

THE GOLD STANDARD MICRO-SCALE SCHEME PROJECT DESIGN DOCUMENT FORM - Version 2.2

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SECTION A. General description of micro-scale project activity

A.1 Title of the micro-scale project activity:

>> Distribution of Energy Savings Lamps in Madagascar – Project 1 (GS 1334)

Date of document: 28.01.2014

Version of document: V04

A.2. Project participants:

>>

Name of Party involved (*) ((host) indicates a host Party)	Private and/or public entity(ies) project participants (*) (as applicable)	Kindly indicate if the Party involved wishes to be considered as project participant (Yes/No)
Madagascar (host)	Private Entity - WWF MWIOPO (World Wide Fund for Nature - Madagascar & Western Indian Ocean Program Office)	No
Switzerland (Annex 1)	Private Entity - WWF Switzerland	No
Switzerland (Annex 1)	Private Entity - Foundation myclimate	No

A.3 Description of the micro-scale project activity:

A.3.1. Location of the micro-scale project activity:

>> Madagascar

A.3.1.1. Host Country:

>> Madagascar

A.3.1.2. Region/State/Province etc.:

>> Analamanga

A.3.1.3. City/Town/Community etc:

>> It is planned to disseminate CFLs in the city of Antananarivo and its surroundings

A.3.1.4. Details of physical location, including information allowing the unique identification of this micro-scale project activity:

>> The project activity is the dissemination of CFLs (Compact Fluorescent Lamps) to households connected to the electricity grids of JIRAMA (Jiro sy rano Malagasy), the national water and power provider in Madagascar. Households can uniquely be identified through the electricity bill issued by JIRAMA and through the national identification card of the household that procures a project CFL from a TELMA (a mobile phone and internet company in Madagascar) or JIRAMA office.

Distributed CFLs are marked with a special logo, which allows distinguishing project CFLs from other CFLs available in Madagascar. There is no other CFL or LED distribution project that targets the cities included in this project.

The table below shows the coordinates of the city of Antananarivo targeted by this project:

Cities	Latitude	Longitude
Antananarivo	18°55'25.89" S	47°31'55.04" E

Map of Madagascar:



Base 802924AI (C00455) 1-03

Map source: http://www.ecoi.net/file_upload/470_1277386756_madagascar-rel-2003.jpg

A.3.2. Description including technology and/or measure of the micro-scale project activity:

>> The project's goal is to (1) distribute approximately 540,000 high quality CFLs to grid-connected households in the city of Antananarivo in Madagascar to replace inefficient ICLs (Incandescent Lamps, ICL), and to (2) move towards the establishment of a regulatory framework promoting good quality lamps at an affordable price on the market. The project will start in mid 2013.

The table below shows number of CLFs to be distributed in city of Antananarivo.

City	Number of households	Number of ICLs	Period of exchange (Month)	Year of CFL distribution
Antananarivo	198,800	540,000	6.0	2013
Total	198,800	540,000		

Context: In Madagascar, the electrification rate is 39%¹ in urban areas and only 4.8% in rural area. 45%² of electricity produced by the national electricity company (JIRAMA) comes from thermal power plant running on fuel and diesel. Each year, Madagascar imports oil for about USD 100 millions² to run these power plants. Not only are the exploitation costs high but the power plants also emit CO₂. The electricity cost is, on average, 400 Ariary/KWh², which is very high considering the purchase power of Malagasy people. Half of the lighting technology used in the households in the considered cities is ICL. The ICL are very inefficient as only 5% of the energy consumed is transformed into light. The CFLs, which are 4 to 5 time more efficient, account only for around 20% of the lamps technology employed by the households (see baseline study report 2011). High quality CFLs are still not affordable to the majority of the population in Madagascar. By replacing ICL with CFLs electricity consumption decreases and in this way CO₂e emissions from the production of electricity at thermal power plants are reduced.

Baseline Survey: A baseline survey was conducted from February to March 2011 in eight cities (Antananarivo, Antsirabe, Antsiranana, Fianarantsoa, Mahajanga, Nosy Be, Toamasina et Toliary) in Madagascar. In this way baseline data was collected from 1,644 households.

Pilot: A pilot project was implemented from October 6th to 21st, 2011 in the town of Ambositra (not covered by this project). A total of 5,873 ICL with an average power of 51W have been exchanged with 20W CFLs. The average reduction in electricity bill was about 10%³ for the month of December 2011 and the economic savings of JIRAMA is estimated at 7 million Ariary for the months of November and December 2011. Thus, the pilot operation is considered a success.

Distribution of CFLs: CFLs are distributed via the network of the TELMA Shops, TELMA offices and JIRAMA agencies in the targeted cities. For each city the maximum number of CFLs that a household can exchange for handing in ICL is defined. Each household must bring along the latest electricity bill

¹ EPM INSTAT, 2010, pp 190. http://www.instat.mg/pdf/epm_10.pdf

² Diagnostic du secteur énergie pp 104, 2012, WWF.
http://awsassets.panda.org/downloads/diagnostic_secteur_energie_.pdf

³ Report on the pilot phase, page 19: see file „12.04.05 Etude Impacts Lumitsits.pdf“

(issued by JIRAMA) and the national identity card to TELMA Shop so that the agent can register name and JIRAMA customer number for each household. This is also important to ensure that only domestic customers (and no businesses) are included in the project. This procedure allows the unique identification of each household participating in the project and to record number and wattage of ICL that are replaced with project CFLs. Every time a household wishes to hand in ICL in exchange for project CFLs and information is entered in the database, it is automatically checked by the system if this household has already received CFLs and if yes how many. Once the maximum number of ICL to be exchanged by each household has been reached, the system does no more allow the exchange of further lamps.

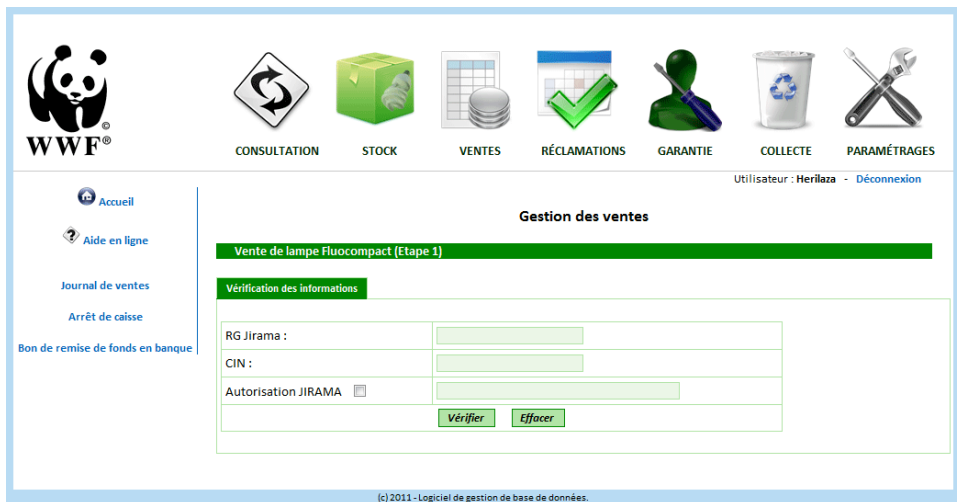
The maximum number of CFLs to be procured by each household is defined based on the baseline survey 2011 results considering the average number of ICL in use.



Household representative signs purchase contract for the CFL during pilot project in Ambositra.

The CFLs are sold at a subsidized price of 1,000 Ariary per lamp. This price was defined based on information on the willingness to pay we obtained from the baseline survey 2011. This sale price is slightly lower than the average lowest price as proposed by the households interviewed for the baseline survey (1,295 Ariary/CFL in Antsirabe) and is about half the price of a regular CFL (of which quality households were disappointed) available on the market in Madagascar. Each CFL has a warranty of one year and can be exchanged for a new one in case of failure within the first year of use. This practice is communicated during the awareness campaign and is important to give households confidence in the quality of the project lamps.

Distribution of CFLs in Antananrivo and surrounding areas is planned for the period from end of August 2013 to end of January 2014.



The screenshot shows a web application interface for WWF. At the top, there is a navigation bar with icons and labels for various functions: CONSULTATION, STOCK, VENTES, RÉCLAMATIONS, GARANTIE, COLLECTE, and PARAMÉTRAGES. Below this, a sidebar on the left contains links like 'Accueil', 'Aide en ligne', 'Journal de ventes', 'Arrêt de caisse', and 'Bon de remise de fonds en banque'. The main content area is titled 'Gestion des ventes' and displays a form for 'Vente de lampe Fluocompact (Etape 1)'. This form includes a 'Vérification des informations' section with input fields for 'RG Jirama', 'CIN', and 'Autorisation JIRAMA' (with a checkbox). There are 'Vérifier' and 'Effacer' buttons at the bottom of the form. The user is identified as 'Utilisateur : Herilaza' with a 'Déconnexion' link.

Print screen of the database where collection of ICL and sale of CFLs is recorded.

Collection of ICL: The ICLs that the households want to exchange for CFLs are tested in front of the household representative in order to check if the lamps are still functional. Only ICL that are fully functional and that have wattage of $\geq 25W$ are accepted by the project agent. Further, decorative lamps are not accepted and cannot be exchanged for CFLs. After reception of ICLs and recording the ICLs' characteristics (wattage, type of lamp fitting), the lamps are wrapped in order to avoid breakage. At the end of each day an inventory of collected ICLs is made and figures of physical lamps are compared to the figures in the database. Collected ICLs are transported to the main storage facility in Antananarivo waiting for destruction/recycling.



ICL are tested in front of the household representative during pilot project in Ambositra.

Responsibilities: The distribution of CFLs is an initiative of WWF-MWIOPO and is implemented in partnership with the Ministry of Energy of Madagascar, JIRAMA and the TELMA Foundation. The table below summarizes the responsibilities of the different partners:

	General project coordination, management of communication contract, management of recycling contract, management of carbon credit, financing and fundraising, monitoring and impact analysis
	Management of CFL contract, management of distribution network and quality assurance, process facilitation, impact monitoring, communication
	Distribution / sales / collection of CFL and ILB, distribution of lamps to the different cities, communication
	financial facilitation, coordination of regulatory framework, communication

Technology employed: The lamp technology employed in this project is the Compact Fluorescent Lamp (CFL). A CFL, also called compact fluorescent light, energy-saving light, and compact fluorescent tube, is a fluorescent lamp designed to replace an incandescent lamp. The lamps use a tube, which is curved or folded to fit into the space of an incandescent bulb, and a compact electronic ballast in the base of the lamp.

The table below summarizes the main characteristics of the project CFL:

	Main lamp characteristics
Wattage	14 Watts (self-ballasted)
Power factor	≥ 0.6
Appl. Voltage	170 - 250 Volts
Light output (lumen)	≥ 850 lm
Rated life time	10 000 h
Color	2 700°K (warm white)
Efficacy (lm/W)	≥ 60 Lumen/Watt
Color rendering index	≥ 80
Mercury content	≤ 1.5 mg
Startin time	1 sec at 25°C, 50 Hz, 220 Volts
Inscription	JIRAMA logo
Warranty	1 year after date of reception
Norms	CEI et RoHS

Lamp specifications were confirmed by a lab test requested by the project owner and conducted in April 2013 at the Philips (China) Investment Co., Ltd. LTC (Lighting Testing Center), ISO17025 Accredited Testing Lab in Shanghai, China.

Awareness campaign: The awareness and communication campaign, as an important component of this CFL distribution project, is initiated before the distribution of lamps takes place and continues until

the distribution phase has been completed. This assures appropriate information flow towards the households. A communication agency was selected to ensure that the following objectives are met:

- Create awareness for the advantages of CFLs among households
- Inform households about the project, the activities in relation to the households, the purchase modalities, the usage of CFLs, as well as the needs for returning and collection of failed lamps.
- Encourage households to purchase project CFLs and recommend and promote the use of high quality CFLs.

The communication agency follows a defined action plan that has been approved by the project partners:

- Propose a communication strategy and workplan and adapt them based on the experiences gained from the pilot project in Ambositra.
- Produce different communication material based on the requirements as defined in the communication strategy.
- Implement the communication campaign with the support of the partners.
- Conduct an analysis of the campaign's impact at city level.

The impact analysis must provide the following information:

- Level of comprehension of main messages
- Perception rate of main messages
- To ability to lead to action and decision making
- Change of attitude towards CFLs
- Changes in behavior.



Awareness campaign during pilot project in Ambositra.

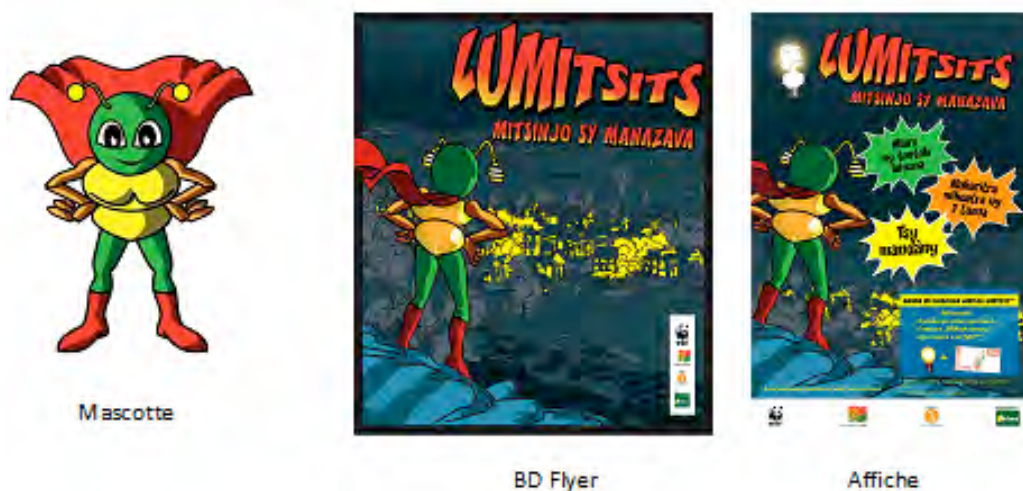


Based on the experience from the pilot project, the communication agency (Société Grand Angle) and project partners have defined media and non-media related activities:

- A mascot ("Lumitsits", see pictures below)
- A radio spot and entertainment radio (radio plays)
- Advertisements in newspapers
- Banners, flyers and posters to be placed in high traffic areas
- Gadgets (caps, T-shirts, pens, key chains, ...)

- Infomercials and testimonials
- Door-to-door visits to distribute flyers
- On the spot promotional and information activities

In cities with TV stations, a TV spot and animations are planned to show firsthand installation of CFLs in households and benefit of CFLs. Communication activities will be conducted where ever possible in local language.



Regulatory framework: Along with the efforts to disseminate high quality energy-saving lamps, action must also be taken to promote the development of a market for high quality, efficient and affordable lamps through the establishment of regulatory frameworks in favor of efficient lamp types and the progressive ban of ICLs. These measures are in view of a development towards a low carbon society.

The first step is to define with stakeholders a standard for electric lamps for lighting in Madagascar. The standard requires the consent of all stakeholders (consumers, vendors of lamps, state agencies responsible for standardization, NGOs ...) and will draw on experiences from other countries and applicable international standards. Issues of standardization are manifold and very important because standardization can develop, harmonize and disseminate best practices through adherence to common rules. The establishment of standards facilitates confidence of consumers and ensures the safety of the various market participants.

In a second phase it will bring together all stakeholders to build a partnership and develop regulations that prioritize the public interest. These regulations refer to the standard and specify the requirements for lamps. Given the existence of lamps on the market that will not meet the standard, a schedule and procedures will be defined for application of regulations and for an interim period taking care of the progressive ban of inefficient lamps.

Future collection of the CFLs: The collection and recycling of CFLs is an integral part of this project. It will be advertised during the distribution campaign that the CFLs will be collected and recycled. This includes advertisements on radio, TV and print media. Further, the bill signed by the representative of the households during CFL distribution contains an agreement to bring back the CFLs in case they fail.

During and after the distribution phase of the CFLs, post-distribution radio and TV ads will tell people to hand in their failed CFLs for warranty (in early 2014). After that period, periodic radio and TV ads will be broadcasted to remind households to hand in their failed CFLs. Starting from 2018, when lamp failure rate is expected to have reached over 30%, a national communication campaign (radio, TV and print media) will be launched to encourage households bringing back their failed CFLs.

The project owner plans to collect the used CFLs in JIRAMA's offices where households come to pay their monthly electricity bill. CFL collection bins will be placed there so that households can dispose their CFLs. This offers a convenient and continuous possibility for households to hand in failed CFLs. This option is still in discussion with JIRAMA. Alternative collection points may be established. The project owner will also study the possibility of providing an incentive to households for bringing back used CFLs in case return rates should be far below expectations.

Recycling of the CFLs: There is no existing recycling center for CFLs in Madagascar. According to GS Annex C "Recycling is not mandatory in the absence of existing recycling infrastructure but disposal must be addressed satisfactorily." The PP strives for recycling of failed project CFLs. The preferred option is build up a CFL recycling facility in Madagascar. For this a feasibility study will be launched in early 2014 to evaluate the different options and assess the financial and technical feasibility of a CFL recycling facility in Madagascar. Thereafter, the PP will identify the fittest partner (NGO or business) for the management and operation and initiate construction of the recycling facility. In case this undertaking should prove not to be feasible, the PP will identify a recycling facility abroad and export failed CFLs for recycling. In case these two recycling options should prove not to be feasible, the PP will ensure environmentally safe and permanent disposal of CFLs with special attention to mercury.

Gold Standard eligibility criteria

This project activity meets the GS eligibility criteria as follows:

1. **Scale:** The project generates emissions reductions (ER) of less than 10,000 tCO₂e per annum for each year of the crediting period. In case the project surpasses the threshold of 10,000 tCO₂e in a given year, the ER will be capped at 10,000 tCO₂e. This project activity therefore classifies as a GS micro-scale project.
2. **Type:** The project is the replacement of inefficient light bulbs (incandescent light bulbs, ICL) with efficient light bulbs (compact fluorescent lamps, CFL) in grid-connected households in Madagascar (project type Relighting). This leads to savings in the consumption of electricity from the grid. This project activity therefore classifies as an end-use energy efficient improvement project.
3. **Project type Relighting:** Relighting activities involving the substitution of incandescent light bulbs by CFLs shall provide a detailed description of the future collection and disposal or recycling plan of the CFLs, with a particular attention to mercury. The effectiveness of the plan shall be part of the Sustainability Monitoring Plan. Recycling is not mandatory in the absence of existing recycling infrastructure but disposal must be addressed satisfactory. Measures undertaken by the project to fulfill this requirement will be described in the corresponding sections of PDD.
4. **Host country:** The project is located in Madagascar, which has ratified the Kyoto Protocol and is listed as a Non-Annex 1 country with no cap on GHG emissions.

5. **Project cycle:** This project is developed under the regular project cycle. The proposed project activity has not been announced previously without mentioning that it will be conducted as a carbon offset project. Project implementation did not start before the LSC meetings (hold on the 10.10.2012), therefore the regular project cycle can be employed.
6. **Additionality:** The project is developed under the regular project cycle and is located in a Least Developed Country (LDC). It is therefore deemed additional. Madagascar is listed as a LDC by the UN Office since 1991 (source: http://www.un.org/en/development/desa/policy/cdp/ldc/ldc_list.pdf).

Measures to avoid double counting

There are contractual agreements in place to ensure that emission reductions from the use of project CFLs belong to the project owner (WWF MWIOPO):

- Each household purchasing project CFLs will sign a contract/receipt (“reçu contractuel d’échange”), where it is mentioned that the rights on the emission reductions generated by the project CFL belong to WWF MWIOPO.
- There is a MoU signed between JIRAMA (Jiro sy rano Malagasy), the national water and power provider in Madagascar, WWF MWIOPO, WWF Switzerland and foundation myclimate stating that the project owner (WWF MWIOPO) is responsible for securing ownership of emission reductions from this project.
- There is a MoU signed between JIRAMA (Jiro sy rano Malagasy), the national water and power provider in Madagascar, foundation TELMA, and WWF WMIOPO stating that ownership of emission reductions are with WWF MWIOPO.

A.3.3 Estimated amount of emission reductions over the chosen crediting period:

>> Estimated amount of emission reductions

Years	Annual estimation of emission reductions in tonnes of CO ₂ e
2014	9,393
2015	8,752
2016	8,111
2017	7,470
2018	6,829
2019	6,188
2020	5,547
2021	0
2022	0
2023	0
Total emission reductions (tonnes of CO₂e)	52,291
Total number of crediting years	10

Annual average over the crediting period of estimated reductions (tonnes of CO ₂ e)	5,229
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In case emission reductions (ER) surpass the threshold for micro-scale project activities in a given year, ERs are capped of 10,000 tCO₂e per annum.

A.3.4. Public funding of the micro-scale project activity:

>> The project activity does not receive ODA provided under the condition, whether express or implied, that any or all of the carbon credits issued as a result of the project's operation will be transferred directly or indirectly to the country of origin of the ODA. See ODA declaration in Annex 2.

The power provider JIRAMA has received a World Bank loan for the purchase of CFLs to be distributed under this project activity. This loan is not connected to the delivery of any carbon credits or emission reductions in any form.

SECTION B. Application of an existing baseline and monitoring methodology or of a new methodology submitted as part of this project activity

B.1. Title and reference of the existing or new baseline and monitoring methodology applied to the micro-scale project activity:

This project applies the methodology AMS II.J "Demand-side activities for efficient lighting technologies, Version 04".

Furthermore, for calculation of grid emission factor the "Tool to calculate the Emission Factor for an electricity system, V03.0.0" is used.

B.2 Justification of the choice of the methodology and applicability:

1. Technology/measure: This project is the installation of new self-ballasted compact fluorescent lamps (CFLs) to replace incandescent lamps (ICLs) in residential application.
2. The total lumen output of the CFLs is equal or more than that of the ICLs: Lumen output of the project CFL is ≥ 850 lm. A lumen output of 850 lm equals ICLs with 69W (according to page 1 of AMS-II.J). Thus only CFLs that replace ICLs ≤ 69 W will be counted.
3. Aggregate electricity savings of the project activity are between 9.4 to 15.9 GWh per year, which is below 60GWh per year.
4. The average rated lifetime of the CFL is known ex ante: it is 10,000 hours according to manufacturer information. The project CFLs were lab tested in April 2013 at Philips (China) Investment Co., Ltd. LTC (Lighting Testing Center), ISO17025 Accredited Testing Lab in Shanghai, China.
5. CFLs are marked for clear unique identification: The CFLs are marked with the JIRAMA logo.

6. The PDD documents distribution of CFLs and collection and destruction of ICLs as well as measures to avoid double counting. See PDD section A.3.2.
7. The project is charging a minimum price for each CFL (foreseen sale price is 1,000 Ariary).
8. The project encourages households to install CFLs in locations with high utilization during the awareness campaign and during the sale process. Further, it is mentioned on flyers and also on the receipt for purchased CFLs.
9. The project boundary is the physical, geographical location of each CFL installed.
10. The crediting period does not exceed 10 years. Certified emission reductions can only be earned for the average life of project CFLs. Thus, a CFL lifetime of 10,000 hours results in 7 credited years.
11. Ex-ante calculation of emission reductions are done using equation (1), (2), (3) and (4) of the applied methodology. See PDD B.6.
12. Monitoring is done in accordance with paragraphs 17. – 20 of the applied methodology.

B.3. Description of the project boundary:

>> The project boundary is the physical, geographical location of each CFL installed.

B.4. Description of the baseline and its development as per the chosen methodology:

>> The applied methodology AMS II.J “Demand-side activities for efficient lighting technologies, Version 04” comprises activities that use CFLs to replace incandescent lamps (ICLs) in residential applications. Thus, the baseline situation is defined as households in Madagascar that use ICLs for lighting.

In Feb/March 2011 a Baseline Study was conducted in 8 cities in Madagascar to collect data on current lighting technologies and households characteristics from a total of 1,644 households.

The Baseline Study revealed the following characteristics of the domestic lighting sector in Antananarivo:

A household has on average 4.86 members and possess on average 5.24 lamps. On average 50% of all lamps in the households are ICLs and 19% are CFLs. ICLs are mainly used in bedrooms, in the kitchen and in the living room, thus in locations with relative high utilization hours. ICLs have an average wattage of 54.3W. The majority of households knows about CFLs (86%), however only 41% already use CFLs in their homes. Households with CFLs complain about the short lifetime and bad light quality of the lamps.

Electricity production in Antananarivo is characterized by hydro power stations (low-cost must run) and thermal power plants running on fuel oil and diesel to cover peak demands. 45%⁴ of electricity produced by the national electricity company (JIRAMA) in Madagascar comes from thermal power

⁴ Diagnostic du secteur énergie pp 104, 2012, WWF.
http://awsassets.panda.org/downloads/diagnostic_secteur_energie_.pdf

plants. Each year, Madagascar imports oil for about USD 100 millions⁴ to run these power plants. Not only are the exploitation costs high but the power plants also emit CO₂.

Without the project activity, households will continue to use ICLs to illuminate their homes. There is neither a national regulation in place concerning efficiency standards for lighting equipment nor a regulation that would oblige households to replace ICLs by more efficient lighting technologies. High quality CFL are available at a price 15-20 times the price of an ICL (500-700 Ar. for a ICL vs. 6,000 Ar. and more for a high quality CFL), which makes them unaffordable to the majority of households. A voluntary switch from ICLs to CFLs is hindered by a huge price difference between low and more efficient lamps. Further, the baseline study revealed that households already using CFLs were disappointed with the CFLs' bad quality (short lifetime and unsatisfied illumination). Bad experiences with CFLs and considerable higher prices for more efficient lamps will preserve the current situation in the domestic lighting sector. The continued use of inefficient lighting technology leads to considerable GHG emissions from power production.

B.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered micro-scale project activity:

In the absence of the project activity grid connected households in Madagascar would continue to use inefficient and low quality lighting technologies leading to considerable GHG emissions from power production.

Additionality

According to Gold Standard guidelines for stand-alone micro-scale project activities the project developed under the regular project cycle is deemed additional if one of the following criteria is met:

Criteria	Criteria met by this project
i) The project is located in a Least Developed Country (LDC), Small Island Developing States (SIDS) or Land Locked Developing Country (LLDC)	Yes: This project is located in Madagascar, which is listed as a LDC by the UN Office since 1991 (source: http://www.un.org/en/development/desa/policy/cdp/ldc/ldc_list.pdf).
ii) The project is located in a special underdeveloped zone of the host country identified by the Government before 28 May 2010. [...]	N.A.
iii) The project is located in any host country different from the countries defined above but PPs can demonstrate that project implementation will essentially benefit poor communities. [...]	N.A.
iv) The project: a. Generates electricity on-site, i.e. electricity generated at the point of use with no connection to any grid, OR b. Feeds into an existing or new local, low voltage isolated grid. [...]	N.A.
v) The project employs specific renewable energy technologies or measures recommended by the	N.A.

host country DNA [...].	
vi) The project is an emission reduction project in which each of the independent subsystems/measures achieve annual emission reductions equal to or less than 600 tCO ₂ or annual energy savings equal to or less than 600 MWh or installed capacity is less than 1500 kW for households/SMEs/communities. The limits defined above apply to each subsystem or the measure implemented.	Yes: The project distributes CFLs with a capacity of 14W, which result in annual savings of approximately 0.1-0.2 tCO ₂ depending on the wattage of the ICL replaced.

Table 1: Criteria for automatic additionality

The project is therefore deemed additional.

Prior consideration of carbon revenues:

First discussions between WWF Switzerland and foundation myclimate to develop a carbon CFL project in Madagascar started in October 2008. In June 2010 a MoU was signed between JIRAMA, WWF Madagascar, WWF Switzerland, and foundation myclimate, with the intention to develop the project as a carbon offset project. A baseline study according to the applied methodology was conducted in Feb/March 2011 to gather baseline data for the project. Thereafter, a pilot project was implemented in October 2011 to test the project set-up. After initial funding for the project could be secured project implementation can now finally start in 2013. This clearly shows, that carbon revenues were considered from the very beginning of the project idea.

B.6 Emission reductions:

B.6.1. Explanation of methodological options or description of new proposed approach:

>> This project applies the methodology AMS II.J “Demand-side activities for efficient lighting technologies, Version 04” and does not propose a new methodological approach.

However, the following simplifications are applied:

- Default values as outlined by the applied methodology are used for O_i , NTG, TD_i , R_i .

Emission reductions calculation

Ex-ante emission reductions are calculated as per steps outlined below.

i) Estimate nameplate/rated power (Watts) of the baseline incandescent lamps to be replaced:

Data on the share of ICL in the baseline with different rated power was collected in the Baseline Study in 2011 (See Table below). ICL with wattage < 25W are not eligible and will thus not be accepted by the project. The project CFL has a lumen output of ≥ 850 lm, which is equivalent to ICL with 69W.

Households that want to exchange ICL of 70-100W will be informed that the lumen output (brightness) of the project CFL is lower. If households still want to exchange their ICL for project CFLs, the project will accept and hand out CFLs. However, these CFLs are not counted for emission reductions since they do not fulfill the requirement of minimum lumen output.

ii) Determine operating hours of the project (and baseline) lamps:

Option 1 is applied using the default value of 3.5 hours per 24 hrs period for “daily operating hours” (factor O_i). This value is used throughout the crediting period and no survey to determine O_i is required.

iii) Calculate annual gross electricity savings:

$$(1) ES_i = (P_{i,BL} - P_{i,PJ}) * O_i * 365 / 1000$$

Where:

- ES_i : Estimated annual electricity savings for equipment of type i , for the relevant technology (kWh)
 $P_{i,BL}$: Rated power of the baseline lighting devices of the group of “ i ” lighting devices (Watts)
 $P_{i,PJ}$: Rated power of the project lighting devices of the group of “ i ” lighting devices (Watts)
 O_i : Average daily operating hours of the lighting devices replaced by the group of “ i ” lighting devices. For ex post values use either 6 (a) 3.5 hours per 24 hour period.

iv) Calculate annual net electricity savings (NES):

$$(2) NES_y = \sum Q_{PJ,i} * ES_i * (1 - LFR_{i,y}) * ES_i * (1 / (1 - TD_i)) * NTG$$

Where:

- NES_y : Net electricity saved in year y (kWh)
 $Q_{PJ,i}$: Number (quantity) of pieces of equipment (CFLs) of type i distributed or installed under the project activity (units). In total for all “ i ”, this value shall be equal to or less than the documented number of all baseline incandescent lamps destroyed. Once all of the project CFLs are distributed or installed, $Q_{PJ,i}$ is a constant value independent from y
 ES_i : Estimated annual electricity savings for equipment of type i , for the relevant technology (kWh)
 $LFR_{i,y}$: Lamp Failure Rate for equipment type i in year y (fraction)
 TD_i : Average annual technical grid losses (transmission and distribution) during year y for the grid serving the locations where the devices are installed, expressed as a fraction.
 NTG : Net-to-gross adjustment factor

Lamp failure rate:

$$\text{If } y * X_i < L_i, LFR_y = y * X_i * (100 - R_i) / (100 * L_i)$$

$$\text{If } y * X_i \geq L_i, LFR_{i,y} = 1$$

Where:

- $LFR_{i,y}$: Lamp Failure Rate for equipment type i in year y (fraction)
 L_i : Average Life (or Rated Average Life until average life value is available) for equipment type i (hours)
 R_i : % of lamps of type i operating at the end of average life or the rated average life (use a value of 50)
 X_i : Number of operating hours per year for equipment type i (hours)
 y : Counter for year

$$(3) ER_y = NES_y * EF_{CO2,ELEC,y}$$

Where:

- $EF_{CO2,ELEC,y}$: Emission Factor in year y calculated in accordance with the provisions in AMS-I.D (tCO₂/Mwh) L
 $ER_{i,y}$: Emission Reductions in year y (tCO₂e)

Furthermore, for calculation of grid emission factor the “Tool to calculate the Emission Factor for an electricity system, V03.0.0” is used. The following simplifications are applied:

- Grid emission factor is calculated ex-ante for entire crediting period (ex ante Option as per paragraph 36, p. 10 of the Tool)
- Grid data from 2008, 2009 and 2010 is used for GEF calculation.
- Lambda calculation based on hourly load data for 5820 hours.
- For CM calculation alternative weights ($W_{OM} = 0.25$ and $W_{BM} = 0.75$) are applied due to suppressed demand.

For detailed GEF calculation see the following separate files:

- 130604_GEF_Madagascar_Report_V01.pdf
- 111220_GEF_Madagascar_V01.xlsx
- 111220_Antananarivo_lambda.xlsx

B.6.2. Data and parameters that are available at validation:

>> (Copy this table for each data and parameter)

Data / Parameter:	P_{i,PJ}
Data unit:	Watts
Description:	Rated power of the project lighting devices of the group of "i" lighting devices (Watts)
Source of data used:	Lamp specifications from CFL supplier/ Lab Test Report for project CFL
Value applied:	14W
Justification of the choice of data or description of measurement methods and procedures actually applied:	N.A.
Any comment:	There is only one type of project CFL distributed.

Data / Parameter:	O_i
Data unit:	Hours per 24hrs period
Description:	Operating hours of the project and baseline lamps per 24hrs period
Source of data used:	AMS-II.J, page 3.
Value applied:	3.5
Justification of the choice of data or description of measurement methods and procedures actually applied:	Default value as per Option 1 in paragraph 11. (ii) on page 3 of the applied methodology AMS-II.J.
Any comment:	This value is fix for the entire crediting period.

Data / Parameter:	$Q_{PJ,i}$
Data unit:	Number (quantity)
Description:	Number (quantity) of pieces of equipment (CFLs) of type i distributed or installed under the project activity (units).
Source of data used:	Project design
Value applied:	540,000 distributed
Justification of the choice of data or description of measurement methods and procedures actually applied:	N.A.
Any comment:	The project plans to distribute 540,000 CFLs in Antananrivo. It is assumed that 10% of sold CFLs are not installed, but bought on stock or resold.

Data / Parameter:	$P_{i,BL}$
Data unit:	Watts
Description:	Rated power of the baseline lighting devices of the group of "i" lighting devices (Watts)
Source of data used:	Baseline Study 2011
Value applied:	25 W: 1.61% 40 W: 41.36% 45 W: 1.80% 60 W: 31.53% 70-100 W: 23.70%
Justification of the choice of data or description of measurement methods and procedures actually applied:	The Baseline Study conducted in 2011 provides most recent data on lamp specifications and lighting habits of households in Madagascar.
Any comment:	The above values are used for ex-ante ER calculation. For ex-post ER calculation the data from the monitoring survey will be used.

Data / Parameter:	NTG
Data unit:	fraction
Description:	Net-to-gross adjustment factor
Source of data used:	AMS-II.J, V04, page 4
Value applied:	0.95
Justification of the choice of data or description of measurement methods and procedures actually applied:	Default value as per applied methodology

applied:	
Any comment:	

Data / Parameter:	TD_i
Data unit:	fraction
Description:	Average annual technical grid losses (transmission and distribution) during year y for the grid serving the locations where the devices are installed, expressed as a fraction
Source of data used:	AMS-II.J, V04, page 4
Value applied:	0.1
Justification of the choice of data or description of measurement methods and procedures actually applied:	Default value as per applied methodology
Any comment:	

Data / Parameter:	L_i
Data unit:	hours
Description:	Average Life (or Rated Average Life until average life value is available) for equipment type i (hours)
Source of data used:	Manufacturer information
Value applied:	10,000
Justification of the choice of data or description of measurement methods and procedures actually applied:	Rated average life as per manufacturer information
Any comment:	

Data / Parameter:	R_i
Data unit:	%
Description:	% of lamps of type i operating at the end of average life or the rated average life (use a value of 50)
Source of data used:	AMS-II.J, V04, page 5
Value applied:	50%
Justification of the choice of data or description of measurement methods and procedures actually applied:	Defaults value as per applied methodology

Any comment:	
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Data / Parameter:	X_i
Data unit:	hours
Description:	Number of operating hours per year for equipment type i (hours)
Source of data used:	AMS-II.J, V04, page 5
Value applied:	1277.5 hours
Justification of the choice of data or description of measurement methods and procedures actually applied:	$X_i = O_i \times 365 = 3.5 \times 365 = 1277.5$ hours
Any comment:	

Data / Parameter:	EF_{CO2,ELEC,y}
Data unit:	tCO2/MWh
Description:	Grid emission factor in year y
Source of data used:	Calculated in files: - 130604_GEF_Madagascar_Report_V01.pdf - 111220_GEF_Madagascar_V01.xlsx - 111220_Antananarivo_lambda.xlsx
Value applied:	0.589
Justification of the choice of data or description of measurement methods and procedures actually applied:	Value was calculated according to the "Tool to calculate the Emission Factor for an electricity system, V03.0.0".
Any comment:	The grid emission factor is calculated ex-ante and fix for the entire crediting period.

B.6.3 Ex-ante calculation of emission reductions:

>> Ex-ante emission reductions are calculated as outlined below:

Net electricity savings:

$$NES_y = \sum Q_{PJ,I} * ES_i * (1 - LFR_{i,y}) * ES_i * (1/(1-TD_i)) * NTG$$

$$= \sum Q_{PJ,I} * ES_i * (1 - LFR_{i,y}) * ES_i * (1/(1-0.1)) * 0.95$$

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
y	1	2	3	4	5	6	7	8	9	10	TOTAL
LFR	6%	13%	19%	26%	32%	38%	45%	51%	57%	64%	
NES (25W)	108	101	94	86	79	71	64	0	0	0	603
NES (40W)	6'598	6'148	5'697	5'247	4'797	4'347	3'897	0	0	0	36'731

NES (45W)	343	319	296	273	249	226	203	0	0	0	1'909
NES (60W)	8'898	8'291	7'684	7'077	6'470	5'862	5'255	0	0	0	49'537
NES (75W)	0	0	0	0	0	0	0	0	0	0	0
NES (100W)	0	0	0	0	0	0	0	0	0	0	0
NES	15'947	14'859	13'771	12'683	11'595	10'507	9'418	0	0	0	88'780 MWh
ER	9'393	8'752	8'111	7'470	6'829	6'188	5'547	0	0	0	52'291 t CO2

Gross electricity savings:

$$ES_i = (P_{i,BL} - P_{i,PJ}) * O_i * 365 / 1000$$

$$= (P_{i,BL} - 14) * 3.5 * 365 / 1000$$

Project 1					
i (Lumen)	Q _{PJ,i}	P _{i,BL}	P _{i,PJ}	ES _i (MWh)	
230	7805.408766	25	14	0.0140525	
415	201027.0438	40	14	0.033215	
593	8762.200808	45	14	0.0396025	
715	153237.7992	60	14	0.058765	
≥940	115167.5474	0	0	0	
Total	486000				
Share of different wattages		CFLs installed		CFL sold	
25W	1.61%	7805	8673		
40W	41.36%	201027	223363		
45W	1.80%	8762	9736		
60W	31.53%	153238	170264		
70-100W	23.70%	115168	127964		
Total	100.00%	486000	540000		

Percentage of lamps bought on stock, re-sold or not installed: **10%**

Lamp failure rate:

If $y * X_i < L_i$, $LFR_y = y * X_i * (100 - R_i) / (100 * L_i)$

If $y * X_i \geq L_i$, $LFR_{i,y} = 1$

If $y * 1277.5 < 10,000$, $LFR_y = y * 1277.5 * (100 - 50) / (100 * 10,000)$

If $y * 1277.5 \geq 10,000$, $LFR_{i,y} = 1$

Year	y * X _i	L _i	y * X _i < L _i	y * X _i ≥ L _i
1	1278	10'000	yes	No
2	2555	10'000	yes	No
3	3833	10'000	yes	No
4	5110	10'000	yes	No
5	6388	10'000	yes	No
6	7665	10'000	yes	No
7	8943	10'000	yes	No
8	10220	10'000	No	Yes
9	11498	10'000	No	Yes

10	12775	10'000	No	Yes
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Emission reductions:

$$ER_y = NES_y \times EF_{CO_2, ELEC, y}$$

$$= (\sum Q_{PJ, i} * ((P_{i, BL} - 14) * 3.5 * 365 / 1000) * (1 - LFR_{i, y}) * ((P_{i, BL} - 14) * 3.5 * 365 / 1000) * (1 / (1 - 0.1))) * 0.95) \times 0.589$$

Project 1

ER tCO₂e/year

City	1	2	3	4	5	6	7	8	9	10	TOTAL
Antananarivo	9393	8752	8111	7470	6829	6188	5547	0	0	0	52291
Total	9'393	8'752	8'111	7'470	6'829	6'188	5'547	0	0	0	52'291 t CO ₂

B.6.4 Summary of the ex-ante estimation of emission reductions:

>>

Year	Estimation of project activity emission (tCO ₂)	Estimation of baseline emissions (tCO ₂)	Estimation of leakage (tCO ₂)	Estimation of overall emission reductions (tCO ₂)
Year 1	3,860	13,253	0	9,393
Year 2	3,597	12,349	0	8,752
Year 3	3,333	11,444	0	8,111
Year 4	3,070	10,540	0	7,470
Year 5	2,807	9,636	0	6,829
Year 6	2,543	8,732	0	6,188
Year 7	2,280	7,827	0	5,547
Year 8	0	0	0	0
Year 9	0	0	0	0
Year 10	0	0	0	0
Total (tCO₂)	21,489	73,781	0	52,291

B.7 Application of a monitoring methodology and description of the monitoring plan as per the existing or new methodology applied to the micro-scale project activity:

B.7.1 Data and parameters monitored:

Data / Parameter:	$Q_{PJ,i}$
Data unit:	Number (quantity)
Description:	Number (quantity) of pieces of equipment (CFLs) of type i distributed or installed under the project activity (units).
Source of data to be used:	Project's sale database and results of first ex-post monitoring survey
Value of data	Ex-ante value: 486,000
Description of measurement methods and procedures to be applied, inc. frequency:	Number of CFLs sold as per project's sale database adjusted with percentage of CFLs installed and operating based on results of first ex-post monitoring survey.
QA/QC procedures to be applied:	Following generic instructions for conducting surveys and sampling as per paragraph 20 of applied methodology.
Any comment:	N.A.

Data / Parameter:	$P_{i,BL}$
Data unit:	Watts
Description:	Rated power of the baseline lighting devices of the group of "i" lighting devices (Watts)
Source of data to be used:	Project's sale database: power rating of all functional ICL handed in for exchange of a project CFL are recorded in the sale database.
Value of data	Ex-ante values: 25 W: 1.61% 40 W: 41.36% 45 W: 1.80% 60 W: 31.53% 70-100 W: 23.70%
Description of measurement methods and procedures to be applied, inc. frequency:	Reading the value of rated power as marked on the ICL. Wattages of ICL is recorded in the sale database.
QA/QC procedures to be applied:	Training of staff on proper use of sales database and of handling and testing of ICL.
Any comment:	

Data / Parameter:	LFR _y																
Data unit:	fraction																
Description:	Lamp Failure Rate for equipment type i in year y (fraction)																
Source of data to be used:	Ex-post monitoring surveys																
Value of data	Ex-ante values: <table><tr><td>y</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td></tr><tr><td>LFR</td><td>6%</td><td>13%</td><td>19%</td><td>26%</td><td>32%</td><td>38%</td><td>45%</td></tr></table>	y	1	2	3	4	5	6	7	LFR	6%	13%	19%	26%	32%	38%	45%
y	1	2	3	4	5	6	7										
LFR	6%	13%	19%	26%	32%	38%	45%										
Description of measurement methods and procedures to be applied, inc. frequency:	LFR is the percentage of project CFLs not found operational during the surveys compared to total number of CFLs installed. Linear extrapolation of LFR based on first ex-post monitoring survey results.																
QA/QC procedures to be applied:	Following generic instructions for conducting surveys and sampling as per paragraph 20 of applied methodology.																
Any comment:																	

Sustainability monitoring indicators:

No		1
Indicator		Recycling/disposal of CFLs
Mitigation measure		
<i>Repeat for each parameter</i>		
Chosen parameter		Percentage of failed/returned CFLs recycled or disposed
Current situation of parameter		No CFLs recycled or disposed
Estimation of baseline situation of parameter		No CFLs recycled or disposed
Future target for parameter		100% of failed/returned CFLs are recycled or environmentally safe and permanently disposed with special attention to mercury.
Way of monitoring	How	Failed CFLs will be collected in the collection points in JIRAMA and transported regularly for recycling or disposal.
	When	Annually
	By who	WWF Madagascar
<i>Repeat for each parameter</i>		
Chosen parameter		Option for recycling or disposal of CFL

Current situation of parameter		None
Estimation of baseline situation of parameter		None
Future target for parameter		Option 1: Build up a CFL recycling facility in Madagascar Option 2: Identify a recycling facility abroad and export failed CFLs for recycling. Option 3: Environmentally safe and permanent disposal of CFLs with special attention to mercury.
Way of monitoring	How	Chosen option will be reported
	When	Once recycling/disposal option has been chosen
	By who	WWF Madagascar

No		2
Indicator		CFL breakage
Mitigation measure		Staff training / caution in handling during transport
<i>Repeat for each parameter</i>		
Chosen parameter		Number of CFLs broken during distribution (handling, transport, etc.)
Current situation of parameter		0
Estimation of baseline situation of parameter		0
Future target for parameter		0.1% (based on initial experience from CFL distribution)
Way of monitoring	How	Regular Inventories: broken CFLs are counted and recorded in the project database/software
	When	Each week and at the end of the distribution
	By who	Project team / WWF Madagascar

No		3
Indicator		Total electricity savings due to CFL use
Mitigation measure		N.A.
<i>Repeat for each parameter</i>		
Chosen parameter		Total electricity savings in GWh per year
Current situation of parameter		0
Estimation of baseline situation of		0

parameter		
Future target for parameter		From 15.9 GWh in the first year to 9.4 GWh in the 7 th year
Way of monitoring	How	Calculation of net electricity savings using the formula in the applied methodology under consideration of actual number of CFLs distributed and actual lamp failure rate monitored.
	When	Once all CFLs have been distributed; thereafter annually
	By who	WWF Madagascar

No		4
Indicator		Average monetary savings per household
Mitigation measure		N.A.
<i>Repeat for each parameter</i>		
Chosen parameter		Average monetary savings per household in % due to CFL usage
Current situation of parameter		0
Estimation of baseline situation of parameter		0
Future target for parameter		10% (based on results from pilot phase)
Way of monitoring	How	A random sample of customers visited for the monitoring survey. Compare monthly electricity bills before and after installation of CFLs.
	When	Within the first year after all CFLs have been disseminated
	By who	WWF Madagascar

B.7.2 Description of the monitoring plan:

>> Required monitoring activities are described in the applied methodology AMS-II.J.

1) Lamp distribution:

During the project activity implementation, the following data are to be recorded:

- Number of pieces of equipment distributed under the project activity, identified by the type of equipment and the date of supply; The date of the receipt, the number and description of the exchanged lamps (automatic). The city and the distribution place. The cost per unit (1000 Ar), the method of payment (cash or MVola - a mobile banking service owned by Telma). The end date of warranty.
- The number and power of the replaced devices; Specification of the exchanged lamps (CFLs and ICL): Wattage, socket type.

- Data to unambiguously identify the recipient of the equipment distributed under the project activity; The identification number of the JIRAMA's customer (residential / household). The name of the representative of the household, ICN, address, (including phone number and email address if available).

2) First ex-post monitoring survey:

This survey will provide a value for the number of CFLs placed in service and operating under the project activity. The survey is carried out within the first year after installation of all efficient lighting equipment. The results of the survey are used to determine quantity of CFLs ($Q_{PJ,1}$) in the ER calculation to determine the ex-post Lamp Failure Rate (LFR_y) for ex-post ER calculations. First ex-post survey takes place in year 1 (2014).

3) Subsequent ex-post monitoring surveys:

Subsequent monitoring surveys are carried out to determine ex-post Lamp Failure Rates (LFR_y) for use in ex-post ER calculations. Minimum frequency for subsequent surveys is "once every 3 years" (Option 1. as per applied methodology). First ex-post survey is conducted in year 1 (2014) and subsequent surveys take place in year 4 (2017) and year 7 (2020).

Operation and management of monitoring activities

The coordination and supervision of all monitoring activities is done by the project coordinator/project owner WWF MWIOPO.

1. During lamp distribution:

WWF MWIOPO will monitor the activities at the CFL distribution spots in real time thanks to the distribution software through dashboards and extraction of information from the database on EXCEL. The database is stored on WWF's server and Data Management System allows retrieval of information at any time by:

- The officer in charge of the distribution spot,
- The project coordinator or other officer authorized by the project coordinator.

Each officer will be given a login and a password for a personalized access.

In addition to that, the software will provide a dashboard which will summarize information on the different operations including: the stock movements, the number of exchanged CFLs, the number of failed and broken CFLs collected, the sum collected, the number of households which benefited from the warranty, the duration of the transaction, etc.

The amount cashed will be collected daily in the project's mobile bank account. The amount in the mobile bank account will be returned regularly in a bank account.

In case of discrepancy between the data supplied by the software and physical cash, the agent responsible of the distribution must investigate the cause of the difference.

Also at the end of each day, it is recommended to return to store the remaining CFLs, the ICL, the broken CFLs, etc. In case of differences between the physical inventory and the information provided by the software, the agent must resolve the discrepancy.

The inventory in the main storehouse is done every weekend under the supervision of the project coordinator.

2. During ex-post monitoring surveys:

The ex-post monitoring surveys will be done by the project owner according to the guidelines as set out by the applied methodology (AMS-II.J) and following the design details of the baseline survey. The survey principles from Paragraph 20 of the methodology will be considered:

- Minimum sample size is 100. Sample size is determined by minimum 90% confidence interval and the 10% maximum error margin.
- Applying random sampling methods considering representativeness of target population (size, location).
- Household interviews are conducted by site visits.
- Only persons over age 12 are interviewed.

In the baseline survey a sample of around 200 households were interviewed in Antananarivo. Using an online sample size calculator (<http://www.raosoft.com/samplesize.html>) the error margin for a sample size of 200 at 90% confidence level is expected to be 5.81%. For ex-post monitoring surveys also a sample size of 200 is envisaged. In case the sample does not provide data that fulfill max. 10% error at 90% confidence level, more households will be interviewed until the requested precision has been attained.

JIRAMA will provide the information concerning the reduction of the peak power call, the use of petrol, the financial aspect, etc.

B.8 Date of completion of the application of the existing or new baseline and monitoring methodology and name of the responsible person(s)/entity(ies)

>> The Baseline Study in 8 cities in Madagascar was conducted by WWF Madagascar in Feb/March 2011. The PDD was developed by foundation myclimate in collaboration with WWF Madagascar.

Date of completion of the baseline section:

01.07.2013

Name of responsible persons/entities:

Tobias Hoeck
Project Manager, foundation myclimate
tobias.hoeck@myclimate.org

Thierry Randriamanalina
Project coordinator, WWF Madagascar
strandriamanalina@wwf.mg

Samuel Ratsimisetra
Technical advisor, WWF Madagascar
sratsimisetra@wwf.mg

SECTION C. Duration of the project activity / crediting period

C.1 Duration of the project activity:

C.1.1. Starting date of the project activity:

>> 29 July 2013 (signing contract with communication agency "Grand Angle")

C.1.2. Expected operational lifetime of the project activity:

>> Certified emission reductions can only be earned for the average life of project CFLs. Thus, a CFL lifetime of 10,000 hours results in 7 credited years. However, also in the 10th year is it estimated that 36% of CFL distributed are still operational.

C.2 Choice of the crediting period and related information:

C.2.1. Renewable crediting period

C.2.1.1. Starting date of the first crediting period:

>> N.A.

C.2.1.2. Length of the first crediting period:

>> N.A.

C.2.2. Fixed crediting period:

C.2.2.1. Starting date:

>> The crediting period will start after CFL distribution campaign has been completed. The starting date of the crediting period is foreseen for end of January 2014.

C.2.2.2. Length:

>> The applied methodology defines the crediting period as the average life of the project CFL. The crediting period is maximum 10 years.

SECTION D. Stakeholders' comments

>> *Please note that the blind scoring exercise during stakeholder consultation need not be carried out.*

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

>> *Please describe the agenda of physical meeting, Non-technical summary, Invitation tracking table, Text of invitations sent, any other consultation method used*

For this project activity a physical local stakeholder meeting has been conducted in October 2012 in Madagascar:

Date: October 10th 2012 at 9:30 AM

Venue: CNEAGR, Nanisana, Antananarivo, Madagascar

Agenda of the meetings

1. Project presentation
2. Questions/Answer
3. Coffee break
4. Group Work :
 - Continuous input/grievance mechanism
 - Sustainable development impact monitoring
 - Other answers and feedbacks
5. Group feedback
6. Evaluation and closing of the meeting

Location of the physical meeting (arrow):



Text of invitation:

The invitations for local participants have been sent in French and the invitations to the GS supporters in English. The invitations included a non-technical summary of the project.



Invitation pour la consultation publique locale

Diffusion de lampes basse consommation à Madagascar

Objectif de la consultation

WWF-MWIOPO, le Ministère de l'Énergie, la JIRAMA et la Fondation TELMA sont heureux de vous inviter à la réunion

de consultation publique dans le cadre d'un projet de diffusion de lampes basse consommation à Madagascar. Cette consultation se déroulera le **Mercredi 10 Octobre 2012 à partir de 09 h 30** au **CNEAGR Nanisana**.

L'objectif de la consultation publique est de récolter divers points de vue concernant le projet, de prendre en compte les préoccupations et les recommandations et dans le cadre des directives internationales de Gold Standard dans la mise en œuvre d'un projet de compensation carbone.

Ordre du jour de la réunion

1. Ouverture
2. Présentation du projet
3. Séance de questions/Réponses
4. Discussions concernant la gestion continue des doléances
5. Discussions concernant le suivi du développement durable
6. Clôture et évaluation

Langue

La réunion se fera en français. Une traduction en anglais est disponible.

Possibilité de donner des feedbacks par écrit

Si vous ne pouvez pas assister à la réunion, vous pouvez envoyer vos commentaires par courrier ou par email à :

Randriamanalina Solo Thierry

WWF Madagascar/ West Indian Ocean Programme Office /B.P. 738 (101)

Antananarivo Madagascar

strandriamanalina@wwf.mg

034 16 587 11

Call for Local Stakeholder Consultation

Distribution of Energy Savings Lamps in Madagascar

Date: October, 3rd

Venue: Hotel Le Palétuvier, Toliary, Madagascar

Date: October 10th

Venue: CNEAGR, Nanisana, Antananarivo, Madagascar

Date: October 12th

Venue : Hotel de la Poste, Antsiranana, Madagascar

Invitation by



In collaboration with



Purpose of the local stakeholder consultation

The objective of this public meeting is to get different views on the project activity, to take into account concerns and recommendations and to meet international guidelines of the Gold Standard in terms of conducting carbon offset projects.

Agenda of the meeting

1. Opening
2. Explanation of the project
3. Questions for clarification about project explanation
4. Discussion on continuous input/grievance mechanism
5. Discussion on monitoring sustainable development
6. Closure of the meeting

Date and venue

Three meetings will be conducted:

The first meeting will take place on October, 3rd from 09:30 am at the Hotel Le Palétuvier – Toliary.

The second meeting will take place on October, 10th from 09:30 am at CNEAGR, Nanisana – Antananarivo.

The third meeting will take place on October, 12th from 03:00 pm at the Hotel de la Poste – Antsiranana (Diego Suarez).

Language

The meeting is conducted in French. Translation into English is available.

Giving feedback in writing

If you cannot attend the meeting, please send your comments on the project either via e-mail or mail to:

myclimate - The Climate Protection Partnership

Tobias Hoeck

Sternenstrasse 12

8002 Zürich

Switzerland

tobias.hoeck@myclimate.org

WWF Madagascar/ West Indian Ocean Programme Office /

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Non-technical summary:

The non-technical summary has been provided in the invitations sent to the participants in French and in English (letter and mail).

Project description (non-technical summary)

Distribution of Energy Savings Lamps in Madagascar

Context : In Madagascar, the electrification rate is 25% in urban area and 7% in rural area. 40% of electricity produced by the national electricity company (JIRAMA) comes from thermal power plant running on fuel and diesel. Each year, Madagascar imports for about 100 million USD of oil to run these power plants. Not only are the exploitation costs high but the power plants also emit CO₂. The electricity cost is, on average, 400 Ariary/Kwh which is very high considering the purchase power of Malagasy people. Half of the electric lighting used in the 7 towns considered in the project is incandescent lamps. The incandescent lamps are very inefficient as only 5% of the energy consumed is transformed into light. CFLs which are 4 to 5 time more efficient account for 21% of the electric lamps used by households. Good quality CFLs are still not affordable for the majority of the population.

Given this, a campaign of distribution of efficient light bulbs was initiated by WWF-MWIOPO in partnership with the Ministry of Energy, JIRAMA and the TELMA Foundation. The goal is to distribute 500,000 CFLs in 7 cities of Madagascar - namely Antananarivo, Antsirabe, Toliara, Mahajanga, Toamasina, Antsiranana and Nosy Be. Alongside these efforts, action must be taken to promote the development of a good quality and affordable efficient lamps market through incentives and the progressive phasing out of incandescent light bulbs. These measures are taken in the context of sustainable low-carbon economy.

Implementation : A pilot was implemented from October 6th to 21st, 2011 in the town of Ambositra. 5873 incandescent lamps with an average power of 51W have been exchanged by 20W CFLs. The average reduction in electricity bill was about 10% for the month of December 2011 and the economy of JIRAMA is estimated at 7 million Ariary for the months of November and December 2011. Thus, the pilot operation was a success.

The project's goal is to distribute approximately 500,000 high quality CFLs in the seven cities targeted by the project and move towards the establishment of a regulatory framework promoting good quality lamps at an affordable price on the market. The project seeks certification under the Gold Standard and will be co-financed through carbon credits. The implementation will start in December 2012 and will be divided into three phases.

Phase I : The objective of the first phase (starting in December 2012) is to distribute 108,000 CFLs to 65 000 households in five cities (Antsiranana, Mahajanga, Toliara, Antsirabe and Nosy Be) in Madagascar and the implementation of the regulatory framework to promote good quality efficient lighting.

Phase II : The objective of the second phase (starting in July 2014) is to distribute 353,000 CFLs to 117,000 households in the city of Antananarivo.

Phase III : The third phase's aim (starting in May 2015) is to distribute 41,500 CFLs to 13,800 households in Toamasina. This phase will also allow assessment of project impacts. In addition, the CFLs will be collected and recycled.

Expected results:

- 500,000 CFLs distributed to approximately 195,800 households;

- 500,000 incandescent lamps collected and recycled;
- Households aware and convinced of the benefits of the use of energy-saving lamps;
- Decreased household electricity bill by about 7%;
- Decreased power demand of about 13 MW;
- Approximately 69,000 tons of CO₂ avoided over 9 years;
- Regulatory framework promoting good quality efficient lamps adopted;

Description du projet (Résumé non technique)

Distribution de lampes basse consommation à Madagascar

Contexte: A Madagascar, le taux d'électrification est de 25% en milieu urbain et 7% en milieu rural. 40% de l'électricité est produite à partir de groupes thermiques fonctionnant au fuel et au gasoil. Les coûts y afférent reviennent cher à la JIRAMA ; chaque année, près de 100 Millions USD de carburant sont importés pour alimenter les générateurs. Le recours aux centrales thermiques se présente ainsi comme un investissement non rentable et entraîne l'émission de gaz carbonique qui contribue au réchauffement climatique. Le KWh coûte, en moyenne, 400 Ar à Madagascar. L'éclairage en lampes à incandescence (LI) représente entre 10 à 20% de la facture d'électricité des ménages ; il accapare ainsi une part non négligeable de leur budget. Les lampes à incandescence sont très inefficaces car elles transforment 95% de l'énergie qu'elles consomment en chaleur et seulement 5% en lumière. Or, elles représentent environ 50% des lampes utilisées dans les 7 villes ciblées. Les lampes fluo compactes (LFC) sont 4 à 5 fois plus performantes que les LI. Or, les LFC représentent seulement 21% des lampes utilisées par les ménages. Les lampes économiques de bonne qualité coûtent chers ; ce qui encourage les ménages à se tourner vers les LFC de moindre qualité.

Compte tenu de cela, une opération de diffusion de lampes basse consommation a été initiée par WWF-MWIOPO en partenariat avec le Ministère de l'Energie, la JIRAMA et la Fondation TELMA. L'objectif est de diffuser 500 000 LFC dans 7 villes de Madagascar – à savoir : Antananarivo, Antsirabe, Toliara, Mahajanga, Toamasina, Antsiranana et Nosy Be.

Parallèlement à ces efforts de diffusion des lampes basse consommation de bonne qualité, des actions doivent également être menées afin de promouvoir le développement d'un marché de lampes efficaces de bonne qualité et à moindre coût à travers la mise en place de cadres réglementaires favorables à ce type de lampe ainsi que le bannissement progressif des lampes à incandescences. Ces mesures entrent dans le cadre d'un développement à faible émission de carbone.

Mise en œuvre : Une opération pilote a été mise en œuvre du 06 au 21 Octobre 2011 dans la ville d'Ambositra. 5873 lampes à incandescence avec une puissance moyenne de 51W ont été échangées par des lampes fluo compactes de 20W. La diminution moyenne de la facture d'électricité des ménages a été d'environ 10% pour le mois de décembre 2011 et l'économie de la JIRAMA estimée à 7 million Ariary pour les mois de Novembre et Décembre 2011. Ainsi, l'opération pilote qui a été réalisée a été un succès.

L'objectif du projet est de stimuler le marché par la diffusion d'environ 500 000 LFC dans les 7 villes ciblées par le projet et d'avancer vers la mise en place d'un cadre réglementaire favorisant les lampes basse consommation de bonne qualité sur le marché. Le projet sera financé en partie par les crédits carbone volontaires certifiés par GoldStandard. La mise en œuvre commencera en décembre 2012 et sera divisée en trois phases.

Phase I : D'ici Novembre 2013, 108 000 LFC sont distribués au niveau de 65 000 ménages dans 5 villes de Madagascar (Antsiranana, Antsirabe, Nosy Be, Toliara, Mahajanga) et un cadre réglementaire favorable aux LFC de bonne qualité est mis en place.

Phase II et III : D'ici Mai 2015, 394 500 LFC sont distribués au niveau de 130 800 ménages d'Antananarivo et de Toamasina. L'évaluation des impacts et le recyclage des LFC seront également effectués durant cette phase ;

Résultats attendus :

- 500 000 LFC distribuées auprès d'environ 195 800 ménages ;
- 500 000 lampes à incandescence collectées et recyclées ;
- Ménages sensibilisés et convaincus des avantages de l'utilisation des lampes basse consommation ;
- Diminution de la facture d'électricité des ménages d'environ 7% ;
- Diminution de l'appel de puissance au niveau de JIRAMA d'environ 13 MW;
- Emission d'environ 69 000 tonnes de CO2 évitée sur 9 ans;
- Projet de cadre réglementaire favorable pour les lampes efficaces de bonne qualité ;

Methods of invitation:

Stakeholders were notified and invited by email, mail and phone. Further, the local stakeholder consultation meetings were publicly announced through:

1. Advertisement in the newspaper Midi Express: September 26th, September 29th and October 1st, 2012.
2. Banners displayed during the day of the consultation.

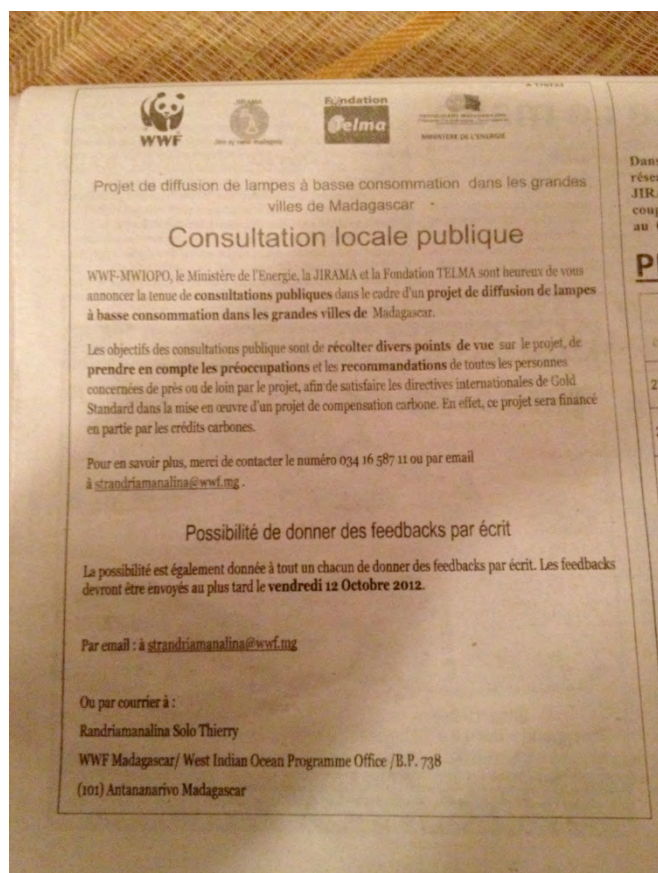


Figure 1 : Newspaper Advertisement



Figure 2: Email invitation

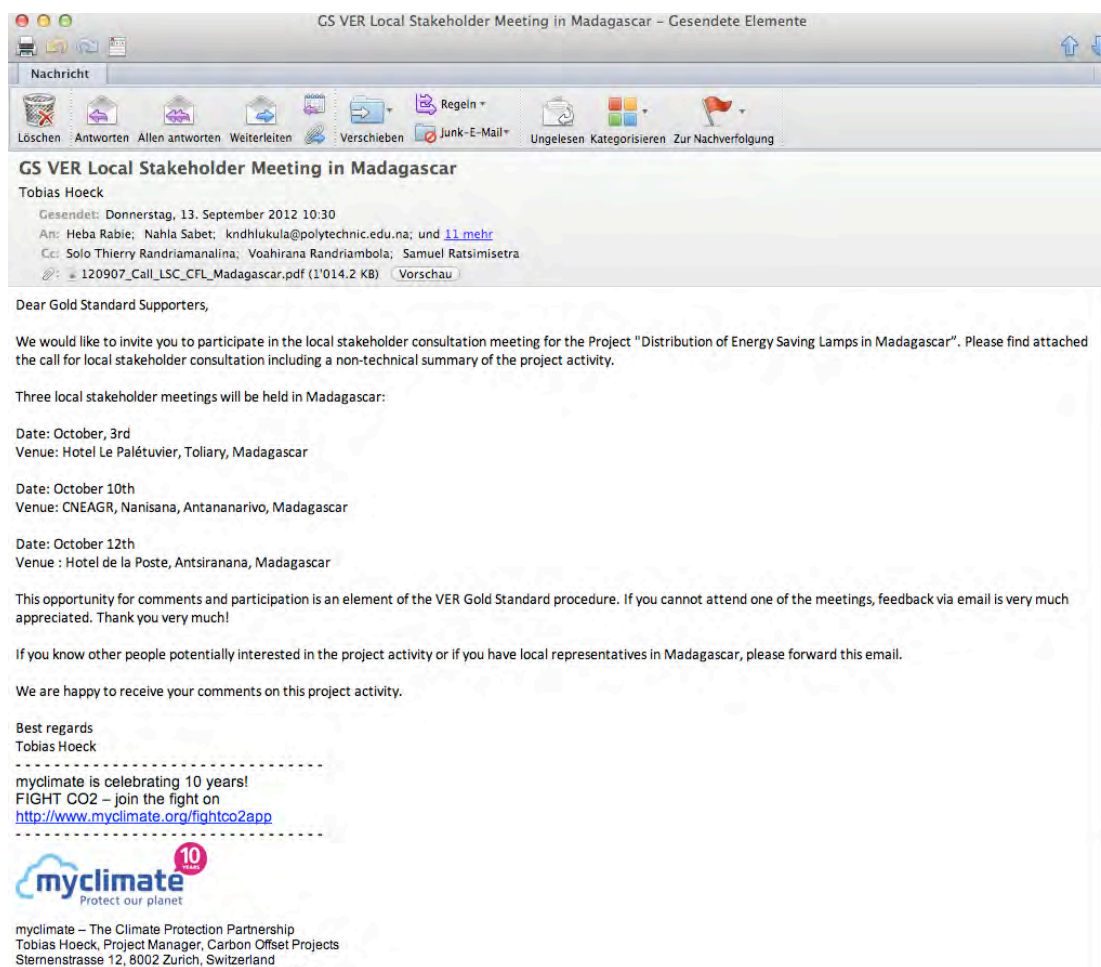


Figure 3: Email invitation sent to GS Supporters

Invitation tracking table

A total of 77 persons have been invited for the LSC meeting:

	Persons invited
International invitation	14
Antananarivo	63
Total	77

	Category Code	Organisation	Name of invitee	Contact	Means of invitation	Date of invitation	Confirmation received? Y/N
1	E	Gold Standard: Local Gold Standard Expert, Africa & Middle East	Nahla Sabet	nahla@cdmgoldstandard.org	Mail	13-Sep-12	N
2	E	Gold Standard: Local Gold Standard Expert, Africa & Middle East	Heba Rabie	heba@cdmgoldstandard.org	Mail	13-Sep-12	Y
3	F	Renewable Energy & Energy Efficiency Institute, Namibia	Ndhlukula Kudakwashe	ndhlukula@polytechnic.edu.na	Mail	13-Sep-12	N
4	F	WWF South Africa	Worthington Richard	rworthington@wwf.org.za (office: +27 11 262 9460, mobile: +27 (0)82 44 86 392)	Mail	13-Sep-12	N
5	F	(SACAN Facilitator) EarthLife Africa Johannesburg	Dora Ledello	185 Smit Street, Braamfontein, 6000 South Africa Telephone: +27 (0)730357208 dorah@ghouse.org.za	Mail	13-Sep-12	N
6	F	SouthSouthNorth, South Africa	Raubenheimer Stefan	stef@southsouthnorth.org	Mail	13-Sep-12	N
7	F	Zero: Regional Environment Organisation, Zimbabwe	Chigwada Johannes	johannes@zeroregional.com	Mail	13-Sep-12	N
8	F	WWF International	Bella Roscher	Bella.Roscher@wwf.ch	Mail	13-Sep-12	Y
9	F	Greenpeace International	Steve Sawyer	supporter.services.int@greenpeace.org	Mail	13-Sep-12	N
10	F	Mercy Corps International	Jim Jarvie	jarvie@hq.mercycorps.org	Mail	13-Sep-12	N
11	F	Helio International	Helene O'Connor-Lajambe	Helene.connor@helio-international.org (helio@helio-international.org)	Mail	13-Sep-12	N
12	F	REEEP	Harvey Katrin	katrin.harvey@reeep.org	Mail	13-Sep-12	N
13	F	World Vision Australia	Dr. Dean C. Thomson	Dean.Thomson@worldvision.com.au	Mail	13-Sep-12	N
14	C	Ministère de l'Environnement, des Eaux et Forêts (DNA)	Monsieur Randriasandrata Germain	pf.cc@moov.mg, randriasandrata@yahoo.fr	Mail + Letter	13-Sep-12	N

Antananarivo							
	Category Code	Organisation	Name of invitee	Contact	Means of invitation	Date of invitation	Confirmation received? Y/N
1	B	Ministre de l'Energie	RAZAFINDRORAKA Nestor		Lettre	17-Sep-12	N
2	B	SG de l'Energie	RANAIVOSON Andriambala		Lettre	18-Sep-12	Y
3	B	DG de l'Energie	IBRAHIM Abdallah		Lettre	19-Sep-12	N
4	B	Directeur Electricité - Ministère de l'Energie	FABIEN Rémi Roger		Lettre	20-Sep-12	N
5	B	Directeur de l'Environnement	RALALARISOA Christine Edmée	034 05 620 03	Lettre	21-Sep-12	N
6	B	Point focal Changement Climatique	RANDRIASANDRATANA Germain	032 07 544 90 pf.cc@moov.mg, randriasandrana@yahoo.fr	Lettre	22-Sep-12	N
7	B	Bureau des normes	RAVOARAHARISON Patrick		Lettre	17-Sep-12	N
8	C	Directeur des études et de la législation fiscale	Ruphin Georges Juvences		Lettre	17-Sep-12	N
9	B	PDS de la commune urbaine d'Antananarivo			Lettre	17-Sep-12	N
10	A	Directeur Général JIRAMA	RASIDY Désiré		Lettre	21-Sep-12	Y
11	A	Directeur de la Planification Stratégique de la JIRAMA	RAZAFIMANDIMBY Jules		Lettre	21-Sep-12	Y
12	A	Directeur Interrégional Tanà 1 - JIRAMA	RAMBELOSON Francis		Lettre	21-Sep-12	Y
13	A	Directeur Interrégional Tanà 2 - JIRAMA	RASAMISON Zoeline		Lettre	21-Sep-12	Y
14	A	HYDELEC			Lettre	21-Sep-12	N
15	A	HENRI FRAISE			Lettre	21-Sep-12	N
16	A	Directeur Général de TELMA	Patrick Pisal Hamida		Lettre	22-Sep-12	N
17	A	Directeur de la Fondation TELMA	Isabelle Salabert		Lettre	22-Sep-12	N
18	A	Responsable Communication - Fondation TELMA	Janick Harivola ANDRIATSALAMA		Lettre	17-Sep-12	Y
19	A	Chargée de projets - Fondation TELMA	Gaëlle RAHARINOSY		Lettre	17-Sep-12	Y
20	B	Chef de Région Antananarivo	Mananjara RANDRIAMBOLOLONA	cr_analamanga@yahoo.fr	Lettre	17-Sep-12	N
21	F	Chef de Service Infrastructures et Transport - Union Européenne	Marc Brickman		Lettre	17-Sep-12	N
22	F	Représentant Résident de la BAD	AbdelKarim Benjajebour		Lettre	17-Sep-12	N
23	F	Energy Specialist - Banque Mondiale	Vonjy		Lettre	17-Sep-12	N
24	F	Chargé de Programme Environnement - PNUD			Lettre	17-Sep-12	N
25	F	Représentant Résident GIZ	Pascal Lopez		Lettre	17-Sep-12	N
26	F	PIC	Rakoto Andriatsilavo		Lettre	17-Sep-12	N
27	F	AFD	Razafindrahona Lydia		Lettre	22-Sep-12	N
28	F	Embassade Suisse	Eric Mayoraz		Lettre	17-Sep-12	N
29	A	Directeur Général de la Société Grand Angle	Mireille MARTIN		Lettre	17-Sep-12	Y
30	D	Association de journalistes		anjaranaday@yahoo.fr, com.ivongazety@gmail	Mail	27-Sep-12	N
31	A	Chargée de mission mobilité urbaine - Institut des Métiers de la Ville	Marion Sybillin	marion.sybillin@gmail.com	Lettre	17-Sep-12	N
32	A	Directeur Général - Insitut de la Maîtrise de l'Energie	RAKOTOMALALA Minoson		Lettre	17-Sep-12	N
33	A	Directeur Général - Ecole Supérieure Polytechnique d'Antananarivo			Lettre	17-Sep-12	N
34	F	Vice Président Régional - WCS	RAJAOBELINA Léon		Lettre	17-Sep-12	N
35	F	Country Director - Conservation International	Christopher Holmes		Lettre	17-Sep-12	N
36	D	Association de consommateurs - Fimzompam	RABARISON Tina	032 04 239 93 fimzompam2011@hotmail.fr	Mail	26-Sep-12	Y
37	D	Association de consommateurs	RAHARUAONA Daniel	034 70 028 96 tongoarahamba@hotmail.fr	Mail	26-Sep-12	Y
38	D	Vintys Universitaire			Mail	26-Sep-12	N
39	A	Directeur Commercial et Marketing - Guilman	Jimmy RAKOTOARIVELO	jabourgarel@hotmail.fr	Mail	26-Sep-12	Y
40	A	EERTEC	Joscelin Pierre RAKOTOVAO		Mail	27-Sep-12	Y
41	A	UNIMA		hanitrinjala.rakotoarivony@unima.mg	Mail	27-Sep-12	Y
42	A		Andrianarivony Tanjakony	and.kony@yahoo.fr	Mail	1-Oct-12	Y
43	A		Tina ANDRIANARISAINA	drinaz@yahoo.fr	Mail	2-Oct-12	Y
44	A	Tag's Studio		tags.studio@gmail.com	Mail	3-Oct-12	Y
45	D	CEDRE - Conseils en Energie, Développement Rural et Environnement		cedre.sartu@gmail.com	Mail	5-Oct-12	Y
46	D	Directeur Général - Toughstuff	Nadia CHAN THIO HINE		Mail	22-Sep-12	Y
47	A	HOLCIM			Lettre	9-Oct-12	N
48	B	ONE			Lettre	9-Oct-12	N
49	A	TRIPHASE Box 218 Suprême Center			Lettre	7-Oct-12	N
50	A	ROYAL ECLAIRAGE Behoririka			Lettre	7-Oct-12	N
51	A	SAMKOCKWA	M Fong		Lettre	7-Oct-12	N
52	A	Ste HELENA			Lettre	7-Oct-12	N
53	A	Cient JIRAMA	RAHARIRAVAKA NINAH NATHALIE		Call +Lettre	20-Sep-12	Y
54	A	Cient JIRAMA	RAKOTONIRINA JEAN PIERRE		Call +Lettre	20-Sep-12	N
55	A	Cient JIRAMA	RAMALISON ANGELE		Call +Lettre	20-Sep-12	N
56	A	Cient JIRAMA	ANDRIANAVONY GREGOIRE		Call +Lettre	20-Sep-12	N
57	A	Cient JIRAMA	RAMAIVOARISOA NIRINA		Call +Lettre	20-Sep-12	N
58	A	Cient JIRAMA	RAJAOANATANA KOLOINA		Call +Lettre	20-Sep-12	N
59	A	Cient JIRAMA	RASOANJANAHARY ESTHER		Call +Lettre	20-Sep-12	N
60	A	Cient JIRAMA	RAZAFIMAHEFA		Call +Lettre	25-Sep-12	Y
61	A	Cient JIRAMA	Mme Jen		Call +Lettre	7-Oct-12	Y
62	A	Cient JIRAMA	RAZAFIMBELO Rondroniaina		Call +Lettre	7-Oct-12	Y
63	A	Cient JIRAMA	RALAHY Justine		Call +Lettre	7-Oct-12	Y

Figure 4: Invitation tracking table

D.2. Summary of the comments received:

>> Please describe the outcome of the meeting, assessment of stakeholders comment, list of participants.

Outcome of the meeting

The local stakeholder consultations were conducted to explain the project activity in detail and to get feedback from people with different background and interest. The meeting helped us to identify aspects and issues of the project activity that stakeholders were most concerned with, as well as to define the input/grievance mechanism and discuss the monitoring of sustainable development indicators.

The table below summarizes questions and comments from the stakeholders raised during the LSC meeting:

Topic	Stakeholders	Project Participant
General	When will the project start?	The project is expected to start at the end of December 2012
	How long will this project last?	The distribution will start town by town. We expect to end the distribution by the first quarter of 2015.
	When will the CFL be distributed?	It is expected to start in the second quarter of 2013
	How is the partnership? Is there a project team in place?	Yes, there are members of the team within all of the partners.
CFL specification	How they will recognize good quality CFLs?	The indelible sign on each CFLs The CFLs are available only in the TELMA Shops The communication campaign will explain
	Doubts about the quality of CFLs due to bad experiences	The CFL of the project are of high quality: 10 000hr rated lifetime A guarantee of one year will also be provided The communication campaign will reassure about the quality For future demand, regulation measures have to be put in place
	What are the norms of the CFLs?	What we want is: IEC62554 According to European commission decision 1999/568/EC IEC60968 ELI and ERP5 standard
Distribution	Will it be first-come first-served?	Yes
	Is it possible to exchange lamps other than incandescent light bulb?	No. The project seeks to replace inefficient light bulbs with CFLs.
	How will you manage the queue?	A system of ticket will be put in place. The concept has been tested during the pilot.
	What type of lamps can be exchanged?	Only incandescent lamps above 20W can be exchanged for CFLs
	Is it possible if the person making the exchange is different from the one mentioned on JIRAMA's invoice?	Yes it is possible. Specific software was developed by WWF to manage this and making sure that an invoice won't be used multiple times and that a household can't get more than the quota.

	Is it possible for the students living in the University campuses to get the CFLs?	The project does not target public lighting but households.
	Why did you choose TELMA?	TELMA Foundation agreed to take in charge the transport and logistics aspect of the project. We are still open for propositions.
	How will TELMA Shop handle the distribution?	TELMA will arrange a space inside TELMA shops with furniture, computer and internet access for the distribution. A pilot has already been done to test the distribution strategy.
	What will be done with the 1000 Ar/CFL?	This will be used to complement the funds for the regulation and recycling components of the project.
Communication campaign	How will households be sensitized?	The communication campaign will be done by a professional communication agency.
The quality of electricity grid	Will this project solve the problem of load shedding?	The reason of load shedding is the incapacity of the electricity production to meet demand. With the use of CFLs, there will be less demand meaning more power available. It means that it can help but there is a limit.
The Use of the CFLs	How should the CFLs be handled?	An explanation should be given during the communication campaign A flyer will be distributed to the households exchanging the CFLs.
Regulation measures	Can you explain the content of the regulation measures and the strategy?	A study will be conducted for this purpose. A strategy will be drafted after that.
Carbon credit	More explanation needed on how the carbon credit works	A brief explanation will be given.
Impacts of the project	Aren't all of data already available with JIRAMA?	The data concerning electricity consumption and production are available with JIRAMA but some others concerning the households, their experience and perception need to be assessed by a poll.
	What will you do with the CFLs at the end of their lifetime?	The CFLs will be collected and recycled. The recycling process is still to be defined.
	What about the mercury that the CFLs contain?	The quantity of mercury is not dangerous in itself. The mercury is released when the CFLs are broken.
	Can you give feedbacks about the pilot operation?	Summary is given.
Other	Isn't it better to invest in renewable energy?	Energy efficiency is necessary even if you put in place sustainable solutions for electricity production. For JIRAMA It is a demand management.
	If we lower power consumption, won't JIRAMA lose money?	Currently, JIRAMA is losing money when using thermal power plants. By reducing the power usage, we are actually reducing JIRAMA's loss.
	Do the CFL have impact on eyes	If used under normal conditions, it doesn't have impacts.
	Can CFLs be tested in the University?	It can be done if the appropriate setting for the tests is available.

Please see Annex 4 for detailed minutes (in French) of the LSC meeting.

Assessment of stakeholders' comments

A feedback form was distributed during the meetings, where stakeholders had the possibility to provide their opinion on the LSC meeting, and provide feedback on what they like and don't like about the project activity.

LSC meeting: The majority of stakeholders (62%) appreciated the meeting and judged it interesting, useful, well organized and informative. A minority (4%) commented that the meeting was too short and 28% wished to continue consultation or have further meetings.

Positive: As positive aspects of the project stakeholders highlighted the impact of energy-savings lamps on the households' budget, environmental protection, and the high quality of the CFL to be distributed under the project. Further, stakeholders judged this project to be a good initiative and made suggestions such as increase the number of distribution points.

Negative: As negative aspects of the project activity 35% of stakeholders pointed out that the number of CFLs to be distributed under this project is too small and distribution should not be limited to households with a JIRAMA electricity bill but should also include household connected to the grid but do not receive a separate electricity bill. Other users for example in rural areas, that are not connected to the JIRAMA electricity grid or non-domestic users such as universities and enterprises should also be eligible to participate in this project. Moreover, the foreseen sale price of the CFL is considered to be too high by 12% of participants. It was also wished that the project would widen its focus and include also other household electric appliances. 12% of participants expressed no comment.

The tables below summarize the feedback received.

What is your impression about this consultation meeting?	Interesting/ useful/ necessary/ well organized and informative	The meeting was too short/ further meetings wished	Other observations	Total		
Antananarivo	16	8	2	26		
Antananarivo (%)	62%	31%	8%	100%		
What do you like about the project?	Impact and/or quality of CFLs	Good initiative and other observations	Total			
Antananarivo	19	7	26			
Antananarivo (%)	73%	27%	100%			
What do you don't like about the project?	Number of CFLs too small /Only households with JIRAMA electricity bill can participate	Max. number of CFLs per household is inadequate	Price of 1000 Ar./CFL is to high	Other observations	None	Total
Antananarivo	6	0	2	7	2	17

Antananarivo (%)	35%	0%	12%	41%	12%	100%
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Under "other observations" some participants wished that CFLs are not subject to customer registration and are distributed to everybody regardless location of residence (city, rural area,...), are not limited to only domestic customers (but also universities, enterprises,...) and that CFLs are not bound to the electricity bill of JIRAMA. Other participants wished that the project widens its focus and includes also other electrical appliances in order to achieve greater impact.

List of participants

A total of 36 participants participated in the LSC meeting with 36% of women attendees. (See Appendix for a signed attendance sheets). A total of 64 local organizations, entities and persons had been invited via email, mail, or phone calls and 28% of all invitations resulted in participation. Further public announcement (newspaper adds, posters...) of the meeting proved to be quite successful; 8% of all participants were not personally invited.

	Male	Female	Total
Antananarivo	23	13	36
Total	23	13	36

LSC in Antananarivo:

LSC Antananarivo	Number	%
Number of participants with invitation	33	92%
Number of participants without invitation	3	8%
Number of participants at LSC	36	

Invited organisations/entities that participated	18	28%
Invited organisations/entities that did not participate	46	72%
Number of invitations sent out	64	

	Antananarivo				
	Name of participant	Woman or Man	Organisation	Title	Contact/Mail
1	ROSCHER Bella	W	WWF Suisse	Project Manager	417 926 549 32/bella.roscher@wwf.ch
2	LIPPUNER Martina	W	WWF Madagascar	Communication Manager	034 49 803 84/mlippuner@wwf.mg
3	RANDRIAMBOLA Voahirana	W	WWF Madagascar	Footprint Programme Coordinator	034 49 803 55/vrandriambola@wwf.mg
4	RABARISON Volantiana Lantsoa	M	FIMZOMPAM (Association de consommateurs)	Président	032 04 239 93/ 033 12 330 83 /fimzompam@hotmail.fr
5	RAKOTOARISON Mamisoa	M	FIMZOMPAM (Association de consommateurs)	Conseillère	033 07 411 62/034 06 293 20
6	ANDRIANANTENAINA M Narindra	W	JIRAMA	Stagiaire	034 91 179 86/aina.prof@gmail.com
7	RAFAURAVAKA Andrinirina Tatamo	M	Ministère de l'Energie	Ingénieur d'Etudes	033 71 460 76
8	ANDRIANJAFITRIMO	M	IST	Enseignant	033 06 589 81/trimo027@gmail.com
9	ANDRIAMITANTSOA Tsiferaniavo	M	MEF/DCC/AND		034 05 623 14
10	ANDRIANTAVY Hary	M	CEDRE	Consultant	034 02 537 94
11	Chan Thio Mine Nadia	W	ToughStuff	Country Director	034 14 500 31
12	Mireille MARTIN	W	Grand Angle	Manager	0311 815 10
13	RANAIVOSON Ravaka	W	Fondation Tany Meva	Gestionnaire de Programme	034 07 083 76/r.ranaivoson@tanymeva.org.mg
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Figure 8: Participants' list for Antananarivo

Pictures from the LSC meeting

LSC meeting in Antananarivo, 10 Oct 2012:





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

>> *Please discuss how the stakeholder's comments have been addressed and include the changes to the design of the programme based on their feedback.*

The table below summarizes stakeholders' main comments and shows how this feedback is considered in the project design.

Stakeholder comment	Was comment taken into account (Yes/ No)?	Explanation (Why? How?)
Number of CFLs distributed under the project is too small	Yes	With the foreseen number of 500,000 CFLs to be distributed around 60% of grid-connected households could be covered. The project will increase the number of CFLs to 776,500, which will increase coverage to around 90% and will include also the city of Fianarantsoa in the project. For this two GS projects will be developed, one covering the capital of Madagascar and another project covering the 7 other cities.
The project should not be limited to the selected 8 cities, but should cover the entire country.	No	Project does not envisage covering the entire country, therefore it was decided to focus on the 8 largest cities in Madagascar. This is also due to limited financial sources. Moreover, the project does not wish to be a substitute for lamp sellers on the market. Lamp sellers should optimize their activities by offering efficient and high quality lamps at affordable prices. The project envisages supporting this be the implementation of a regulatory

		framework for efficient lighting technologies.
Distribution should not be limited to households that can provide a JIRAMA electricity bill. Other users for example in rural areas, that are not connected to the JIRAMA electricity grid or non-domestic users such as universities and enterprises should also be eligible to participate in this project.	No	In fact it is difficult to monitor and evaluate the impact of the project if the household is not a client of JIRAMA and does not receive an electricity bill. Further, if we include customers without electricity bill then this increases the risk that CFLs are bought for stock or resold. This is also why a quota (maximum number of CFLs that a household is allowed to purchase) is applied.
Maximum number of CFLs per household (2-3 CFLs/hh depending on the city) is inadequate.	Yes	A quota defining the maximum number of CFLs that a household is allowed to purchase is necessary to limit the risks that household purchases CFLs for stock or resells CFLs.
Sale price of the CFL at 1,000 Ariary is too high and should be lowered.	No	It should be recognized that the price of 1,000 Ariary per CFL is a subsidized price. Giving away things for free often leads to negligence and is not economic. The defined price for a project CFL is lower than the average lowest price suggested by households investigated during the baseline survey in the 8 targeted cities (1,295 Ariary/CFL in Antsirabe) and it is equal to half the price of a regular cheap CFL available in the market of which quality customers were disappointed. Moreover, one should consider that a too low price will create market distortion and may discourage lamp sellers that have to continue in a regulated market that respects the general interest and the environment. The income for lamp sale is used to partly finance collection of CFLs at end of lifetime.
Project should also include other electrical appliances	No	This is an energy-saving lamp project focusing on distributing CFLs to households in Madagascar. To open up the project to include other domestic electric appliances would require much more financial means and a larger project set-up.
This project must comply with the texts regarding Environmental Impact Assessment. Organizations are also in place for that matter.	Yes	We will make sure that the project follows all the national obligation.
The households' electricity consumption should be monitored	Yes	The household's electricity consumption is one key indicator for the impact monitoring that WWF will carry out with the partners.

Surveys must be done to monitor impacts	Yes	Surveys are part of the methodology of impact monitoring. The surveys will be done after the CFL distribution.
Show households how to track their own electricity consumption on their bill	Yes	Explanation about electricity bill will be given during the communication campaign. The goal is to help households to better understand and to manage their electricity bill. This will be carried out with the help of JIRAMA.
Make the surveys during the consumption recording by JIRAMA	No	JIRAMA's employees in charge of the recording already have a lot of work to deal with. It is also preferable to have external pollsters to minimize the potential bias.
Take a sample of customers and monitor their electricity consumption	Yes	This is part of the impact monitoring that JIRAMA has already planned.

The discussions on how the project's impact on sustainable development can be monitored revealed the following parameters (see table below).

Stakeholder comment	Was comment taken into account (Yes/ No)?	Explanation (Why? How?)
The decrease of fuel oil consumption by JIRAMA should be monitored	Yes	This will be included in the impact analysis
Reduction of the peak power demand should be monitored	Yes	It is possible to get the theoretical reduction but the actual number cannot be monitored.
The number of new customers should be monitored	Yes	This information is available with JIRAMA.
Number of complaints should be monitored	Yes	Available in the software's database.
Number of incandescent lamps exchanged should be monitored	Yes	Available in the software's database.
Number of failed CFL returned (after usage) should be monitored	Yes	Available in the software's database
Decrease of the electricity bill	Yes	This information is available with JIRAMA.

D.4. Report on the Continuous input / grievance mechanism:

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

Stakeholders' comments on input / grievance mechanism

Continuous input / grievance mechanism was discussed with stakeholders during the three LSC meetings. The table below summarizes the discussions and stakeholders' wishes.

Stakeholder comment	Was comment taken into account (Yes/No)?	Explanation by PP
The input/grievance mechanism chosen must be communicated to the concerned people (posters, media, JIRAMA invoice, etc.	Yes	The input/grievance mechanism will be advertised during the communication campaign
Consider people who can't write	Yes	The possibility will be given to people who can't write to be able to give feedbacks. A person will be made available to write for people who are illiterate.
Appoint a person responsible for the recording feedback in each town.	Yes	The input/grievance mechanism will be available in every town targeted by the project
Clearly define who will : - record complaints - Regroup and deal with them - Make the report	Yes	The project team will appoint a person who will be responsible for these tasks.
Inform people about the answers to their feedbacks. Consider the frequency, the importance and urgency.	Yes	The answers will be reported in the feedback expression book. Depending on the importance and urgency of the issue, the project team may use radio, TV or newspaper.
Make the Continuous Input & Grievance Expression Process Book available in JIRAMA	No	The expression books will be made available in the TELMA shops. At JIRAMA it will be difficult to mobilize an additional staff for taking care of the book.
Make regular surveys	Yes	Surveys will be done after completion of CFL distribution.
Continuous Input & Grievance Expression Process Book	Yes	An expression book will be accessible publicly. A person will be made available to write for people who are illiterate.
Continuous Input & Grievance form	Yes	A sheet will be made available for people asking for it.
A computer should be available to record the comments	Yes	There will be a computer in TELMA shops for the management of the CFL distribution. The comments will be recorded regularly (at least once a week) and sent by email to the project team.
Free SMS to provide input and feedback	No	It would require more resources and pose some technical problems (how the SMS would be treated, which operator to choose, too much complaints with little possibility to intervene and give feedbacks).
Free Hotline to provide input and feedback	No	It would require more resources for a free hotline.
Website an email address	Yes	The possibility will be offered for the stakeholders to give feedback by email. A project website will be created, where contact details are described.
Mailbox	No	It would take longer for the information to get to the project team. It would be better to go directly to the distribution spot.
Suggestion boxes	No	It is the same idea as the expression book. The expression book has the advantage of being publicly

		accessible so that everyone can check if the issue they raised has been addressed or not.
--	--	---

The following input / grievance mechanism will be applied for this project:

	Method Chosen (include all known details e.g. location of book, phone, number, identity of mediator)	Justification
Continuous Input / Grievance Expression Process Book	The expression process book will be located in the TELMA Shops in the targeted city.	The TELMA shops are the place, where households will buy the project CFLs. Thus, making available the expression books in the TELMA shops ensures easy access for all households.
Telephone access	Phone number: +261 34 49 810 03	The phone number will be communicated during communication campaign before the start of CFL distribution.
Internet/email access	Email address: lumitsits@wwf.mg	The email address will be communicated during communication campaign before the start of CFL distribution.
Nominated Independent Mediator (optional)	Not applied.	Not mandatory.

All issues identified during the crediting period through any of the Methods shall have a mitigation measure in place that should be added to the monitoring plan.

D.5. Report on stakeholder consultation feedback round:

>> The stakeholder consultation feedback round was initiated end of October 2013 and ended at the beginning of January 2014.

The PDD including the LSC report was publicly made available in the GS registry. Global stakeholders were informed via email about the stakeholder feedback round. In the two-months period no comment was received from them.

Local stakeholders were informed via email, letter or phone call about the feedback round. In addition to making the PDD including the LSC report publicly available in the GS registry, the project documentation was made available as hard copy in three easily accessible locations in Antananarivo: 1) the WWF office in Nanisana, 2) the CFL distribution point at the TELMA shop in Behoririka, and 3) the CFL distribution point at the TELMA shop in Ambatomena. The non-technical summary and section D.3 of the PDD were translated in French to ensure that local stakeholders properly understand how due account was taken of any comments received and on measures taken to address concerns raised.

Two stakeholders provided feedback during the feedback round (see below).

Translated feedback forms:

Name and organization	Madame SAM SAO HA Royal Eclairage	RANDRIANASOLO Narindraniaina ONG TARATRA –Ambatonjara- alasora tana 103
What is your overall impression of the project?	Serious project, well designed, dynamic	This project meets parts of the targeted people's needs so it provides positive impacted on them. -On the social level, it communicates some messages public on the disadvantages of the use of incandescent lamps. In this case it can change the behavior of targets to act in a positive way. -On the economic level, the project improves household's budget by reducing their monthly electricity expense
What do you like about the project?	Interesting and beneficial project for the environment and the socio-economic development in the medium term.	It provides an improvement of the living conditions of the targeted households and contributes to the development of the country. It also promotes the benefits of using CFLs (Compact Fluorescent Lamp) and gives a technical and economic assistance to JIRAMA (National electricity company) by reducing their expenditure on fuel.
What do you not like about the project?		This project does not cover the cities of Madagascar.
Are you content with how feedback from the local stakeholder consultation meeting was considered in the project design (PDD)?	Yes	If one is satisfied
Are there any issues that you think need to be addressed?	suggestion: - Broadcast some positive impacts at the end of the project to inform the company and consumers of the importance of the project. - Expand distribution points	In my opinion, there is nothing to be added because this project is impeccable but it is always necessary to manage external threats such as political instability, inflation, insecurity.... that can impact the project negatively.
Signature		RANDRIANASOLO Narindraniaina M.D

Summary of comments received

The two feedbacks received are positive. No negative feedback was received. The following suggestion will be taken into account by the PP:

- Broadcast some positive impacts at the end of the project to inform the company and consumers of the importance of the project.
- Expand distribution points

Please see Annex 5 for invitation tracking table, call for feedback round and original feedback forms.

Annex 1

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Annex 2 - Information regarding Public Funding (ODA declaration)



ANNEX D - OFFICIAL DEVELOPMENT ASSISTANCE DECLARATION

Date: 06 Nov 2012

The Gold Standard Foundation

79 Avenue Louis Casai

Geneva Cointrin, CH-1216

Switzerland

RE: Declaration of Non-Use of Official Development Assistance by Project Owner of GS1334

WWF MWIOP (Madagascar & Western Indian Ocean Program World Wide Fund for Nature)

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

Richard Hughes

I hereby declare that I am duly and fully authorized by the Project Owner of the above-referenced project to act on behalf of all Project Participants and make the following representations:

I. The Gold Standard Documentation

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

II. Duty to Notify Upon Discovery

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





III. Investigation

The Gold Standard reserves the right to conduct an investigation into any project it reasonably believes may be receiving ODA with the condition that some or all of the carbon credits from the project will be transferred to the ODA donor country.

IV. Sanctions

I am fully aware that the sanctions identified in The Gold Standard Terms and Conditions may be applied to me or the above-referenced project in the event that any of the information provided above is false or I fail to notify The Gold Standard of any changes to ODA in a timely manner.

I swear that all of the statements contained herein are true to the best of my knowledge.

Signed:



Name: Bodo Rasendrasoa

Title: Regional Representative a.i.

On behalf of: WWF MWIOPO

Place: Antananarivo, Madagascar

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Annex 3 – Signed Participants” list

Liste des participants à la consultation locale

10 Octobre 2012

Antananarivo

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Liste des participants à la consultation locale

10 Octobre 2012

Antananarivo

	Nom et Prénoms	Homme (H) ou Femme (F)	Organisation	Titre/Fonction	Téléphone/Mail	Emargement
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Liste des participants à la consultation locale

10 Octobre 2012

Antananarivo

	Nom et Prénoms	Homme (H) ou Femme (F)	Organisation	Titre/Fonction	Téléphone/Mail	Emargement
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Annex 4 – Minutes from the LSC meetings

LSC in Antananarivo:

Demandes de clarifications et remarques suite à la présentation du projet (Antananarivo 10 Octobre 2012)

Délégation UE

Participation de 1000 Ar par lampe fluo compacte: qu'allez-vous faire du montant de cette participation ?

Promoteurs du projet : Cette somme sera utilisée pour la collecte et le recyclage des LFC en fin de vie

Textes réglementaires : textes pour importer les lampes du projet ou pour l'ensemble du marché ?

Promoteurs du projet : A Madagascar, il n'y a pas de textes réglementaires sur les lampes. L'objectif est de mettre en place une réglementation pérenne pour l'ensemble du marché.
Dans les autres pays, ces textes existent et incitent à l'utilisation des lampes efficaces

CEDRE

Pour la ville d'Ambositra : avez-vous des feedbacks sur ce projet pilote ?

Promoteurs du projet : L'opération pilote réalisée dans la ville d'Ambositra a eu comme principaux impacts :

- Environ 5 700 LI échangées
- Une réduction de 7 à 10% de la facture mensuelle des ménages
- Une diminution de la consommation de Gasoil par la JIRAMA (environ 7 Millions Ariary en Novembre et Décembre 2011)
- Une réduction de la puissance demandée en période de pointe

Comment allez-vous recycler les lampes à incandescence qui seront collectées ?

Promoteurs du projet : Les lampes à incandescence échangées ne seront plus utilisées. Il ne s'agira pas uniquement de les détruire mais de chercher à réutiliser en partie ces lampes (ex : artisanat). Il faut signaler que ces lampes seront recyclées même si elles ne comportent aucune substance dangereuse pour l'environnement.

Association FIMZOMPAM

Le représentant de cette association de consommateurs a exprimé sa satisfaction sur le projet.

A quelles normes ces lampes se réfèrent-elles ?

Promoteurs du projet : Ces lampes fluo compactes sont conformes aux normes Européennes. De plus, des tests par un laboratoire européen seront effectués sur un échantillon afin de s'assurer de la qualité des lampes qui seront distribuées.

Y-a-t-il une possibilité pour éviter les contrefaçons ? Comment distinguer le vrai du faux ?

Promoteurs du projet : Les lampes fluo compactes distribuées dans le cadre du projet comporteront un marquage indélébile qui les différenciera des autres lampes.

Pourquoi le choix de TELMA ?

Promoteurs du projet : La Fondation TELMA est un organisme qui a des objectifs sociaux et de protection de l'environnement. Ce projet cadre donc avec ses objectifs. La Fondation TELMA prend en charge les aspects logistiques, le personnel et le transport relatifs à la distribution des lampes fluo compactes.

Avez-vous des références normatives ?

Promoteurs du projet : Actuellement, il n'y a pas encore de normes sur les lampes à Madagascar. Au niveau international, il y a l'IEC (International Electrotechnic Commission).

IST

Impact environnemental du projet : que fera-t-on des LFC en fin de vie ?

Demande de précisions sur la réduction des émissions de CO2 : quand est-ce qu'il y a la réduction ? A la fabrication ou à Madagascar ?

Il faut signaler que $1,5 \text{ mg de mercure} \times 500\,000 = 750\,000 \text{ mg de mercure}$!

Promoteurs du projet : Un volet sur le recyclage des LFC en fin de vie est prévu dans ce projet et un partenariat sera mis en place pour étudier et mettre en œuvre ce recyclage. Il faut signaler que ces lampes vont durer entre 9 et 12 ans et que le mercure ne représente pas une menace tant que la lampe n'est pas brisée.

La réduction des émissions de CO2 est obtenue lorsque le ménage substitue les LI actuelles par des LFC du projet et qu'il utilise la LFC pour s'éclairer. Les lampes fluo compactes seront importées.

M LANDRY : Guillman

Pourquoi ne pas utiliser les lampes LED ?

Promoteurs du projet : Les Standard sur les LED ont été établis en 2010 et les fabricants optimisent actuellement leur processus de fabrication. De ce fait, les lampes LED de bonne qualité coûtent encore chers (entre 40 et 60 USD). Il faut cependant noter que le LED est la lampe de l'avenir. En termes de coût/bénéfice, les LFC sont plus intéressantes à l'heure actuelle.

Lapidairerie

La distribution restera-t-elle seulement au niveau de la Fondation TELMA ?

Promoteurs du projet : Le projet cite le TELMA Shop comme point de distribution et reste ouvert à d'autres propositions et possibilités.

Fondation TANY MEVA

L'étude s'est basée sur la fourniture d'électricité par les centrales thermiques : il y a déjà des centrales hydroélectriques. Quel est le lien avec la diminution de la puissance appelée ?

Promoteurs du projet : En période de pointe (entre 17 heures et 22 heures), la demande en puissance est forte car les clients de la JIRAMA utilisent tous l'électricité durant cette période. Pour répondre à cette demande additionnelle, la JIRAMA fait tourner ses groupes thermiques en plus des centrales hydrauliques.

Les indicateurs qu'on a obtenus sont issus d'un réseau isolé (Ambositra). Antananarivo est relié à un réseau interconnecté.

Promoteurs du projet : Une étude faisabilité a été effectuée en 2009, et des enquêtes de référence ont été effectuées dans les villes ciblées.

Une opération pilote a été également menée dans la ville d'Ambositra.

L'interconnexion est une technique qui permet de mettre en commun les systèmes de production et de transport de 2 ou plusieurs agglomérations, qui à l'origine étaient indépendantes.

Les indicateurs restent donc valides pour mesurer les impacts du projet, car ils sont calculés en se référant à l'ensemble des centrales qui sont interconnectées par le réseau de transport.

Qu'en est-il des villes rurales ? Et les clients fournis en électricité par des opérateurs autres que JIRAMA ?

Promoteurs du projet : Ce projet cible les grandes villes de Madagascar fournies en électricité par la JIRAMA.

La mise en place d'une norme et d'une réglementation permettra aux ménages de disposer de lampes de bonne qualité à un prix abordable, sachant que la technologie avance vers des produits de moins en moins chers.

Clarifications données par DG JIRAMA

- Sur la distribution pourquoi TELMA ?
La distribution de ces lampes constitue une charge logistique, administrative, TELMA s'est proposée pour le faire et nous les en remercions. Si d'autres partenaires sont intéressés, le projet est ouvert.
- Pour le calcul des réductions d'émissions de CO₂, il y a des démarches et des méthodes précises qui ont été normalisées par les organismes de certification et de vérification des émissions.
- La distribution des LFC est effectuée dans ces villes car il y a un financement par l'intermédiaire des crédits carbone qui nécessite la disponibilité des données et des informations nécessaires à la mesure des impacts.

Jacques Legros

Peut-on avoir une idée globale du projet en termes de financement?

Promoteurs du projet : Le projet coûtera environ 1,8 Million USD.

Les principaux postes de dépenses sont : l'importation des LFC (), la campagne de communication (), la distribution des LFC (), la mise en place de normes et d'une réglementation (), l'étude et le recyclage des LFC en fin de vie (), la mesure des impacts pour chaque volet du projet.

Les crédits carbone volontaires permettent de financer en partie le projet. Si d'autres sources de fonds seraient disponibles, les fonds issus des crédits carbone seront réalloués à d'autres activités du projet.

Doublon entre le suivi des impacts et les données disponibles au niveau de JIRAMA ?

Promoteurs du projet : *Les données de la JIRAMA font partie des informations nécessaires aux études d'impacts et au suivi du projet. Il ne s'agit donc pas d'un doublon car toutes les informations sont coordonnées par les partenaires.*

Une enquête a déjà été effectuée au niveau d'Ambositra : est-il possible de faire de même (1 mois après distribution) dans les autres villes ?

Promoteurs du projet : *Oui cela est déjà prévu dans le projet.*

Qu'en est-il de l'avenir de ces lampes par rapport aux lampes LED qui commencent à être disponibles sur le marché.

Promoteurs du projet : *On ne sait pas quand les LED seront compétitives car les normes ont été mises en place en 2010. Pour l'instant, ce sont les LFC qui sont le plus avantageux en termes de coûts/bénéfices.*

Que faire des personnes qui ne pourront pas avoir accès aux lampes du projet ?

Promoteurs du projet : *La réglementation a pour objectif de promouvoir un marché de lampes efficaces de bonne qualité à un prix abordable.*

Il faut signaler que le projet ne peut et ne veut pas se substituer au marché et vise plutôt à améliorer les lampes disponibles sur ce marché grâce à la définition d'une norme et la mise en place d'une réglementation.

Précisions concernant le cadre réglementaire : le contenu, les stratégies ?

Promoteurs du projet : *Une étude sera menée à cette fin et elle aura à définir la stratégie et les modalités de mise en œuvre de cette stratégie.*

RESTITUTIONS SUITE AUX ATELIERS DE REFLEXIONS ET D'ECHANGES

Gestion continue des doléances

Préalable de la gestion des doléances : communiquer le système adopté dans les médias, affiches (JIRAMA, TELMA Shop), au verso des factures JIRAMA, ... et considérer ceux qui ne savent pas écrire

- Mettre un ordinateur dans les TELMA Shop afin de récolter une version électronique des doléances

Promoteurs du projet : un ordinateur est utilisé dans les TELMA Shop pour la gestion de la distribution des LFC. Son utilisation dans le cadre de la gestion des doléances sera examinée, sachant que les doléances envoyées par email pourront éventuellement être traitées de manière centralisée à Antananarivo.

- Distribuer une feuille de doléances (FD) pendant l'échange des lampes. La FD peut être rendue au niveau des partenaires (TELMA Shop, JIRAMA locales) qui le transmettront
- Menu sms dans les téléphones / sms gratuit/ Possibilité d'une campagne sms pour informer sur la possibilité d'envoyer des sms sur le projet
- Créer un Numéro vert pour tous les opérateurs
- Créer un site Web, une adresse email, facebook, twitter
- Mettre un Cahier de doléances au niveau des agences JIRAMA, TELMA Shop et associations des consommateurs dans toutes les villes ciblées
- Ouvrir une Boîte Postale

Traitement des doléances

- Mettre un représentant au niveau de chaque ville pour récolter les doléances
- Bien définir qui va traiter les doléances
- Regroupement et analyse
- Rapport à effectuer

Communication

- Faire un feedback par rapport aux doléances (périodicité à définir selon l'importance et l'urgence des doléances)

Les promoteurs du projet ont annoncé par ailleurs qu'ils ont enregistré les autres propositions et suggestions, et qu'ils les étudieront en fonction des ressources disponibles, la faisabilité de leur mise en œuvre.

Une communication sera faite sur la gestion des doléances retenue avant la distribution des lampes fluo compactes.

MESURE DES IMPACTS SUR LE DÉVELOPPEMENT DURABLE ET INDICATEURS

Des textes sont en vigueur concernant les procédures pour les EIE (Etudes d'Impacts Environnementaux) et des organismes sont en place. Il faut se conformer aux textes.

Suivre périodiquement la consommation au niveau des ménages (est-ce qu'il y a eu une baisse de consommation sur la base des données fournies par JIRAMA ?).

Il faut faire des enquêtes au niveau des ménages afin de déterminer les impacts du projet.

Promoteurs du projet : le projet se conformera aux textes et directives en vigueur à Madagascar sur la mise en compatibilité des investissements avec l'environnement.

Conformément à ce qui a été testé lors de la distribution de LFC dans la ville pilote d'Ambositra, la consommation des ménages qui ont effectué des échanges de LFC dans le cadre du projet seront suivis grâce aux informations enregistrées par JIRAMA et par ailleurs, une enquête post-diffusion est prévue d'être effectuée après l'étape de distribution des LFC, pour mesurer les impacts du projet.

AUTRES QUESTIONS ET REMARQUES

1 - Il faudrait étendre dans d'autres villes à Madagascar (Continuité du projet).

Promoteurs du projet : les ressources financières et matérielles dont disposent les partenaires sont limitées et restreignent l'envergure du projet aux grandes villes ciblées. Le projet n'a également pas l'ambition de se substituer aux opérateurs privés, spécialistes de la vente des lampes.

2 - Il faut créer une incitation pour l'utilisation des LBC.

Promoteurs du projet : le projet incite effectivement la population à remplacer les lampes à incandescence par des lampes à basse consommation (participation de 1 000 Ariary/LFC qui est en-dessous du prix des LFC actuellement sur le marché, campagne de communication, garantie de 1 an des LFC du projet, ...)

3 - Ce projet devrait être une opportunité pour JIRAMA afin d'investir et que cela ne soit pas un frein pour l'investissement dans les énergies renouvelables.

Promoteurs du projet : le projet a des impacts positifs pour les ménages, la JIRAMA et réduit les émissions de CO₂. La promotion de l'efficacité énergétique évite la construction éventuelle de centrales thermiques supplémentaires pour satisfaire la demande, et incite JIRAMA à mettre en place des projets de développement durables qui respectent l'environnement et satisfont les besoins de la population.

4 - Il n'y a pas assez de communication (Pas assez de participants à cette consultation).

Promoteurs du projet : les invitations pour cette consultation ont été envoyées à des ménages, à des ONG, des bailleurs de fonds, à des associations de consommateurs, à l'ordre des journalistes, à des sociétés de vente de lampes électriques, aux responsables des Ministères intéressés, ... et fait l'objet de publication dans les journaux de la place.

Plus de 35 personnes ont participé à la consultation du 12 Octobre 2012, mais environ 10 participants n'ont pas pu participer aux travaux de réflexion et d'échanges, compte-tenu de leurs responsabilités.

Toutefois, les doléances, réclamations et suggestions exprimées par les 3 groupes qui ont été constitués ont été nombreuses et riches.

5 - Le planning et la durée du projet sont à préciser.

Promoteurs du projet : conformément à ce qui a été exposé sur le projet, la diffusion des LFC dans les grandes villes débutera au 2^{ème} trimestre 2013 et finira en 2014.

La distribution sera associée à une campagne de communication dans chaque ville et sera suivie par des enquêtes post-diffusion pour la mesure des impacts.

Le projet comportera également les volets réglementations et recyclage qui seront mis en œuvre en 2013.

6 - Il faut plus de transparence par rapport aux aspects financiers (revenus carbone).

Promoteurs du projet : se conférer à la partie "demandes de clarifications " ci-dessus.

7 - Sur la traçabilité et marquage des lampes, il faut que les lampes du projet puissent être distinguées par rapport aux autres lampes.

Promoteurs du projet : les lampes du projet comporteront un logo indélébile conformément à ce qui a été dit lors de la présentation du projet.

8 - Concernant la gestion des déchets, il faut considérer cela dès le départ car les lampes contiennent des éléments nocifs pour l'environnement.

Promoteurs du projet : le projet prévoit un volet recyclage pour la gestion des LFC en fin de vie.

9 - Un manuel de bon usage à distribuer durant l'échange (instructions pour une meilleure utilisation des lampes par les ménages).

Cette proposition est retenue par les promoteurs du projet et des améliorations seront apportées aux "Flyers" qui sont prévus être distribués aux ménages, comme ce qui a été fait dans la ville pilote.

Annex 5 – Evidence from Stakeholder Feedback Round

Call for feedback



Call for Stakeholder Feedback Round

Distribution of Energy Savings Lamps in Madagascar – Project 1 (GS1334)

and

Distribution of Energy Savings Lamps in Madagascar – Project 2 (GS1387)

Invitation by



In collaboration with



Purpose of the stakeholder feedback round

The objective of this stakeholder feedback round is to give stakeholders the opportunity to comment on the project activity, its design and set-up as outlined in the project documentation. The stakeholder feedback round covers all issues raised in the local stakeholder consultation meeting and how due account was taken following the stakeholders' comments. The local stakeholder consultation meetings for the two projects were held in October 2012, the project activity of Project 1 started in September 2013 and the two projects are currently under validation with the Gold Standard. This feedback round is conducted following the Gold Standard guidelines V2.2 for carbon offset projects.

Project documentation

The following project documentation is available:

- Project Design Document (PDD) including the report on local stakeholder consultation activities under section D.

Project documentation can be downloaded at:

- https://products.markit.com/br-reg/public/project.jsp?project_id=103000000001596
- https://products.markit.com/br-reg/public/project.jsp?project_id=103000000001543

or can also be requested from WWF Madagascar or myclimate.

Time frame

Stakeholders are invited to comment on the project activities within a period of two months after receipt of this call for feedback.

Language

Project documentation is available in English. The call for feedback including the non-technical summary is also available in local language.

Giving feedback in writing

Please send your comments on the project either via e-mail or mail to either:

myclimate - The Climate Protection Partnership
Tobias Hoeck
Sternenstrasse 12
8002 Zürich
Switzerland
tobias.hoeck@myclimate.org

WWF Madagascar/ West Indian Ocean
Programme Office /
Randriamanalina Solo Thierry
B.P. 738
(101) Antananarivo, Madagascar
strandriamanalina@wwf.mg

Project descriptions

Distribution of Energy Savings Lamps in Madagascar – Project 1 (GS1334)

The project's goal is to (1) distribute approximately 540,000 high quality CFLs to grid-connected households in the city of Antananarivo in Madagascar to replace inefficient ICLs (Incandescent Lamps, ICL), and to (2) move towards the establishment of a regulatory framework promoting good quality lamps at an affordable price on the market. The project implementation started in September 2013.

Context: In Madagascar, the electrification rate is 39% in urban areas and only 4.8% in rural area. 45% of electricity produced by the national electricity company (JIRAMA) comes from thermal power plant running on fuel and diesel. Each year, Madagascar imports oil for about USD 100 millions to run these power plants. Not only are the exploitation costs high but the power plants also emit CO₂. The electricity cost is, on average, 400 Ariary/KWh, which is very high considering the purchase power of Malagasy people. Half of the lighting technology used in the households in the considered cities is ICL. The ICL are very inefficient as only 5% of the energy consumed is transformed into light. The CFLs, which are 4 to 5 time more efficient, account only for around 20% of the lamps technology employed by the households. High quality CFLs are still not affordable to the majority of the population in Madagascar. By replacing ICL with CFLs electricity consumption decreases and in this way CO₂e emissions from the production of electricity at thermal power plants are reduced.

Given this, a campaign of distribution of efficient light bulbs was initiated by WWF-MWIOPO in partnership with the Ministry of Energy, JIRAMA and the TELMA Foundation. The goal is to distribute 540,000 CFLs in the city of Antananarivo. Alongside these efforts, action must be taken to promote the development of a good quality and affordable efficient lamps market through incentives and the progressive phasing out of incandescent light bulbs. These measures are taken in the context of sustainable low-carbon economy.

Pilot: A pilot project was implemented from October 6th to 21st, 2011 in the town of Ambositra (not covered by this project). A total of 5,873 ICL with an average power of 51W have been exchanged with 20W CFLs. The average reduction in electricity bill was about 10% for the month of December 2011 and the economic savings of JIRAMA is estimated at 7 million Ariary for the months of November and December 2011. Thus, the pilot operation is considered a success.

Implementation: Project implementation started in September 2013 and it is expected that the anticipated number of CFLs will be distributed within a period of 6 months. CFLs are distributed via the network of the TELMA Shops, TELMA offices and JIRAMA agencies in the targeted city. For each city the maximum number of CFLs that a household can exchange for handing in ICL is defined. Each household must bring along the latest electricity bill (issued by JIRAMA) and the national identity card to TELMA Shop so that the agent can register name and JIRAMA customer number for each household. The CFLs are sold at a subsidized price of 1,000 Ariary per lamp. This price was defined based on information on the willingness to pay we obtained from the baseline survey 2011.

Expected results:

- 540,000 CFLs distributed to approximately 198,800 households;
- 540,000 incandescent lamps collected and recycled;
- Households aware and convinced of the benefits of the use of energy-saving lamps;
- Decreased household electricity bill by about 7%;
- Aggregate electricity savings between 9.4 to 15.9 GWh per year;
- Approximately 52,000 tons of CO₂ avoided over 7 years;
- Regulatory framework promoting good quality efficient lamps adopted;

Call for feedback (French)

Invitation pour la deuxième consultation publique

Feedback round / Appel à commentaires

Diffusion de lampes à basse consommation à Antananarivo



En collaboration avec



Deuxième consultation publique (feedback round)

Une première consultation a été menée le 10 Octobre 2012 afin de récolter divers points de vue sur le projet, de prendre en compte les préoccupations et les recommandations de toutes les personnes concernées de près ou de loin par le projet. A la suite de cela, le projet a été modifié afin de prendre en compte, dans la mesure du possible, les commentaires et recommandations des participants. Le projet de diffusion de lampes à basse consommation dans la ville d'Antananarivo a commencé en Septembre 2013.

Cette deuxième consultation (feedback round) a pour objectif de donner l'opportunité aux personnes concernées de donner leurs commentaires sur le projet et sa mise en œuvre tel que décrit dans la documentation du projet.

Cette consultation est menée suivant les directives du guide de Gold Standard Version 2.2 pour la mise en œuvre de projets de compensation des émissions de CO₂.

Documentation disponible

Les documents suivants disponibles :

- Document de conception de projet (PDD, en version anglaise), y compris le rapport sur la consultation des parties prenantes locales activités prévues à l'article D.
- Section D3 du rapport sur la consultation des parties prenantes (traduite en version française) ;

Le PDD peut être téléchargé à l'adresse:

<http://goo.gl/nRgW4J>

La section D3 du rapport de consultation est jointe à cette invitation.

Les deux documents peuvent également être consultés dans l'un des points suivants :

- Bureau de WWF à Nanisana,
- Point Lumitsits auprès de TELMA Shop Behoririka,
- Point Lumitsits auprès de TELMA Shop Ambatomena.

Echéance

Les parties prenantes sont invitées à se prononcer sur les activités du projet dans un délai de deux mois après réception de cet appel à commentaires.

Langue

- La section D3 du PDD a été traduite en version française et est jointe à la présente invitation.
- Le résumé non technique est en version française et est joint à la présente invitation.
- Le PDD est disponible en version anglaise.

Possibilité de donner des feedbacks par écrit

Vous pouvez envoyer vos commentaires par courrier ou par email à :

Randriamanalina Solo Thierry

WWF Madagascar/ West Indian Ocean Programme Office /B.P. 738

(101) Antananarivo Madagascar

strandriamanalina@wwf.mg

034 49 840 03 / 034 16 587 11

Description du projet (Résumé non technique)

Distribution de lampes basse consommation à Madagascar

Le projet a pour objectif de :

- stimuler le marché de lampes économiques de bonne qualité : inciter les ménages à utiliser des lampes économiques qui ont une longue durée de vie ; 540 000 LFC seront mis à la disposition de 140 000 à 200 000 ménages de la ville d'Antananarivo.
- promouvoir un marché de lampes économiques de bonne qualité à prix abordable : mettre en place les dispositifs réglementaires et mécanismes favorisant l'accès aux lampes économiques de bonne qualité.

Contexte: A Madagascar, le taux d'électrification est de 39% en milieu urbain et 4,8% en milieu rural. 45% de l'électricité est produite à partir de groupes thermiques fonctionnant au fuel et au gasoil. Les coûts y afférent reviennent cher à la JIRAMA ; chaque année, près de 100 Millions USD de carburant sont importés pour alimenter les générateurs. Le recours aux centrales thermiques se présente ainsi comme un investissement non rentable et entraîne l'émission de gaz à effets de serre qui contribuent au réchauffement climatique. Le KWh coûte, en moyenne, 400 Ar à Madagascar. L'éclairage par des lampes à incandescence (LI) représente entre 10 à 20% de la facture d'électricité des ménages ; il accapare ainsi une part non négligeable de leur budget. Les lampes à incandescence sont très inefficaces car elles transforment 95% de l'énergie qu'elles consomment en chaleur et seulement 5% en lumière. Or, elles représentent environ 50% des lampes utilisées dans les villes ciblées. Les lampes fluo compactes (LFC) sont 4 à 5 fois plus performantes que les LI. Or, les LFC représentent seulement 21% des lampes utilisées par les ménages. Les lampes économiques de bonne qualité coûtent chers ; ce qui encourage les ménages à se tourner vers les LFC de moindre qualité.

Compte tenu de cela, une opération de diffusion de lampes basse consommation a été initiée par WWF-MWIOPO en partenariat avec le Ministère de l'Energie, la JIRAMA et la Fondation TELMA.

Opération pilote : Une opération pilote a été mise en œuvre du 06 au 21 Octobre 2011 dans la ville d'Ambositra. 5873 lampes à incandescence avec une puissance moyenne de 51W ont été échangées par des lampes fluo compactes de 20W. La diminution moyenne de la facture d'électricité des ménages a été d'environ 10% pour le mois de décembre 2011 et l'économie de la JIRAMA estimée à 7 millions Ariary pour les mois de Novembre et Décembre 2011. Ainsi, l'opération pilote qui a été réalisée a été un succès.

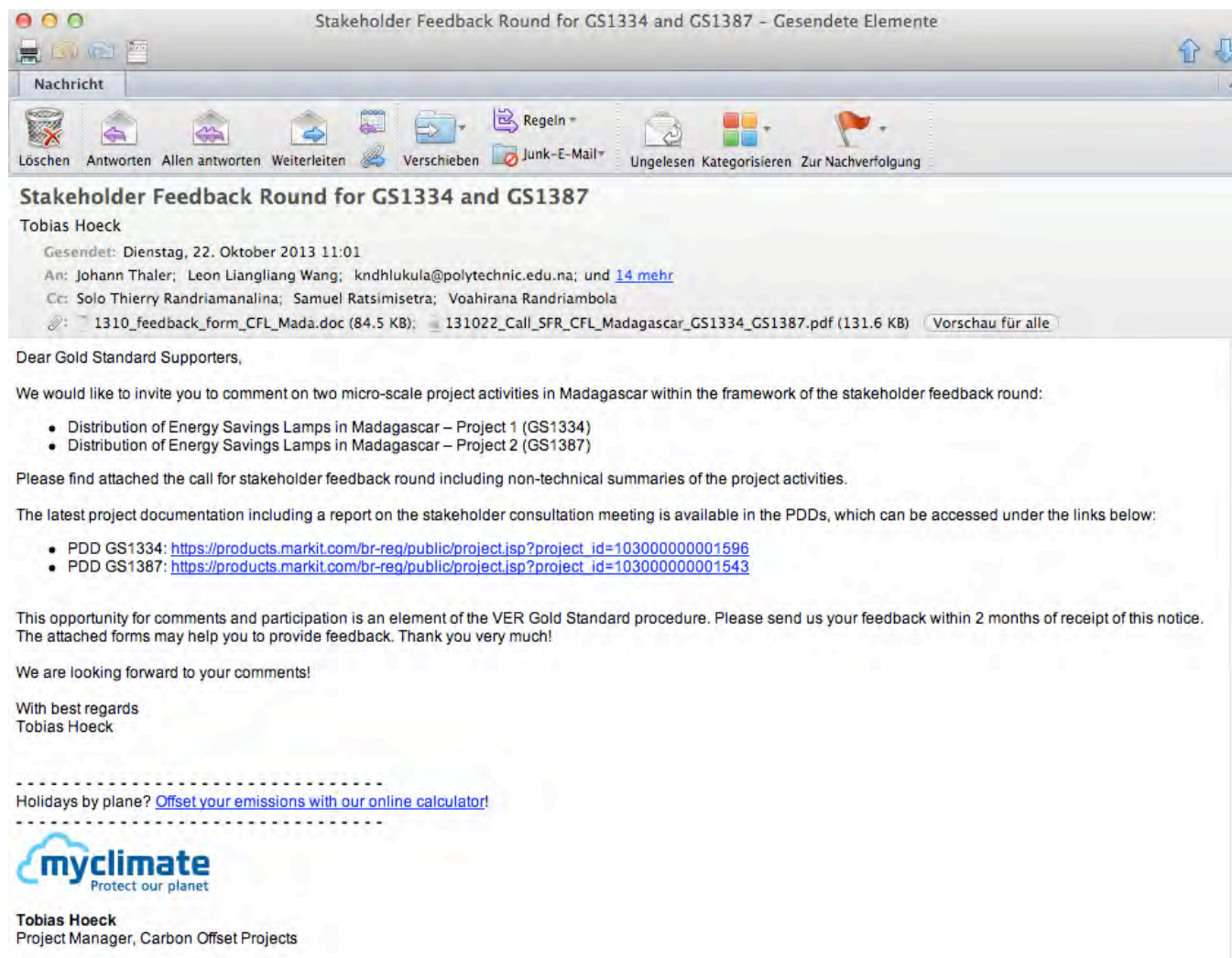
Mise en œuvre : La mise en œuvre du projet a commencé en Septembre 2013 et il est prévu que les LFC seront distribuées dans un délai de 6 mois. Le nombre maximum de LFC qu'un ménage peut échanger est de 4. Les LFC seront disponibles au niveau des Points d'Echange suivants : agence JIRAMA 67 HA, agence JIRAMA Soanierana, agence JIRAMA Ambatonakanga, agence JIRAMA Mahavoky, agence JIRAMA Tanjombato, agence JIRAMA Analamahitsy, agence JIRAMA Ambodimita, Bureaux JIRAMA Mandrozeza, Bureaux TELMA Ambatomena, Bureaux TELMA Behoririka.

Pour obtenir les LFC, l'abonné "ménage" (de type résidentiel) devra se présenter se munir de : Sa facture d'électricité la plus récente, le nombre de lampes à incandescence (LI) en état de marche à échanger, 1 000 Ar par lampes à incandescence à échanger, la carte d'identité nationale du représentant du ménage.

Résultats attendus :

- 540 000 LFC distribuées auprès d'environ 130 000 ménages à Antananarivo ;
- 540 000 lampes à incandescence collectées et recyclées ;
- Ménages sensibilisés et convaincus sur les avantages de l'utilisation des lampes à basse consommation ;
- Diminution de la facture d'électricité des ménages d'environ 7% ;
- Diminution de l'appel de puissance au niveau de JIRAMA compris entre 9,4 et 15,9 GWh;
- Emissions d'environ 52 000 tonnes de CO₂ évitées sur 7 ans;
- Projet de cadre réglementaire favorable pour les lampes efficaces de bonne qualité ;

Email sent to global stakeholders:



Stakeholder Feedback Round for GS1334 and GS1387

Tobias Hoeck

Gesendet: Dienstag, 22. Oktober 2013 11:01

An: Johann Thaler; Leon Liangliang Wang; knhdlukula@polytechnic.edu.na; und [14 mehr](#)

Cc: Solo Thierry Randriamanalina; Samuel Ratsimisetra; Voahirana Randriambola

📎 1310_feedback_form_CFL_Mada.doc (84.5 KB); 📎 131022_Call_SFR_CFL_Madagascar_GS1334_GS1387.pdf (131.6 KB) Vorschau für alle

Dear Gold Standard Supporters,

We would like to invite you to comment on two micro-scale project activities in Madagascar within the framework of the stakeholder feedback round:

- Distribution of Energy Savings Lamps in Madagascar – Project 1 (GS1334)
- Distribution of Energy Savings Lamps in Madagascar – Project 2 (GS1387)

Please find attached the call for stakeholder feedback round including non-technical summaries of the project activities.

The latest project documentation including a report on the stakeholder consultation meeting is available in the PDDs, which can be accessed under the links below:

- PDD GS1334: https://products.markit.com/br-reg/public/project.jsp?project_id=103000000001596
- PDD GS1387: https://products.markit.com/br-reg/public/project.jsp?project_id=103000000001543

This opportunity for comments and participation is an element of the VER Gold Standard procedure. Please send us your feedback within 2 months of receipt of this notice. The attached forms may help you to provide feedback. Thank you very much!

We are looking forward to your comments!

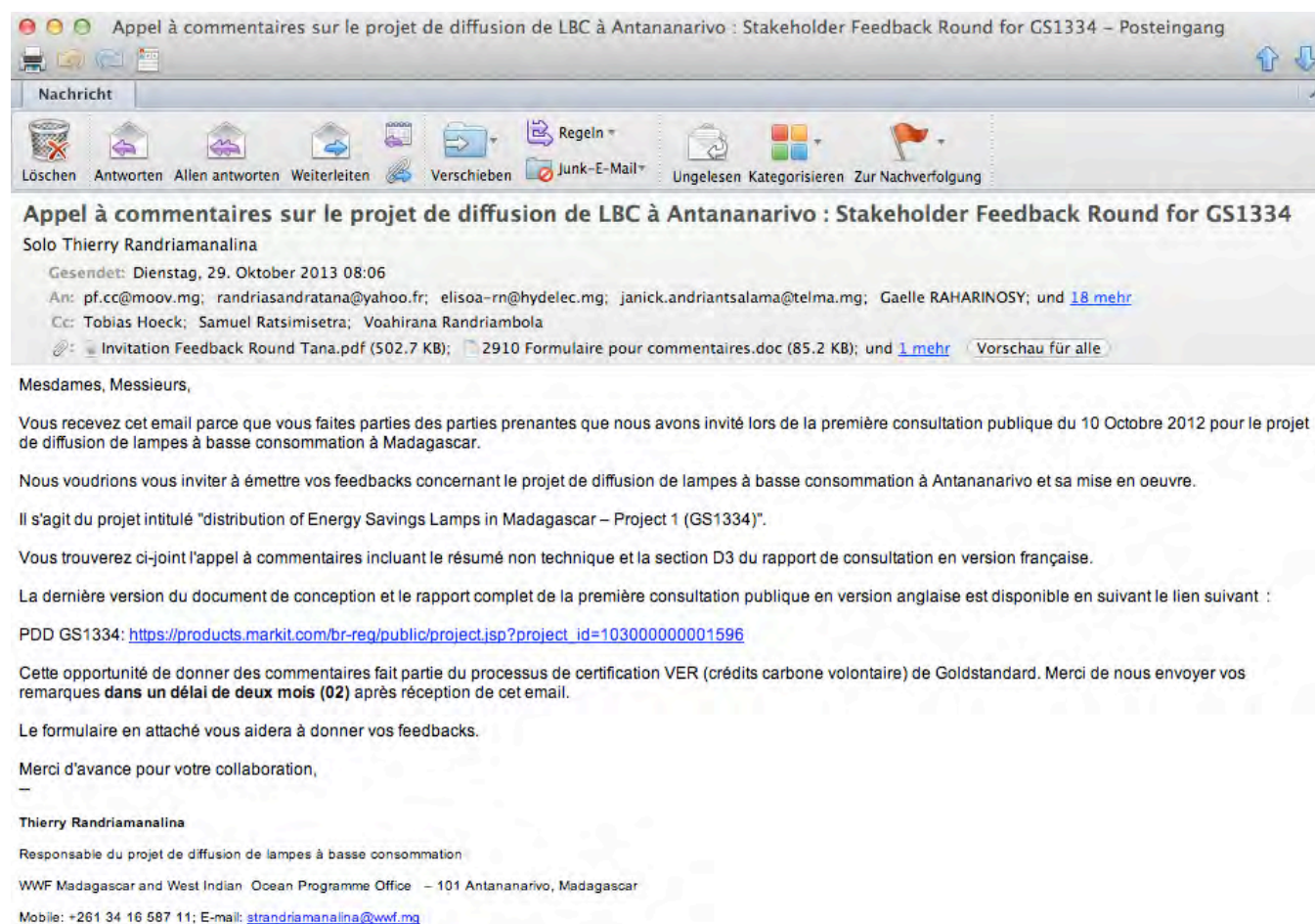
With best regards
Tobias Hoeck

Holidays by plane? [Offset your emissions with our online calculator!](#)

 **myclimate**
Protect our planet

Tobias Hoeck
Project Manager, Carbon Offset Projects

Email sent to local stakeholders:



Appel à commentaires sur le projet de diffusion de LBC à Antananarivo : Stakeholder Feedback Round for GS1334 – Posteingang

Nachricht

Löschen Antworten Allen antworten Weiterleiten Verschieben Regeln Junk-E-Mail Ungelesen Kategorisieren Zur Nachverfolgung

Appel à commentaires sur le projet de diffusion de LBC à Antananarivo : Stakeholder Feedback Round for GS1334

Solo Thierry Randriamanalina

Gesendet: Dienstag, 29. Oktober 2013 08:06

An: pf.cc@moov.mg; randriasandratana@yahoo.fr; elisoa-rn@hydelec.mg; janick.andriantsalama@telma.mg; Gaelle RAHARINOSY; und [18 mehr](#)

Cc: Tobias Hoeck; Samuel Ratsimisetra; Voahirana Randriambola

Invitation Feedback Round Tana.pdf (502.7 KB); 2910 Formulaire pour commentaires.doc (85.2 KB); und [1 mehr](#) (Vorschau für alle)

Mesdames, Messieurs,

Vous recevez cet email parce que vous faites parties des parties prenantes que nous avons invité lors de la première consultation publique du 10 Octobre 2012 pour le projet de diffusion de lampes à basse consommation à Madagascar.

Nous voudrions vous inviter à émettre vos feedbacks concernant le projet de diffusion de lampes à basse consommation à Antananarivo et sa mise en oeuvre.

Il s'agit du projet intitulé "distribution of Energy Savings Lamps in Madagascar – Project 1 (GS1334)".

Vous trouverez ci-joint l'appel à commentaires incluant le résumé non technique et la section D3 du rapport de consultation en version française.

La dernière version du document de conception et le rapport complet de la première consultation publique en version anglaise est disponible en suivant le lien suivant :

PDD GS1334: https://products.markit.com/br-reg/public/project.jsp?project_id=10300000001596

Cette opportunité de donner des commentaires fait partie du processus de certification VER (crédits carbone volontaire) de Goldstandard. Merci de nous envoyer vos remarques **dans un délai de deux mois (02)** après réception de cet email.

Le formulaire en attaché vous aidera à donner vos feedbacks.

Merci d'avance pour votre collaboration,

—

Thierry Randriamanalina

Responsable du projet de diffusion de lampes à basse consommation

WWF Madagascar and West Indian Ocean Programme Office – 101 Antananarivo, Madagascar

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Section D.3 of the PDD translated in French:

Section D3 du PDD

Le tableau ci-après résume les commentaires des parties consultées et la manière dont ces commentaires ont été considérés dans la conception du projet.

Commentaires des parties consultées	Commentaire pris en compte (oui/non)	Explication (Pourquoi ? Comment ?)
Le nombre de LFC à distribuer est trop petit	Oui	Au total, le nombre de LFC à distribuer pour la ville d'Antananarivo a été de 340 000. Ce nombre a été augmenté à 540 000 lampes pour le projet 1. Cela permettra de couvrir les besoins de 60 à 90% des abonnés de type résidentiel de la JIRAMA.
Le projet ne devrait couvrir plus de villes.	Non	Le projet n'envisage pas de couvrir le pays. Cela est dû aux limitations des ressources financières disponibles. De plus, le projet ne souhaite pas se substituer aux fournisseurs de lampes sur le marché. Les fournisseurs de lampes seront encouragés à offrir des lampes économiques de meilleure qualité à prix abordable. Le projet envisage de mettre en place un dispositif réglementaire en faveur des lampes économiques de bonne qualité.
La distribution ne devrait pas se limiter aux ménages disposant d'une facture d'électricité de la JIRAMA. D'autres utilisateurs dans les zones rurales et qui ne sont pas connectés à la JIRAMA ou les abonnés non résidentiels (universités, entreprises) devraient aussi être éligibles.	Non	Il est difficile de mesurer les impacts du projet si les ménages ne sont pas clients de la JIRAMA et ne reçoit pas de facture d'électricité. De plus, si les ménages ne disposant pas de facture d'électricité, le risque de revente ou de non utilisation augmente. C'est aussi la raison pour laquelle un quota (quatre pour Antananarivo) a été fixé.
Le nombre maximum de LFC par ménage est insuffisant (2 à 3 LFC/ménage).	Oui	Le quota pour Antananarivo a été fixé à 4 au lieu de 3. Le quota est une limite nécessaire afin de minimiser la revente ou la non utilisation.
Le prix de 1 000 Ar/lampe est trop élevé et devrait être réduit	Non	Le prix de 1000 Ar est déjà subventionné. Si les lampes sont données gratuitement, cela peut entraîner la négligence et ne promeut pas l'idée que ces lampes de bonne qualité doivent être disponibles sur le marché (donc payant). Le prix qui a été défini est inférieur au prix moyen proposé par les ménages lors des études de références qui ont été réalisées en 2011 (1 295 Ar/ lampe à Antsirabe). Ce prix équivaut à la moitié du prix d'une LFC sur le marché dont la qualité a déjà déçu les utilisateurs. Les revenus générés par cette participation contribueront à l'amélioration du réseau de distribution d'électricité de la JIRAMA bien que cela ne puisse pas financer tous les besoins.
Le projet devrait inclure les autres appareils électriques.	Non	Il s'agit d'un projet de diffusion de lampes économiques pour les ménages à Antananarivo. Cela

		nécessiterait beaucoup plus de ressources d'inclure les autres appareils électriques.
Ce projet doit suivre les lois en vigueur concernant les évaluations des impacts environnementaux. Des organisations existent pour cela.	Oui	Ce projet suivra les obligations nationales en la matière.
La consommation d'électricité des ménages devrait être suivie.	Oui	La consommation électrique des ménages est un indicateur clé que WWF et ses partenaires mesureront.
Une enquête devrait être réalisée pour évaluer les impacts.	Oui	Les enquêtes font parties de la méthodologie d'évaluation des impacts. Les enquêtes seront réalisées à la fin de la distribution.
Il faut montrer aux ménages comment suivre leur consommation en électricité sur la facture d'électricité.	Oui	Des explications concernant la facture d'électricité seront données durant la campagne de communication. L'objectif est d'aider les ménages à mieux comprendre et à gérer leur facture d'électricité. Cela sera réalisé par JIRAMA.
Faire les enquêtes pendant le relevé des factures JIRAMA.	Non	Les employés de la JIRAMA en charge du relevé ont déjà une charge de travail importante. Il est aussi préférable de faire appel à des enquêteurs externes pour minimiser les biais.
Prendre un échantillon de clients et suivre leur consommation électricité.	Oui	Cela fait partie des évaluations d'impacts que JIRAMA a déjà planifié.

Discussions concernant les indicateurs d'impacts du projet

Commentaires des parties consultées	Commentaire pris en compte (oui/non)	Explication (Pourquoi ? Comment ?)
La réduction de la consommation en fuel et en gasoil devrait être mesurée	Oui	Cela sera inclus dans les études d'impacts
La réduction du pic de consommation devrait être mesurée	Oui	Il est possible d'évaluer la réduction théorique de l'appel de puissance mais la vraie valeur est difficile à obtenir.
Le nombre de clients devrait être mesuré	Oui	Les informations sont disponibles chez JIRAMA
Le nombre de doléances devrait être mesuré	Oui	Disponible dans le logiciel de gestion
Le nombre de lampes à incandescence échangées devrait être mesuré	Oui	Disponible dans le logiciel de gestion
Le nombre de LFC en panne (retournées après usage) devrait être mesuré	Oui	Disponible dans le logiciel de gestion
La diminution de la facture d'électricité devrait être mesurée	Oui	Les informations sont disponibles chez JIRAMA

Feedback from received from stakeholder:

Formulaire pour commentaires / Feedback round

Formulaire pour commentaires	
Nom et organization	Madame SAM SAO HA ROYAL ECLAIRAGE
Quelle est votre impression générale sur le projet ?	Projet sérieuse, bien étudié, dynamique
Qu'est-ce que vous aimez dans ce projet ?	Projet intéressant et bénéfique pour l'environnement et pour le développement socio-économique à moyen-long terme
Qu'est ce que vous n'aimez pas dans ce projet ?	
Êtes-vous satisfait de la manière dans les commentaires et suggestions de la première consultation publique ont été pris en compte dans le document de conception du projet (PDD) ?	Oui
Y a-t-il d'autres points qui doivent être considérés selon vous ?	suggestion : publier certains résultats positifs à la fin du projet pour informer la société et les consommateurs de l'importance du projet • étendre les Points d'échange / de distribution
Signature	

Feedback form received from stakeholder:

Formulaire pour commentaires	
Nom et organization	RANDRIANASOLO Narindraniaina <u>ONG TARATRA –Ambatonjara- alasora tana 103</u>
Quelle est votre impression générale sur le projet ?	Ce projet fait partie des besoins des gens ciblés alors il procure des impacts positifs sur eux. -Sur le plan social, il fait communiquer quelques messages aux publiques sur les inconvénients de l'utilisation de la LI (Lampe incandescence). Dans ce cas il peut changer les comportements des cibles à agir d'une manière positive. -Sur le plan économique, ce projet réduit le budget des ménages ciblés en diminuant leur dépense d'électricité mensuel.
Qu'est-ce que vous aimez dans ce projet ?	Il apporte une amélioration de conditions de vie des ménages ciblés et une partie de développement sur le pays, transmet des messages aux publiques pour les avantages de l'utilisation de LFC (Lampe Fluo Compactes) et donne une aide technico-économique pour l'entreprise Malgache (JIRAMA) en réduisant leur dépense de carburant utilisé.
Qu'est ce que vous n'aimez pas dans ce projet ?	Ce projet ne peut pas couvrir les villes de Madagascar.
Êtes-vous satisfait de la manière dans les commentaires et suggestions de la première consultation publique ont été pris en compte dans le document de conception du projet (PDD) ?	Si, on est satisfait
Y a-t-il d'autres points qui doivent être considérés selon vous ?	A mon avis , il n'a rien ajouté car ce projet est impeccable mais il faut toujours bien gérer les menaces apportés par les environnements externes par exemple l'instabilité politique ,l'inflation ,l'insécurité ,.... qui créent des impacts négatifs sur réalisation du projet.
Signature	RANDRIANASOLO Narindraniaina M.D

Invitation tracking table for global stakeholders:

Category Code (see list above)	Organisation (if relevant)	Name of invitee	Means of invitation	Date of invitation	Confirmation received? Y/N
E	Gold Standard: Local Gold Standard Expert, Africa & Middle East	Johann Thaler	johann@cdmgoldstandard.org	22.10.2013	N
E	Gold Standard Expert	Leon Liangliang Wang	leon@cdmgoldstandard.org	22.10.2013	N
F	Renewable Energy & Energy Efficiency Institute, Namibia	Ndhlukula Kudakwashe	kndhlukula@polytechnic.edu.na	22.10.2013	N
F	WWF South Africa	Worthington Richard	rworthington@wwf.org.za (office: +27 11 262 9460, mobile: +27 (0)82 44 66 392)	22.10.2013	N
F	(SACAN Facilitator) EarthLife Africa Johannesburg	Dora Ledello	185 Smit Street, Braamfontein, 8000 South Africa Telephone: +27 (0)730357208 dorahl@ghouse.org.za new address: dora@gendercc.net	22.10.2013	N
F	SouthSouthNorth, South Africa	Raubenheimer Stefan	stef@southsouthnorth.org	22.10.2013	N
F	NOVA Institute	Christiaan Pauw	christiaan.pauw@nova.org.za	22.10.2013	N
F	ONKE Training	Mmathabo Mrubata	mkhuseli@telkomsa.net	22.10.2013	N
F	Zero: Regional Environment Organisation, Zimbabwe	Chigwada Johannes	johannes@zeroregional.com	22.10.2013	N
F	WWF International	Bella Roscher	Bella.Roscher@wwf.ch	22.10.2013	N
F	Greenpeace International	Steve Sawyer	supporter.services.int@greenpeace.org	22.10.2013	N
F	Mercy Corps International	Jim Jarvie	jjarvie@hq.mercycorps.org new contact: dnicholson@dc.mercycorps.org	22.10.2013	N
F	Helio International	Helene O'Connor-Lajambe	Helene.connor@helio-international.org hcl@helio-international.org (helio@helio-international.org)	22.10.2013	N
F	REEEP	Harvey Katrin	katrin.harvey@reeep.org	22.10.2013	N
F	World Vision Australia	Dr. Dean C. Thomson	Dean.Thomson@worldvision.com.au	22.10.2013	N

Invitation tracking table for local stakeholders:

Code	Organisation	Name of invitee	Contact	Means of invitation	Date of invitation
1 B	Point focal Changement Climatique	RANDRIASANDRATANA Germain	pf.cc@moov.mg, randriasandrana@yahoo.fr	Mail	29.10.13
2 A	HYDELEC	RANDRIANISON Feno Elisoa	elisoa-mn@hydec.mg	Mail	29.10.13
3 A	Responsable Communication - Fondation TELMA	Janick Harivola ANDRIATSALAMA	janick.andriatsalama@telma.mg	Mail	29.10.13
4 A	Chargée de projets - Fondation TELMA	Gaëlle RAHARINOSY	gaelle.raharinosy@telma.mg	Mail	29.10.13
5 B	Chef de Région Antananarivo	Mansjara RANDRIAMBOLOLONA	cr_analamanga@yahoo.fr	Mail	29.10.13
6 F	Union Européenne	Maro Brickman		Mail	29.10.13
7 F	Délégation de l'Union Européenne/Chargé de Programme	LEGROS Jacques	jacques.legros@eeas.europa.eu	Mail	29.10.13
8 F	Délégation de l'Union Européenne/Chef de section	BACIGALUPI Claudio	claudio.bacigalupi@eeas.europa.eu	Mail	29.10.13
9 D	Association de journalistes		anjanaday@yahoo.fr, com.ivonjazyty@gmail	Mail	29.10.13
10 A	Chargée de mission mobilité urbaine - Institut des Métiers de la Ville	Marion Sybillin	marion.sybillin@gmail.com	Mail	29.10.13
11 D	Association de consommateurs - Fimzompam	RABARISON Tina	finzompam2011@hotmail.fr	Mail	29.10.13
12 D	Association de consommateurs	RAHARJAOA Daniel	longoanahamba@hotmail.fr	Mail	29.10.13
13 A	Directeur Commercial et Marketing - Guilman	Jimmy RAKOTOARIVELO	jabourganel@hotmail.fr	Mail	29.10.13
14 A	UNIMA		hantrinala.rakotoarivony@unima.mg	Mail	29.10.13
15 A		Andrianavony Tanjakony	and.kony@yahoo.fr	Mail	29.10.13
16 A		Tina ANDRIANARISAINA	drinaz@yahoo.fr	Mail	29.10.13
17 A	Tag's Studio		tags.studio@gmail.com	Mail	29.10.13
18 D	CEDRE - Conseils en Energie, Développement Rural et Environnement	ANDRIANTAVY Hary	cedre.sarl@gmail.com	Mail	29.10.13
19 D	Directeur Général - Toughstuff	Nadia CHAN THIO HINE	madagascar@toughstuffonline.org	Mail	29.10.13
20 B	ONE	RABEFARIHY Andrianaina Tsilavina	tsilavina@pnae.mg	Mail	29.10.13
21 B	ONE	RAKOTOMALALA Frank	fara@pnae.mg	Mail	29.10.13
22 A	Client JIRAMA	RAJONATANA KOLOINA	rajonakolo@yahoo.fr	Mail	29.10.13
23 B	Ministre de l'Energie	RAZAFINDRIRAKA Nestor		Letter	Week of 04.11.2013
24 B	Ministre de l'Energie	RAFAIRAVAKA Andrianirina Tatamo		Letter	Week of 04.11.2013
25 B	SG de l'Energie	RANAIVOSON Andrianbala		Letter	Week of 04.11.2013
26 B	DG de l'Energie	IBRAHIM Abdoufah		Letter	Week of 04.11.2013
27 B	Assistante DG de l'Energie	RAMALIARISOA Herivelio		Letter	Week of 04.11.2013
28 B	Directeur Electricité - Ministère de l'Energie	FABIEN Rémi Roger		Letter	Week of 04.11.2013
29 B	Directeur de l'Environnement	RALALARISSA Christine Edmée		Letter	Week of 04.11.2013
30 B	Bureau des normes	RAVOARAHARISON Patrick		Letter	Week of 04.11.2013
31 C	Directeur des études et de la législation fiscale	Ruphin Georges Juvenès		Letter	Week of 04.11.2013
32 B	PDS de la commune urbaine d'Antananarivo			Letter	Week of 04.11.2013
33 A	Directeur Général JIRAMA	RASIDY Désiré		Letter	Week of 04.11.2013
34 A	Directeur de la Planification Stratégique de la JIRAMA	RAZAFIMANDIMBY Jules		Letter	Week of 04.11.2013
35 A	Directeur Inter-régional Tanà 1 - JIRAMA	RAMBELOSON Francis		Letter	Week of 04.11.2013
36 A	Directeur Inter-régional Tanà 2 - JIRAMA	RASAMISON Zoeline		Letter	Week of 04.11.2013
37 A	HENRI FRAISE			Letter	Week of 04.11.2013
38 A	Directeur Général de TELMA	Patrick Pissal Hamida		Letter	Week of 04.11.2013
39 A	Directeur de la Fondation TELMA	Isabelle Salabert		Letter	Week of 04.11.2013
40 F	Union Européenne			Letter	Week of 04.11.2013
41 F	Représentant Résident de la BAD	AbdelKarim Benjaabour		Letter	Week of 04.11.2013
42 F	Energy Specialist - Banque Mondiale	Vority		Letter	Week of 04.11.2013
43 F	Chargé de Programme Environnement - PNUD			Letter	Week of 04.11.2013
44 F	Représentant Résident GIZ	Pascal Lopez		Letter	Week of 04.11.2013
45 F	PIC	Rakoto Andriatsilavo		Letter	Week of 04.11.2013
46 F	AFD	Razafindrahona Lydia		Letter	Week of 04.11.2013
47 F	Embassade Suisse	Eric Mayoraz		Letter	Week of 04.11.2013
48 A	Directeur Général de la Société Grand Angle	Mireille MARTIN		Letter	Week of 04.11.2013
49 A	Directeur Général - Institut de la Maîtrise de l'Energie	RAKOTOMALALA Mioson		Letter	Week of 04.11.2013
50 A	Directeur Général - Ecole Supérieure Polytechnique d'Antananarivo			Letter	Week of 04.11.2013
51 D	ONG TARATRA	RANDRIANASOLO Nandrianaina	Ambatonjara - Aiasora Tana 103	Letter	Week of 04.11.2013
52 F	Vice Président Régional - WCS	RAJAOBELINA Léon		Letter	Week of 04.11.2013
53 F	Country Director - Conservation International	Christopher Holmes		Letter	Week of 04.11.2013
54 D	Vintsy Universitaire	RASOLOFOMANANA Tokimaina Maholy		Letter	Week of 04.11.2013
55 D	Vintsy Universitaire	NAHARIMAHEFA Mbintsoa Adria		Letter	Week of 04.11.2013
56 D	Vintsy Universitaire	ANDRIANALIZAH BACHASSE Andrianaina Herte		Letter	Week of 04.11.2013
57 A	EERTEC	Joscelin Pierre RAKOTOVAO		Letter	Week of 04.11.2013
58 A	HOLCIM			Letter	Week of 04.11.2013
59 A	TRIPHASE Box 218 Suprême Center			Letter	Week of 04.11.2013
60 A	ROYAL ECLAIRAGE Behorinka	Madame Sam Sao Ha		Letter	Week of 04.11.2013
61 A	SAMKOCKWA	M Fong		Letter	Week of 04.11.2013
62 A	Ste HELENA			Letter	Week of 04.11.2013
63 A	Client JIRAMA	RAHARIRAVAKA N'NAH NATHALIE	034 64 821 15	Call + Letter	Week of 04.11.2013
64 A	Client JIRAMA	RAKOTONIRINA JEAN PIERRE	020 22 293 55	Call + Letter	Week of 04.11.2013
65 A	Client JIRAMA	RAMALISON ANGELE	020 22 323 74	Call + Letter	Week of 04.11.2013
66 A	Client JIRAMA	ANDRIANAVONY GREGOIRE	032 02 085 72	Call + Letter	Week of 04.11.2013
67 A	Client JIRAMA	RAMAVOARISOA NIRINA	033 08 779 91	Call + Letter	Week of 04.11.2013
68 A	Client JIRAMA	RAJONATANA KOLOINA	033 74 525 76/rajonakolo@yahoo.fr	Call + Letter	Week of 04.11.2013
69 A	Client JIRAMA	RASOANJANAHARY ESTHER	033 14 019 38	Call + Letter	Week of 04.11.2013
70 A	Client JIRAMA	RAZAFIMAHEFA	033 07 807 07	Call + Letter	Week of 04.11.2013
71 A	Client JIRAMA	Vme Jen		Call + Letter	Week of 04.11.2013
72 A	Client JIRAMA	RAZAFIMBELO Rondoniaina		Call + Letter	Week of 04.11.2013
73 A	Client JIRAMA	RAHAHY Justine		Call + Letter	Week of 04.11.2013