

ANNEX R – PASSPORT TEMPLATE

CONTENTS



- A. Project title**
- B. Project description**
- C. Proof of project eligibility**
- D. Unique Project Identification**
- E. Outcome stakeholder consultation process**
- F. Outcome sustainability assessment**
- G. Sustainability monitoring plan**
- H. Additionality and conservativeness deviations**
- Annex 1 ODA declarations**

SECTION A. Project Title

Title: Panasolar Photovoltaic Project

Date: June 21, 2018

Version No.: 3

SECTION B. Project description

Estimated project start date: July 12, 2016, date were the project owner order the main equipment (solar panels).

The project consists of the construction, installation, operation and maintenance of a newly installed photovoltaic panels for the production of electricity through solar energy. This energy is captured by photovoltaic modules, with an installed capacity of 9.9 MW AC and 12.09 MW DC. These panels are placed on fixed structures anchored to the ground. The project activity will connect to the 34.5 KV substation in Llano Sanchez, via a mix (underground and aerial) transmission line that it does not require for trees to be cut or trimmed where the lines passes. Once the line reaches the substation, it connects to the national electrical grid, known as Empresa de Transmisión Eléctrica, S.A. (ETESA). The project has an expected lifetime of 25 years.

The estimated annual energy generation will be 19,661 MWh with a plant load factor of 18.53% that will generate an annual average of 10,322 reductions of tCO₂e per year, which means a total emission reduction of 72,254 tCO₂e for the first crediting period.

Prior to the project activity, no activity related to the generation of electricity took place in the project area. The baseline scenario is, as per the provisions of the methodology AMS-I.D., "that the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid."

The baseline scenario is therefore the same as the scenario existing prior the implementation of the project activity.

The proposed photovoltaic power project will contribute to the sustainable development trough improvement of family income due to jobs created during construction and operation of the plant, strengthen commercial and institutional conditions and also promote the sustainable development of the surrounding area through the generation of renewable energy, which will expand the available power in Panamanian grid to meet increasing energy demand through clean and renewable sources and have positive impacts on the balance of trade, as Panama's coal and oil imports used to fuel national thermals plants will be replaced by the use of renewable indigenous energy sources.

SECTION C. Proof of project eligibility

C.1. Scale of the Project

Please tick where applicable:

Project Type	Large	Small
	☐	☐
	☐	☐
	☐	☐
	☐	X
	☐	☐
	☐	☐

C.2. Host Country

Republic of Panama

C.3. Project Type

Please tick where applicable:

Project type	Yes	No
Does your project activity classify as a Renewable Energy project?	X	☐
Does your project activity classify as an End-use Energy Efficiency Improvement project?	☐	☐
Does your project activity classify as waste handling and disposal project?	☐	☐

Please justify the eligibility of your project activity:

The project activity is eligible as a GS CO2 reduction project because it meets the following criteria:

- It is a Photovoltaic Power Plant with an installed capacity of less than 20 MWe, which will deliver electricity to the national electricity grid of Panama.
- The project activity does not count with any Official Development Aid (ODA)
- The project activity does not have any prior consideration issues due to the fact that it has begun the GS certification process well before attaining financial closure or beginning construction.
- It is not seeking registration under any other GHG reduction scheme.

Pre-Announcement	Yes	No
Was your project previously announced?	☐	X
No previous announcement has been done concerning the Panasolar Photovoltaic Project.		

C.4. Greenhouse gas

Greenhouse Gas	
Carbon dioxide	X
Methane	☐
Nitrous oxide	☐

C.5. Project Registration Type

Project Registration Type	
Regular	X

Pre-feasibility assessment	Retroactive projects (T.2.5.1)	Preliminary evaluation (eg: Large Hydro or palm oil-related project) (T.2.5.2)	Rejected by UNFCCC (T2.5.3)
	☐	☐	☐

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

SECTION D. Unique project identification

D.1. GPS-coordinates of project location

	Coordinates
Latitude	+8.216667
Longitude	+80.692778



Explain given coordinates

The Panasolar Photovoltaic project will be located in the City of Aguadulce, borough of El Roble. The given coordinates correspond to the location of the field where the panels will be installed.

D.2. Map



SECTION E. Outcome stakeholder consultation process

E.1. Assessment of stakeholder comments

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The local stakeholder consultation was made in community of Vista Hermosa, on May 9, 2014. A survey of opinions was conducted as well as interviews with the inhabitants of the local communities, where the project proponents could seek the views of these people in relation to the project.

A total of 12 people attended the local stakeholder consultation this is due to the fact that the project activity will take place in a largely uninhabited area, and the land where the project will be is currently not utilized for any agricultural or housing purposes.

The residents of the community where the project activity will be executed presented a favorable attitude toward the project. Their opinion reflects a sense that the project will contribute to the local trade and create jobs as well as increase commerce in the area.

The following is a list of the questions that were presented during the opinion poll and the answers that were given:

1 - Are you aware of the 9.9 MW solar power project that is being developed?

According to the results, 98.6% of people were not aware that this project will be developed in the near their community.

2 - Do you think your house, property or community will be positively or negatively affected by the project?

98.4% of participants believe that this project will have no significant negative impact to the environment or to their property. Some people think that since this area is consisting primarily of wild, unkept grass, that the project activity will have no impact on the land. It is also of the opinion of the local community that the impact on wildlife is minimal because the number of species in the area is very small.

3 - Do you think the project activity will negatively impact the health of people in the community?

The vast majority, 98.6% of participants believe that this project will not affect the health of people in the community.

4 – Are you in favor of the project activity?

100% of the participants agreed with the project activity.

5 - What are the major environmental issues that affect your community?

10% believed that there is no environmental problem in the community. However, 25% believe that wildfires and deforestation are an issue. And finally 65% considered the possible difficulties in availability of water during the summer to be a concern.

6 - In your opinion, what are the causes to these problems?

The consensus was unanimous that the problems are all related to deforestation, and that unnecessary logging must be avoided.

7 - Do you think that this project will bring benefits to the community?

100% of the people polled consider that this project will bring benefits to the community.

8- What benefits?

75% of the people polled consider that the project will bring jobs to the community. 25% of the community believes that the project activity will bring economic benefits. The most important benefit that was identified is the creation of jobs, even if some of the jobs are to be temporary.

9 - Do you have a job?

65.5% do not have direct employment, which indicates that the area is of low economic activity. The rest of the people interviewed work in agriculture.

10 - What is your educational level?

65.5% do not have direct employment, which indicates that the area is of low economic activity. The rest of the people interviewed work in agriculture.

11 - How many years have you lived in the community?

The average number of years lived in the community is 51 years.

12 - What advice would you give the developer for this project?

85.7% would recommend to comply with environmental standards, and 14.3% had no recommendations for the developer of this project.

E.2. Stakeholder Feedback Round

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

The stakeholder feedback round is based on a book will be available at the "Vista Hermosa" church , where the stakeholder will be able to include all comments and questions that may appear during construction and operation of the project. The availability of the book has been discussed with the foreman at the construction site and with the clergy at the church, who will then relay the information to all of the construction workers at the project site and to the local population.

The PP has personally visited the stakeholders in category "A" and discussed the project activity at length. Among those stakeholder we can find: Aguadulce's Mayor, Engineer of the Municipality of Agua Dulce, Manager of Water department, Vista Hermosa Organization, Committee of Water in Vista Hermosa, Director of School Eric del Valle, MiAmbiente, Instituto Nacional de Cultura (INAC), and the Ministry of Housing and Territorial Planning.

They are aware of the presence of the book in the Vista Church and they know that if they have any questions or comments regarding the project activity, they can contact Anaconda Carbon or the PP directly also.

Any comments made to this book will be reviewed and addressed by the project owner and responded in person or in writing with the person(s) making the entry into the feedback book. The PP received a comment about the status of the road on July 27, 2017. The PP finish the reparation of the road as response to the stakeholder comment in September 24, 2017.

E. 3. Discussion on continuous input / grievance mechanism

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

	Method Chosen (include all known details e.g. location of book, phone, number, identity of mediator)	Justification
Continuous Input / Grievance Expression Process Book	The book shall be available at the local church of Vista Hermosa.	The information provided from stakeholders will be archived by the project participant and provided to Anaconda Carbon, to be published periodically in the Anaconda Carbon website. Availability of this books was made public during the feedback round.
Telephone access	Mr. Enrico Desiata +507 68966754	The contact information provided corresponds to the project owner, located in Panama which facilitates contact in person if needed. This contact information was given in the invitation to the feedback round as well as during the feedback round
Internet/email access	enrico.desiata@gmail.com or Panasolar.generation@gmail.com	The contact information provided corresponds to the project owner, located in Panama which facilitates contact if needed. This contact information was given in the invitation to the feedback round as well as during the feedback round
Nominated Independent Mediator (optional)	NA	NA

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

SECTION F. Outcome Sustainability assessment

F.1. 'Do no harm' Assessment

Safeguarding principles	Description of relevance to my project	Assessment of my project risks breaching it (low/medium/high)	Mitigation measure
1. The project respects internationally proclaimed human rights including dignity, cultural property and uniqueness of indigenous people. The project is not complicit in Human Rights abuses.	The Project activity is not in conflict with the livelihood of the local communities. Stakeholder consultations that have been carried out through questionnaires and with meetings and have shown all respondents are in support of the Project. It can therefore be concluded that the Project does not cause any human rights abuse. It should also be noted that Panama is a signatory of the United Nations Declaration on the Rights of Indigenous Peoples ¹ as well as numerous United Nations Human Rights treaties ² .	Low	NA
2. The project does not involve and is not complicit in involuntary resettlement	There has been no resettlement as the area was previously uninhabited. This is a private property that formerly was utilized for	Low	NA

¹ <http://unbisnet.un.org:8080/ipac20/ipac.jsp?profile=voting&index=.VM&term=ares61295>

² http://tbinternet.ohchr.org/_layouts/TreatyBodyExternal/Treaty.aspx?CountryID=133&Lang=EN

	cattle grazing.		
3. The project does not involve and is not complicit in the alteration, damage or removal of any critical cultural heritage	There are no archaeological sites on the project site or the surrounding area according to the Archaeological Monitoring permit given to PANASOLAR from the National Institute of Culture (INAC), Resolution No. 157-17 DNPH from date 4 th of July, 2017	Low	NA
4. The project respects the employees' freedom of association and their right to collective bargaining and is not complicit in restrictions of these freedoms and rights	The project owner will strictly respects the employees' freedom of association and their right to collective bargaining, therefore the project is not complicit in restrictions of these freedoms and rights, which are clearly stated in Panama's labor laws ³ and it should be noted that Panama has ratified the ILO Convention 87 and 98 on freedom of association and right to collective bargaining, respectively. ⁴	Low	NA
5. The project does not involve and is not complicit in any form of forced or compulsory	No forced or compulsory labor is involved in the project. The project activity strictly complies	Low	NA

³ Articles 334 - 340 of the Panamanian Labour Code: <http://cetippat.gob.pa/wp-content/uploads/2017/05/co%CC%81digo-detrabajo.pdf>

⁴ ILO Convention 87 and 98
http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:102792

labour	with all laws of other Republic of Panama⁵. The project proponent will only recruit professional staff responsible for construction, operation and maintenance of the Project. All contracts will be signed between the project proponent and the staff and be in accordance to Panamanian laws. The project activity is not complicit in any form of forced or compulsory labor and it should be noted that Panama has ratified the ILO Convention 29 and 105 on elimination of forced and compulsory labor.⁶		
6. The project does not employ and is not complicit in any form of child labour	No child labor is involved in the project, in accordance to Panamanian labor laws⁷. It should also be noted that Panama has ratified Convention 138(minimum age) and convention 182(worst form of child labor) under the ILO Declaration on	Low	NA

⁵ Article 1 of the Panamanian Labor Code: <http://cetippat.gob.pa/wp-content/uploads/2017/05/co%CC%81digo-detrabajo.pdf>

⁶ ILO Convention 29 and 105_ http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:102792

⁷ Articles 117 – 125 of the Panamanian Labor Code: <http://cetippat.gob.pa/wp-content/uploads/2017/05/co%CC%81digo-detrabajo.pdf>

	Fundamental Principles and Rights at Work ⁵ .		
7. The project does not involve and is not complicit in any form of discrimination based on gender, race, religion, sexual orientation or any other basis.	The Project will act in strict accordance to Panamanian labour laws⁸ and protect the rights of all staff and make sure it is involved nor complicit in any form of discrimination based on gender, race, religion, sexual orientation or any other basis. It should also be noted that Panama has ratified Convention 100(equal remuneration) and convention 111 (Discrimination in employment/occupation) under the ILO Declaration on Fundamental Principles and Rights at Work⁵.	Low	NA
8. The project provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe or unhealthy work environments.	The Project will act in strict accordance to Panamanian labour laws and the project sponsor is committed to improve people working situation and therefore looks after a healthy work environment⁹ according to the policies established in the document training and qualification "Procedimiento General Formación y Capacitación (PG-06)"	Medium	Proper annual trainings for all workers, and distribution and usage of protective equipment.

⁸ Articles 21 and 23 of the Panamanian Labor Code: <http://cetipat.gob.pa/wp-content/uploads/2017/05/co%CC%81digo-detrabajo.pdf>

⁹ Articles 283 - 325 of the Panamanian Labor Code: <http://cetipat.gob.pa/wp-content/uploads/2017/05/co%CC%81digo-detrabajo.pdf>

9. The project takes a precautionary approach in regard to environmental challenges and is not complicit in practices contrary to the precautionary principle.	Because the project activity is a new built solar PV power project, it will have a very limited impact to air, soil, water and noise pollution. There will not be any dangerous chemicals produced as a result of the project activity during the construction and operation phases. Also, any liquid or solid wastes will be safely disposed. Therefore the project activity will not raise any threat of harm to human health or the environment. The transmission line will cover few kilometres given the proximity of the substation. There is very little tree cover that will be affected during the installation of this transmission line, particularly given the little tree cover in the area. It should also be noted that the transmission line will be mix (underground and aerial) and it does not require for trees to be cut or trimmed where the lines passes. If the	Low	The project owner is very mindful of any possible environmental impacts during construction and operation of the project. All government laws regarding environmental impact have been followed and will be followed during project execution.
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	operation of the project stops, it is planned to restore the place. First, it will be an analysis about how was the original conditions of the ecosystem. The aspects that will be consider in the restauration are: Soil evaluation and decontamination (if necessary); access control; Cleaning and arrangement of the ground surface; drainage control; reforestation and plant cover (if it's possible and necessary according to the zone)		
10. The project does not involve and is not complicit in significant conversion or degradation of critical natural habitats, including those that are (a) legally protected, (b) officially proposed for protection, (c) identified by authoritative sources for their high conservation value, or (d) recognized as protected by traditional local communities.	None of the mentioned critical natural habitats are touched by the project. Before the construction phase of the project, the land on which the project is to take place is barren and unfertile and no beneficial use other than for cattle grazing. There is no critical natural habitats within or around the project site. Therefore the project activity is not complicit in significant conversion or degradation of critical natural habitats.	Low	NA

11. The project does not involve and is not complicit in corruption.	The project activity will not promote or be complicit in corruption. All the project financial information will be available for the project beneficiaries and legal authorities to ensure that the project does not involve and is not complicit in corruption. It should also be noted that Panama is a signatory of the UN Convention against Corruption¹⁰.	Low	The company has a clear policy regarding the rules of conduct regarding gifts and bribes and the engagement in any form corruption activities.
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F.2. Sustainable Development matrix

Indicator	Mitigation measure	Relevance to achieving MDG	Chosen parameter and explanation	Preliminary score
Gold Standard indicators of sustainable development.	If relevant copy mitigation measure from "do no harm" – table, or include mitigation measure used to neutralise a score of '–'	Check www.undp.or/mdg and www.mdgmonit.or.org Describe how your indicator is related to local MDG goals	Defined by project developer	Negative impact: score '–' in case negative impact is not fully mitigated score 0 in case impact is planned to be fully mitigated No change in impact: score 0 Positive impact: score '+'

¹⁰ <https://www.unodc.org/unodc/en/treaties/CAC/signatories.html>

Air quality	.	MDG target 7	Explanation: The project activity will avoid pollutant emissions (SO_x, NO_x, CO, VOC, particulate) from fossil fuels that would have been used for energy generation. However, Concentrations of Sox and NOX cannot be easily monitored by the project, nor can any changes be attributed to the project. Therefore this parameter scores "0"	0
Water quality and quantity	There is no Waste water. The seasonal creek that runs through the project property will be left untouched and all surrounding vegetation will also be left untouched.	MDG target 7	Explanation: There is no waste water created within the project activity. Also, the seasonal creek that runs through the project property will be left untouched. Therefore it scores '0'.	0

Soil condition	Water and soil conservation will be emphasized during and after construction, according to the waste management and disposal plan in all phases of the project, established in the Environmental Impact Assessment Study Report.	MDG target 7	Explanation: The project would not emit any pollutants to the soil during the construction and operation period, with no negative impact on the soil quality. According to the Procedure Plan for Waste management of the Project the quantity of solid/liquid waste, to be generated during the construction phase, will be an estimated of 51.35 Kg considering all the materials that will be used in this phase. This plan also specified that the project have no noticeable impact on soil use and will be disposed of in an environmentally sound manner. Therefore it scores '0'.	0
Other pollutants	During the construction period waste materials from residuals and domestic garbage	NA	Explanation: With the implementation of mitigation and management	0

	will be cleaned and sent to a landfill in order to reduce the impact on the surrounding environment. During the operation phase, waste silicon cell residuals will be recycled by the supplier. Because of the listed procedures and practices listed above, the solid waste from the Project was no negative impact on the local environment.		measures, solid waste from the project activity will present no negative impact on the local environment. The noise during construction mainly comes from operating equipment and transportation vehicles. The construction time and will be controlled strictly, so as to not bother the local population. Machinery and transportation equipment will also have the proper maintenance in order to lower noise levels. Therefore impact from noise is not significant. Therefore it scores '0'.	
Biodiversity	Through revegetation measures, the condition of ground vegetation will be gradually improved and the biodiversity will be gradually improved.	MDG Target 7	Explanation: The land on which the project will take place is barren and unfertile with very sparse vegetation with no beneficial use, according to the section 3.2 Categorization, Criterion II of the	0

			Environmental Impact Study¹¹. Moreover, there are no migratory birds/ endangered species in the region of the project activity. Therefore, the project activity scores '0'.	
Quality of employment	NA	MDG Target 1	Chosen parameter: Payroll information of employees and how it compares to minimum wage in Panama that is \$3.14 per hour.¹² Number of events that have training of staff regarding safe and healthy working conditions or other technical project implementation aspects. Explanation: Besides providing training to the	+

¹¹ Estudio de Impacto Ambiental, Categoría I, Proyecto "Generación de 9.9 MW de Energía Fotovoltaica, Page 6.

¹² Decree No. 75, Article 2 from Panama Labor Law
https://www.gacetaoficial.gob.pa/pdfTemp/28433_A/GacetaNo_28433a_20171227.pdf

			employees, the Project will create permanent jobs that require qualified and skilled staff. Given the fact that this will be the first project of its kind in Panama, staff will be trained to have the appropriate skills and certification to perform such power generation. As per Panamanian labor laws, labor conditions will ensure the working environment, labor intensity and work times will be of humane and internationally recognized standards. Health and safety standards of the employees will also be conducted according to Panamanian labor laws, ensuring appropriate working conditions for the staff. Therefore it scores '+'.	
Livelihood of the poor	NA	MDG Target 1	Chosen parameter: Availability and	+

			use of water tank for the community. Explanation: The project will improve the livelihood of the employees through training, income, and national social security. The project proponents have also pledged to donate a water storage tank to be used by the local inhabitants. The water pump that feeds the Vista Hermosa community with said water will also now run with electricity donated from the project activity..	
Access to affordable and clean energy services	NA	MDG Target 7	Explanation: The project utilizes renewable, solar energy to displace fossil fuel in the Panamanian electricity grid. Which results in a small and positive contribution in meeting national power demand and thus indirectly helps to maintain the security of the	0

			electricity system. However, since the project is a modest size, the total impact on the grid composition will be relatively small. Therefore, in the interest of conservativeness the score given is '0'.	
Human and institutional capacity	NA	MDG Target 1	Chosen parameter: Number of employees in skilled jobs. Proportion of locally hired (employees that lives near the Project) employees will be monitored. Number of trainings sessions per year given to all the employees, according to the policies established in the document training and qualification "Procedimiento General Formación y Capacitación (PG-06)". Explanation: Besides providing training to the employees, the Project will create	+

			permanent jobs that require qualified and skilled staff. Given the fact that solar projects are rare in Panama, staff has to be trained to have the appropriate skills and certification to perform such power generation. Therefore it scores '+’.	
Quantitative employment and income generation	All workers receive a regular contract, including social insurance and a salary with at least the minimum legal salary.	MDG Target 1	Chosen parameter: Number of jobs and the staff salary level. Proportion of locally hired (employees that lives near the Project) employees will be monitored. Explanation: The project will provide up to 7 permanent work positions for people responsible for operation and maintenance of the project during the operation phase. Given that these staff will be mostly engineers and skilled labor, their salary levels	+

			will exceed the local average salary levels. Therefore the score given is '+’.	
Access to Investment	NA	MDG Target 8	Explanation: The electricity generated by the project activity will displace equivalent electricity mostly produced by fossil fueled power plants, resulting in reduced fossil fuel consumption. Panama imports all coal and fossil fuels used for energy use. However, given the relatively small size of the project activity, the perceived displaced coal import is marginal to the total imports, the impact is deemed to be very small. Therefore, it scores '0'.	0
Technology transfer and technological self-reliance	NA	MDG Target 8	Explanation: The project entails implementation of solar PV technology in Panama, something that is not common practice in Panama. However, there	0

			are newer Solar PV project that are being developed and that will be developed in Panama, which makes monitoring of this parameter difficult. Therefore the score given is '0'.
Justification choices, data source and provision of references			
Air quality	The adoption of solar PV technology reduces the emission of pollutants and greenhouse gas into the atmosphere, even when the whole life cycle analysis of the PV production is accounted for. -A.E.Alsema, Energy Requirements and CO₂ Mitigation Potential of PV Systems: http://igitur-archive.library.uu.nl/copernicus/2006-0308-200117/98054.pdf -http://www.scientificamerican.com/article.cfm?id=solar-cells-prove-cleaner-way-to-produce-power Moreover, air quality will be improved substantially compared to emission levels (SO_x and NO_x) related to fossil fuel-fired power plants. As the Project supplies clean energy and replaces equivalent electricity from the grid, it helps to reduce SO_x and NO_x emissions that would be produced without the Project, and thus can have a positive impact on air quality.		
Water quality and quantity	Waste water will be minimized by reuse of water and by installation of proper drainage systems. The seasonal creek that runs through the project property will be left untouched and all surrounding vegetation will also be left untouched. <u>Data source:</u> The Environmental Impact Assessment Report of the Project activity and the granting of the Environmental License, granted by ANAM, Panama's Environmental Authority.		
Soil condition	The project would not emit any pollutants to the soil during the construction and operation period, with no negative impact on the soil quality. <u>Data source:</u> The Environmental Impact Assessment Report of the Project activity and the granting of the Environmental License, granted by ANAM, Panama's Environmental Authority.		
Other pollutants	During the construction period waste materials from residuals and domestic garbage will be cleaned and sent to a landfill in order to reduce the impact on the surrounding environment. During the operation phase, waste silicon cell residuals will be recycled by		

	the supplier. Because of the listed procedures and practices listed above, the solid waste from the Project was no negative impact on the local environment. <u>Data source:</u> The Environmental Impact Assessment Report of the Project activity and the granting of the Environmental License, granted by ANAM, Panama's Environmental Authority.
Biodiversity	The land on which the project will take place is barren and unfertile with no beneficial use. The negligible quantity of solid/liquid waste, to be generated during the construction phase will have no noticeable impact on soil use and will be disposed of in an environmentally sound manner. Moreover, there are no migratory birds/ endangered species in the region of the project activity. <u>Data source:</u> The Environmental Impact Assessment Report of the Project activity and the granting of the Environmental License, granted by ANAM, Panama's Environmental Authority.
Quality of employment	Besides providing training to the employees, the Project will create permanent jobs that require qualified and skilled staff. Given the fact that this will be the first project of its kind in Panama, staff will be trained to have the appropriate skills and certification to perform such power generation. As per Panamanian labor laws, labor conditions will ensure the working environment, labor intensity and work times will be of humane and internationally recognized standards. Health and safety standards of the employees will also be conducted according to Panamanian labor laws, ensuring appropriate working conditions for the staff. <u>Data Source:</u> Organización Internacional del Trabajo, Oficina Regional para América Latina y el Caribe www.oit.org.pe/portal Código de Trabajo de Panamá: http://www.organojudicial.gob.pa/cendoj/wp-content/blogs.dir/cendoj/c%C3%B3digo-detrabajo.pdf
Livelihood of the poor	Through the additional employment, the beneficiaries increase their economic potential, more precisely, of the employee's family members. <u>Data Source:</u> UN Report on the World Social Situation 2013 http://www.un.org/esa/socdev/documents/reports/InequalityMatters.pdf Moreover, the project will improve the livelihood of the employees through training, income, and national social security. The project proponents have also pledged to donate a water storage tank to be used by the local inhabitants. The water pump that feeds the Vista Hermosa community with said water will also now run with electricity donated from the project

	activity.
Access to affordable and clean energy services	The project utilizes renewable, solar energy to displace fossil fuel in the Panamanian electricity grid. Which results in a small and positive contribution in meeting national power demand and thus indirectly helps to maintain the security of the electricity system. <u>Data Source:</u> Empresa de Transmisión Eléctrica S.A. http://www.etsa.com.pa/
Human and institutional capacity	Besides providing training to the employees, the Project will create permanent jobs that require qualified and skilled staff. Given the fact that this will be the first project of its kind in Panama, staff will be trained to have the appropriate skills and certification to perform such power generation.
Quantitative employment and income generation	The number of contracts is an effective measure to reflect the labor volume and income generation. <u>Data Source:</u> UN Report on the World Social Situation 2013: http://www.un.org/esa/socdev/documents/reports/InequalityMatters.pdf Moreover, the project will provide up to 7 permanent work positions for people responsible for operation and maintenance of the project during the operation phase. Given that these staff will be mostly engineers and skilled labor, their salary levels will exceed the local average salary levels.
Access to Investment	The electricity generated by the project activity will displace equivalent electricity mostly produced by fossil fueled power plants, resulting in reduced fossil fuel consumption. Panama imports all coal and fossil fuels used for energy use. <u>Data source:</u> Empresa de Transmisión Eléctrica S.A. http://www.etsa.com.pa/
Technology transfer and technological self-reliance	The project entails implementation of solar PV technology in Panama, something that has never been done before outside of a small pilot plant that was developed by the government. This is a significant transfer of technology and know-how for Panama. <u>Data source:</u> Empresa de Transmisión Eléctrica S.A. http://www.etsa.com.pa/
Comments accompanying own sustainable development matrix	
N/A	

SECTION G. Sustainability Monitoring Plan

Copy Table for each indicator

No.		1
Indicator		Quantitative employment and income generation
Mitigation measure		NA since indicator scored positive.
Chosen parameter		Number of jobs created in the operations of the Project and their salary levels. Proportion locally hired employees will also be monitored.
Current situation of parameter		Without the project activity, the local people have no such job opportunities from the project, and their incomes see no increase.
Estimation of baseline situation of parameter		In the baseline, the local people have no such job opportunities from the project, and their incomes see no increase. Consistency in the number of jobs created during operational period, and the salary of employees will be above the local average.
Future target for parameter		Consistent number of jobs created during operational period, and salary levels of employees to be above the local average.
Way of monitoring	How	HR records that show total number of employees or report proportion of locally hired employees (people that live near the Project) will be monitored. These salaries will be confirmed to be at or above the national legal minimum salary.
	When	Monthly
	By who	Project Owner

No.		2
Indicator		Quality of employment
Mitigation measure		NA since indicator scored positive.
Chosen parameter		Payroll information of employees and how it compares to minimum wage in Panama that is \$3.14 per hour. Number of events that have training of staff regarding safe and healthy working conditions or other technical project implementation aspects. Provision of adequate personal protective equipment (PPE) will also be monitored.

Current situation of parameter		Without the Project, local people have no such opportunities to be trained on the technology and the monitoring of the plant operation.
Estimation of baseline situation of parameter		In the baseline, local people have no such opportunities to be trained on the technology and the monitoring of the plant operation.
Future target for parameter		The project proponents organize training for the staff on the technology and the monitoring of the plant operation.
Way of monitoring	How	The training records for all the employees, including health and safety training. Provision of adequate personal protective equipment (PPE) will also be monitored.
	When	Annually
	By who	Project Owner

No.	3
Indicator	Human and institutional capacity
Mitigation measure	NA since indicator scored positive.
Chosen parameter	Number of employees in skilled jobs. Proportion of locally hired employees (people that live in the same town) will be monitored Number of trainings sessions per year according to the policies established in the document training and qualification "Procedimiento General Formación y Capacitación (PG-06)".
Current situation of parameter	Without the Project, local people have no such opportunities to be trained on the technology and the monitoring of the plant operation.
Estimation of baseline situation of parameter	In the baseline, local people have no such opportunities to be trained on the technology and the monitoring of the plant operation.
Future target for parameter	Consistent number of jobs created during operational period, and salary levels of employees to be above the local average as well as the % of employees that are local. The project activity has planned one annual training activity

		for relevant personnel.
Way of monitoring	How	Number of contracts with employees and number of training session annually as well as the % of employees that are local.
	When	Annually
	By who	Project owner.

No.	4	
Indicator	Livelihood of the poor	
Mitigation measure	NA since indicator scored positive.	
Chosen parameter	Operation of water tank in the local community	
Current situation of parameter	Without the Project, local people have no water tank available for their use like the one that the project activity will donate.	
Estimation of baseline situation of parameter	In the baseline, local people do not have access to a water tank such as the one that the project will donate.	
Future target for parameter	Availability and use of water tank for the community.	
Way of monitoring	How	Confirmation of use and availability of water tank by the local community.
	When	Monthly.
	By who	Project owner.

Additional remarks monitoring

NA

SECTION H. Additionality and conservativeness



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

H.1. Additionality

NA

H.2. Conservativeness

NA

ANNEX 1 ODA declaration

There is no public funding from Annex I Parties for this Project.