Fondo Multilateral de Inversiones
Miembro del Grupo BID

REPORTE DE ESTADO DEL PROYECTO

JULIO 2014 - DICIEMBRE 2014

SECCIÓN 1: SÍNTESIS DEL PROYECTO

NOMBRE DEL PROYECTO: QUETSOL ENERGIA SOLAR PREPAGA PARA LA BDP EN GUATEMALA

Número de proyecto: GU-M1053 - Nro. Operación: ATN/ME-14292-GU

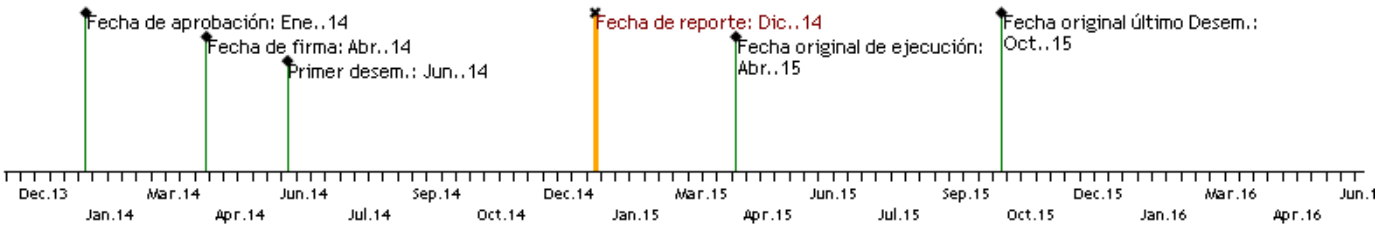
Resultado: Create a business model that provides a solar power solution that is financially and practically accessible to the BOP, and that rapidly scales Quetsol's share of the energy market in departments such as Alta Verapaz, Quiché, and Petén.

País Administrador	País Beneficiario
GUATEMALA	GUATEMALA

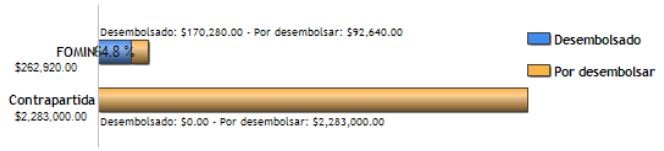
Agencia ejecutora: QUETSOL S.A.

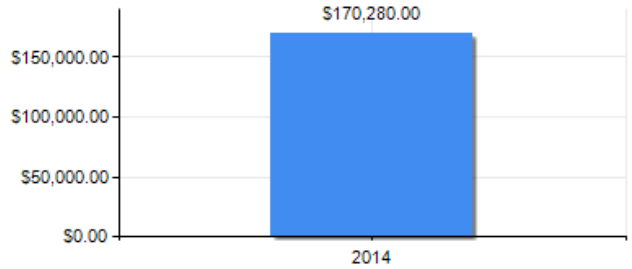
Líder equipo de diseño: Bloomgarden, David
Líder equipo de supervisión: Mejia Caniz, Luis

CRONOLOGÍA DE EVENTOS

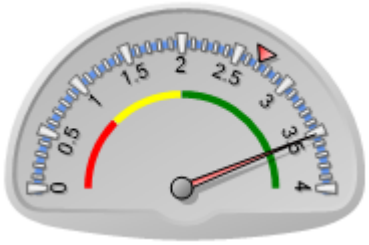


RECURSOS

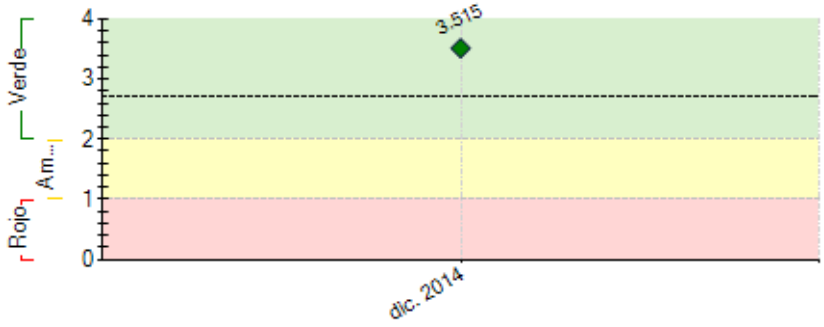




PUNTAJE DE DESEMPEÑO



Puntaje actual: Satisfactorio: 3.515
Promedio FOMIN: 2.705

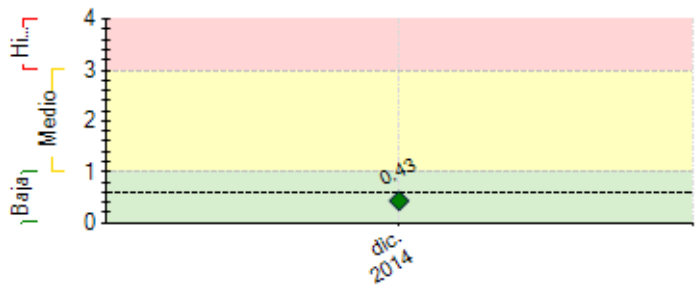


----- Promedio desempeño FOMIN

RIESGOS EXTERNOS

CAPACIDAD INSTITUCIONAL

	Riesgo
Administración Financiera:	Medio
Adquisiciones:	Medio
Capacidad Técnica:	Medio



---- Promedio de riesgo FOMIN: 0.604

SECCIÓN 2: DESEMPEÑO

Resumen del desempeño del proyecto en los últimos seis meses

The most important achievements during this semester, were: (i) the consolidation of 11 positions for the sales area, having planned 12; (ii) procurement of the consultancy firm for redisigning the cases, LED bases, and panel mounts; (iii) the consolidation processes to invest in two new models of solar systems. On the other hand, some difficulties and/or delays were presented in an equipment order from China. The reason for delay was due to quality control issues and malfunction. Given this, we proceeded to report and discuss regarding solutions to solve the problem as soon as we could. The main obstacles encountered during this semester were: (i) an interference problem found in new equipment coming from China, delaying the shipment of the order; (ii) a supplier change for the bulbs and investor, related with the first obstacle. To overcome these obstacles, it was necessary to investigate and perform multiple tests on the equipment to prevent further problems, as well as to dedicate more time to receive new quotes and evaluating proposals to locate the best supplier. Next semester, the coordinating unit of the project hopes to achieve the following: (i) enable the installation of more than 450 solar systems in the communities; (ii) to invest in more equipments; (iii) to finish the new hardware and software version of the kits.

Comentarios del líder de Equipo de Supervisión

De acuerdo con los comentarios de la Agencia Ejecutora
Agree with the description. It should be said that, even though there were supply chain barriers and delays, the project is up to date fulfilling indicators required to December 2014.

SECCIÓN 3: INDICADORES E HITOS

		Indicadores	Línea de base	Intermedio 1	Intermedio 2	Intermedio 3	Planeado	Logrado	Estado
Resultado: Create a business model that provides a solar power solution that is financially and practically accessible to the BOP, and that rapidly scales Quetsol's share of the energy market in departments such as Alta Verapaz, Quiché, and Petén.	**R.1**	Households with Solar Kits installed - Number of households with solar kits installed by Quetsol during the reporting period	0 Abr. 2014	375 Oct. 2014			1500 Abr. 2015	382 Dic. 2014	
	R.2	Utilization rate of the installed kits -The average percentage of a monthly PAYG code bought by clients in a month. Note that rates over 100% are possible as codes for smaller time units are more expensive.	0 Abr. 2014	60 Oct. 2014			80 Abr. 2015	73 Dic. 2014	
	R.3	Communities with access to sustainable energy (solar power solution) - Number of communities with 15 or more systems installed during the reporting period	0 Abr. 2014	15 Oct. 2014			60 Abr. 2015	15 Dic. 2014	
	R.4	Total revenue (for Quetsol) - Increase in revenue during the reporting period	0 Abr. 2014	5000 Oct. 2014			60000 Abr. 2015	22416 Dic. 2014	
Componente 1: Solar Pay-As-You-Go Development **Peso:** 55% **Clasificación:** Satisfactorio	**C1.I1**	Integrated electronics circuit board developed - Number of printed circuit boards combining both the charge controller and PAYG unit developed for the improvement of the solar panel kit.	0 Abr. 2014				1 Abr. 2015		En curso
	C1.I2	Case prototypes designed - Number of Case prototypes designed incorporating the new PAYG user interface	0 Abr. 2014				1 Abr. 2015	0 Dic. 2014	En curso
	C1.I3	Smart phone and feature phone apps developed - Number of beta version apps developed to deliver PAYG codes and manage client relationships	0 Abr. 2014				1 Abr. 2015	0 Dic. 2014	En curso
	C1.I4	LED base prototype developed - Number of easy-install LED bases developed, designed to include individual switches to reduce consumption	0 Abr. 2014				1 Abr. 2015	0 Dic. 2014	En curso
	C1.I5	Solar system investment - Amount of Quetsol's investment on improved PAYG solar systems	0 Abr. 2014	100000 Oct. 2014			186000 Abr. 2015	187088 Dic. 2014	Finalizado
Componente 2: Education, Promotion, Installation and Training. **Peso:** 37% **Clasificación:** Muy Satisfactorio	**C2.I1**	Communities informed of the advantages of investing in solar panel energy kits - Number of communities informed by Quetsol about the environmental and financial advantages of PAYG solar panel kits	0 Abr. 2014	15 Oct. 2014			60 Abr. 2015	24 Dic. 2014	En curso
	C2.I2	Households informed about the benefits of using solar power versus candles and kerosene - Number of households that are visited or engaged through community meetings	0 Abr. 2014	3600 Oct. 2014			14400 Abr. 2015	3788 Dic. 2014	En curso
Componente 3: Monitoring and Evaluation **Peso:** 8% **Clasificación:** Satisfactorio	**C3.I1**	Impact assessment of solar energy on community development presented to targeted entities - Robust and objective measurement of the impact of solar energy through Quetsol's solar panel kits on a range of development indicators, through baseline and impact surveys	0 Abr. 2014				1 Abr. 2015	0 Dic. 2014	En curso

C3.I2	Report analysing the importance of PAYG as a financial tool for the poor presented to targeted entities - Analysis of the importance of PAYG as a financial tool for the poor in rural Guatemala and a sales strategy to improve the sustainability Quetsol's business model.	0 Abr. 2014				1 Abr. 2015	0 Dic. 2014	En curso

Hitos		Planeado	Fecha de cumplimiento	Logrado	Fecha alcanzada	Estado
H1	Condiciones previas	1	Oct. 2014	5	May. 2014	Logrado
H1	Investment in Solar Kits	100000	Oct. 2014	103089	Ago. 2014	Logrado
H2	PAYG systems installed	150	Oct. 2014	151	Oct. 2014	Logrado
H3	Investment in Solar Kits	186000	Abr. 2015			
H4	PAYG systems installed	450	Abr. 2015			

FACTORES CRÍTICOS QUE HAN AFECTADO EL DESEMPEÑO

[X] Desempeño inadecuado de proveedores de servicios/contratistas

[X] Cambios en la política nacional

SECCIÓN 4: RIESGOS

RIESGOS MÁS RELEVANTES QUE PUEDEN AFECTAR EL DESEMPEÑO FUTURO

	Nivel	Acción de mitigación	Responsable
1. Low rate of payment collection	Baja	Quetsol has largely mitigated it by signing a partnership with Tigo Money, the largest mobile money operator in Guatemala. Tigo Money will handle all transactions from Quetsol agents and individual customers, debiting money from their mobile wallets and depositing it in Quetsol's bank account.	Invitado Proyecto
2. The installed kit could be stolen, tampered with or just left unused	Baja	The risk can be mitigated by carefully selecting clients, smart design decisions and creating an incentive structure to encourage good behavior. Quetsol will handle client selection in a similar manner to MFIs and is hiring loan officers to oversee the placement of equipment. The kits have been designed with several anti-tampering features, including the pay-as-you-go mechanism, seals on the enclosure, non-standard screws and component plugs. An incentive structure similar to the step-up loans operated by microfinance institutions will encourage long term client engagement and good behavior.	Invitado Proyecto
3. Difficulty of providing ongoing maintenance and customer care	Baja	Quetsol has three years of experience of maintaining solar installations in Guatemala's challenging terrain and scattered villages, which will help them deliver a good customer experience with the PAYG model.	Invitado Proyecto
4. Technological risks	Baja	Quetsol has advanced functional prototypes for each part of the system but it has sought outside help to improve its designs and mitigate any technological risks. Quetsol has managed the technological challenges by leveraging its own engineering team, carefully selecting strong partners to bring additional expertise, and by committing early to a pilot program.	Invitado Proyecto

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

Factor	Comentarios
[X] Falta de capacidad organizacional, gerencial y de gestión financiera para **continuar** y sustentar el programa una vez terminada la fase de ejecución	Este aspecto está referido a contar con una estrategia de crecimiento para administrar el crecimiento internacional que se está teniendo, además de lo que es este proyecto

Acciones realizadas o a ser implementadas relativas a la sostenibilidad:

The sustainability of this Project is based on different aspects, but mainly in providing to the communities a sustainable prepaid solar energy service that is cheaper than candles, kerosene, or diesel, activity that has been performed through the Project up to date.

The PAYG service model is designed to be sustainable for both poor rural communities and Quetsol. The key measure of sustainability is the utilization rate of the PAYG systems. Maintaing a high utilization rate is critical for Quetsol´s profitability and also shows that PAYG solar is affordable for clients. Quetsol is targeting a utilization rate of 80% over a period of 18 months or more in order to generate the returns necessary to scale the model. Quetsol´s clients spend on average more than US$15.75 (GTQ 124) a month on candles and charging mobile phones. Compared with this, Quetsol is charging GTQ 90 (US$11.43) for a monthly PAYG code, a saving of 27.4%. It is also offering the flexibility to consume energy on an hourly, daily, or weekly basis.

SECCIÓN 6: LECCIONES PRÁCTICAS

	Relativa a	Autor
1. In the early processes for purchase of services by the CP method, the main difficulty was to find the minimum amount of economic proposals for the services needed; the main reason was due to the low number of companies selling the exact number of items requested for being smaller quantities. We managed to finally locate vendors that sell the amount requested, which took more time. It would be appropiate that in cases like this, the Bank allows a justification of the difficulty to obtain an alternative of purchase using the same method, perhaps by reducing the number of requests.	Design	Bejarano, Beatriz
2. At the time of preparing the first TOR for consultancy services, specifically for the development area, the main difficulty was to define precisely the type of skills that were most important to the process; the main reason was due to different tasks that had to be executed that involved different areas of knowledge both professional and academic. We proceeded to develop different profiles to facilitate the recruiting process for the consultants. It would be a good idea to have manuals of TOR, to facilitate the development of more accurate profiles, by area of expertise: technology, development, HR, marketing, etc.	Design	Bejarano, Beatriz
3. During the first consultancies to recruit, the main difficulty was to find the qualified consultants for the services we needed; the main reason was due to the low number of candidates available in the local market (Peten). Considering that the process to advertise a job position works in a different way in Peten, where is much more common to use posters or physical advertisements, we started to locate specific places were we could get the attention of more people interested, with the correct profile. It would be useful to have access to a detailed list of consultants, who have worked before with IDB projects, as a reference for future consultant services.	Design	Bejarano, Beatriz