



## SECCIÓN 2: DESEMPEÑO

## Resumen del desempeño del proyecto en los últimos seis meses

The first semester of the project focused on raising the private sector capital of \$320,000 to finance the project. Several investors showed interest, but only one has agreed to pursue the project towards financial closure, on the condition of a 100% risk guarantee on capital invested from VIA's Powering Agriculture Facility. As of December 2017, the investment case is being prepared for their investment committee review in February, including outcomes of a field visit to VIA's similar projects in other countries to fully understand the model.

The Honduras project manager, Earl Harcrow, has taken actions to form a project company within Honduras to formalize his involvement in the project, and has started the search for suitable field staff.

Mapping households in Gracias a Dios has been started, and can be viewed at [https://montycraigne.shinyapps.io/HND\\_Gracias\\_a\\_Dios\\_mapping/](https://montycraigne.shinyapps.io/HND_Gracias_a_Dios_mapping/) together with telecom tower infrastructure for communicating operational energy consumption data from mills to the internet via Internet-of-Things sensors, and ground presence of possible field partners.

Given the very long delay in getting the project up and running since the pilot project in 2014-15, it is intended to change from two annual shipments over 2 years of 900 + 1800 households of equipment to one single shipment in one year of all 2700 households of equipment. There has been no objection noted to this change, and experience in rollout of such quantities in other countries had no problems.

## Comentarios del líder de Equipo de Supervisión

De acuerdo con los comentarios de la Agencia Ejecutora

## SECCIÓN 3: INDICADORES E HITOS

	Indicadores	Línea de base	Intermedio 1	Intermedio 2	Intermedio 3	Planificado	Logrado	Estado
<b>Fin:</b> The overarching objective of this project is to contribute to deliver access to modern energy for lighting and productive activities to isolated off-grid communities of Honduras.	I.1 Households with improved living conditions (CRF: 310401)	0	900			2700	0	
		Abr. 2017	Abr. 2018			Abr. 2020	Dic. 2017	
	I.2 Monthly average hours saved by women participating in the project from KWh produced by processing mills.	0	360			720	0	
		Abr. 2017	Abr. 2018			Abr. 2020	Dic. 2017	
I.3 Increased average monthly economic output per mill user from spare time.		0	2.5			5	0	
		Abr. 2017	Abr. 2018			Abr. 2020	Dic. 2017	
I.4 GHG Emissions Avoided		1	20000			40000	0	
		Abr. 2017	Abr. 2019			Abr. 2020	Dic. 2017	
<b>Propósito:</b> The project looks to demonstrate that lower cost, more efficient and innovative designs for solar rural electrification can deliver an adequate level of "access to energy" to the poorest remote villages of Honduras, where an expansion of the electrical grid is not foreseen in the near future.	R.1 People with access to new basic services (CRF: 210600)	0	4500			13500	0	
		Abr. 2017	Abr. 2018			Abr. 2020	Dic. 2017	
	R.2 Total value of issued leases (milling + lighting)	0	119609			378000	0	
		Abr. 2017	Abr. 2018			Abr. 2020	Dic. 2017	
R.3 Cumulative solar energy generated from all mills (kWh)		0	203	1458		3618	0	
		Abr. 2017	Abr. 2018	Abr. 2019		Abr. 2020	Dic. 2017	
<b>Componente 1:</b> Investment and RBF Fund <b>Peso:</b> 40% <b>Clasificación:</b> Satisfactorio	C1.1 Total number of SHS units leased	0	900			2700	0	En curso
		Abr. 2017	Abr. 2018			Abr. 2020	Dic. 2017	
	C1.2 Total number of solar power mills units installed	0	10	40		40	0	En curso
		Abr. 2017	Abr. 2018	Abr. 2019		Abr. 2020	Dic. 2017	
C1.3 % PAR 90 of leasing portfolio (Less than)		0	25	25		25	0	En curso
		Abr. 2017	Abr. 2018	Abr. 2019		Abr. 2020	Dic. 2017	
<b>Componente 2:</b> Project set up costs and training <b>Peso:</b> 35% <b>Clasificación:</b> Satisfactorio	C2.1 Number of microentrepreneurs (prepaid codes sales points) trained (gender disaggregated)	0	35	100		100	0	En curso
		Abr. 2017	Abr. 2018	Abr. 2019		Abr. 2020	Dic. 2017	
	C2.2 GIS mapping of the project area completed.	0	1	1		1		
		Abr. 2017	Abr. 2018	Abr. 2019		Abr. 2020		
<b>Componente 3:</b> Project and Knowledge management <b>Peso:</b> 25% <b>Clasificación:</b> Satisfactorio	C3.1 Case study completed (including lessons learned and best practices) completed.	0				1		
						Abr. 2020		
	C3.2 Case study shared with targeted audiences (MDBs, energy agencies, angel investors and other potential partners)	0				1	0	En curso
						Abr. 2020	Dic. 2017	

Hitos	Planificado	Fecha Vencimiento	Logrado	Fecha en que se logró	Estado
H1 Condiciones previas	7	Mar. 2018	1	Oct. 2017	

## FACTORES CRÍTICOS QUE HAN AFECTADO EL DESEMPEÑO

[X] Insuficiencia de fondos de contrapartida

## SECCIÓN 4: RIESGOS

## RIESGOS MÁS RELEVANTES QUE PUEDEN AFECTAR EL DESEMPEÑO FUTURO

	Nivel	Acción de mitigación	Responsable
1. Long-term lending capital (refinancing) is not raised from Kiva.org/other crowdfunders	Media	While VIA's first project have been fully funded on Kiva.org at 0% p.a. in 4 hours, it is possible that some or all of the anticipated fundraising for a 5-year loan to refinance the built project is not successful. In this case, and assuming other non-crowdfunding debt is not secured either, the worst case scenario is that Construction Investors would remain as the funding source for the assets for the long term, until the end of the lease/repayment period. Construction Investors will be made well aware of the risks connected with the refinancing and that there is a possibility that the refinancing may not be successful.	Project Guest
2. Default payments by villagers during 5 year leasing period is higher than expected and impact the financial sustainability of the project.	Media	Households that default will have systems repossessed, and redistributed to other households. Repeating this cycle will, within 1 year, phase out most defaulting households. The pay-as-you-go technology adopted by this service model will switch off the equipment if the payment has not been made, mimicking existing payment habits for mobile phone recharges.	Project Guest
3. Solar mills are not socially / culturally appropriate	Baja	To date, field feedback has indicated that women are far more interested in operating a solar-powered agroprocessing mill than a diesel-powered mill, due to the perception that they are simpler to operate due to their smaller size (200-100Wp instead of 2000-3000Wp) and highly reduced maintenance requirements. Tests runs of the first batch of mills (first shipment) during the first year of operation of the project will provide data that will be used to fine tune the technology as to ensure that the final product is of an acceptable quality, similar to that obtained with traditional methods. It is expected that women will benefit from the technologies more than men.	Project Guest
4. Product failure of lighting, phone charging, or agro-processing equipment	Baja	Products used for the project have been used for many years in multiple countries, with lighting system and phone charging components generally certified by the World Bank Group's Lighting Global quality assurance system for solar home system kits. Solar agro-processing machines will be run in laboratory situations for the equivalent of 5 years of 1 hour/day operation (2000 hours) before release to the field, to further improve the reliability of the DC motors and other weak points that may occur (field operation to date has been satisfactory in other projects VIA is managing in Africa and Asia). An adequate stock of spare replacement parts will be kept in stock in a secure storage location near the project's main site.	Project Guest

NIVEL DE RIESGO DEL PROYECTO: Baja NÚMERO TOTAL DE RIESGOS: 4 RIESGOS VIGENTES: 4 RIESGOS NO VIGENTES: 0 RIESGOS MITIGADOS: 0

## SECCIÓN 5: SOSTENIBILIDAD

Probabilidad de que exista sostenibilidad después de terminado el proyecto: P - Probable

## FACTORES CRÍTICOS QUE PUEDEN AFECTAR LA SOSTENIBILIDAD DEL PROYECTO

[No se reportaron factores para este periodo]

## Acciones realizadas o a ser implementadas relativas a la sostenibilidad:

The project has not yet been built, so no actions towards sustainability have yet been taken, other than ensure the products procured have the highest quality possible.

## SECCIÓN 6: LECCIONES PRÁCTICAS

	Relativo a	Autor
1. Finding private sector finance for a new solar technology (micro rice hulling mills) in a very low income area is a big challenge, and taking longer than expected, even with a 100% risk guarantee on capital being offered, eliminating almost all risk.	Implementation	Craine, Stewart