

## Microgrid economics yemen

In Yemen, opportunities for women to earn an independent living are few. One group of women have found ongoing employment by building a solar microgrid providing energy for their rural community.

The 10 women, who live in the Abs district in the north of the country close to the border with Saudi Arabia, set up the 26.8kW-capacity microgrid in January 2019. Now, it is providing the women with a sustainable income and allowing them to develop professional skills.

"At first, they made fun of us, that we want to do men's work. But now, the community is respecting us as we are business owners," said Iman Ghaleb, one of the microgrid owners. "This project has built the trust and broken the red line in dealing with men. We are now contributing to the family monthly budget to cover food and other life requirements."

Abs is one of three rural communities where women and young people have been trained to set up and manage solar microgrids to bring electricity to the area. Two similar microgrids have been set up in the Bani Qais district and the Lahj district. The microgrids are believed to be the first privately run energy sources in the country.

The project, which is run by the United Nations Development Programme (UNDP), tackles two major challenges in Yemen: access to affordable energy and providing income for women and young people. Its successes in these areas saw the project win an Ashden Award for sustainable development earlier this year.

More than half of Yemen's rural population does not have access to energy. Before the grids, the community in Abs was reliant on diesel generators. According to Arvind Kumar, Yemen project manager at UNDP, 10,000 people now have access to clean power and electricity bills have been cut by 65 per cent. The microgrid model is "the way forward" for energy in rural areas of Yemen, he added.

The next step for the programme is to secure private-sector funding to build more microgrids. The aim is to build 100 in total across remote areas of the country, in order to keep schools and hospitals open during the conflict.

A United Nations Development Programme (UNDP) Yemen project that works to help resolve these issues has been awarded the prestigious Ashden Award for Humanitarian Energy. The UNDP-managed joint project, the Enhanced Rural Resilience in Yemen (ERRY), has been recognized as one of the world's most practical and scalable low carbon innovators and was among 11 winners selected from over 200 global applications in the areas of creating resilience, green growth, and fairer societies.

The UNDP-ERRY project has intervened in three frontline communities of the conflict in Hajjah and Lahj to



## Microgrid economics yemen

address access to affordable energy for Yemen's most vulnerable population while also economically empowering women and youth to help support their families. The project designed and developed a unique, low-cost solar microgrid solution that uses our 3x6 approach for longer term sustainability.

The solar microgrids offer an alternative, clean and renewable energy source that allows rural homes the ability to afford uninterrupted electricity for hours. They also provide a solution and hope for communities that may have little else.

The tremendous increase in fuel prices and Yemen's frequently failed public electricity grid have left citizens with few options: they can install individual solar systems in their homes or subscribe to a private diesel-powered energy grid. Both options are expensive and renewable energy is too costly for many Yemenis. No matter the option, the cost adds significant financial burdens to already financially stressed homes.

The solar microgrids create alternative energy options that can be a better source than diesel because it is clean energy with a low cost and is easily replicated in rural areas, impacting large numbers of Yemenis. The UNDP project has been successful at cutting the cost of energy by 65 per cent. Instead of diesel costing 42 cents an hour, solar energy costs only 2 cents, making it more affordable to the average Yemeni.

Contact us for free full report

Web: <https://hollanddutchtours.nl/contact-us/>

Email: [energystorage2000@gmail.com](mailto:energystorage2000@gmail.com)

WhatsApp: 8613816583346

