental Analysis at the PoA level was considered appropriate.

The proposed CPAs will have positive contribution to the environment through the reduction of consumption of kerosene / fossil fuel / NRB, which will lead to lower greenhouse gas emissions, air pollution, deforestation and dependence on fossil fuels.

Provide set of Sustainable Development Criteria for inclusion of CPA/VPA if SD assessment is done only at PoA level

Please refer to section G – Sustainability Monitoring Plan, and section H.3 - Inclusion Criteria

SECTION E. Outcome of the stakeholder consultation process at PoA level

E.1. Assessment of stakeholder comments

Stakeholder comment	Was comment taken into account (Yes/No)?	Explanation (Why? How?)
<p>Merita de Jesus, FEEO Subsidising appliances is not a good idea, as people wonder whether appliances are cheaper for illegal reasons or that they are of lower quality. Also our NGO had experienced some difficulty locating spare parts for d.lights.</p>	Yes	<p>Ewa Wojkowska from Kopernik clarified Kopernik did provide subsidies in the project in Oecusse referred to by FEEO, but that it will not do so in future.</p> <p>Jørund Buen confirmed that Differ does not believe in subsidies to end users, as this threatens long-term market sustainability. He highlighted that the intention is instead to use carbon revenues to build a build a supply chain for sustainably harvested biomass fuel, and improve distribution and marketing.</p>
<p>Jose Ximenes, Alola Foundation There is a need to focus on user education, as well as maintenance and provision of spare parts.</p>	Yes	<p>Jørund Buen confirmed that especially for the Prime stoves, user education and capacity building is very important, as using the stoves incorrectly will reduce their efficiency and lifetime, for example if users pour water over the stove in order to shut it off.</p>

<p>Cosma Ximenes, GIZ</p> <p>How monitoring is done, given that there are other efficient stoves available in Timor-Leste plus another entity planning activity (Carbon Exchange)? How does Differ know how much each stove reduces?</p>	<p>No</p>	<p>Jørund Buen from Differ explained the collection of sales records and linking of these with appliance serial numbers along with DOE verification of resulting data. Further, the DNA secretariat representatives confirmed that they know no other CDM project in Timor Leste.</p>
<p>Justin Odum, Mercy Corps</p> <p>Spare parts and maintenance is not really a problem with d.lights as they are very robust and have long duration. However, challenges are posed by:</p> <ul style="list-style-type: none"> • the government's expansion of the grid: access is unstable and it is not clear whether it will last, due to lacking investments in infrastructure, but it has negative effect on sales, even in areas where there's no grid connection, as people think they have prospects of getting grid access. Grid access is initially for free, so people see no incentive to buy power-related products - but connection is unlikely to remain free • free or subsidised distribution - by government and some NGOs - of d.lights and solar home systems, as well as cookstoves, also hurts sales 	<p>No</p>	<p>Jørund Buen confirmed he was aware of grid expansion and the government handing out appliances for free, and agreed this could pose a threat to Differ's investment.</p>

<p>Felisbela Pires, Independent consultant</p> <p>The presentation doesn't provide enough information to clarify whether the project will induce positive social change, such as in terms of qualitative employment improvements. Will Differ limit local companies' involvement? How will they be involved? Will we sell to them so that they can retail? How will we ensure maintenance? Why would people buy products in the districts when they can buy them cheaper in Dili?</p>	<p>Yes</p>	<p>Jørund Buen clarified on the sustainable development aspects of the project and the proposed business plan for distribution of appliances. This includes establishing a company in Timor-Leste, with local management and employees. He also highlighted that using local distributors and retailers - both private sector and NGOs - is crucial for project success. He referred to similar projects Differ has taken part in starting in North Sumatra, Senegal and Zambia, where such partnerships are a core element.</p> <p>Kim Tchia from Startec explained how his company distributes d.lights and efficient stoves today, and how he differentiates pricing and other aspects of product packaging so that customers from the districts outside Dili use his local distributors instead of him.</p>
<p>Kim Tchia, Startec Enterprises</p> <p>The stove that you use here, because you use kerosene and the cost of kerosene is also not subsidized for the end users, have you worked out cost for that, and how much they are going to spend for the use of kerosene for cooking?</p>	<p>Yes</p>	<p>Jørund Buen clarified that the Prime stoves use biomass and not kerosene as fuel. He further explained that the user would save so substantial amount of money due to reduced fuel spending that the payback time on the purchase of the stove would be short.</p>
<p>Adao Barbosa, DNA Timor Leste</p> <p>Stove price should be reduced from the price of approx 30 USD highlighted in the presentation as this price is business as usual and CDM needs to go beyond business as usual, and because Differ gets revenues from both appliance sales and carbon.</p>	<p>No</p>	<p>Jørund Buen responded that Differ would not be able to reduce the price, because BAU is that the stoves are not available commercially in Timor-Leste at all. Also, carbon revenues are crucial for the decision to invest, and the payback time even with carbon benefits could be stretching Differ Cookstoves' risk appetite.</p>
<p>Adao Barbosa, DNA Timor Leste</p> <p>What are the emission reductions per year of each appliance?</p>	<p>No</p>	<p>Jørund Buen provided the estimate of emission reductions for each appliance.</p>

<p>Jose Ximenes, Alola Foundation</p> <p>The cookstoves that were introduced by Mercy Corps uses a little bit of kerosene. I see that Prime Cookstove uses briquettes. Will you be training the community in how to make briquettes?</p>	<p>Jørund Buen responded that the Prime cookstove does not only use briquettes. It also uses logs and most other types of biomass. He also referred to the intention to recycle the carbon revenues into manufacturing and distribution of sustainably harvested biomass fuel, and that one approach to this could be building a supply chain for briquettes or pellets.</p>
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The stakeholder comments and remarks to the project design were discussed and answered. They are important in order to implement the project successfully and with the support of the local population. However, there is no need to alter the project documents due to the stakeholder comments as the overall PoA with future CPAs already covers the requests from the stakeholders such as definition of responsibilities for maintenance, provision of spare parts, capacity building and training; monitoring requirements; technology specifications, including reference to fuels; reference to employment; and the need for market infrastructure (rather than subsidies).

E.2. Stakeholder Feedback Round (in case LSC is done at PoA level)

The 2 months long Stakeholder Feedback Round will include the following: the LSC report will, together with the PoA-DD, CPA-DD and the Passport, be publicly available on Gold Standard website. All participants in the LSC will receive an email with a link to the report (or information through other means, such as telephone calls, in case they do not have access to email). The participants will be encouraged, via email, phone and letters, to give comments and suggestions to the LSC report.

Please describe and report how the feedback round was organised, what the outcomes were and how you followed up on the feedback.

[See Toolkit 2.11]

E. 3. Discussion on continuous input / grievance mechanism

[See Annex W]

Discuss the Continuous input / grievance mechanism expression method and details, as discussed with stakeholders.

	Method Chosen (include all known details e.g. location of book, phone, number, identity of mediator)	Justification
Continuous Input / Grievance Expression Process Book	Book will be available at the DNA Secretariat in Dili, Timor-Leste, and in the main office of the distribution company to be located in Timor-Leste (location to be decided)	The DNA office in the center of Dili is easily accessible and gives people located in the capital the possibility to comment. For each CPA, there will be a book in the project office located in one village/town in the CPA area.
Telephone access	+47 22170510 and +65 98582496	All stakeholders can be assumed to have access to a phone. The first phone number is the main landline number to Differ Cookstoves' office. The Gold Standard's South East Asia telephone number is provided, as per Gold Standard Toolkit 2.2. Annex W
Internet/email access	PoAgrievances@differgroup.com and ellen.reynes@goldstandard.org	Most of the invitees for the local stakeholder consultation, and almost all participants at the consultation, had email addresses. The Gold Standard's South East Asia email address is provided, as per Gold Standard Toolkit 2.2. Annex W
Nominated Independent Mediator (optional)		

The Continuous input / grievance mechanism should be implemented for all activities within the PoA as per feedback received during PoA LSC. All issues identified at the activity level (CPA/VPA) during the crediting period through any of the Methods shall have a mitigation measure in place. The identified issue should be discussed in the revised activity Passport and the corresponding mitigation measure should be added to sustainability monitoring plan in the activity Passport.

SECTION F. Outcome Sustainability Assessment³

F.1. 'Do no harm' Assessment

Safeguarding principles	Description of relevance to my programme	Assessment of my programme risks breaching it (low, medium, high)	Mitigation measure
1 – Human rights	Programme countries have ratified the Universal Declaration of Human Rights and the African Charter on Humans and People's Rights. The program will protect human rights including freedoms and cultural property.	low	N/A
2 – Involuntary settlements	The program will not cause any involuntary settlements.	low	N/A
3 – Cultural heritage	Programme countries are active members of the United Nations Educational, Scientific and Cultural Organisation (UNESCO). The program does not involve and is not complicit in the alteration, damage or removal of any critical cultural heritage.	low	N/A
4 – Labor – collective bargaining and freedom of association	Programme countries have ratified both ILO convention 87 (freedom of association) and 98 (right to collective bargaining).	low	N/A
5 – Forced labor	Programme countries have ratified both ILO Convention 29 and 105 on elimination of forced and compulsory	low	N/A

³ In case, DNH/SD assessment is done at the Programme level, DNH/SD assessment per technology/practice included in the Programme shall be provided. In case the DNH/SD assessment is done at the activity level this section may not be filled.

	<p>labour.</p> <p>The program does not involve and is not complicit in any form of forced or compulsory labour.</p> <p>All labor is voluntary. Neither Differ nor any other CPA implementation partner engages in any form of forced or compulsory labour.</p>		
6 – Child labor	<p>Programme countries have ratified both ILO convention 138 (minimum age) and 182 (worst form of child labor).</p> <p>The CME will not employ anyone under the legal working age.</p>	Low	N/A
7 – Labor discrimination	<p>Programme countries have ratified convention 100 (equal remuneration) and convention 111 (Discrimination in employment/ occupation) under the ILO Declaration on Fundamental Principles and Rights at Work.</p> <p>Labor discrimination will not occur.</p>	low	N/A
8 – Labor safety	<p>Labor conditions in this program are safe.</p>	low	N/A
9- Environmental harm	<p>Programme countries have ratified the Rio Declaration on Environment and Development and works, activities and projects that have to undertake an environmental impact assessment are defined.</p>	low	N/A

10 – Degradation of habitats	<p>Programme countries have ratified the UN Convention on Biological Diversity and the UN Convention to combat Desertification.</p> <p>The program is positive for the environment, since it decreases unsustainable harvesting of wood from forests. The program will prevent the degradation of habitats due to decreased deforestation.</p>	low	N/A
11- Corruption	<p>Programme countries have ratified the United Nations Convention Against Corruption⁴.</p> <p>The CME and its partners do not engage in any type of corruption or activities that are anything but legal and just.</p>	low	N/A

F.2. Sustainable Development matrix

Note. The SD matrix is frozen at PoA level.

Indicator	Mitigation measure	Relevance to achieving MDG	Chosen parameter and explanation	Preliminary score
Air quality	N/A	MDG 7: Ensure environmental sustainability	Parameter: Emissions from stove fuel consumption. The amount fuel burned will be reduced and thereby the air quality will be improved. However fuel will still be burned, impacts are not seen as being obvious enough to monitor and direct monitoring would be very expensive and complicated.	0

⁴ <http://www.unodc.org/unodc/en/treaties/CAC/signatories.html>

Water quality and quantity	N/A	MDG 7: Ensure environmental sustainability	<p>Parameter: Unsustainable biomass fuel consumption with impact on sedimentation of water reservoirs by deforestation.</p> <p>Reduced wood and charcoal consumption leads to reduced deforestation, which leads to reduced soil erosion, which in turn leads to reduced sedimentation of water reservoirs. However, deforestation of biomass fuel will continue outside of this program, so the impact will be neutral and therefore monitoring is not necessary.</p>	0
Soil condition	N/A	MDG 7: Ensure environmental sustainability	<p>Parameter: Unsustainable biomass fuel consumption with impact on soil erosion from deforestation.</p> <p>Reduced wood and charcoal consumption leads to reduced pressure on forests and reduced soil erosion. However, deforestation of biomass fuel will continue outside of this program so the impact will be neutral and therefore monitoring is not necessary.</p>	0
Other pollutants	N/A	MDG 7: Ensure environmental sustainability	N/A	0
Biodiversity	N/A	MDG 7: Ensure environmental sustainability	<p>Parameter: Unsustainable biomass and fossil fuel consumption.</p> <p>The reduced fuel consumption will reduce the pressure on remaining forest reserves in the programme countries. However, deforestation of biomass fuel will continue outside of this program so the impact will be neutral and therefore monitoring is not necessary.</p>	0

Quality of employment	N/A	MDG 1: Eradicate extreme poverty and hunger	Parameter: Number of high quality employments. The program will offer employment with high quality training for the employees. As pointed out during the local stakeholder consultation, the overall societal outcome could depend on the actual interaction with local companies and other entities in the distribution network.	+
Livelihood of poor	N/A	MDG 1: Eradicate extreme poverty and hunger	Parameter: Money and time saved due to reduced fuel consumption. Fuel cost will be reduced, reduction in wood consumption implies relief from drudgery and more opportunity for productive activity arising from less time spent collecting fuel. Change in money and time saved will be monitored.	+
Access to affordable and clean energy services	N/A	MDG 1: Eradicate extreme poverty and hunger	Parameter: Number of appliances disseminated. The project appliances require less fuel, which in many areas is a scarce resource or expensive to buy. The program will enable more households to access new appliances. Number of new appliances disseminated will be monitored.	+
Human and institutional capacity	N/A	MDG 1: Eradicate extreme poverty and hunger	Parameter: Number of trainings held. The program will facilitate capacity development among the employed staff through trainings and workshops in the programme countries. However, the number of trainings will still be limited under the program and the effect will overall only be marginal and therefore neutral. Monitoring is therefore seen as unnecessary.	0
Quantitative employment and income generation	N/A	MDG 1: Eradicate extreme poverty and hunger	Parameter: Employments created. The program will create employment opportunities within its supply chain, offices, training and monitoring activities and in manufacturing, which will have a high quality level for future similar business.	+
Balance of payments and investment	N/A	MDG 1: Eradicate extreme poverty and hunger	N/A	0

Technology transfer and technological self - reliance	N/A	MDG 8: Develop a Global Partnership for Development	N/A	0
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Justification choices, data source and provision of references

(A justification paragraph and reference source is required for each indicator, regardless of score)

Air quality	The amount fuel burned and fossil fuel used will be reduced, which will reduce the emissions and improve air quality. The appliances used in this program will reduce emissions and biomass used for cooking, lighting and water purification.
Water quality and quantity	The deforestation in the programme countries is one of the main reasons of the sedimentation of water reservoirs. By removing the forests, the canopy layer becomes thinner, and when it rains the rain will cause an impact on the top soil, loosening it and thus resulting in an increase in soil erosion and surface runoff. Loose soil is washed away into rivers and lakes. Reduced wood consumption leads to reduced deforestation, which leads to reduced soil erosion, which in turn leads to reduced sedimentation of water reservoirs. This program will have only a marginal impact on reducing deforestation of biomass fuel and therefore this will not be monitored under this program.
Soil condition	Fuel wood collection results in deforestation and soil erosion, whereas the programme countries are facing an increasing deforestation problem. Reduced wood consumption leads to reduced deforestation, which leads to reduced soil erosion. This program will have only a marginal impact on reducing deforestation of biomass fuel and this therefore will not be monitored under this program.
Other pollutants	This category is not applicable to the project, as there is no additional noise or light "pollution"/reduction through the use of efficient cook stoves.

Biodiversity	The programme countries are reservoirs of biodiversity; one of the impacts of deforestation is biodiversity loss. Reduced wood consumption leads to reduced deforestation which will reduce the negative impact on biodiversity. This program will have only a marginal impact on reducing deforestation of biomass fuel and therefore will not be monitored under this program.
Quality of employment	The rural population makes up 80% of the population. More than 65% is engaged in the agricultural sector. Poverty is affecting more than 70% of the population. Over 90% of Timor Leste's and Myanmar's population lives below US\$1 a day. The program will offer employments with high quality training for the employees. This has clearly positive results on the population and will be monitored.
Livelihood of the poor	Women are the main collectors of combustible materials such as firewood (82 %) and spend 2-5 hours daily on collecting firewood. Reducing the wood and fossil fuel consumption will be reduced and less time spent collecting fuel means more opportunity for productive activity arising. Change in money and time saved will be monitored.
Access to affordable and clean energy services	In Timor-Leste and Myanmar the three-stone fire is most commonly (87 %), 11% uses a metallic stove and 2% uses a clay stove. Usage of other appliances. Wood fuel and fossil fuel is a rare and expensive resource. The program will enable more households to access the improved appliances. Number of appliances disseminated will be monitored.
Human and institutional capacity	The program will facilitate capacity development among the employed staff through trainings and workshops in the programme countries. There will be a focus on targeting women for employment who are also the main users of the appliances. Strengthening women by reducing their time spent on collecting fuel and cooking, improving their health by improving the air quality while cooking, and by targeting women for new employments under the program will improve gender equality. However, the effects of the program are marginal and therefore neutral and monitoring is therefore seen as unnecessary.

Quantitative employment and income generation	Poverty is affecting more than 70 percent of the population in the programme countries. The program will create employment opportunities within its supply chain, offices, training and monitoring activities and in a later stage potentially also in manufacturing which will have a high quality level for future similar business. However, this has a marginal impact on the quantity of employments needed in Timor-Leste and Myanmar. The effect is therefore neutral and therefore will not be monitored.
Balance of payments and investment	N/A
Technology transfer and technological self-reliance	N/A

SECTION G. Sustainability Monitoring Plan⁵

Note: Chosen parameters apply for all CPAs implemented under the PoA

No	1	
Indicator	Livelihood of the Poor	
Mitigation measure	NA	
Chosen parameter	Money and time saved due to reduced fuel consumption	
Current situation of parameter	Households spend a significant amount of money on purchasing fuel, and furthermore in particular women and children currently spend a significant portion of their time acquiring fuel.	
Estimation of baseline situation of parameter	See above	
Future target for parameter	Savings from purchasing less fuel will increase the amount of disposable income available, and less time spent collecting fuel will increase opportunity for productive activity.	
Way of monitoring	How	In the household survey, households that are part of the CDM monitoring sample group will be asked whether they think less money and time is spent acquiring fuel for cooking and other activities, in comparison to before joining the programme.
	When	Biennial but records continuously maintained until the end of

⁵ In case, DNH/SD assessment is done at the Programme level, SD monitoring parameters pertaining to SD aspects, safeguarding principles per technology/practice shall be provided. In case DNH/SD assessment is done at the activity level this section may not be filled.

		the crediting period.
	By who	CPA Implementer

No	2	
Indicator	Access to affordable and clean energy services	
Mitigation measure	NA	
Chosen parameter	Number of appliances disseminated	
Current situation of parameter	Improved stoves, solar lanterns, solar home systems and water purification equipment are currently either too expensive or not within reach for the households.	
Estimation of baseline situation of parameter	See above	
Future target for parameter	Appliances under this PoA will be available in the targeted areas.	
Way of monitoring	How	Number of appliances purchased.
	When	Biennial but records continuously maintained until the end of the crediting period.
	By who	CPA implementer

No	3	
Indicator	Quality of employment	
Mitigation measure	NA	
Chosen parameter	Number of new jobs created	
Current situation of parameter	65% of the population in Timor-Leste and Myanmar is engaged in the agricultural sector.	
Estimation of baseline situation of parameter	See above	
Future target for parameter	More people will be employed and find jobs outside the agricultural sector and daily income will increase.	
Way of monitoring	How	Number of people in the communities employed and involved in the programme.

	When	Biennial
	By who	CPA implementer

Additional remarks monitoring

SECTION H. Additionality, conservativeness, inclusion criteria and other deviations⁶



This section is only applicable if the section on additionality and/or your choice of baseline does not follow Gold Standard guidance

H.1. Additionality

As per the Guidelines on the demonstration of additionality of small-scale project activities Version 9 para 2 (c), the CPA deploys equipment to households where the size of each unit is smaller than 5% of the small-scale CDM threshold i.e.

- Solar lighting systems (Type I): 750 kW
- Cook stove thermal saving (Type II): 9,000 MWhth per year
- Water filter emission reduction (Type III): 3,000 tCO₂e per year

H.2. Conservativeness

As per the Guidelines on the demonstration of additionality of small-scale project activities Version 9 para 2 (c), the CPA deploys equipment to households where the size of each unit is smaller than 5% of the small-scale CDM threshold i.e.

- Solar lighting systems (Type I): 750 kW
- Cook stove thermal saving (Type II): 9,000 MWhth per year
- Water filter emission reduction (Type III): 3,000 tCO₂e per year

H.3 Inclusion criteria

Eligibility criteria for the inclusion of a SSC CPA:

⁶ Only for CDM PoAs

S. No.	Criteria	Response	Justification
1.1.	<p>Does the proposed CPA involve one of the following combination of technologies to be implemented in households:</p> <ul style="list-style-type: none"> • Only solar lighting systems or only efficient cook stoves or only water purifiers • Solar lighting systems and efficient cook stoves • Solar lighting systems and water purifiers 	Yes	The proposed CPA involves deployment of solar lighting systems and efficient cook stoves in households.
1.2.	Does the proposed CPA deploy equipment only in households?	Yes	The proposed CPA involves deployment of solar lights, solar home systems and efficient cook stoves in households.
1.3.	Is the proposed CPA located in Myanmar or Democratic Republic of Timor-Leste?	Yes	The proposed CPA is located in Democratic Republic of Timor-Leste.
1.4.	Has the CPA owner entered into a contractual agreement with Differ Cookstoves AS at the CPA level?	Yes	Differ has entered into a contract with Differ Cookstoves AS at the CPA level.
1.5.	Is the proposed CPA a voluntary initiative, not mandated by any policy and/or regulation in the host country?	Yes	The CPA is a voluntary initiative and there are no policies or regulations in Democratic Republic of Timor-Leste mandating the use of solar lights and/or improved cook stoves in households.

1.6.	Is the CPA in conformance with mandatory laws and regulations?	Yes	There are no laws or regulations governing the use of solar lights and/or solar home systems and/or improved cook stoves in Timor-Leste households. However, the stoves have surpassed all benchmarks for improved cookstoves under the IWA 11:2012 “Guidelines for evaluating cookstove performance”.
1.7.	Is the proposed CPA already registered as a part of a PoA or as an individual CDM project?	No	The CPA is not registered as a part of any other PoA or as an individual CDM project. An analysis of the CDM pipeline was also conducted to confirm the same ⁷ . Further, an undertaking to this effect has also been provided by Differ.
1.8.	Do the consumers under the CPA agree to concede their right to claim CERs for the equipment at the time of their purchase to the CME / CPA implementing body?	Yes	Every consumer at the time of purchase of the solar light and/or solar home system and/or cook stove is required to sign a standard equipment purchase contract conceding their rights to claim CERs for the cook stove to the CME.
1.9.	Is the start date of the proposed CPA prior to 02/12/2013, i.e. the date of notification of the intention to seek CDM status by the CME to the secretariat and the DNA?	No	The start date of the CPA is 16/05/2014, that is, after the date of notification of the intention to seek CDM status by the CME to the secretariat and the DNA
1.10.	As per the Guidelines on the demonstration of additionality of small-scale project activities Version 9 para 2 (c), does the CPA deploy equipments to	Yes	The CPA deploys solar lights of rated capacity 1 W, solar home systems of rated capacity 10 W and cook

⁷ No cook stove based CDM projects in Timor-Leste were found in the analysis of CDM pipeline conducted on 22/02/2014.

	<p>household where the size of each unit is smaller than 5% of the small-scale CDM threshold i.e.</p> <ul style="list-style-type: none"> • Solar lighting systems (Type I): 750 kW • Cook stove thermal saving (Type II): 9,000 MWhth per year • Water filter emission reduction (Type III): 3,000 tCO₂e per year 		<p>stoves that result in a thermal saving of 7.99 MWhth/ year to households.</p>
1.11.	<p>Can the monitoring parameters for the individual CPA be accurately measured and recorded to calculate actual emission reductions according to the applied baseline and monitoring methodology?</p>	Yes	<p>The monitoring plan of the CPA detailed in section D.7 has been designed to ensure accurate measurement and recording for calculation of actual emission reductions as per AMS-II.G Version 06 and AMS-I.A Version 16.</p>
1.12.	<p>Has the CPA conducted an environmental impact assessment and achieved clearance / approval from the environmental agency, if required by host country regulations?</p>	Not applicable	<p>The host country regulations do not require environmental impact assessment for household solar lights, solar home systems and cook stove projects as explained in section B.1.</p>
1.13.	<p>Has the CPA conducted a local stakeholder consultation?</p>	Yes	<p>The CPA has conducted a local stakeholder consultation on 07/05/2014 at Timor Plaza, Dili, Timor-Leste. The details of the same have been provided in section C.1.</p>
1.14.	<p>Does the CPA involve funding from Annex I parties that results in a diversion of official development assistance?</p>	No	<p>The CPA does not involve funding from Annex I parties that results in a diversion of official development assistance. An undertaking to this effect is being provided by Differ to the CME.</p>

1.15.	<p>Does the CPA fall under the SSC threshold i.e.</p> <ul style="list-style-type: none"> • Type I: 15 MW • Type II: 60 GWh per year • Type III: 60 ktCO₂e per year <p>and remain under that threshold throughout the crediting period of the CPA?</p>	Yes	<p>The CPA deploys 100,000 solar lights of rated capacity 1 W and 100,000 solar home systems of rated capacity 10 W resulting in a total capacity of 1.1 MW for type I. Further, the CPA results in a thermal energy saving of 179.77 GWhth which is below the type II SSC threshold of 60 GWh (180 GWhth) per year. Thus, the CPA shall remain under the SSC threshold throughout the crediting period of the CPA.</p>
1.16.	<p>As per the Guidelines on assessment of debundling for SSC project activities Version 03 para 10, does the CPA deploy equipments to household where the size of each independent unit is smaller than 1% of the small-scale CDM threshold i.e.</p> <ul style="list-style-type: none"> • Solar lighting systems (Type I): 150 kW • Cook stove thermal saving (Type II): 900 MWhth per year • Water filter emission reduction (Type III): 600 tCO₂e per year 	Yes	<p>The CPA deploys solar lights of rated capacity 1 W, solar home systems of rated capacity 10 W and cook stoves that result in a thermal saving of 7.99 MWhth/ year to households.</p>

H.3 Other deviations from CDM documentation (if applicable)

Not applicable

ANNEX 1 ODA declaration

ODA declaration has been uploaded.

Number: KOP/01/IV/2014
Attachments: 1. Programme Summary
2. Questionnaire
Subject: Household Energy Appliance Programme

14h April 2014

Ms. Marilia da Silva
Director of FOKUPERS
Dili, Timor-Leste

Invitation

Dear Ms. Da Silva

With great pleasure we would like to inform you of a new business to sell efficient cookstoves, solar lights and solar home systems in Timor-Leste. It is part of a larger business initiative to sell efficient cook stoves, solar lights, water filters and solar home systems in Timor-Leste and Myanmar. Enclosed please find the description of the initiatives.

The sales of cookstoves and solar lights Timor-Leste will be done through a local company with employees hired locally. Kopernik, a well-established non-governmental organization with in-depth experience in Timor-Leste, will help establish the business locally. Differ Cookstoves, a solid financial backer with detailed understanding of project risks, will invest in the business.

The business will help reduce the exposure of local inhabitants in Timor-Leste towards harmful indoor air pollution. This can cause child pneumonia, lung cancer, chronic obstructive pulmonary disease, and heart disease. It will also contribute to reduced fuel consumption, and reduce greenhouse gas emissions from the use of non-renewable biomass, kerosene and diesel generator sets, by allowing households to use less wood, charcoal, kerosene and/or diesel. The business will use an existing, well-functioning distribution approach and appliances that have already been tested in the project target areas or similar areas.

The growth of the local business in Timor-Leste, and its expansion across Timor-Leste as well as Myanmar, will be supported by carbon credits from a programme of activities (PoA) under the Clean Development Mechanism.

A stakeholder consultation to inform about the business and the programme has been organized on 7 May 2014 in Dili. Differ Cookstoves and Kopernik would like to take necessary measures to satisfy your concerns and implement your kind suggestions.

Date: 07th May 2014

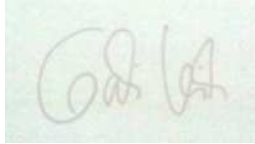
Time: 10:00am – 12:00pm

Venue: Timor Plaza, Level 5. Rua Presidente Nicolao Lobato, Comoro, Dili, Timor Leste

We would also like to invite you to complete the attached stakeholders' consultation questionnaire in lieu of or in addition to your participation in the meeting on 7th May 2014.

In case of any clarification kindly contact the undersigned.

Thanking you,



Gabriela Leite-Soares
Kopernik



Jorund Buen
Co-Founder, Differ Cookstoves Group

Yayasan Kopernik
Address: Pondok Wisata Sayan Ayu, Jalan Raya Kedewatan, Banjar Kutuh Sayan
Ubud, Bali, 80571 Indonesia
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Household Energy Appliance Programme in Timor-Leste and Myanmar

Introduction

The project in Timor-Leste is to be part of a proposed small-scale Programme of Activities (SSC-PoA) under the Clean Development Mechanism (CDM) and the Gold Standard is the sale and distribution of the following appliances to households in Myanmar and Timor-Leste:

- improved biomass cook stoves (ICS)
- solar lighting appliances
- solar home systems
- water purification equipment

This will replace the use of inefficient traditional stoves and cooking devices, kerosene and diesel gen-sets, thus reducing fuel consumption. The PoA will reduce greenhouse gas (GHG) emissions from the use of non-renewable biomass, kerosene and diesel gen-sets, by allowing households to use less wood, charcoal, kerosene and/or diesel. The PoA will use an existing, well-functioning distribution approach and appliances that have already been tested in the project target areas or similar areas.

The **ICS models** to implement are fuel efficient, resulting in a decrease in fuel use in comparison to conventional stoves while also reducing particulate matter and carbon emissions.

Solar lighting appliances could provide up to four hours of bright light on a full day's charge, and use highly efficient light emitting diodes (LEDs). Many appliances enable charging of mobile phones as well as other small appliances.

Solar home systems are stand-alone electrical power systems energised by photovoltaic panels. These types of systems may use solar panels only. In addition to lighting, such systems can be used for phone charging, and appliances such as radios, TVs, and fans.

Water filters remove impurities from water by means of a fine physical barrier, a chemical process or a biological process. The filters used in this PoA will remove bacteria, viruses, cysts, parasites, fungus and other micro-organisms from water, and will also reduce the rate of chemicals such as pesticides and chlorine. They have a lifetime capacity of minimum 7,000 litres.

The PoA will be coordinated by Differ Cookstoves, a solid financial backer with detailed understanding of project risks and technicalities. Differ Cookstoves has partnered with Kopernik, a well-established non-governmental organisation with in-depth experience in Timor-Leste. Differ Cookstoves will be the Coordinating Managing Entity (CME) of the PoA. Through the reduction of GHG emissions the PoA will generate Certified Emission Reductions (CERs), thus accessing carbon finance to facilitate dissemination of household appliances in Timor-Leste and Myanmar.

Environmental & social impacts

Water quality and quantity, soil condition: Fuelwood demand driven deforestation contributes to habitat destruction and soil erosion and undermines crucial ecosystem services, namely flood mitigation, water purification and nutrient cycling.

Solution: The distribution of efficient cookstoves and water purification technologies will reduce households' fuelwood demand, and thereby contribute to the integrity of both the quality and quantity of biodiversity, soil and water.

Biodiversity, livelihood of the poor: Black carbon and carbon dioxide-induced short- and long-term global climate change further upset biodiversity health, affecting habitat stability, migration patterns, food availability and predator patterns. Climate change also amplifies the vulnerabilities of low-income and historically underserved communities, exacerbating food insecurity; water scarcity (or excess - flooding); and infrastructural weaknesses (housing, roads, etc.).

Solution: The use of clean cookstoves and water purification technologies reduces not only carbon dioxide emissions but the production of short-term climate-forcing black carbon particulate pollution.

Human and institutional capacity: The domestic burden of fuelwood gathering and preparation falls most commonly to women and young girls who need to spend ever increasing amounts of time and effort to seek adequate sources of biomass. They risk being attacked and sexually assaulted, and forego their right to education and their potential for participation in the workforce in the process. Furthermore, constant exposure to dangerous indoor air pollution undermines their short-, medium- and long-term health, further compromising the future of their children.

Solution: The distribution of clean cookstoves and water purification technologies alleviates the domestic burden befalling women and young girls, which could ensure greater workforce participation, educational acquisition, and improved respiratory health.

Access to investment: The targeted communities are historically underserved and prone to natural disaster and therefore facing profound shortages of market development, crucial infrastructure, water, sanitation, education and food resources. In other words, these communities are caught in a vicious cycle triggered by a lack of real community investment.

Solution: By bringing not only life-improving technologies but associated market infrastructure (sales kiosks, maintenance know-how, spare part supply chains, etc.) the PoA is delivering genuine community investment that has potential ripple effects into other important areas (education, etc.).

Access to energy: Lack of rural electrification only contributes further to the lack of investment and service brought to historically underserved communities. Children's education and household productivity suffers in the absence of regularly accessible and clean energy, as do annual earnings spent on kerosene and other unsustainable lighting sources.

Solution: Solar lights and solar home systems, with a one-time cost, offer ideal sources of productivity gains, educational improvement, and household monetary savings.

First sub-project in Timor-Leste: Summary

Fuelwood demand driven deforestation contributes to habitat destruction and soil erosion and undermines crucial ecosystem services, namely flood mitigation, water purification and nutrient cycling. Timor-Leste and Myanmar have recorded damage to their ecosystems in the last decades following the unsustainable use and exploitation of natural resources. The on-going deforestation in Timor-Leste and Myanmar is a serious concern

for the ecosystems as the population pressure on the resources is increasing. The wood demand for household energy exceeds the available renewable woody biomass.

The first sub-project (CDM programme activity, or CPA) under the PoA will take place in Timor-Leste. It will cover the sale and distribution of up to 100,000 fuel-efficient cookstoves, 100,000 solar lights and 5,000 solar home systems. Kopernik, a local non-governmental organisation with headquarters in Bali, Indonesia, will implement the project, together with Differ Cookstoves, a project developer and investor from Norway. A distribution company being established by Differ Group Indonesia will assist in implementation, through establishing a local branch in Timor-Leste.



The first CPA will sell the Square cookstove, invented by Indonesian professor Muhammad Nurhuda, and marketed by Prime. Its design is based on that of kerosene stoves commonly used in Indonesia. It has a large stove table and four legs for stability. The legs are commonly also used as handles to move the stove or to empty it for ash or biochar after cooking. It has the capacity to combust up to 1.5 kg of chopped wood or 2 kg of biomass briquette. It uses up to 70% less than a three-stone fire, and has a lifetime of up to 2 years.



d.light 300s is the solar lighting appliance to be sold in the first CPA. It has four brightness settings from 4 hours on High to 100 hours on bed-light setting, and can charge mobile phones. It has at least 5 year lifetime.



The solar home system sold under the initial CPA is fosera 4200 LSHS. Daily operation hours of one light (200 lumen) is 15 hours, but it can serve many different loads, such as phone charging, radio, TV, and fans.

Programa produktu enerjia uma-kain iha Timor-Leste no Myanmar

Introdusaun

Projeitu iha Timor-Leste sei sai hanesan planu programa atividade ba skala-kik oan (small-scale Programme of Activities) nebe sei halao iha Mekanismu Dezenvolvimentu Mos ou Clean Development Mechanism nian okos, no Gold Standard husi sistema ne'e mak atividade hanesan fan no distribusaun ba sasan uma laran tuir mai ne'e iha Myanmar no Timor-Leste:

- Hadiak fugaun tein biomass (ICS)
- Sasan ba ahi-oan solar
- Sistema solar ba uma
- Ekipamentu ba be mos

Mekanismu ida ne'e sei trouka uza ba fugaun tein tradisional nebe ladun eficiente no sasan uza ba tein nia, hanesan mina rai, diesel, gen-sets, hodi nune bele mos hamenus konsumsaun ba mina. Programme of Activities ou PoA sei hamenus emisaun husi greenhouse gas. Greenhouse Gas (GHG) emisaun hetan bainhira uma-kain tein uza ai maran, anar ai, mina-rai ou diesel. Programme of Activities (PoA) sei ajuda atu hamenus emisaun husi greenhouse gas. PoA mos sei uza mekanismu distribusaun nebe oras ne'e halao dedaun ona no sei uza mos produktu nebe liu tia ona husi test iha area seluk nebe hanesan

Fugaun tein biomass (improved biomass cook stoves/ICS) nebe sei implementa mak fugaun tein nebe la han mina kompara ho fugaun seluk, no sei hamenus mos emisaun karbon nian.

Sistema sasan ba ahi-oan solar (solar lighting appliances) nudar ahi-oan solar nebe bele leno ho naroman diak durante oras hat (4) nian laran bainhira karega loron tomak. Ahi-oan solar ne'e uza LEDs (light emitting diodes). Ahi-oan solar ne'e mos bele uza ba karega telemovel.

Sistema solar ba uma (solar home systems) nudar sistema elektrisidade nebe jenera husi photovoltaic panel. Tipo husi sistema ne'e bele uza deit ho solar panel. Sistema ida ne'e bele ajuda fo naroman ba uma, no sistema ne'e bele uza mos atu karega telemovel, no sasan seluk tan hanesan radio, televizaun, no ventunha.

Sistema be mos ou water filters – ajuda atu hasai foer husi be. Sistema be mos nebe uza iha Programme of Activities ne'e bele ajuda atu hasai bacteria, virus, parasite, no buat foer kik-

oan tebes ita nian matan la bele hare husi be. Sistema be mos ne'e bele hamenus pestisida no klorine husi ita nian be mos. Sistema be mos ne'e bele tau ou tampung b to 7,000 litru.

Differ Cookstoves mak sei koordena Programme of Activities (PoA) ne'e. Differ Cookstoves nudar organizasaun ida nebe hatene klean kona ba sistema finanseiru, tekniku, no risiko projeitu nian. Differ Cookstoves forma ona parseiru ho Kopernik, NGO ida nebe serbisu kleur ona iha Timor-Leste. Differ Cookstoves sei sai nudar Coordinating Managing Entity (CME) ba PoA ne'e.

Tuir husi atividade hamenus emisaun greenhouse gas ne'e, PoA sei produs certified emissions reductions sertifikat ba hamenus emisaun, no fo aksesu ba carbon finance hodi nune bele fasilita diseminaun ba sasan uma-laran nian iha Timor-Leste no Myanmar.

Environmentu & Impaktu Sosial

Kuantidade no kualidade be, kondisaun rai: Atividade ta ai-maran no uza ba tein sei neneik-neneik kria distrusaun ou estragus ba habitat no rai. Bainhira tein uza ai, Bainhira ta ai-maran atu uza ba halo ai-oan ba tein nian, Atividades sira ne'e neneik sei estraga sistema ekosistem rai laran nian.

Solusasan: Distribusaun fugaun efisienti no produktu be mos sei hamenus ejiji uma-kain nian ba ai-maran, nune sei kontribui ba integridade ba kualidade no kuantidade ba biodiversity, rai no be.

Biodiversity, moris ema kiak nian: Karbon metan no karbon dioxide aumenta klima mudansa global. Mudansa klima mos halo ema kiak sira sai vulneravel liu tan, liu-liu komunidadade sira nebe hela iha area rurais , halo bot liu tan problem ba seguransa hahan, menus be (ou mota bot); no fraku infrastrutura.

Kapasitasaun ema no Institusaun: Feto adultu no labarik feto mak babain sempre hetan todan atu ba hili ai ba tein nian. Bainhira ba hili ai, iha risiko ba sira atu hetan ataka iha fatin fuik no bele mos hetan asaltu seksual. Nia konsekuensia mak labarik feto sira ne'e dala barak tenki para eskola no hamenus sira nian oportunidade atu partisipa iha kampu de trabalhu. Bainhira malun feto sira sempre tein uza ai matan no kona bebeik ho ai suar husi ai matan, neneik-neneik ida ne'e sei fo afeitu ba sira nian saude, no bele mos afeitua sira nian oan nian future.

Solusaun: Distribusaun ba fugaun tein nebe mos no produktu be mos sei ajuda hamenus todan uma laran nebe babain monu iha feto no labarik feto nian kabas. Ida ne'e bele

aumenta oportunidade ba maluk feto sira atu bele partisipa iha kampu trabalhu, kontinua eskola, no hadiak saude respirasaun.

Aksesu ba investimentu: Tuir istoria nebe ita hare ona, ema kiak iha area rusais mak babain hetan risku as liu ba dezastra natural. Tamba problema hanesan ne'e, area rurais sempre enfrenta difikuldade iha infrastrutura no be'e, sanitasaun, edukasaun, rekursu hahan, no dezenvolve ba merkadu.

Solusaun: Lori produktu nebe laos deit hadiak komidade nian moris, maibe mos parseira-parseira nebe involve iha merkadu ba produktu sira ne'e (hanesan kios nebe fan produktu, mantensansaun ba produktu nian, parte nebe fan sasan ba produktu sira ne'e). Programa atividade ou Program of Activity (PoA) sei lori mai investimentu komidade nebe iha potensial atu ajuda mos ba area seluk nebe importante (hanesan edukasaun no seluk tan).

Aksesu ba enerjia: eletrisidade nebe sei menus nian konsekuensia mak investimentu no serbisu nebe menus ba komidade sira iha area rurais. Labarik sira nian edukasaun no produtividade uma-kain sofre tamba aksesu ba enerjia mos laiha. Rendimentu uma-kain nian mos barak mak gasta hodi hola mina rai, lilin , lampu no seluk tan nebe bele fo naroman ba uma laran.

Solusaun: ahi solar no sistema solar nebe monta iha uma, selu dala ida deit, sei ajuda atu hadiak edukasaun ba labarik sira, hamenus gasta uma-kain nian ba mina rai no lilin sira no sei ajuda atu aumenta produtividade uma-kain nian.

Sub-projeitu primeiru iha Timor-Leste: Sumariu

Uza ai-maran hodi tein iha ai matan sei kria problema bot hanesan estragus ba ai laran no sei estraga mos rai. Iha tinan sanulu nian laran, Timor-Leste no Myanmar halo ona reportajem kona ba estragus ba sira nian ekosistema tamba modelu uza ai laran nebe ladun sustentavel no eksploitasaun ba rekursu naturais. Praktika ta-ai nebe halao iha Timor-Leste no Myanmar kria problema nebe seriu ba ekostema tamba populasaun nian uzu ba rekursu naturais aumenta ba bebeik. Uma-kain nian presiza ba ai-maran bot liu fali do que rekursu ai nebe Timor iha.

Sub-projeitu primeiru (CDM programme activity, ou CPA) iha Program of Activity nian okos sei halao iha Timor-Leste. Programa ne'e sei inklui fan no distribusaun ba 100,000 fugaun tein nebe efisienti liu (uza mina oitoan los), 100,000 ahi solar, no 5,000 sistema solar nebe

monta iha uma. Kopernik, nudar NGO lokal ho nian edifisiu fatin iha Bali, Indonesia, sei implementa projeitu ida ne'e. Kopernik sei serbisu hamutuk ho Differ Cookstoves atu halao projeitu ida ne'e. Differ Cookstoves ne'e investor ida husi rai Norwegia nian nebe mos dezenvolve projeitu. Differ Group Indonesia agora dedaun estabiliza hela kompanha ida nebe sei responsavel ba atividade distribusaun ba programa ida ne'e. Kompanha ne'e sei ajuda iha prosesu implementasaun nian, no sei hari'i cabang lokal ida iha Timor-Leste.



CPA primeiru sei fan Square cookstove, nebe professor ida husi Indonesia naran Muhammad Nurhuda mak halo. Fugaun Square (Square cookstove) ne'e Prime mak promote. Idea dezenhu ba fugaun ida ne'e halo tuir husi modelu fugaun uza mina rai nebe babain uza iha Indonesia. Fugaun ne'e iha stove table/meza fugan nebe bot no iha ain hat nebe ajuda halo fugaun ne'e atu bele hamrik metin. Fugaun nian ain ne'e babain bele uza hanesan kaer fatin bainhira atu muda fugaun ou bainhira atu hamos rai-rahun ou anar depois de tein. Fugaun ne'e iha kapasidade atu uza to'o 1.5 kilo ai rahun ou 2 kg biomass briket. Fugaun ne'e sei hamenus konsumsaun ba ai-maran to'o 70%, no bele uza to'o tinan 2.



d.light 300s ne'e produktu ahi solar nebe fan ba CPA primeiru nian. Ahi solar ne'e bele fo naroman tuir ita nian presiza. Bainhira ita uza nivel naroman nebe leno makas, entaun nia bele lakan to'o oras hat (4). Bainhira ita halo ahi ne'e nian naroman ladun makas, entaun ahi solar ne'e bele uza to'o oras 100 (loron hat/4). Ita mos bele karega ita nian telemovel baa hi solar ne'e. Ahi solar ne'e bele uza to'o tinan 5.



Sistema solar nebe monta ba uma nebe fan iha inisiu CPA nian okos ne'e fosera 4200 LSHS. Bele fo naroman ba uma to'o kinzi (15) oras, maibe bele mos uza atu karega telemovel, radio, TV, no ventunha.

Household Energy Appliance Programme:

Stakeholders' Consultation Questionnaire

The Household Energy Appliance Programme is a Clean Development Mechanism (CDM) Programme of Activities (PoA) supporting the sales of efficient cookstoves, solar lights, solar home systems and water filters.

The first sub-project covers efficient cookstoves, solar lights, and solar home systems in Timor Leste.

S.No	Environmental Impacts	Yes / No	Describe briefly
1	Can the CDM PoA and its sub-project adversely affect the local residents?	Y / N	
2	Can this CDM PoA and its sub-project adversely affect the employment opportunities in the local area?	Y / N	
3	Will this CDM PoA and its sub-project adversely affect natural resources in this area?	Y / N	
4	Will the CDM PoA and its sub-project adversely affect the environment in the local area?	Y / N	
5	Will the CDM PoA and its sub-project cause any additional noise and vibration or release of light, heat energy or electromagnetic radiation?	Y / N	
6	Will the CDM PoA and its sub-project result in social changes?	Y / N	
7	Can any transport routes or facilities get congested as a result of this CDM PoA and its sub-project?	Y / N	
Additional comments:			

Signature: _____

Name: _____

Address: _____

Please return the completed questionnaire to:

Gabriela Leite-Soares

Banku Mundial Timor-Leste

Fatin: Banku Mundial Timor-Leste

Lecidere, Dili

Telephone: +670 7816 1305

Programa Produtu Enerjia ba Uma-Kain:

Perguntas ba Konsultasaun ho Stakeholders

Programa Produtu Enerjia ba Uma-Kain nudar parte husi progra nebe fan no distribui fugaun efisienti (efficient cookstoves), ahi solar, sistema solar nebe monta ba uma, no be mos ou water filter. Programa ne'e hanesan inisiativu ida ba Clean Development Mechanism (CDM).

Sub-projeitu primeiru sei halo atividade ba iha area efficient cookstoves/fugaun efisienti, ahi solar, no sistema solar nebe monta ba uma iha Timor-Leste.

S.No	Impaktu ba Meio-Ambienti	Sim / Lae	Esplika oitan
1	CDM PoA no sub-projeitu ne'e sei bele fo influensia ladun diak ba comunidade lokal?	Sim / Lae	
2	CDM PoA no sub-projeitu ne'e sei bele fo influensia ladun diak ba oportunidade ba empregus iha rai laran?	Sim / Lae	
3	CDM PoA no sub-projeitu ne'e sei bele fo influensia ladun diak ba rekursu naturais iha fatin ida ne'e?	Sim / Lae	
4	CDM PoA no sub-projeitu sei bele fo influensia ladun diak ba meio-ambiente iha rai laran?	Sim / Lae	
5	CDM PoA no sub-projeitu ne'e sei bele halo barulhu no nakdoko, enerjia manas ou radiasaun elektromagnetik? Will the CDM PoA and its sub-project cause any additional noise and vibration or release of light, heat energy or electromagnetic radiation?	Sim / Lae	
6	CDM PoA no sub-projeitu sei bele fo impaktu ba mudansa social?	Sim / Lae	
7	CDM PoA bele ka la'e fo impaktu ladun diak ba estrada nebe kareta liu?	Sim / Lae	
Komentariu seluk:			

Asinatura: _____

Naran: _____

Fatin: _____

Bainhira ita resposta hotu tia ba perguntas sira iha leten ne'e, favor fo fila fali dokumentu nee ba:

Gabriela Leite-Soares

Banku Mundial Timor-Leste

Fatin: Banku Mundial Timor-Leste

Lecidere, Dili

Telefone: +670 7816 1305

ANNEX Q – LSC REPORT TEMPLATE

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SECTION A. PROJECT DESCRIPTION

A. 1. Title of the project activity

Title: Household appliance distribution in Timor-Leste

Date: 25/03/2014

Version no.: 01

Unique ID Number: Differ-CPA-001

A. 2. Project eligibility under the Gold Standard

The project activity involves the distribution of improved cook stoves, solar home systems and solar lights to households in Timor-Leste by Differ Cookstoves AS (“Differ”).

Distribution of improved cook stoves would displace the use of non-renewable biomass to meet similar thermal energy needs for cooking in households. Further, the distribution of solar lighting systems would displace the use of kerosene in lamps to generate the equivalent quantity of lighting service in households. Thus the project activity would result in a reduction of GHG emissions from the baseline scenario.

The CPA will involve the sale of about 18,500 Prime Square stoves, 100,000 d.light 300s solar lighting appliances and 100,000 fosera LSHS 4200 solar home systems to households in Timor-Leste.

The project activity is being pursued as a component of the PoA “Household energy appliance programme” with Differ Cookstoves AS being the CME. As the CPA involves dissemination of improved cook stoves to clearly identified end user households, it is eligible to Gold Standard under the ‘end-use energy efficiency improvement’ category, defined as the reduction in the amount of energy required for delivering or producing non-energy physical goods or services.

As the CPA involves dissemination of solar lanterns and solar home systems to clearly identified end user households, it is eligible to Gold Standard under the ‘renewable energy supply’ category, defined as the generation and delivery of energy services (e.g. mechanical work, electricity, heat) from non-fossil and non-depletable energy sources.

A. 3. Current project status

The CPA is nearing the end of its preparation stage of planning and design.

Differ Cookstoves is in discussions with two different local partners in Timor-Leste. National level testing of cook stoves in Timor-Leste is planned for end-May 2014.

Transport and distribution of stoves and lanterns are being discussed (solar home systems are planned for introduction later).

Differ Cookstoves AS held the Local Stakeholder Consultation on May 7th 2014 to present the project to the stakeholders and receive their views and comments concerning the implementation of the project. The CPA-DD has been submitted for validation and is open for global stakeholder comments from 16 May 2014.

SECTION B. DESIGN OF STAKEHOLDER CONSULTATION PROCESS

B. 1. Design of physical meeting(s)

i. Agenda

The Agenda for LSC

- 10:00 AM: Welcome from Differ Cookstoves
- 10:10 AM: Presentation of the “Household Energy Appliance Programme” PoA and the “Household appliance distribution in Timor-Leste” CPA , Gabriela Leite Soares (in Tetun)
- 10:40 AM: Blind Sustainable Development exercise including discussion on monitoring of SD parameters
- 11.10 AM: Questions and comments
- 12:00 PM: Closure of the meeting

ii. Non-technical summary

Differ AS was established in 2010 with a mission to spearhead the scale up of small-scale GHG emission reductions. This is done through early stage investments in technology providers and distributors within energy efficiency and renewable energy in developing countries, mainly in Sub-Saharan Africa and Southeast Asia. The proposed project by Differ will distribute solar lighting systems (lanterns, home systems) and improved cook stoves to households in Timor-Leste. Differ’s recently established subsidiary, Differ

Cookstoves AS (“Differ Cookstoves”), will implement the CPA.

Households in Timor-Leste consume large amounts of fuelwood for cooking purposes. Fuelwood is also used in households in large quantities to boil water for drinking purposes. The implementation of clean technologies like solar lighting systems and improved cook stoves currently faces various technological, institutional and financial barriers. The CPA seeks to alleviate these barriers through provision of revenue from sale of CERs generated by the CPA.

The distribution of efficient cook stoves dramatically reduces the fuelwood demand at the household level, contributing to the integrity of both the quality and quantity of biodiversity, soil and water.

Clean cook stoves and reduced reliance on inefficient combustion reduce carbon dioxide emissions and black carbon particulate pollution.

By bringing life-improving technologies and associated market infrastructure (sales kiosks, maintenance know-how, spare part supply chains, etc.) the CPA is delivering genuine community investment that has potential ripple effects into other important areas (education, etc.).

Solar lights distributed under the CPA offer ideal sources of productivity gains, educational improvement, and household monetary savings.

The distribution of clean cook stoves alleviates the domestic burden befalling women and young girls, ensuring greater workforce participation, educational acquisition, and improved respiratory health.

The CPA introduces new and/or improved technologies such as solar lighting systems and efficient cook stoves in the project region. It will mainly be financed by equity from Differ Cookstoves. CER revenues will be reinvested in scaling the PoA through investing in marketing and distribution, plus building a supply chain for sustainably harvested biomass fuel to be used in the distributed stoves.

iii. Invitation tracking table

Category code	Organisation (if relevant)	Name of invitee	Method of invitation	Date of invitation	Confirmation received? Y/N
B	Ministry of Health	Isabel Maria Gomes	Hand	07.04.2014	Y
B	Ministry of Agriculture and Fishery	Januario Marceal	Hand	07.04.2014	Y
B	Secretary of State for Promotion and Equality	Ana Paula	Hand	07.04.2014	Y
B	Ministry of Social Solidarity	Francisco Franco Mendes do Rosario	Hand	07.04.2014	Y
B	Ministry of Commerce,	Antonio da Concecao	Hand	07.04.2014	Y

	Industry & Environment				
C	Ministry of Commerce, Industry & Environment, State Secretariat for Environment (SEMA)	Mario Ximenes	Email	07.04.2014	Y
C	Ministry of Commerce, Industry & Environment	Adao Barbosa	Email	07.04.2014	Y
B	Forest Directorate	Manuel Mendes	Hand	07.04.2014	Y
Other	Dili Institute of Technology (DIT)	Lidio Inacio Freitas	Hand	07.04.2014	Y
Other	UNDP	Tommi Aarne Samuli Kajander	Email	09.04.2014	N
Other	UNDP	Niina Kylliainen	Email	09.04.2014	Y
Other	International Finance Corporation (IFC)	Ricardo Silva	Email	09.04.2014	N
Other	World Bank	Hans Anand Beck	Email	09.04.2014	Y
Other	World Bank	Gabriela Leite Soares	Hand	07.04.2014	Y
Other	Conservation International	Trudiann Dale	Email	07.04.2014	Y
F	Mercy Corps	Justin Odum	Hand	07.04.2014	Y
D	HABURAS	Virgilio Guterres	Hand	07.04.2014	Y
A	Fundasaun Esperanza Enclave Oecusse (FEEO)	Merita de Jesus	Email	07.04.2014	Y
A	Fundasaun Esperanza Enclave Oecusse (FEEO)	Lucia M. Ena	Email	07.04.2014	Y
A	Roman Luan	Avelino Pereira Fernandes	Phone	07.04.2014	Y
A	Move Forward (MF)	Osaias Soares	Phone	07.04.2014	Y
A	Move Forward (MF)	Olimpia Soares	Phone	07.04.2014	Y
Other	Timor Post	Otelio Ote	Email	14.04.2014	N
Other	Timor Post	Rita Almeida	Email	14.04.2014	N
Other	Suara Timor Lorosa'e	Salvador Saldanha	Email	14.04.2014	N
Other	Startec Enterprises	Kim Lium Tchia	Email	14.04.2014	Y
Other	Accenture	Ian Lobo	Email	09.04.2014	N
Other	Bairopite Clinic	Dr. Dan Murphy	Hand	07.04.2014	Y
D	OHM	Rince	Hand	07.04.2014	Y
D	HADEER	Abel Pereira	Email	09.04.2014	N
D	Organizasaun Feto Ba Futuro	Eugenia Neves	Email	09.04.2014	N
Other	UNICEF	Min Yuan (Ms)	Email	09.04.2014	N
Other	WHO	Luis dos Reis	Email	09.04.2014	N
D	HASATIL	Gil Boavida	Hand	07.04.2014	Y
D	Yayasan HAK	Manuel Monteiro	Hand	07.04.2014	Y
B	Demetrio Amaral	Demetrio Amaral	Hand	07.04.2014	Y

D	PERMATIL	Ego Lemos	Hand	07.04.2014	Y
B	SEFOPE	Elidio da Costa Ximenes	Hand	07.04.2014	Y
Other	Sentru Bambu	Mario Freitas Ribeiro	Hand	07.04.2014	Y
D	Alola Foundation	Ilda da Cruz	Email	07.04.2014	Y
D	Alola Foundation	Jose Ximenes	Hand	07.04.2014	Y
B	Office of the President	H.E. Taur Matan Ruak	Hand	07.04.2014	Y
D	La'o Hamutuk	Charles Scheiner	Email	14.04.2014	Y
Other	Worley Parsons	Christopher Serjak	Hand	07.04.2014	Y
D	FOKUPERS	Marilia da Silva	Email	14.04.2014	N
D	BESIK (Bee, Saneamentu no Ijiene iha Komunidade)	Joanna Mott	Email	14.04.2014	N
Other	Felisbela Pires	Felisbela Pires	Email	14.04.2014	Y
F	HIVOS	Angelina Sarmiento	Email	14.04.2014	N
F	World Vision	Samaresh Nayak (Mr)	Email	09.04.2014	N
F	World Vision	Domingos Lagos	Email	09.04.2014	N
Other	GIZ	Silvio Decurtins	Email	09.04.2014	Y
Other	GIZ	Cosme Ximenes	Email	09.04.2014	Y
F	CARE International	Geraldine Mary-Zwack	Email	14.04.2014	N
D	East Timor Development Agency (ETDA)	Palmira Pires	Email	09.04.2014	N
Other	Differ Cookstoves	Jørund Buen	Hand	07.04.2014	Y
D	Kopernik	Ewa Wojkowska	Hand	07.04.2014	Y

Different categories of participants were invited:

1. The ministries on the invitee list were invited because of their decision making powers within sectors targeted by the CPA
2. Environmental NGOs, as well as bi-and multilateral development aid providers, could provide critical views on the CPA plans, based on implementation experiences
3. Local NGOs and civil society groups could also perform this function; in addition, they could represent the perspectives of appliance users, especially women
4. Technology providers and –distributors could provide experiences from commercialisation of appliance distribution, as well as shed light on distribution challenges
5. Research institutions could provide local technical support in testing and certification of appliances
6. Media could disseminate information about the CPA, to inform a broader spectrum of stakeholders

iv. Text of individual invitations



Spearheading the scale-up of
small-scale carbon reductions

Number: KOP/01/IV/2014
Attachments: 1. Programme Summary
2. Questionnaire
Subject: Household Energy Appliance Programme

07th April 2014

S.E. Elidio da Costa Ximenes
Secretary of State for Vocational Training and Employment
Balide, Dili
Timor-Leste

Invitation

Excellency:

With great pleasure we would like to inform you of a new business to sell efficient cookstoves, solar lights and solar home systems in Timor-Leste. It is part of a larger business initiative to sell efficient cook stoves, solar lights, water filters and solar home systems in Timor-Leste and Myanmar. Enclosed please find the description of the initiatives.

The sales of cookstoves and solar lights Timor-Leste will be done through a local company with employees hired locally. Kopernik, a well-established non-governmental organization with in-depth experience in Timor-Leste, will help establish the business locally. Differ Cookstoves, a solid financial backer with detailed understanding of project risks, will invest in the business.

The business will help reduce the exposure of local inhabitants in Timor-Leste towards harmful indoor air pollution. This can cause child pneumonia, lung cancer, chronic obstructive pulmonary disease, and heart disease. It will also contribute to reduced fuel consumption, and reduce greenhouse gas emissions from the use of non-renewable biomass, kerosene and diesel generator sets, by allowing households to use less wood, charcoal, kerosene and/or diesel. The business will use an existing, well-functioning distribution approach and appliances that have already been tested in the project target areas or similar areas.

The growth of the local business in Timor-Leste, and its expansion across Timor-Leste as well as Myanmar, will be supported by carbon credits from a programme of activities (PoA) under the Clean Development Mechanism.

A stakeholder consultation to inform about the business and the programme has been organized on 7 May 2014 in Dili. Differ Cookstoves and Kopernik would like to take necessary measures to satisfy your concerns and implement your kind suggestions.

Date: 07th May 2014

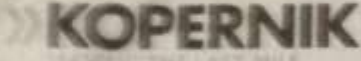
Time: 10:00am – 12:00pm

Venue: Timor Plaza, Level 5. Rua Presidente Nicolao Lobato, Comoro, Dili, Timor Leste


We would also like to invite you to complete the attached stakeholders' consultation questionnaire in lieu of or in addition to your participation in the meeting on 7th May 2014.

In case of any clarification kindly contact the undersigned.

v. Text of public invitations



KOPERNIK
LEAVING THE LAST MILE



DIFFER
Spearheading the scale-up of small-scale carbon reductions

Differ Cookstoves & Kopernik

Stakeholders Consultation for Clean Development Mechanism dia 7 de Maiu 2014

Ho kontente ami atu informa ita bot konaba bisnis foun nebe fan fugaun efisienti, ahi oan solar, no sistema ahi solar nebe mak monta ba uma iha Timor-Leste. Bisnis ida ne'e nudar parte husi inisiativu ba bisnis bot ida atu fan fugaun tein efisient, ahi solar, sistema be mos no sistema solar nebe monta iha uma iha Timor-Leste laran no Myanmar.

Bisnis ne'e sei ajuda povu iha Timor laran atu hamenus polusaun uma laran nebe perigosu. Polusaun uma laran ne'e bele hamosu moras hanesan pneumonia ba labarik sira, kankeru hirus matan, moras pulmonariu nebe todan, no sofre kura-saun.

Clean Development Mechanism (CDM) mak sei suporta local bisnis iha Timor-Leste no Indonesia.

Hodi bele rona maiuk Timor sira nian hanoin kona ba inisiativu ida ne'e, komite organizadora husi Kopernik no Differ Cook stoves hakarak konvida ita atu partisipa iha eventu ankontru stakeholder nebe sei organiza iha dia 7 de Maiu 2014 iha Dili.

Data: 7 Maiu 2014
Oras: 10:00 dader ate 12:00 meiodia
Fatin: Timor Plaza, Level 5, Rua Presidente Nicolao Lobato, Comoro, Dili, Timor Leste

Bain hira ita iha pergunta ruma karik, favor bele kontaktu ba:

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B. 2. Description of other consultation methods used

The LSC report will be publically available on the Gold Standard website, as per Gold Standard requirements, as well as on the Differ Group website. All participants in the LSC will receive an email with a link to the report (or a hand delivered copy in case they do not have email access), and printed copies will be available at the DNA Secretariat office in Dili, Timor-Leste.

SECTION C. CONSULTATION PROCESS

C. 1. Participants in physical meeting(s)

i. List of participants

Please attach original participants' list (in original language) as Annex 1.

Comments accompanying Annex 1

A total of 16 participants took part in the Local Stakeholder Consultation. These represented prospective users of the appliances to be distributed; government representatives (including from the Timor-Leste DNA); tech providers/distributors; local environmental and social NGOs; international NGOs (of which several are Gold Standard NGO Supporters); multilateral development banks; as well as bilateral aid agencies. Of the 16 registered participants, 8 were women.

ii. Evaluation forms

Original evaluation forms in original language are attached (Annex 2).

Comments accompanying Annex 2

In total, 11 evaluation forms were submitted, which is 85% of those participants that were not LSC organisers. The official language in Timor-Leste is Tetun; 3 answered in English and 8 in Tetun.

The general impressions about the LSC and the CPA were positive. Participants found that the consultation was good and interesting, and that translation was of good quality. Many participants mentioned that they learnt a lot about the planned programme as well as about the appliances to be distributed under the programme, including in the planned CPA, and one NGO representative signalled a wish to get involved in implementation. Several participants also appreciated the opportunity to exchange information.

Many participants also highlighted the planned CPA's positive societal, environmental and economic impacts, including access to affordable and clean energy services, the health of users due to improved air quality, and reduced emissions.

Regarding areas of improvement, several participants highlighted the need for collaboration with all stakeholders involved, including government entities. One government stakeholder said more of the invited government stakeholders should have been present at the consultation. The need for training so that users and sellers understand appliances was also emphasised.

One participant claimed that the stoves planned for distribution will be too expensive, and feared that prospective users would substitute these products with other, cheaper products.

Some participants said they had wanted more time, for an even more thorough and comprehensive review and discussion of the programme and the CPA.

C. 2. Pictures from physical meeting(s)





C. 3. Outcome of consultation process

i. Minutes of physical meeting(s)

The local stakeholder consultation was held on Wednesday, 7 May 2014, from 10:00 AM to 12:00 PM, in Timor Plaza Hotel, Comoro, Dili, capital city of Timor-Leste. The consultation aimed to present the “Household Energy Appliance Programme” of Differ Cookstoves, as well as the initial CPA in Timor Leste: “Household appliance distribution in Timor-Leste” (Differ-CPA-001) . A total of 16 national and international participants, representing prospective users of the appliances to be distributed; government representatives (including from the Timor-Leste DNA); tech providers/distributors; local environmental and social NGOs; international NGOs (of which several are Gold Standard NGO Supporters); multilateral development banks; as well as bilateral aid agencies.

Gabriela Leite Soares (consultant for Differ Cookstoves; based in Timor-Leste), joined by Jørund Buen from Differ Cookstoves AS, opened the meeting at 10:15 by welcoming the participants.

On behalf of Differ Cookstoves, Gabriela Leite Soares gave a presentation in Tetun (the Timor-Leste official language), on the Household Energy Appliance Programme in general, the business model of the PoA, the project types involved, and their sustainable development benefits. The presentation also covered the specific CPA on distribution of improved cookstoves, solar lights and solar home systems in Timor-Leste; as well as CDM and its benefits for relevant stakeholders. This was followed by a series of pictures displaying the actual use of selected appliances planned for implementation in the initial CPA, in areas in e.g. Timor-Leste similar to the CPA area.

Differ also discussed on the environmental and socio-economic impacts of improved cookstoves, solar lanterns, and solar home systems.

After the presentation, Mr Jørund Buen from Differ Cookstoves conducted a blind sustainable development exercise, mentioned the possibilities for continuous input, and discussed sustainable development aspects with participants.

This was followed by a Q&A session. During the Q&A session and sustainable development discussion, Gabriela Leite Soares translated between Tetun and English. A Prime square stove, a d.light s300 and components of a fosera LSHS 4200 solar home system were displayed during the stakeholder consultation.

The questions and comments received during the meeting along with the responses provided are summarized below

At the end of the workshop, all participants were given a questionnaire on specific PoA and CPA sustainable development aspects, as well as an evaluation form to communicate their views about the consultation as well as the project.

The consultation ended at 12:30PM and was closed by Mr Jørund Buen from Differ

Cookstoves.

Comments, Question and Answers

1. Merita de Jesus Marques, FEEO (in Tetun)

Q: In regard to access to renewable energy, I think this is a good initiative. Our organization has implemented this project in our community. However, the challenge we face when implementing the project is finding spare parts for the technology appliances. Moreover, there seems to be no warranty provided either in Dili or Oecusse. If we don't have access to spare parts for the technology, I think it is a waste for the project.

Another issue is that we sell the technology using incentive price or subsidy. A local store, called Startec Enterprises, is also selling the technology; however, at the original price, which is a lot higher. This creates suspicion in the community regarding our operation. Startec is selling the product for US\$30 and our organization, FEEO is selling them for US\$15.

A (Jørund Buen, Differ Cookstoves): I think it's a good question. It's clearly a challenge in Timor-Leste to be able to distribute and sell to end costumers in the sub-districts, and it's a challenge for us to build up a distribution chain to achieve that. This is why we also need to secure carbon funding although it's very hard. Quite fortunately, we have entities quite familiar with d.light; Kopernik and Startec for example. They have both built distribution networks to sub-districts. In the case of Startec they have retailers locally that would need to take care of maintenance. But I think, still, even that situation it is certainly a challenge. Another good thing, which doesn't necessarily solve every problem but which is helpful, is that d.light are built very solidly, even when you drop it from the top of the roof in most cases they will not drop. Therefore, the number of spare parts will probably be relatively limited.

A (Ewa Wojkowska, Kopernik): Yes, it's true, Kopernik was subsidizing d'Lights in Oecusse, and the idea behind that is people in Oecusse were really poor, really cash-poor, and we wanted to provide access to solar lights for the poorest communities. This is why we are working with FEEO, because they serve poorest communities. The plan was always to phase the subsidies out, so that in the end to establish sustainable distribution. To be honest, in hind sight, I wouldn't do the subsidies again, I think it was a mistake, one that we learnt from, and we don't want to do subsidies again, because of the reasons that you mentioned, once you set a price, its really difficult to increase it, and people become suspicious, and think that people are trying to cheat them and robbed them, so that's a mistake on our part.

A (Jørund Buen, Differ Cookstoves): We have the benefit of learning from others' mistakes, and in general, we are not supporters of subsidizing products to the end user. There are all sorts of good arguments for why people have done it. Certainly, there are end consumers that don't have the cash available right away to purchase technology, so it's easy to understand why people have previously done it, and I have all respect for that decision. But I think from a long-term sustainability point of view, in terms of ensuring that this is a business that will go on for a long time, it is not

good, for the reasons we just heard. But also because if you rely on subsidies to get a business going, as we heard, it is then difficult to take them away, as we are incurring a loss at the start, and we might continue incurring losses all the way, until the business goes bankrupt. This is not a way to build a business. We will obviously then don't do well ourselves, but we will also make a mistake that will hurt others, because people will think that if we buy a stove the business will be closed down soon and they will not trust it. We don't want that situation. So it is better to have a functioning market based price. For those who cannot afford to pay cash upfront, you can have installment payments. They can pay a bit upfront and another part later on, and then another part later on, and then they will have complete ownership. Talking about pioneers – it has worked for Kopernik in many places, and it seems to work very well in the joint project Differ Cookstoves has with Kopernik, in Tapanuli Selatan, North Sumatra. We have a lot of upfront cash sales. We also have a system for incentivizing retailers and we are prepared to accept installment payments.

2. José Ximenes, Fundasaun Alola (in Tetun)

Q: Our organization is also partnering with Mercy Corps on a cookstove project. This cookstove project is developing. However, the technology is still very simple. This Prime Cookstove seems to be a little bit more modern. Hence, if you want to introduce this technology to a community, I think it is important that you educate and train the community not only on how to use it, but also how to maintain the product and fix it.

A (Jørund Buen, Differ Cookstoves): I agree. It's also the experience that we've had in doing business, and as you saw from the pictures [in the presentation], in general, for any product, we wouldn't be planning on just "dropping it and running away and forgetting about it". We want to have interaction with customers. This is also important for this cookstove [points towards Prime stove]; it's our experience and I'm sure also Kopernik would support me in saying that it's a lot of value in being there in the starting phase when customers start using it, making sure the stove's used correctly, and also to make sure it's used in ways that don't raise the need for maintenance very early. For example, it is not right to pour water on this stove in order to stop it, because then it starts rusting. This stove has been used in West Timor, and it has worked reasonably well there, so there's no reason why people here should not be able to understand its use just as well. But it's still important to use the opportunity to be there and educate people, and also educate those selling the stoves. In order to actually manage to do what you rightly point to, we need to build partnerships with private companies that are distributing these technologies, but also NGOs that are able to help us to do capacity building and education. This is a pretty demanding exercise in the starting phase. This is one important element I need to consider: are we able to commit to this pretty long period of ramp-up and building partnerships before we, from a private sector point of view, actually can get revenues out of this. I know this is going to be a long period of time because I have experience from other projects.

3. Cosma Ximenes, GIZ

Q: As far as I know, there are other organizations working on Carbon Credits as well, there's one called Carbon Exchange, implementing in Baucau, in Baguia sub-district, and there is another cooking stove from Mercy Corps, and there are a lot of interventions there. And, what I heard from the presentation is that you will be paid based on the carbon emissions you reduce, if I am not mistaken. And my question is, what is the monitoring system that you'll be put in place and how do you know, how much carbon emissions does it reduce due to your project intervention, and how do you know, how much carbon emissions that have been reduced by other project interventions?

A (Jørund Buen, Differ Cookstoves): It could well be that there are other initiatives underway on the carbon side that I'm not aware of. I don't think any have sought DNA approval, but I'm sure the representatives from the DNA Secretariat can clarify that if needed and I'm fully aware that there exist other stoves, and other stoves distributors. From a monitoring perspective, this is solved in the following manner: on this stove or on this light or on this panel there needs to be a unique identification number, so we can track which units have been distributed under this program. So this is one way we can immediately identify units sold under this program.

Secondly, when they are sold, we need to track each unit sold, and there needs to be a written contract with the end customer, where the end customer signs that "yes, I have bought this one" and this contract then links to the [sold unit's] unique identification number. This is a standard way to do monitoring under programs for CDM. It's not something I invented just now. It's the way it's normally done, and it's a specific methodology. That said, it's not without challenges in developing countries to do this in a consistent manner over a long period of time. Therefore, under CDM, there's a system of third party of verification of the kind of data that we'll be producing in our database. If the third party verifier sees this database and sees that there are inconsistencies or lacking information for a unit, say for this specific unit here, there's no match between that unit and our records, that unit will not count. So we will get no carbon credits for it. It's quite common that single units are excluded from the issuance of carbon credits for that specific reason. As you probably understand, if you have this unique identification number, that are linked our organization, maybe it will be called "DIFFER PoA number x,y,z". Then it's difficult for, let's say, Carbon Exchange to claim that this stove has been distributed by them. And it's a way to ensuring each stoves get only this many credits, and that there is no double counting.

4. Justin Odum, Mercy Corps

Q: Regarding the spare parts issue, we have found that unlike some other products, d.lights are extremely durable. We have a promotional video, where we have someone running over the product with a motorbike, and shows the product is just

fine, and drops it from a tree, and it is just fine. So, while there are always potential problems with spare parts, but this is a very good product for durability. This is my first comment.

The second comment: our biggest problem with the solar part of our program is simply the fact that the Government has been expanding the electricity network. It's on-going process, but a lot of people have at least been promised free electricity, and that's probably the number one reason why people said they do not want to buy our products. Developing a marketing approach, that is the number one big enemy, and you really need strategy to deal with that, somehow. 'cause they [the lights] *are* still benefits, even if Government supplies electricity, because it's not gonna be free forever.

Finally, our main issue about stove distribution, if stoves are distributed for free, much like electricity, people are not eager to buy the stoves, because they see that their person down the street got it for free.

A (Jørund Buen, Differ Cookstoves): Well, I can say that this causes me headaches as well. We've already heard about subsidization of solar lanterns. I also heard examples of free distribution of solar home systems, not exactly this one [points to fosera system] but similar, and I've also heard plans about distribution of stoves, some examples are by NGOs, while others are potentially by Government. While I very much respect the intentions behind those types of distribution, I don't think they are helpful in the long term. The more such examples I hear about, the less likely Differ is to invest, that's clear. It's not a very good idea for getting private sector investment to have this kind of uncertainty. When it comes to grid connection, I don't have personal experience with this so I might be wrong, but what I'm hearing is the grid connection quality varies, it's a bit on and off in places. And that, at least what I've seen in Indonesia, there is still parallel use of kerosene and electricity, so there are still examples where these lights can replace kerosene use. For example, the solar home system, (I couldn't bring the actual solar panel with me it's a bit tricky to bring that with me on the plane), that would enable people who do have a grid connection to use the same things they normally use when they have a grid connection, even in cases when that connection breaks down, for example a simple TV, fridge, radio. It can handle up to four loads at the same time, and although perhaps not "Western or USA style", it's going to provide a pretty decent service. So both of these [pointing to d.light and fosera] will be helpful even if you do have a grid connection. And of course there are areas that don't have a grid connection.

5. Felisbela Pires, Consultant

Q: This is very important and necessary for Timor-Leste. However, let's go back to the main question that you showed before [cf the Gold Standard criteria], I think in order to answer this question we need to find more information, definitely from my general knowledge this kind of project will have a positive impact on air quality, water quality, soil and pollution. But I think the answer to the question about social impact, including livelihood of the poor, which is more of quality of employment, in

order to answer that question, we need to find more information about the strategy you have, and how this program will work out. For example, just in the last few minutes we found out that we have a problem with distribution channels and also maintenance. I read from the briefing that you provided, about existing distribution, but we found out that we have a gap in that channel. So I think what I want to do is I would like to provide some comments and find clarity and more information on how this projects works, and to what extent and how private companies are going to be involved. If I am not mistaken, a few thousand products are going to be sold, so for that few thousands products how many local companies are you going to involve, and what is the process like? Are they going to take a loan, and then go and sell it, are they going to buy it and sell it, because I really don't understand how it is going to work. And about maintenance, how far are you going to involve in ensuring a long term maintenance, to make sure this product works for a long time, also, and one thing that I'm interested in about the carbon credit, from the general understanding there is one problem, monopoly. How do you address that monopoly in relation to the private sector? And if you are going to involve local companies, how do you make sure that credits not just go to one company, the biggest company, and how do you make sure that there is distribution of the credits, in order to improve quantity of employment and quality of employment and income generation?

A (Jørund Buen, Differ Cookstoves): As I said initially, we're still fairly early stage in our preparations, hence it's good to have this interaction now, as it makes us able to adjust our approach properly in response to your comments. One important concern that I already have, and which you are also supporting me in, is that of enabling distribution not only here in Dili, but also in the sub-districts. It's clear that from our point of view, it probably makes sense to start off sales and distribution in Dili, because we have starting off with stoves, and it makes sense to start selling them in areas where a lot of the poor have daily outlays for fuelwood, because the stove can reduce fuelwood use by up to 80 per cent and clearly that will have a direct effect on poor people's income. So the distribution here would be a challenge, but it would be less challenging than to distribute to remote areas of Timor-Leste.

6. Felisbela Pires, Consultant

Q: So you are the distributor and the seller as well, or will there be other sellers?

A (Jørund Buen, Differ Cookstoves): In North Sumatra, we purchase appliances from sellers – for example Prime - and then we would be selling them on to tech agents or to distributors and retailers, selling them to end customers. That will be, I think, the way we will do this here as well.

7. Felisbela Pires, Consultant

Q: So will you have a quota on sales for each company then? Do you have a limit?

A (Jørund Buen, Differ Cookstoves): No, I don't think that makes sense, and I don't think it would be a monopoly. Allocating this upfront, without knowing the quality of each distributor, to me that doesn't sound like good business model, as then I'll put all my eggs in one basket. Say I'm allocation a thousand products to distributor x and this distributor just fails, what do I do then? There will be a number of distributors, and you might have a situation where you would be allocating certain geographical areas of the country to distributors. We have examples where we've done that, and it could make sense to do it. If an entity has a stronghold in, say, Oecusse, then maybe this entity could be allowed to distribute there.

On maintenance, each of these entities would issue a warranty for their products. I'm not sure I remember the warranty for each of them. I think 1 year from the point of sale [Prime] and at least 2 years from the point of sale [pointing to d.lights and foseira].

I should say that the [Fosera] solar home systems technology has not been sold so far in either in Indonesia or Timor-Leste. We have a very sober approach to that technology. Solar home systems in Timor-Leste in general are more or less not existing. So we should test whether it makes sense. This technology has sold very well in many countries such as in Sub-Saharan Africa, and it has been manufactured in Thailand, and has been sold in the area of 20 to 30 thousand, so it's a fairly mature product, but has not been sold here, and we're very sober about how many we *will* sell. But I think this is very important, if there is a demand for technology, it should be met because it really makes a large change for families purchasing it. They can have a small fridge, they can watch television, charge several mobile phones etc. So it makes a lot of change.

Regarding the process of including local companies: if we decided to go forward with this, and we obtain the necessary approval from the DNA, which is a prerequisite, then we will establish a local company ourselves. It doesn't mean that we will do all business, but we will have local employees, we'll have a local management. We will hire local employees for normal positions in a distribution company, initially it will be in Dili, but if things work out really well it is likely that we will have local sub-districts offices. But even in a scenario when we establish a local company to implement this, we will have very clear need for interaction with existing NGOs and existing distributors of the technologies, for example Startec. They have a sole agent role for d.light, so definitely we will need to and want to interact with them, because they have an existing network, and they know what the typical maintenance needs would be. Prime has an office in Malang, Indonesia. The guy who has day-to-day responsibility for our Prime office in Malang in Indonesia today, has lived several years in Dili, so he is familiar with the situation here.

8. Felisbela Pires, Consultant

Q: You say you will establish your own company. There are very few and only small companies here. How will you manage to involve them?

A (Jørund Buen, Differ Cookstoves): I would be rather sad if we didn't manage to involve quite a number of local companies. I consider that as more important than my company earning additional money. It would be a better outcome for me.

9. Felisbela Pires, Consultant

Q: But the problem is Timor is small. If you have a main store there, and some other store, I don't think people will visit the small store, because the prices are relatively higher there, or because people just don't travel 2 kilometers to the main store.

A (Jørund Buen, Differ Cookstoves):

I had an interesting discussion with Startec yesterday, and they have many local retailers, and when people from the districts come to the main store, they're pushing them back to the districts, by saying that "you'll warranty, and you'll not have transport cost that you get here, etc. I certainly try to learn from that experience. It's not really in my interest to have everyone coming here [to Dili], because if you don't have a strong distribution network out in the districts, you might have a successful first half-year, but after that, well, where exactly will you sell?. We need to sell it in the sub-districts, where the needs are much higher. I'm not going to portray myself as anywhere near an expert on the economic development of Timor-Leste, but if you differentiate income levels, Dili has only 2.5% of the two lowest income levels, whereas all the rest of the poor would be in the rest of the country. These technologies will to a varying extent target the two poorest two segments. This one [points to fosera] probably not, but the two others would certainly. We'll need to have distribution in the sub-districts to have a viable business over time. So it's in our interest to start selling in the sub-districts; otherwise I don't think it's going to work.

10. Kim Chia, Director, Startec Enterprises

Q: As the main distributor of d.lights and the cookstove, we collaborate with Mercy Corps and Kopernik. Kopernik focuses on d.lights only, and they just supply to local NGO and supply to the local community via the NGO. The price are different, we have also discussed this. I think they will change it. They are going to make it balanced between the price we sell for locally and the price NGOs sell for locally. It is going to affect local sales in the future. We work with Mercy Corps, the program has been going on for almost two years, and have around 28 stores in the district, including Oecusse and Atauro. Now all distributors outside the main store distribute d.lights,

provide service, warranty, and including the cookstoves. Included in the services we provided, is that we train local sellers, they understand how to sell the product, how to maintain the product, how to give a warranty for the product. If there are any warranty requests are coming to Startec, for two-year warranty, it doesn't matter even if it is past two years, any break, or casing, we're getting any question, we replace with a new. I don't know if you have watched the advertisement, but if it falls from the tree, it is still in good condition, and if it breaks, we just replace. They've been testing, they've been trying, and they've been giving this guarantee. We are working together, we make sure we balance the price and its benefit. That is why Kopernik was really pushing d.lights in Oecusse and Atauro. I have a question regarding the stove. The stove that you use here, because you use kerosene and the cost of kerosene is also not subsidized for the end users, have you worked out cost for that, and how much they are going to spend for the use of kerosene for cooking?

A (Jørund Buen, Differ Cookstoves): This stove [Prime] uses biomass as fuel, it could be peanut shells, briquettes, pellets - but not kerosene. We have different types of burning chamber, one is more suitable for granular fuels, and one is more suitable for logs. You light it on the top. There's no need the kerosene but just a piece of newspaper and a matchstick. So this stove combusts biomass efficiently and hence reduces biomass fuel use, it is a good opportunity to reduce cost for people who regularly have to pay for the sticks they use in their three-stone fire, or similar. I had a chance to walk around a bit and see how people seem to do that here. Based on the consumption of wood people would have here in a normal working week, it's a pretty substantial outlay. Three normal bunches of fuelwood could cost a dollar, it's not an enormous amount of fuelwood, and in a normal three-stone fire I'd be surprised if you don't use a number of those a day. Then it's positive with a stove reducing your consumption by at least 50 per cent and probably up to 80 per cent. That will really make a change for people in their daily lives.

As was said in the presentation, Prime is an example of a stove that can be used [in the PoA]. It doesn't mean that it is the only stove that can be used in this programme. Any stove can be used, as long as it is proving that it has a thermal efficiency, of at least 20%. I haven't seen reports on the Mercy Corps stove, but I assume it will be qualifying along those lines. In principle, it could be possible to include it in this programme as well, and it would be, from my perspective, very interesting do to so. We definitely will try to follow up. Differ is the main investor in Prime, but it doesn't mean that Prime needs to be the only stove. There's a local stove here, that is building on a solid feasibility study, there is a distributor of it and it is selling reasonably well. It's every reason to include it from my point of view and I guess from a societal point of view as well. We are not deciding, what Mercy Corps or Startec but I am personally interested. It is a There are some technical challenges, though, from a CDM point of view to have many different types of stove in each sub-project, the CPA, we are now implementing, it's a monitoring challenge.

11. Adao Barbosa, UNFCCC Focal Point, State Secretariat for Environment

(SEMA)/Ministry of Commerce, Industry and the Environment (MCIA)

Q: In terms of benefit, it [the PoA] is good for Timor-Leste, because there is benefit for environment, social and development. And in terms of legal and procedural issues, we need to discuss about this issue separately, not in this moment, we need to discuss more how to submit proposal, approval. But at least, from SEOE [Secretary of State for Environment] as the DNA office of Timor-Leste, we have produced one single document on legal procedures for Timor-Leste. So you need to follow what we've formulated.

In terms of price [for the cookstoves], it says in the presentation the price of the stove will be 30 [US] dollars. We need to clarify this issue, with legal procedures, because we need to make difference between business as usual and CDM. Because if this is business as usual, then just sell out, if we need this activity to be CDM, with CER selling from your side to World Bank and Swedish Government, it means that CER will be belonging to your company, but you will acting on behalf of the Government of Timor-Leste. So for the CDM committee to approve your proposal, it needs to be clear how much each unit reduces. It's very important. Let's take the cook stove. One stove will reduce how many kilograms or tonnes for two years? That's why I said it's important to discuss these technical issues separately. You will sell products, and carbon credits as well, so it means that you will have double benefits.

Can you explain this clearly?

A (Jørund Buen, Differ Cookstoves): It's correct that we sell these [Prime] cookstoves for 30 dollars in projects Indonesia after we have had a lot of outlays in terms of local distribution network and staff, purchasing [appliances] and we also would have investments in all sorts of things, upfront. *Then* we can sell that for 30 dollars. So, I cannot show up here, with a large organization, straight away, and sell it for 30 dollars. That's not the way it works. The baseline here in Timor-Leste is no stoves [of this type]. Have any of these stoves been sold in Timor-Leste so far? Have you seen them?

12. Adao Barbosa, UNFCCC Focal Point, State Secretariat for Environment (SEMA)/Ministry of Commerce, Industry and the Environment (MCIA)

No but there are different stoves.

A (Jørund Buen, Differ Cookstoves):

Mercy Corps has a different type of stove. Only about hundred Prime stoves have been distributed in Timor Leste, by Kopernik, an NGO, through a grant, and that's it. So the market does not exist in Timor-Leste, and no such stoves exist here, because

it's not economically viable.

13. Adao Barbosa, UNFCCC Focal Point, State Secretariat for Environment (SEMA)/Ministry of Commerce, Industry and the Environment (MCIA)

I think you should reduce the price of the cook stoves, so that you'll get more benefits from CERs. You need to make difference in price between business as usual and CDM.

A (Jørund Buen, Differ Cookstoves): But there is no business as usual price for the Prime stoves in Timor-Leste, because they haven't been sold here yet. And that's because they are not economically viable to sell here. But I think I know where you're heading. We had a discussion about subsidizing prices for the end user earlier, and you suggest that we use money from CER revenues and subsidize the price for the end user. Correct?

14. Adao Barbosa, UNFCCC Focal Point, State Secretariat for Environment (SEMA)/Ministry of Commerce, Industry and the Environment (MCIA)

Yes.

A (Jørund Buen, Differ Cookstoves):

Well, we've heard that subsidizing prices for end users has been unsuccessful, in the sense that they've resulting in a situation where people start questioning whether the reduced price is due to illegal activities. Or say [to other entities, without carbon credit subsidy] "I get this stove so cheap via Differ so why should I pay you the full price?"

Since this projects is actually additional, it needs CDM revenues to go forward, selling these stoves at a price much lower than 30 dollars will not work. It's basically the same as saying this project will not come to fruition. That's of course a viable standpoint to have. But I am not a great supporter of subsidizing prices through CERs. As we told in the presentation, the interesting thing from our point of view is not that we get paid from selling the CERs. It's that these CER revenues will be used to scale the project. My intention with this project is not to sell CERs for a thousand stoves, and then leave. For me, for this to make sense, we need to be operational here five, six or seven years, before we break even, That means that after that this makes business sense for us. And that's *with* carbon revenues. I need to have *that* long perspective *with* carbon credits. Without it, this will not be profitable. Not at all. I would never do it. So, the sales of carbon credits is absolutely necessary with the price of just 30 for this project.

You had a second question about reductions per year: I don't know the answers by

heart, but these reductions are based on methodologies established by the UN. As far as I can remember, based on the efficiency of the stove, they reduce 1.9 tons a year for a normal household [the correct number is 2.4 tons a year], and these two [the solar lights and solar home systems] will be 0.2 tons approximately, but take this with a grain of salt, I might remember it incorrectly.

Jørund Buen, Differ Cookstoves: Before I forget, each one of you needs to think through whether there are points in the overview of questions I showed earlier that are clearly negative, because then we are obliged to address that in the followup to this meeting.

15. Jose Ximenes, Alola Foundation

Q: The cookstoves that were introduced by Mercy Corps uses a little bit of kerosene. I see that Prime Cookstove uses briquettes. Will you be training the community in how to make briquettes?

A (Jørund Buen, Differ Cookstoves): This cookstove does not only use briquettes. It also uses logs and any type of biomass you like, really. In the presentation, we mentioned that we will recycle the carbon revenues into sustainably harvested biomass fuel. One way to do that is to use the money to establish pellet or briquette production. We have a similar project in Senegal and Zambia, and there we have invested in a wood chipper. It's cheaper and more convenient to use woodchips in these stoves, instead of logs. We have established a sales channel for chipped wood. In discussions with the potential buyers of CERs, we have said in our proposals we will use CER revenues for this purpose. I also know Haburas have thoughts around briquettes, so we'll certainly listen carefully to those thoughts. And I'm very interested in getting to know sources of sustainable harvested biomass fuel. This will need to be harvesting taking place under a government management plan. This is not only sustainable on paper, it needs to be backed by a government plan, ideally. This is the way we've done it in Senegal, and I think it makes a lot of sense to do it here as well, so we are certain that we're reducing deforestation – not only through using less wood but also by ensuring that the outtake of wood is being sustainably managed.

ii. Minutes of other consultations

The LSC report will be publically available on the Gold Standard website, as per Gold Standard requirement, as well as on the Differ Group website (www.differgroup.com). All participants in the LSC will receive an email with a link to the report and printed

copies will be available at the DNA Secretariat in Dili, Timor-Leste. No other consultations were held.

iii. Assessment of all comments

Stakeholder comment	Was comment taken into account (Yes/ No)?	Explanation (Why? How?)
<p>Merita de Jesus, FEEO Subsidising appliances is not a good idea, as people wonder whether appliances are cheaper for illegal reasons or that they are of lower quality. Also our NGO had experienced some difficulty locating spare parts for d.lights</p>	Yes	<p>Ewa Wojkowska from Kopernik clarified Kopernik did provide subsidies in the project in Oecusse referred to by FEEO, but that it will not do so in future.</p> <p>Jørund Buen confirmed that Differ does not believe in subsidies to end users, as this threatens long-term market sustainability. He highlighted that the intention is instead to use carbon revenues to build a supply chain for sustainably harvested biomass fuel, and improve distribution and marketing.</p>
<p>Jose Ximenes, Alola Foundation There is a need to focus on user education, as well as maintenance and provision of spare parts</p>	Yes	<p>Jørund Buen confirmed that especially for the Prime stoves, user education and capacity building is very important, as using the stoves incorrectly will reduce their efficiency and lifetime, for example if users pour water over the stove in order to shut it off.</p>
<p>Cosma Ximenes, GIZ How monitoring is done, given that there are other efficient stoves available in Timor-Leste plus another entity planning activity (Carbon Exchange), and how we know how much each stove reduces</p>	Yes	<p>Jørund Buen from Differ Cookstoves explained the collection of sales records and linking of these with appliance serial numbers along with DOE verification of resulting data. Further, the DNA secretariat representatives confirmed that they are not aware of any other CDM project in Timor Leste.</p>
<p>Justin Odum, Mercy Corps</p>	Yes	<p>Jørund Buen confirmed he was</p>

<p>Spare parts and maintenance is not really a problem with d.lights as they are very robust and have long duration. However, challenge is posed by:</p> <ul style="list-style-type: none"> the government's expansion of the grid: access is unstable and it is not clear whether it will last, due to lacking investments in infrastructure, but it has negative effect on sales, even in areas where there's no grid connection, as people think they have prospects of getting grid access. Grid access is initially for free, so people see no incentive to buy power-related products - but connection is unlikely to remain free free or subsidised distribution - by government and some NGOs - of d.lights and solar home systems also hurts sales 		<p>aware of grid expansion and the government handing out appliances for free, and agreed this could pose a threat to Differ's investment.</p>
<p>Felisbela Pires, Independent consultant</p> <p>The presentation doesn't provide enough information to clarify whether we will induce positive social change. Will Differ limit local companies' involvement? How will they be involved? Will we sell to them so that they can retail? How will we ensure maintenance? Why would people buy products in the districts when they can buy them cheaper in Dili?</p>	<p>Yes</p>	<p>Jørund Buen clarified on the sustainable development aspects of the project and the proposed business plan for distribution of appliances. This includes establishing a company in Timor-Leste, with local management and employees. He also highlighted that using local distributors and retailers - both private sector and NGOs - is crucial for project success. He referred to similar projects Differ has taken part in starting in North Sumatra, Senegal and Zambia, where such partnerships are a core element.</p> <p>Kim Tchia from Startec explained how his company distributes d.lights and efficient stoves today, and how he differentiates pricing and other aspects of product packaging so that customers from the districts outside Dili use his local</p>

		distributors instead of him.
<p>Kim Tchia, Startec Enterprises</p> <p>The stove that you use here, because you use kerosene and the cost of kerosene is also not subsidized for the end users, have you worked out cost for that, and how much they are going to spend for the use of kerosene for cooking?</p>	Yes	Jørund Buen clarified that the Prime stoves use biomass and not kerosene as fuel. He further explained that the user would save so substantial amount of money due to reduced fuel spending that the payback time on the purchase of the stove would be short.
<p>Adao Barbosa, DNA Timor Leste</p> <p>Stove price should be reduced from the price of approx 30 USD highlighted in the presentation as this price is business as usual and CDM needs to go beyond business as usual, and because Differ gets revenues from both appliance sales and carbon.</p>	Yes	Jørund Buen responded that Differ would not be able to reduce the price, because BAU is that the stoves are not available commercially in Timor-Leste at all. Also, carbon is crucial for the decision to invest, and the payback time even with carbon benefits could be stretching beyond Differ Cookstove's risk appetite.
<p>Adao Barbosa, DNA Timor Leste</p> <p>What are the emission reductions per year of each appliance?</p>	Yes	Jørund Buen provided the estimate of emission reductions for each appliance.
<p>Jose Ximenes, Alola Foundation</p> <p>The cookstoves that were introduced by Mercy Corps use a little bit of kerosene. I see that Prime Cookstove uses briquettes. Will you be training the community in how to make briquettes?</p>	Yes	Jørund Buen responded that the Prime cookstove does not only use briquettes. It also uses logs and most other types of biomass. He also referred to the intention to recycle the carbon revenues into manufacturing and distribution of sustainably harvested biomass fuel, and that one approach to this could be building a supply chain for briquettes or pellets.

iv. **Revisit sustainability assessment (to be assessed per Methodology/technology/practice)**

Are you going to revisit the sustainable development assessment?	Yes	No
Please note that this is necessary when there are indicators scored 'negative' or if there are stakeholder comments that can't be mitigated	<input type="checkbox"/>	X

[See Toolkit 2.7]

At the stakeholder consultation, no negative scores were given by the stakeholders during the sustainable development assessment. The results of the blind sustainable development exercise were taken into account and are presented in the consolidated SD matrix (see Section D.3).

v. Summary of alterations based on comments

The stakeholder comments and remarks to the project design were discussed and answered. They are important in order to implement the CPA successfully and with the support of the local population. However, there is no need to alter the project documents due to the stakeholder comments as the PoA-DD together with the CPA-DD already covers the requests from the stakeholders such as i) definition of responsibilities for maintenance, provision of spare parts, capacity building and training; ii) monitoring requirements; iii) technology specifications, including reference to fuels; iv) reference to employment; and v) the need for market infrastructure (rather than subsidies).

SECTION D. SUSTAINABLE DEVELOPMENT ASSESSMENT

D. 1. Own sustainable development assessment

i. 'Do no harm' assessment

Safeguarding principles	Description of relevance to my project	Assessment of my project risks breaching it (low, medium, high)	Mitigation measure
1 – Human rights	Programme countries have ratified the Universal Declaration of Human Rights and the African Charter on Humans and People's Rights. The program will protect	Low	N/A

	human rights including freedoms and cultural property.		
2 – Involuntary settlements	The program will not cause any involuntary settlements.	Low	N/A
3 – Cultural heritage	Programme countries are active members of the United Nations Educational, Scientific and Cultural Organisation (UNESCO). The program does not involve and is not complicit in the alteration, damage or removal of any critical cultural heritage.	Low	N/A
4 – Labor – collective bargaining and freedom of association	Programme countries have ratified both ILO convention 87 (freedom of association) and 98 (right to collective bargaining).	Low	N/A
5 – Forced labor	<p>Programme countries have ratified both ILO Convention 29 and 105 on elimination of forced and compulsory labour.</p> <p>The program does not involve and is not complicit in any form of forced or compulsory labour.</p> <p>All labor is voluntary. Neither Differ nor any other CPA implementation partner engages in any form of forced or compulsory labour.</p>	Low	N/A
6 – Child labor	<p>Programme countries have ratified both ILO convention 138 (minimum age) and 182 (worst form of child labor).</p> <p>The CME will not employ anyone under the legal working age.</p>	Low	N/A

7 – Labor discrimination	Programme countries have ratified convention 100 (equal remuneration) and convention 111 (Discrimination in employment/ occupation) under the ILO Declaration on Fundamental Principles and Rights at Work. Labor discrimination will not occur.	Low	N/A
8 – Labor safety	Labor conditions in this program are safe.	Low	N/A
9- Environmental harm	Programme countries have ratified the Rio Declaration on Environment and Development and works, activities and projects that have to undertake an environmental impact assessment are defined.	Low	N/A
10 – Degradation of habitats	Programme countries have ratified the UN Convention on Biological Diversity and the UN Convention to combat Desertification. The program is positive for the environment, since it decreases unsustainable harvesting of wood from forests. The program will prevent the degradation of habitats due to decreased deforestation.	Low	N/A
11- Corruption	Programme countries have ratified the United Nations Convention Against Corruption ¹ . The CME and its partners do not engage in any type of corruption or activities that	Low	N/A

¹ <http://www.unodc.org/unodc/en/treaties/CAC/signatories.html>

	are anything but legal and just.		
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ii. Sustainable development matrix

Note. The SD matrix is frozen at PoA level.

Indicator	Mitigation measure	Relevance to achieving MDG	Chosen parameter and explanation	Preliminary score
Air quality	N/A	MDG 7: Ensure environmental sustainability	Parameter: Emissions from stove fuel consumption. The amount fuel burned will be reduced and thereby air quality will be improved. However fuel will still be burned, impacts are not seen as being obvious enough to monitor and direct monitoring would be very expensive and complicated.	0
Water quality and quantity	N/A	MDG 7: Ensure environmental sustainability	Parameter: Unsustainable biomass fuel consumption with impact on sedimentation of water reservoirs by deforestation. Reduced wood and charcoal consumption leads to reduced deforestation, which leads to reduced soil erosion, which in turn leads to reduced sedimentation of water reservoirs. However, deforestation of biomass fuel will continue outside of this program, so the impact will be neutral and therefore monitoring is not necessary.	0
Soil condition	N/A	MDG 7: Ensure environmental sustainability	Parameter: Unsustainable biomass fuel consumption with impact on soil erosion from deforestation. Reduced wood and charcoal consumption leads to reduced pressure on forests and reduced soil erosion. However, deforestation will continue outside of this program so the impact will be neutral and therefore monitoring is not necessary.	0

Other pollutants	N/A	MDG 7: Ensure environmental sustainability	N/A	0
Biodiversity	N/A	MDG 7: Ensure environmental sustainability	Parameter: Unsustainable biomass and fossil fuel consumption. The reduced fuel consumption will reduce the pressure on remaining forest reserves in the programme countries. However, deforestation of biomass fuel will continue outside of this program so the impact will be neutral and therefore monitoring is not necessary.	0
Quality of employment	N/A	MDG 1: Eradicate extreme poverty and hunger	Parameter: Number of high quality employments. The program will offer employment with high quality training for the employees. As pointed out during the local stakeholder consultation, the overall societal outcome could depend on the actual interaction with local companies and other entities in the distribution network.	+
Livelihood of poor	N/A	MDG 1: Eradicate extreme poverty and hunger	Parameter: Money and time saved due to reduced fuel consumption. Fuel cost will be reduced, reduction in wood consumption implies relief from drudgery and more opportunity for productive activity arising from less time spent collecting fuel. Change in money and time saved will be monitored.	+
Access to affordable and clean energy services	N/A	MDG 1: Eradicate extreme poverty and hunger	Parameter: Number of appliances disseminated. The project appliances require less fuel, which in many areas is a scarce resource or expensive to buy. The program will enable more households to access new appliances. Number of new appliances disseminated will be monitored.	+

Human and institutional capacity	N/A	MDG 1: Eradicate extreme poverty and hunger	Parameter: Number of trainings held. The program will facilitate capacity development among the employed staff through trainings and workshops in the programme countries. However, the number of trainings will still be limited under the program and the effect will overall only be marginal and therefore neutral. Monitoring is therefore deemed unnecessary.	0
Quantitative employment and income generation	N/A	MDG 1: Eradicate extreme poverty and hunger	Parameter: Employments created. The program will create employment opportunities within the different appliance supply chains; the establishment of offices; training; and monitoring activities.	+
Balance of payments and investment	N/A	MDG 1: Eradicate extreme poverty and hunger	N/A	0
Technology transfer and technological self - reliance	N/A	MDG 8: Develop a Global Partnership for Development	N/A	0

Justification choices, data source and provision of references

(A justification paragraph and reference source is required for each indicator, regardless of score)

Air quality	The amount fuel burned and fossil fuel used will be reduced, which will reduce the emissions and improve air quality. The appliances used in this CPA will reduce emissions and biomass used for cooking and lighting.
Water quality and quantity	The deforestation in the programme countries is one of the main reasons of the sedimentation of water reservoirs. By removing the forests, the canopy layer becomes thinner, and when it rains the rain will cause an impact on the top soil, loosening it and thus resulting in an increase in soil erosion and surface runoff. Loose soil is washed away into rivers and lakes.

	<p>Reduced wood consumption leads to reduced deforestation, which leads to reduced soil erosion, which in turn leads to reduced sedimentation of water reservoirs. This program will have only a marginal impact on reducing deforestation of biomass fuel and therefore this will not be monitored under this program.</p>
Soil condition	<p>Fuel wood and charcoal collection, for cooking purposes as well as for boiling water, results in deforestation and soil erosion, whereas the programme countries are facing an increasing deforestation problem. Reduced wood consumption leads to reduced deforestation, which leads to reduced soil erosion. This program will have only a marginal impact on reducing deforestation due to use of biomass fuel and this therefore will not be monitored under this program.</p>
Other pollutants	<p>This category would not seem applicable to the project, as there would be no additional noise or light “pollution”/reduction through the use of the appliances in question.</p>
Biodiversity	<p>The programme countries are reservoirs of biodiversity; one of the impacts of deforestation is biodiversity loss. Reduced wood consumption leads to reduced deforestation which will reduce the negative impact on biodiversity. This program will have only a marginal impact on reducing deforestation of biomass fuel and therefore will not be monitored under this program.</p>
Quality of employment	<p>The rural population makes up 80% of the population. More than 65% is engaged in the agricultural sector. Poverty is affecting more than 70% of the population. Over 90% of Timor Leste’s population lives below US\$1 a day. The program will offer employments with high quality training for the employees. This has clearly positive results on the population and will be monitored.</p>
Livelihood of the poor	<p>Women are the main collectors of combustible materials such as firewood (82 %) and spend 2-5 hours daily on collecting firewood. Reducing the wood and fossil fuel consumption will be reduced and less time spent collecting fuel means more opportunity for productive activity arising. Change in money and time saved will be monitored.</p>
Access to affordable and clean energy services	<p>In Timor-Leste, the three-stone fire is most common (87 %), 11% uses a metallic stove and 2% uses a clay stove. Solar lanterns have been distributed in limited numbers through grant projects in both countries, whereas solar home systems are almost non-existent. Wood fuel and fossil fuels such as diesel and kerosene is a rare and expensive resource. The</p>

	program will enable more households to access the improved appliances. Number of appliances disseminated will be monitored.
Human and institutional capacity	The program will facilitate capacity development among the employed staff through trainings and workshops in the programme countries. There will be a focus on targeting women for employment who are also the main users of the appliances. Strengthening women by reducing their time spent on collecting fuel and cooking, improving their health by improving the air quality while cooking, and by targeting women for new employments under the program will improve gender equality. However, the effects of the program are marginal and therefore neutral and monitoring is therefore seen as unnecessary.
Quantitative employment and income generation	Poverty is affecting more than 70 percent of the population in the programme countries. The program will create employment opportunities within its supply chain, offices, training and monitoring activities and in a later stage potentially also in manufacturing which will have a high quality level for future similar business. However, this has a marginal impact on the quantity of employments needed in Timor-Leste. The effect is therefore neutral and therefore will not be monitored.
Balance of payments and investment	N/A
Technology transfer and technological self-reliance	N/A

Comments accompanying own sustainable development matrix

The CPA is expected to contribute to sustainable development as only neutral or positive indicators could be perceived from the own sustainable development matrix

D. 2. Stakeholders' Blind sustainable development matrix

Indicator	Mitigation	Relevance to achieving MDG	Chosen parameter and explanation	Preliminary score
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	mea sure			
Air quality	N/A	MDG 7: Ensure environmental sustainability	Use of ICS leads to reduction of smoke. The need to use other materials such as kerosene to start fires will be reduced. Number of stoves in use, user survey	+
Water quality and quantity	N/A	MDG 7: Ensure environmental sustainability	Purification of drinking water. Could be assessed	+
Soil condition	N/A	MDG 7: Ensure environmental sustainability	Reduced pressure on forests, less erosion, good soil condition will be supported. No obvious parameter.	+
Other pollutants	N/A	MDG 7: Ensure environmental sustainability	N/A	0
Biodiversity	N/A	MDG 7: Ensure environmental sustainability	Reduced pressure on forests, less erosion, good soil condition will be supported. No reasonable monitoring parameter.	+
Quality of employment	N/A	MDG 1: Eradicate extreme poverty and hunger	Project helps to move from informal to formal work opportunities, new jobs created, but jobs could be lost in other sectors, such as biomass sales. Still uncertain how distribution and maintenance will take place, and which role	0

			local private sector will play. However, the plan is to use carbon revenues to build a supply chain for sustainably harvested biomass fuel. Number of high quality jobs created by project can be assessed.	
Livelihood of the poor	N/A	MDG 1: Eradicate extreme poverty and hunger	Less money spent for buying fuelwood and kerosene, less time spent on collecting wood. Can be investigated in user survey.	+
Access to affordable and clean energy services	N/A	MDG 1: Eradicate extreme poverty and hunger	Energy services improved by using cook stoves, solar lanterns and solar home systems. Number of cook stoves, solar lanterns and solar home systems in use can be monitored.	+
Human and institutional capacity	N/A	MDG 1: Eradicate extreme poverty and hunger	Human capacity can and should be improved by training on use of appliances. Number of trainings held can be monitored.	+
Quantitative employment and income generation	N/A	MDG 1: Eradicate extreme poverty and hunger	Project helps to move from informal to formal work opportunities, new jobs created, but jobs could be lost in other sectors, such as biomass sales. Still uncertain how distribution and	0

			<p>maintenance will take place, and which role local private sector will play. However, the plan is to use carbon revenues to build a supply chain for sustainably harvested biomass fuel. Number of jobs created by project can be assessed.</p>	
Balance of payments and investment	N/A	MDG 1: Eradicate extreme poverty and hunger	The programme brings investment. Total investment into appliance distribution can be monitored.	+
Technology transfer and technological self-reliance	N/A	MDG 8: Develop a global partnership for development	New appliances and knowledge about how to use such appliances, but would be imported, and involvement of local private sector is unclear. No clear parameter to be monitored.	0

Comments resulting from the stakeholders blind sustainable development matrix

The stakeholders engaged very actively in the discussion. Around half of the people participating made statements about one or various indicators. Based on the discussions, it would be correct to give 8 of 12 indicators a positive score. Only 4 indicators – quality of employment, quantity of employment, other pollutants as well as technology transfer and self-reliance – were seen as neutral. No indicator was evaluated negatively.

No parameter was scored negatively in the blind exercise and our own sustainable development matrix. A higher number of indicators were scored positive during the blind exercise, which is an important confirmation of the quality of the project.

In the process of consolidating our own assessment with that of stakeholders, we have

chosen to neutralize several positively rated indicators from the blind exercise: “Air quality”, “Biodiversity”, “Human and institutional capacity” and “Balance of payments and investments”.

The comment from some stakeholders on water purification (or, rather, the lack of safe drinking water) as a potential parameter is clearly relevant. However, we have chosen to maintain the parameter “Unsustainable biomass fuel consumption with impact on sedimentation of water reservoirs by deforestation”, as this is linked to two different uses of non-renewable biomass: cooking (addressed by improved cookstoves) and water boiling (addressed by water filters in other CPAs under the PoA).

We have chosen to maintain the neutral effects from the programme on air quality. Biomass fuel will still be burnt so the impact will not be obvious enough and monitoring would be very expensive and complicated. Positive effects from the project on biodiversity are neutralized because so many other elements than this project influence biodiversity in the host countries. Similarly, this project will have only marginal effects on balance of payments, as well as on overall human and institutional capacity.

Two indicators rated positively both in own and blind sustainable development matrix, which kept a positive rating in the consolidated matrix, and which will be monitored, are “Livelihood of the poor”, and “Access to affordable and clean energy services”.

Some stakeholders were hesitant regarding the employment effects of the programme, We have chosen to neutralize the programme’s quantitative employment effects based on these comments. However, since we believe there will be important positive qualitative employment effects from the programme, and have hence decided to maintain the programme’s positive effects on this parameter. It will be monitored, which should be a constructive approach to the comment by some stakeholders that the felt a need for more information on these aspects of the programme.

D. 3. Consolidated sustainable development matrix

Indicator	Mitigation measure	Relevance to achieving MDG	Chosen parameter and explanation	Preliminary score
Air quality	N/A	MDG 7: Ensure environmental	Parameter: Emissions from stove fuel consumption.	0

		sustainability	The amount of fuel burned will be reduced. Air quality will therefore be improved. However, fuel will still be burned. Impacts are not seen as being obvious enough to monitor, and direct monitoring would be very expensive and complicated.	
Water quality and quantity	N/A	MDG 7: Ensure environmental sustainability	Parameter: Unsustainable biomass fuel consumption with impact on sedimentation of water reservoirs by deforestation. Reduced wood and charcoal consumption leads to reduced deforestation, which leads to reduced soil erosion, which in turn leads to reduced sedimentation of water reservoirs. However, deforestation of biomass fuel will continue outside of this program, so the impact will be neutral and therefore monitoring is not necessary.	0
Soil condition	N/A	MDG 7: Ensure environmental sustainability	Parameter: Unsustainable biomass fuel consumption with impact on soil erosion from deforestation. Reduced fuelwood and charcoal consumption leads to reduced pressure on forests and reduced soil erosion. However, deforestation will continue outside of this program so the impact will be neutral and therefore monitoring is not necessary.	0
Other	N/A	MDG 7: Ensure environmental	N/A	0

pollutants		sustainability		
Biodiversity	N/A	MDG 7: Ensure environmental sustainability	Parameter: Unsustainable biomass and fossil fuel consumption. The reduced fuel consumption will reduce the pressure on remaining forest reserves in the programme countries. However, deforestation of biomass fuel will continue outside of this program so the impact will be neutral and therefore monitoring is not necessary.	0
Quality of employment	N/A	MDG 1: Eradicate extreme poverty and hunger	Parameter: Number of high quality employments. The program will offer employment with high quality training for the employees. As pointed out during the local stakeholder consultation, the overall societal outcome could depend on the actual interaction with local companies and other entities in the distribution network.	+
Livelihood of poor	N/A	MDG 1: Eradicate extreme poverty and hunger	Parameter: Money and time saved due to reduced fuel consumption. Fuel cost will be reduced, reduction in wood consumption implies relief from drudgery and more opportunity for productive activity arising from less time spent collecting fuel. Change in money and time saved will be monitored.	+
Access to affordable and clean energy	N/A	MDG 1: Eradicate extreme poverty and	Parameter: Number of appliances disseminated. The project appliances require less fuel, which in	+

services		hunger	many areas is a scarce resource or expensive to buy. The program will enable more households to access new appliances. Number of new appliances disseminated will be monitored.	
Human and institutional capacity	N/A	MDG 1: Eradicate extreme poverty and hunger	Parameter: Number of trainings held. The program will facilitate capacity development among the employed staff through trainings and workshops in the programme countries. However, the number of trainings will still be limited under the program and the effect will overall only be marginal and therefore neutral. Monitoring is therefore deemed unnecessary.	0
Quantitative employment and income generation	N/A	MDG 1: Eradicate extreme poverty and hunger	Parameter: Employments created. The program will create employment opportunities within the different appliance supply chains; the establishment of offices; training; and monitoring activities. But as pointed out during the local stakeholder consultation, effects depend on the involvement of local companies and other entities in the distribution network.	0
Balance of payments and investment	N/A	MDG 1: Eradicate extreme poverty and hunger	N/A	0
Technology	N/A	MDG 8:	N/A	0

transfer and technological self - reliance		Develop a Global Partnership for Development		
Justification choices, data source and provision of references				
Air quality				
Water quality and quantity				
Soil condition				
Other pollutants				
Biodiversity				
Quality of employment				
Livelihood of the poor				
Access to affordable and clean energy services				
Human and institutional capacity				
Quantitative employment and income generation				
Balance of payments and investment				
Technology transfer and technological self-reliance				

References can be an academic or non-academic source, such as a university research document, a feasibility study report, EIA, relevant website, etc.

SECTION E. SUSTAINABILITY MONITORING PLAN

E. 1. Discussion on Sustainability monitoring Plan

The discussions during the stakeholder consultation primarily focused on how to score the different sustainable development criteria rather than parameters suitable for monitoring them. Still, based on the discussion, indicators for possible monitoring parameters could reasonably be discerned for most categories.

Parameters that will be monitored include:

- Livelihood of the poor: money and time saved due to reduced solid fuel consumption stemming from e.g. use of efficient cookstoves instead of boiling water, or decreased use of kerosene as a result of using solar lighting systems
- Access to affordable and clean energy services: Number of stoves, solar lanterns, solar home systems disseminated
- Quality of employment: Number of high quality employments.

Many parameters are influenced by many factors, of which the household energy appliance is only one. Therefore, only the parameters where the appliances have a direct and significant impact are suggested to be monitored in order to avoid false positive results.

E. 2. Discussion on continuous input / grievance mechanism

Continuous Input / Grievance Expression Process Book	Book will be available at the DNA Secretariat in Dili, Timor-Leste, and in the main office of the distribution company to be located in Timor-Leste (location to be decided)	The DNA Secretariat in the center of Dili is easily accessible and gives people located in the capital the possibility to comment. For each CPA, there will be a book in the project office located in one village/town in the CPA area.
Telephone access	+47 22170510	All stakeholders can be assumed to

	and +65 98582496	have access to a phone. The first phone number is the main landline number to Differ Cookstoves' office. The Gold Standard's South East Asia telephone number is provided, as per Gold Standard Toolkit 2.2. Annex W
Internet/email access	PoAgrievances@differgroup.com and ellen.reynes@goldstandard.org	Most of the invitees for the local stakeholder consultation, and almost all participants at the consultation, had email addresses. The Gold Standard's South East Asia email address is provided, as per Gold Standard Toolkit 2.2. Annex W
Continuous Input / Grievance Expression Process Book	Book will be available at the DNA Secretariat in Dili, Timor-Leste, and in the main office of the distribution company to be located in Timor-Leste (location to be decided)	The World Bank office in the center of Dili is easily accessible and gives people located in the capital the possibility to comment. For each CPA, there will be a book in the project office located in one village/town in the CPA area.
Nominated Independent Mediator (optional)		

All issues identified during the crediting period through any of the Methods shall have a mitigation measure in place. The identified issue should be discussed in the revised Passport and the corresponding mitigation measure should be added to sustainability monitoring plan

SECTION F.	DESCRIPTION OF THE DESIGN OF THE STAKEHOLDER FEEDBACK ROUND
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The 2 months long Stakeholder Feedback Round will include the following: the LSC report will together with the CPA-DD, and the CPA Passport be publicly available on the Gold standard website as well as on the Differ Group website. The stakeholders that participated in the LSC meeting will be encouraged, via email, phone and letters, to give comments and suggestions to the report and design of the project. The documents will be emailed and printed copies of the documents will be available at the DNA Secretariat in Dili, Timor-Leste.

ANNEX 1. ORIGINAL PARTICIPANTS LIST

ANNEX 2. ORIGINAL EVALUATION FORMS