




© Laura Eynard et RC Photography

PTEAH BAITONG

*Technological innovation enables
the most impoverished to access energy*

 Pteah Baitong is looking for new financial partners so it can equip even more families

COUNTRY FACTS

- 16 million inhabitants
- 143rd/188 in the HDI*
- 33.8 % of the population is poor, according to the Multidimensional Poverty Index (MPI)

* IDH: Human Development Index
<http://hdr.undp.org/en/countries/profiles>



2017 KEY FIGURES

- 3 regions covered
- 1,153 lamps sold
- 83 domestic solar systems
- 66 active vendors

MISSION



Responding to need

40% of Cambodian households are not connected to the electricity network and are instead relying on rudimentary equipment. Although cheap to buy, this type of equipment proves to be very expensive to use, presents a fire risk and emits noxious fumes. That's why Entrepreneurs du Monde created Pteah Baitong in 2014, a network for distributing solar powered equipment for lighting, charging telephones, fans, etc.

Innovative products

Pteah Baitong distributes innovative equipment, fitted with lithium batteries,

which maximise energy efficiency and lasts three times longer than rudimentary methods.



A local distribution network

The equipment is distributed by salaried vendors from rural zones which are most affected by energy poverty. The vendors are recruited, trained, and then supported. As part of the Pteah Baitong network, they bring high-impact products to their communities using the complete marketing approach created by Pteah Baitong: its well-known branding, communication tools, and sales initiatives.

2017 HIGHLIGHTS



A strengthened reputation

The team has developed a format for village discussions to encourage take-up and win confidence in the products offered. More than 70 meetings have already taken place in the provinces of Kampong Thom and Kampong Speu, and 2200 people have learnt about the products. Concurrently, Pteah Baitong constructed a centralised telephone hotline which has brought the average maintenance response time to under 24 hours, even in the most remote areas. This tight structure helps raise client satisfaction, leading to prompt repayment of energy loans.



Extending the distribution network

Within a year, the number of vendors has increased from 24 to 66; in turn, sales have tripled. Growing interest among the vendors has allowed Pteah Baitong to add a completely new solar lighting system to its current range. Fitted with a 130Watt solar panel, this new equipment is more powerful and can power four to five lighting units, a television and a low-energy cooling fan.



SOTH NORNG
Service user and vendor

"I am a farmer. My wife, our 6 children and I have never really had a comfortable lifestyle but since getting the Pteah Baitong solar kit, our life has been transformed! We have three lamps; everyone uses them for several hours each day, and I can recharge my mobile phone. It's so good, I've become a bridging vendor for the people in the village. It's another way to be of service to them: having helped build a village school, now I'm providing lighting. It's a big step towards a comfortable lifestyle, towards progress!"

FOCUS

Unsuitable rival products



In Cambodia, rural electrification essentially relies on car batteries. Families travel long distances several times a week to recharge them at stations equipped with diesel generators. The batteries do not last for long as they are not designed to be slowly drained by lamps, radios and fans. As a consequence, the kWh cost to these already poor households is ten times higher than that of the national electricity network.

Furthermore, the solar equipment available on the market is of poor quality, and the vendors do not have a good understanding of their technology and its maintenance requirements. Consequently, the usable life of this equipment is reduced and the cost per kWh remains considerable. As a result, the general population has a poor opinion of solar energy.



Reassuring support

Pteah Baitong has chosen to promote robust, high-quality products which halve the kWh cost and considerably increase the amount of energy available. However, in order to convince a wary population and build a good reputation, the team must establish a relationship of trust. To that end, the company has put in place a centralised after-sales service and has a policy of preventative maintenance visits. Pteah Baitong agents ensure, three months after installing a solar system, that operating conditions are being respected. These visits also give them the opportunity to refresh the training given on maintenance, batteries and electronic equipment.



INDICATORS

	No of products sold	No of new users	No of new indirect beneficiaries	Turnover achieved (€)	No of active vendors on 31/12	Savings made per family	
						€	CO ₂ (t)
2016	515	412	2,060	32,133	24	90,860	92.3
2017	1,236	1,140	4,560	55,618	66	229,840	227

OBJECTIVES

Technological innovation

In 2018, Pteah Baitong plans to install intelligent electricity networks, in partnership with the Australian start-up company Okra, whose technology allows domestic solar systems to be connected together. The energy generated within the network is then distributed to all the members in the network. The members simply pay for the electricity that they consume, as measured by the Okra technology. The kWh cost is comparable to that of the national electricity network.

Financial innovation



To compensate for the relatively high cost of this investment for families, Pteah Baitong and its supplier Kamworks started a pay-as-you-go project in March 2018: clients pay their

monthly instalments by telephone, until they have purchased their solar equipment outright. This financial service will allow a large number of families to become quickly equipped, especially the poorest families.

Commercial innovation



At the end of 2017, solar equipment developer Greenlight Planet suggested to Pteah Baitong that it become more involved in the distribution of its solar kits and lamps. Together they will create a national network of 5 to 10 microfinance institutions, offering tailored loans to enable beneficiaries to finance their purchase of this equipment. Pteah Baitong will be handling the training of these microfinance institutions and the promotion of products to their beneficiaries.

FUNDING NEEDS

In 2017, the programme benefited from the support of the French Development Agency, the Egis Foundation, and the international NGO People in Need. For 2018, Pteah Baitong is counting on renewed

support from the French Development Agency. However, in order to develop its innovative projects and extend its activities into other areas, Pteah Baitong needs to find new means of support.

PARTNERS

FINANCES



AFD



fondation @ egis

TECHNIQUES



OKRA KAMWORKS



PTEAH BAITONG

Programme manager: Ugo Andréo
> ugo.andreo@entrepreneursdumonde.org

Entrepreneurs du Monde France

Asia Area Manager for Energy Programs:
> alexandre.borme@entrepreneursdumonde.org
> www.entrepreneursdumonde.org/energie

CONTACTS