

Highlights

Producing the world's first flat-packable solar thermal collector.

Award winning, patented technology that provides a solution to expensive solar heating.

Labelled one of the '1000 solutions to change the world' by the Solar Impulse Foundation.

Inexpensive and scalable design that is easy to assemble and transport.

Fulfilling commitment to lowering global carbon emissions.



SolarisKit Ltd

SolarisKit Ltd is a Dundee based cleantech start-up that has designed and patented the world's first flat-packable solar thermal collector. The device has been specifically developed to provide affordable, low-carbon heat to millions of people in the global south. It is based on a unique prismatic design able to convert sunlight directly into hot water.

With carbon emissions from developing countries exceeding those produced from the industrialised nations, and 40% of energy related carbon emissions due to heating, there is urgent need for affordable and widely scalable low-carbon heating solutions to tackle the climate emergency. Technology developed by SolarisKit in Scotland aims to address this global need.

SolarisKit Ltd was founded by Dr Faisal Ghani in 2019 after learning that households in Rwanda were spending up to 40% of their income on electricity bills, 70% of which was going into heating water. As a mechanical engineer with over 15 years' experience in developing solar thermal technology, he set out to find a solution that harnesses Rwanda's abundant solar resource, relieves the financial pressure on households, while also lowering carbon emissions.

Website: <https://solariskit.com>
Twitter: @flatpacksolar
Facebook: <https://www.facebook.com/solariskit/>
LinkedIn: <https://www.linkedin.com/company/solariskit/>

The biggest barriers for developing countries to uptake solar energy are high cost, difficulty in installation, and transport issues. The clean technology would need to be low cost, easily transported, and quick and simple to install. The SolarisKit collector can be assembled in less than 20 minutes using no tooling and simple instructions. This solution is cheaper to manufacture, purchase, transport and install, making it perfect for developing economies. The collector has been rigorously tested at Heriot-Watt University to prove its viability.

The technology has attracted funding from Scottish Enterprise (£60k) and Innovate UK through the Energy Catalyst 7 programme (£242k) to fund pilot trials of the solar collector in Rwanda. Further funding has been provided through the Unlocking Ambition program and the Royal Society of Edinburgh. Funding has also allowed the company to refine the design to a point where it is ready for pilot trials in its target market and allow for the installation of approximately 100 collectors in Rwanda scheduled in 2021.

The technology has the potential to make a real difference to peoples' lives and the environment. The company states that two SolarisKit solar collectors installed in Rwanda will annually save a household approximately \$400 USD while reducing carbon emissions by about 500kgs.



SolarisKit is also committed to reducing its environmental impacts and lowering global carbon emissions through taking part in several initiatives, including a corporate commitment to plant 25 trees for every solar collector sold; aiming to plant 1.25 million trees by 2025 based on sales forecasts (as at October 2020).

