International Climate Initiative

Climate Partnerships with the Private Sector: Capacity building for off-grid power supply

Ghana has experienced rapid economic growth in recent years, reaching the World Bank status of a "Middle-Income Country" in 2010. Due to the prioritised supply of power to the manufacturing industry and the increasing shortage of power, there is an increased demand for decentralised energy solutions in Ghana. However, there is a lack of market penetration, especially in the rural areas, where these products could be amortised quickly. This is exactly where Solarkiosk comes in as a local "energy gateway to rural communities". The Solarkiosk consists of a modular and expandable building made of lightweight construction combined with a small solar power plant with a 1-4kw/p capacity. The local Solarkiosk subsidiaries provide the kiosks through sustainable products (mainly solar products for end customers), technical support as well as sales & marketing material. In 2013, the Solarkiosk technology received BMUB's Federal Eco-Design Prize.

To reduce significantly the production costs of the kiosks and to increase the local added value, the project aims to set up an entire production facility for Solarkiosks with a local partner from Ghana's metalworking industry. The measures within the project include the local capacity building and the necessary knowledge transfer as well as the production of at least one solar prototype (1–2kw/p) on site. The entire process will be analysed as part of a project-accompanying study and evaluated with regard to serial production. The evaluation will include, in particular, recommendations for resource planning, supplier operations, logistics, assembling, cost planning, possible adjustments to the design and/or manufacturing process, as well as the necessary training measures of relevant specialists concerning production methods.

The cheaper, locally manufactured solar kiosks accelerate decisively the distribution of such kiosks in the Ghanaian market. This innovative business model creates the basis to disseminate renewable energies. The climate partnership accompanies the award-winning Eco-Design technology towards its successful implementation on the ground.
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Country:	Ghana
Implementation:	DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne
Private sector partner:	Solarkiosk AG
Total project costs:	356,162 €
BMUB-funding:	160,273 €
Project duration:	02/2015 – 05/2017

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