Education in solar technology and entrepreneurship to foster self-reliance

Solafrica is a Swiss non-profit organisation addressing the need for safe and reliable energy, and developing solar technology in Africa. Founded in 2009, the goal of Solafrica is to improve people’s lives by providing sustainable energy solutions and services based in their own communities. As a spin-off of Greenpeace Switzerland, Solafrica works closely with local organisations while using a wide international network. To transfer know-how to Africa, the organisation trains local people in solar technology and energy efficiency. It is currently active in a number of projects mainly in Sub-Saharan Africa. Solafrica seeks to achieve long-term sustainability by investing primarily in vocational training and in development processes in communities, as well as by supporting the establishment of institutions such as social solar businesses. Beyond focusing on energy and the preservation of natural resources, it attaches high importance to the life circumstances of indigenous peoples and economically disadvantaged groups.

In Ethiopia, the Julius Baer Foundation supports the development and implementation of a comprehensive demand-driven training, coaching, and mentoring programme in solar technology and entrepreneurship. Within a period of five years, 540 youths will be trained in the installation, maintenance and selling of solar photovoltaic systems. Accredited TVET polytechnic colleges will use participatory techniques and tools to ensure the sustainability of the new vocational trainings. This concept envisages the improvement of the economic self-reliance of disadvantaged youths and of the livelihoods of community members in the Amhara region of Ethiopia.
Creating jobs in a growing market while reducing energy poverty

Through the vocational training in solar technology, the employability of 540 youths will be increased. The young adults will be successfully linked with job opportunities via job placement and business support for self-employment. Through the trained technicians, about 40,000 rural off-grid households and 200,000 community members will benefit from improved access to solar energy by the end of 2022.

Facts and figures: Ethiopia

Founded in 980 BC, Ethiopia is one of the oldest nations in the world. Today, Ethiopia is one of the world’s fastest-growing countries. The poverty rate at national poverty line fell gradually from 45.5% in 1995 to 29.6% in 2010. However, 67 million Ethiopians remain without access to electricity. Ethiopia aims to achieve middle-income status by 2025 while developing a green economy. Through the Climate-Resilient Green Economy Strategy, the government strongly committed to push the promotion of renewable energy. More and more companies are entering its growing solar market. Still, there are no official training opportunities for technicians in the Ethiopian solar sector. Many of its employed solar technicians are unqualified or only marginally qualified. Especially in rural areas, where the need for solar technology to improve access to energy is great, there is a significant lack of expertise.

• Capital: Addis Abeba
• Population: 104 million
• Language: Amharic
• Youth unemployment rate (15–24 years): 7.4%
• Population without access to electricity: 67 million
• Exports: coffee ($899M), refined petroleum ($693M), cut flowers ($605M)
• A year in the Ethiopian calendar is 13 months long. The last month, called Pagume, has 5 days in a common year and 6 days during leap year.

For more information about Solafrica, please visit: www.solafrica.ch

“Last year, the Julius Baer Foundation organised a so-called crowdsourcing programme design workshop. Various non-profit organisations active in Ethiopia were invited to discuss the need for future professions. Solafrica had the opportunity to present its experience in vocational training for solar technicians in Kenya along with Ethiopia specialists from other organisations. As a result, the three Swiss-Ethiopian organisations Solafrica, Education for Sustainable Development (ESD), and Helvetas jointly developed a programme to implement a vocational training for solar technicians in rural Ethiopia – a region in which 75% of the people still have no access to electricity.”

Elias Kost,
CEO of Solafrica

“We learn to do something by doing it. There is no other way.”

John Holt, American author and educator