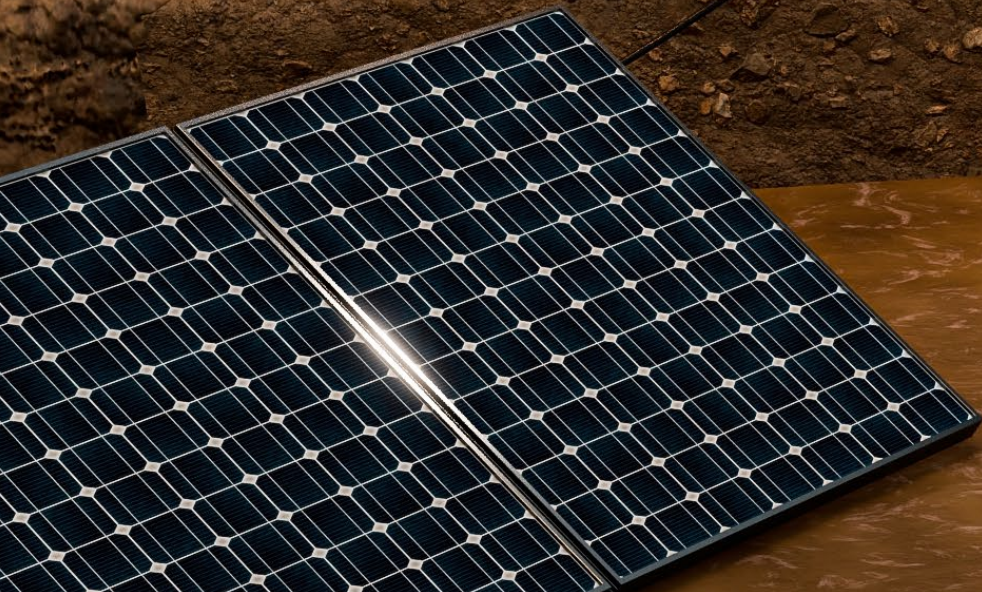


Solutions

# Solar Home System.





# Access to energy.

Access to energy is essential for sustainable development, yet Africa faces major challenges in achieving SDG 7—“Affordable and Clean Energy for All.” With limited infrastructure for power generation and distribution, millions are left without reliable, affordable energy, limiting progress in health, education, and economic growth.

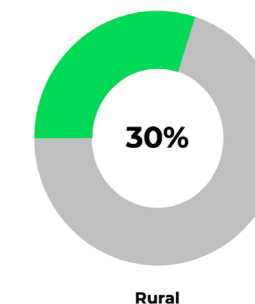
Africa's energy challenges include limited infrastructure, funding constraints, and reliance on expensive fossil fuels. While urban areas often receive priority, rural communities remain underserved, and the effects of climate change make sustainable energy even more urgent.

Transitioning to clean, renewable energy can pave the way for a brighter, sustainable future for Africa, bringing energy access and economic opportunities to every community.



## 30% Rural Energy Access

In Sub-Saharan Africa, only 30% of the rural population has access to energy, compared to 81% in urban areas, highlighting a significant disparity in energy availability.



**„747 Mio. people worldwide without access to electricity 2023.“**

In 2023, 747 million people worldwide lack access to energy, with a staggering 600 million from Sub-Saharan Africa alone. This energy poverty hinders progress and opportunities, highlighting the urgent need for innovative solutions and investment in sustainable energy access.

## Need for reliable power solutions

Many rural areas or small businesses rely on diesel generators, which are costly, environmentally unsustainable, and logistically difficult to maintain.





# Solar Home System.

Solar Home Systems provide a sustainable and reliable solution for meeting household energy needs, particularly in areas with limited or no access to electricity grids. They are an immediate and effective solution for informal settlements and other remote areas.

Solar Home Systems are designed to be user-friendly, requiring minimal maintenance and providing a reliable source of electricity for essential energy needs such as lighting, phone charging, and powering small appliances. They contribute to better living conditions and improved safety for individuals and communities.

Additionally, they reduce dependency on traditional energy sources and help reduce carbon emissions and air pollution associated with fossil fuel based power generation e.g. diesel generators.

## Technical specifications

- Capacity: The 640 Wh configuration meets various household energy requirements
- PAYG (Pay-As-You-Go) Integration: each system supports both online and offline payment mechanisms allowing for flexible, user-friendly payment options
- Standard support for GSM and Bluetooth connectivity
- Optional features: NFC, 3G, 4G, and GPS integration for enhanced functionality and remote management
- Durability and longevity: dust and water resistant casing
- 200 W MPPT Charger: high-efficiency solar charging for optimal performance in varied solar conditions
- Equipped with the Off-Grid Controller for advanced Monitoring & Control



## Benefits



### Energy independence

Practical, cost-effective and sustainable solution for informal settlements.



### Economic growth

Potential for home-based economic activities enabled by stable power.



### Immediacy

Rapid roll-out without the need to create expensive and permanent infrastructure.

**“At Off-Grid Europe, we are committed to innovation, constantly optimizing our technology to combat energy poverty. With our work, we strive to uplift the lives of millions of people.”**

Christiane Kragh, CEO

# Who we are.

Off-Grid Europe (OGE) was founded in 2010 by Christiane Kragh and Mark Kragh. The company developed into a provider of complex technical energy solutions. OGE provides customers with end-to-end renewable energy solutions.

OGE specializes in PV (Photovoltaics) and BESS (Battery Energy Storage Systems) and works across a wide spectrum from system design and planning to system procurement and construction. The company's proprietary intelligent software solution, the Off-Grid Controller, provides efficient energy monitoring and control.

Since 2020, OGE is part of the rural electrification project ASER300 in Senegal. In the course of realizing this project, OGE founded its Senegalese subsidiary Off-Grid Africa. Together, the two companies are making an important contribution to the electrification of rural regions in Senegal and beyond.

By providing competitively priced, easy to maintain and scalable energy systems, OGE strives to create a positive impact on the environment, local economy and uplift the lives of millions of people.

Innovation is at the heart of OGE. They recently launched Ohms Box, a compact BESS that can be used to generate electricity in off-grid regions and in harsh conditions, even for MW-sized installations.

Additionally, the company developed a solar powered cooling hall: Much Cooler to combat post harvest loss which is still a huge issue on the African continent. With 100% solar power and battery storage, farmers can store and cool their harvest. This solution contributes to nutrition security, price stability and food quality in Africa.



Christiane Kragh  
CEO and co-founder



Mark Kragh  
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