

Green Tech



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Solar power lights up rural homes

The government has set a target to generate 500 megawatts (MW) of green energy -- almost ten times the current amount -- by 2015, in an attempt to narrow the gap between current demand and supply of grid electricity

SUMAN SAHA

THE Infrastructure Development Company Ltd (IDCOL) has revised its target to set up solar home systems (SHS) across Bangladesh. It had planned to install 10 lakh SHSs by December 2012 but it has already met its target by June this year.

The non-banking financial institution has now set a new target to install a total of 25 lakh SHSs by 2014 in areas where electricity is not available, says SM Monirul Islam, general manager (accounts and administration) of IDCOL.

SHSs have helped save 80,000 tonnes of kerosene worth around Tk

580 crore and Tk 2,821 crore in electricity connection costs. So far the initiative has created 15,000 direct and 30,000 indirect jobs.

Once completed, the combined capacity of the SHSs will be 140 megawatts, lighting 1.25 crore beneficiary homes, accounting for 8.3 percent of the country's 15 crore population, says Islam.

The company invested around Tk 1,440 crore -- Tk 1,200 crore in loans and Tk 240 crore in grants -- for the installations until June.

IDCOL also plans to invest another Tk 2,867 crore in soft loans and Tk 338 crore in grants for the same purpose.

"With the current pace of operations, we expect to reach the target by mid-2012," says Islam.

The average 50 percent growth of SHS installations came on the back of availability of financial and technical support and quality equipments, says Islam. Easy credit facilities and subsidies helped IDCOL achieve the goal ahead of time.

Most of the solar home systems installed under financing from IDCOL have a capacity of 50 watt-peaks.

The original cost of the 50 watt-peak system is Tk 30,800, of which IDCOL grants Tk 2,800. A household has to pay a down payment of Tk 4,200. An IDCOL loan of Tk 19,040 is distributed through partner non-

governmental organisations that actually install the systems. These partners ultimately give loans worth Tk 4,760 to customers for the 50 watt-peak systems.

"We installed systems of different capacities, but the 50 watt-peak system is the popular one among rural customers," says Islam. Most of the SHSs were installed on off-grid areas. Each 50 watt-peak system can run 4 CFL (compact fluorescent lamps) of 6 watts each, a 17 to 20 inch black and white television and a mobile charger.

Rural households in Bangladesh are frequently not on the state electrical grid and so have embraced solar power, helped by NGOs providing panels that can be paid for in small monthly instalments.

The government has set a target to generate 500 megawatts (MW) of green energy -- almost ten times the current amount -- by 2015, in an attempt to narrow the gap between current demand and supply of grid electricity.

Only half of Bangladesh's population has access to electricity from the national grid. Fossil fuel accounts for most of power generation worth 5,000 MW daily, with renewable sources -- mostly solar power -- contributing just 55 MW.

People on non-grid areas who have no access to main electricity rely



Solar panels are installed on the roof of the Bangladesh Bank building in Dhaka.

heavily on costly kerosene lamps for lighting. This makes SHSs more attractive to them.

According to IDCOL statistics, it installed 60,142 SHSs in Sunamganj -- the highest coverage by the company in a district. Patuakhali and Satkhira come in second and third, with each installing 58,836 and 39,483 SHSs till June.

Of the partner organisations that implemented the IDCOL solar projects, Grameen Shakti alone installed over 6 lakh out of 10 lakh SHSs. Rural

Service Foundation has set up over 1.5 lakh SHSs in different parts of the country.

Twenty-nine organisations have partnered with IDCOL to install the solar systems.

Officials say the systems are attractive as maintenance costs for the solar panels are low. Besides, the companies also give 20 to 25 years of warranty.

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NUMBERS OF SOLAR HOME SYSTEMS

DISTRICT-WISE COVERAGE UNTIL JUNE

SHARIATPUR	33,706
BARGUNA	38,406
SATKHIRA	39,483
PATUAKHALI	58,836
SUNAMGANJ	60,142

SOURCE: IDCOL

Green job prospects bright

SUMAN SAHA

EVEN five years ago, Jamal Uddin had little hopes of getting a dignified job as he could not study beyond secondary level. But he is now employed by a solar home system producing company.

"I was unable to continue beyond my SSC exams as my father passed away and my mother could not bear the expenses," said the 25-year-old from Satkhira.

Nonetheless, he got a job as a technician at a solar panel distribution and installation company in his home district.

Jamal is not the only one there either. Renewable energy companies have generated a large number of jobs in the country in the last few years.

Around 28 lakh people are currently involved in green or environment-related

jobs, according to a recent study styled 'Estimating green jobs in Bangladesh' by International Labour Organisation.

More than two million people have, in recent years, found new jobs in the renewable energy sector, and potential for job growth is huge.

By 2030, employment in wind energy production could climb to more than two million while solar power could account for more than six million jobs worldwide.

The global environmental job market is projected to double from \$1,370 billion at present to \$2,740 billion by 2020, said industry insiders.

The prospects of the renewable sector in the country are huge as the future adaptation and mitigation measures will generate hundreds and thousands of jobs, said Bibekananda Ghatak, manager for operation of Rural Service Foundation

(RSF).

RSF has 455 unit offices across the country and each unit office has 5-7 field level workers.

The renewable sector generally needs to hire a large number of field level employees, such as technicians, field assistants, sub-assistant engineers and unit managers to reach out to the remote areas.

The field level workers are normally responsible for installation and maintenance of the solar home system. They also collect monthly instalments from the customers, said AK Zahid, a manager of SolarEn Foundation.

A solar company generally recruits secondary or higher secondary pass candidates as technicians. They normally get Tk 4,500-Tk 6,000 based on their experience.

Grassroots level workers are also

employed for door-to-door marketing to encourage people to use solar systems, said Dipak Kumar Chakraborty, senior assistant director of Srizoni Bangladesh that has 306 unit offices and 36 area offices.

Industry insiders said opportunities to create a large number of green jobs exist in Bangladesh and every other country. It contributes to building an environmentally friendly, low carbon economy.

Some employment will substitute jobs in other fields, like shifting jobs from fossil fuel to renewable or from land filling and waste incineration to recycling.

Renewable energy, buildings and construction, transportation, basic industries, agriculture and forestry will be the priority areas for the future green job market.

Green jobs are 'decent' jobs that help reduce consumption of energy and raw

materials, de-carbonise the economy, protect and restore ecosystem services like clean water, flood protection and biodiversity, and minimise the production of waste and pollution.

Career prospects in the renewable sector are bright as the country emphasises the use of solar energy, says Munawar Moin, managing director of Rahimafrooz Renewable Energy Ltd.

"We are engaged in the renewable sector with our Rahimafrooz Renewable Energy and its non-profit organisation RSE. Around 4,000 people are now working for the two ventures," says Moin.

He said there are two options to build a career in the sector. These are the technical segment and field level operations.

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