

THE ARB APEX BANK GHANA MODEL OF FINANCING SOLAR PV SYSTEMS FOR OFF-GRID RURAL PEOPLE – CHALLENGES AND LESSONS LEARNED

BY



PRESENTATION OUTLINE

- -Brief on ARB Apex Bank Model
- -Goal & Target of project
- -Components/Funding sources
- -Project Financing plan
- -Achievements to date
- -Challenges and their solutions
- -Lessons learnt
- -Conclusions



Brief on the ARB Apex Bank Solar Project under GEDAP

- Started implementation in 2009
- Works in collaboration with Ministry of Energy, Energy Commission and Association of Ghana Solar companies
- The systems are paid for by the rural people through a 10% initial cash contribution, loan from rural bank (IDA funding) and a grant support from GPOBA (Global Partnership for Output Based Aid).
- Accredited Solar companies market, install and maintain their pre-approved products in the target communities.
- The project is implemented in 11 districts, targeting communities that are most unlikely to be connected to the grid in five to ten years.

GOAL & TARGET OF PROJECT

- The overall goal of the project is to enable the off grid rural dweller/business to have access to electricity using solar PV systems.
- The target of the project is 15,000 systems to serve over 90,000 rural people.

COMPONENTS/FUNDING SOURCES

- 1. Capacity Building (funds from GEF) for participating rural and community banks and Marketing to target populations.
- 2. Credit line (funds from IDA) to support rural off-grid dwellers to purchase solar PV systems.

3. Partial grants (funds from GPOBA) to provide appropriate incentives for solar PV systems and making loans affordable.



PROJECT FINANCING PLAN

• BASIS: At present, costs of Solar Home Systems are considered to be generally beyond the reach of potential users in the relatively remote, poor areas being targeted.





Achievements to date

 9038 systems have been installed to date and we expect to achieve our target of 15,000 systems by end of December 2013.



CHALLENGES ALONG THE WAY AND WHAT WE HAVE DONE TO SOLVE THEM

Challenge	What has been done to solve them
Lack of adequate well trained solar installers to cater for the increased installation rates of the participating companies	The Deng Solar Training Centre has been engaged under the project to train more solar installers to cater for the up surge in rate of installations
Political interference	Try and eliminate all political interference by working directly with the people as a private bank
Failure of earlier installed systems and projects	Install Demo systems to show them that solar works
Lack of full time staff with knowledge on solar products at the financial institutions	Hire full time solar project officers at each participating bank branch

CHALLENGES ALONG THE WAY AND WHAT WE HAVE DONE TO SOLVE THEM

Challenge	What has been done to solve them
The perceived inferiority of solar systems compared to the grid due to usage limitations	Offering varied products to satisfy different users especially the small business community in this rural areas.
Relative high price of solar products due to the fact that we do not produce any component in Ghana today	Continue to interact with Solar dealers to find a common ground on achieving this by supporting the production of solar components in Ghana and removing all barriers to its profitability
High transportation cost of accessing target markets	Train rural staff and start rural production of components)
Customers tampering with systems	Education of customers and design of systems that prevent tampering.
Solar Companies delays in responding to system faults and supply requests	Institute penalties including delayed payments of up to 60 days

LESSONS LEARNT

- Rural off grid people need more than just lighting.
- No need to re-invent the wheel. We should learn from each other and use consultants who have tried similar activities to reduce project failures.
- Quality after sales service is key to the success of the project.
- Beyond education, products must be designed to prevent tampering.
- Re-payment plans must be well designed to meet the cash flow pattern of the target people.
- Eliminate Direct donor and Government interference
- Work with solar companies that are prepared to be close to the target communities.

MORE LESSONS LEARNT

- Capital support should be sourced for participating solar companies and payment to the companies should be fast.
- To ensure quality installations, on field independent inspectors should be engaged
- Full time staff for the banks are required.

Conclusions

- Installation of Solar Systems are a viable way to provide electricity to rural off-grid businesses.
- The collaboration between microfinance and private sector solar companies is possible.
- Lets work together and use the experience that is already available to create successful projects all over the world.



It is not easy to run off-grid solar projects due to the many challenges but little by little it is achievable



THANK YOU

FRANK YEBOAH DADZIE PROJECT MANAGER

EMAIL: <u>engineerfyd@yahoo.com</u> Tel No: 23326270095

