(Bogra, Bangladesh) Wrapped in a brown sari, Sanjida Akhter climbs a ladder and steps carefully onto the corrugated steel roof of a rural home near the town of Bogra, 200 kilometres northwest of the capital Dhaka.

Ms Akhter is one of a growing number of trained solar home technicians installing energy-saving solar panels onto the rooftops of homes that have no access to the national electricity grid or simply can’t afford the connection fee.

"The solar panel on this house transfers energy from the sunlight into a rechargeable battery,” explained Ms Akhter. “Through this system we can have lights, charge a mobile phone, watch TV and run other things -- all from solar energy. The villagers here are seeing great benefits from it.”

While the national grid reaches many areas of Bangladesh, most of the country’s 142 million inhabitants live in rural areas and 70% of them are not connected. Most rely on kerosene fuelled lamps for lighting and petrol or diesel-fired generators for other power needs. Solar power is increasingly seen as a convenient, affordable and environmentally friendly alternative for many in Bangladesh.

Ms Akhter has been installing solar panels on rural homes for three years. She received her initial training through a programme supported by the International Labour Organization (ILO) and Grameen Shakti, a partner organization of the Infrastructure Development Corporation Limited (IDCOL) – a public agency in Bangladesh that promotes renewable energy. Under the ILO’s Green Jobs in Asia project, supported by the Australian Government – ILO Partnership Agreement (2010 – 2015), more solar home technicians are graduating each month following a series of six week training programmes operated by the Bureau of Manpower, Employment and Training (BMET) through its Technical Training Centres across the country.

“I think job prospects and the future of (solar home systems) are getting better day by day,” said Mr G.N. Bhattacharjee, Principal-in-Charge of the BMET Technical Training Centre at Bogra. Indeed, his students are eager to get to work.

“I’ve taken this course only for one reason,” said Mahmudul Hasan, one of the trainees in a class of 40 students. “We have a deficiency of electricity in our country. We have lots of demand but lack of electricity. So if we can make this rechargeable solar energy system successful it will bring great benefits to the villagers and my country.”

Indeed, the move toward greater use of solar energy is being encouraged by the Bangladesh government and is officially endorsed in its current sixth five-year development plan. It is recognised that by rolling out solar home systems, new jobs are created for the installation and maintenance of solar energy products, while bringing a clean and alternative form of energy to rural areas.
This win-win situation is further advanced because greater access to energy opens up new opportunities for business and economic growth in rural areas. The creation of decent work, coupled with a reduced reliance on carbon intensive fuels, has resulted in the endorsement of the ILO’s ‘Green Jobs’ employment model for Bangladesh.

The green jobs programme also places a specific emphasis on promoting the role of women who still face barriers entering into the labour market. “I see no difference between male and female trainees and my teachers here have supported that view,” said 19 year old trainee, Nilafur Yasmin. “I’m doing this work with great interest and I’m encouraging other women to get involved,” added Ms Shahida Khatoon, another of the solar home technicians now on the job.

The training results in technicians who not only install the solar panels but also assemble various component parts and maintain the systems. In the city of Bogra, Sheema Akhter (no relation to Sanjida) uses a soldering iron to assemble a control box required to operate the solar panel system. She feels that her work is decent and her skills are in demand. “I’m in a better position now (since the training),” she said. “I can also now give some money to my parents.”

Back in the capital Dhaka, the government is intently following the success of the solar home programmes and is promoting further expansion. “The concept of green jobs is totally new for us but that is where we need help,” said Mikail Shipar, Secretary, Ministry of Labour and Employment. “The ILO is providing a very supportive role. They are giving us training and knowledge sharing on green jobs and it’s very effective for our rural people,” he added.

According to employers, there is a strong business case to be made for rolling out solar home systems right across the country.

“In the context of Bangladesh, in terms of solar energy the opportunity is huge,” said Fazlul Hoque, President of the Bangladesh Employers’ Federation. “From an entrepreneurial perspective, installing and maintaining the solar panels creates opportunity.”

Workers’ organizations are also impressed. “Green jobs is an emerging issue in Bangladesh but it benefits the workers,” said Mojibur Rahman Bhuiyan, Member Secretary of the National Co-ordination Committee for Workers’ Education. “So the trade unions support it because solar home systems will benefit people and create new jobs,” said Bhuiyan.

There is great optimism among those already working in this new green jobs sector. Those who’ve been through the ILO-supported training in Bangladesh see nothing but a bright future on the solar home’s horizon.

“I wish to see solar home panels everywhere in this country in the next five years,” said Farhana Akhter Ranu, a 25 year old graduate of the training. She smiles and proudly adds that she has recently installed her 60th solar home panel on the home of a local villager. “From sewing machines to air conditioners or computers, whatever household things we use, we’ll soon be powering them all through solar home systems.”

Photo credits (of two women): ILO/A.DOW; (man with solar panel) BMET