



Financing RET
Experience of Grameen Shakti

Journey Towards Green Energy Revolution





Our Mission is to Empower the Rural People with Access to Green Energy & Income

► We envisage a future where rural households of Bangladesh, would have access to environment friendly and pollution free energy at affordable cost





Grameen Shakti Programs
Meeting the Diversified Energy Needs of the Rural People

- ❑ Solar PV Program providing light, income generating opportunities to the rural people
- ❑ Small SHS Program for the poor
- ❑ Biogas & Organic Fertilizer Program paving the way to an integrated energy and waste management system
- ❑ Improved Cook Stoves Program for protecting women's health, stopping deforestation

Grameen Shakti Update

	SHS	100000
	Biogas Plants	1000 < 3 years
	ICS	1000 < 8 months
	Unit Offices	278
	Employees	1340
	Number of GTC	20
	Area covered	64 districts, 400 Upzilas
	Power generation	20 MW hour-day
	SHS per month	More than 4000

Main Barriers to Promoting Renewable Energy Technologies to the Rural People

- High Up front Costs
- Very limited Consumer financing
- Lack of support from financial institutions
- Very limited investments in this sector due to perceived risks and uncertainty



GS Approach : Successful Blending of Technology with Social, Market Forces

- Innovative financial mechanism - bridging the gap between modern technology and the rural communities
- Coupled with -
- Efficient , Effective Service at the local level
 - Community participation
 - Linking technology with income generation



Micro-utility Model- A successful model for market places

Innovative Application of Micro-credit



Symbiosis between micro-credit & technology to boost business & employment

- **Payment through installments** has helped it to reach economy of scale and increase sales
- **Overhead** minimized by employing staffs who are multi-task oriented
- **Cost** reduced due to local manufacture of SHS components
- **Feasibility & break-even analysis** before opening a new unit office

Example : Financial Package (Solar Home Systems)

Option	Down payment	Installments	Service Charge (Flat rate)
Option-1	15%	36 months	6%
Option-2	25%	24 months	4%
Option-3	100% cash payment with 4% discount		
SSHS	Min 15%	24- 36 months	6%

Renewable Energy Entrepreneur Development Grameen Technology Centers

- 20 GTCs set up, managed mainly by Women Engineers
- Training women technicians, who market, install, repair SHSs for GS
- They also manufacture SHS accessories at GTCs

1000 Women Technicians have already been trained



Innovative approach to financing RET

Developing Renewable Energy Entrepreneurs

In the Future GTCs will -

- Source appropriate technology & new product development and business, technical information
- Supply equipment and technical help
- Provide Business and management training,
- Assist to link with financial institutions

Let many Flowers Bloom



Helping to Develop hundreds of Women Renewable Energy Entrepreneurs

Boosting Green Business through Biogas Technology Linking Finance with Income, Live stock & Agriculture

- Poultry /Live-stock business able to get rid of their wastes, get cost effective energy, generate income through selling biogas, slurry etc
- Organic Fertilizers promoting Agriculture, restoring soil nutrients
- Households able to have light, gas for cooking—more cost effective than kerosene or fuel
- Small Business Units get power at cost effective price through renting
- Development of Entrepreneurs, Employment generation
- Poor Households able to get biogas at lower costs through renting
- Opportunity for Credit for livestock to the poor, in-kind payment through slurry, live stock



Promoting Improved Cook Stoves through Local Entrepreneurs

Aim: To popularize the use of improved cook stoves to reduce women's health risks and protect forest areas

Facilitating a Market development Approach

- ❑ Has trained more than 500 ICS technicians
- ❑ Set up 10 manufacturing units through seed capital and technical assistance
- ❑ Constructed nearly 2000 ICSS through local technicians and entrepreneurs in less than 8 months



What Needs to be Done ?



- Provide direct finance to Consumers through financial institutions , micro-credit organizations etc
- Take action to develop renewable energy micro-entrepreneurs through financial and technical assistance
- Update and change financial policy to provide incentives to private players
- Facilitate private investment in renewable energy through capacity development in business development and technical knowledge

Thanks for your
Kind Attention