### Title of case study
Meeting energy needs for climate-resilient development

### Name of organization(s)
Sunlabob

### Business sector
Energy & Utilities

### Region(s) relevant to case study
- [X] All regions
- [ ] Africa and the Arab States
- [X] Asia and the Pacific
- [X] Caribbean and Central America
- [ ] Europe
- [ ] Least Developed Countries
- [ ] North America
- [ ] Polar regions
- [ ] Small Island Developing States
- [ ] South America

### Country(s) relevant to case study
Lao People’s Democratic Republic

### Adaptation sector(s) relevant to case study
- [X] Food security, agriculture, forestry and fisheries
- [X] Human health
- [X] Oceans and coastal areas
- [X] Science, assessment, monitoring and early warning
- [X] Terrestrial ecosystems
- [ ] Tourism
- [X] Transport, infrastructure and human settlements
- [ ] Water resources
- [ ] Other (please specify):

### Adaptation activity
Meeting energy needs with clean distributed power resources is a critical component of climate-resilient development. Sunlabob, based in Lao People’s Democratic Republic, has established an enterprise to provide off-grid solar, hydro and biomass energy profitably to rural areas. In doing so, energy access is improved and local entrepreneurs receive training to install and service the technologies, helping to diversify local employment, another need in many communities that may lead to enhanced adaptive capacity.

Sunlabob is a full-service energy provider selling
hardware and energy services in remote regions where the public grid does not yet reach, across Southeast Asia and parts of Africa. In Lao PDR, it has installed over 5,600 systems in over 450 villages, and strives to become the largest provider in the country of renewable energy solutions.

In Lao PDR, many poor people in remote rural areas rely on kerosene for lighting. Kerosene lamps can be dangerous, causing burns, starting fires and polluting the air indoors. Solar lanterns, portable lighting fixtures that run on batteries charged using solar power, are a very promising alternative to kerosene lamps. Sunlabob has introduced high quality solar photovoltaic (PV) systems to Lao PDR in a way that people can afford.

Although solar lanterns are being widely promoted as a lighting solution in remote villages, experience shows that the lanterns fail much earlier than would be expected due to low quality components that make them affordable for rural households. Furthermore, batteries are irregularly charged, and households engage in “hotwiring”, whereby they use the charge for operating other equipment, which causes the batteries to fail earlier. Independent solar lanterns with their own panels have therefore been uneconomical for rural households in the long run.

Sunlabob has responded to this challenge by providing solar lantern charging services, using a carefully selected and trained network of franchises that install and maintain state-of-the-art solar PV equipment at centrally accessible locations. Each franchise trains village technicians to perform day-to-day maintenance. Sunlabob rents maintenance equipment to a Village Energy Committee, who are selected by the whole community, and who lease the equipment to entrepreneurs in the village. Village entrepreneurs then collect a fee for recharging portable lamps. This fee is a regular small expense for a household, just like buying kerosene at the village shop.

Sunlabob’s products help rural communities build assets and capacities that they can use in adapting to climate change. Cutting back kerosene usage has left more money in citizens’ pockets for other purposes. The consistent local electricity supply from village systems has generated new sources of income and brought educational resources and modern communication tools to these communities, including mobile phones, power radios, and TVs. Larger village systems provide power for community services such as health systems and water pumping. In some cases, electricity will even allow the schools, community centers, and government offices to install computers. All of these assets can help
### Cost-benefit

Sunlabob maintains as its core philosophy that profit-making organizations are the best driving forces for sustainable economic development and for providing the managerial, technical, and financial resources needed to meet social and environmental challenges. Sunlabob realized the need for inexpensive, consistent, easily maintained, and low-impact energy sources in rural communities. It conducted extensive market research in rural communities to establish cost-effective and sustainable practices, and to develop payment mechanisms that would complement existing practices. Its initial diligence has paid off, and it is now taking the lessons it learned in Lao PDR to new branches in Cambodia, Indonesia, Bhutan, East Timor, Eastern Africa and Latin America.

### Case study source(s)

Making Climate Your Business: Private Sector Adaptation in South East Asia (WRI)

Source: www.sunlabob.com