



# CLIMATE SOLVER 2014 AWARDEE

## Energy Access: Progressive Purchase — Pay-as-you-go Pricing Model

Developed by: Simpa Energy India Pvt. Ltd.

### INNOVATION

International Energy Agency (IEA) estimates that around 1.3 billion people worldwide have no access to electricity. Basic needs such as lighting, using a fan during summers or charging of mobile phones still appear as implausible aspirations for a large number of rural households. Kerosene is often the main source of lighting in these areas, which results in indoor air pollution and poor illumination at a higher expense.

Modern solar technologies have immense potential to address the energy access challenge. However, their adoption is low primarily due to higher upfront cost and limited accessibility. Thus, there is an immediate need for innovative financing mechanism and effective local entrepreneurship networks for wider penetration of clean energy solutions.

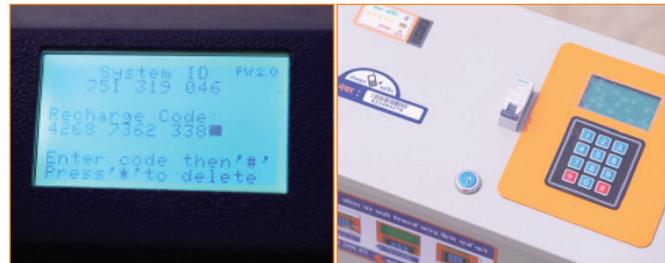
Simpa, a company that sells solar as a service to the energy-poor households and micro-enterprises, has introduced an innovative pay-as-you-go and instalment plan pricing model to address the issue of affordability as well as accessibility of sustainable energy solutions for rural customers. They have also created a proprietary prepaid metering and mobile payment technology called Progressive Purchase™.

Under Progressive Purchase™, consumers make an initial down payment for a high-quality solar PV system and then pre-pay for the energy service, topping up their systems in small user-defined increments using a mobile phone. Each payment for energy also adds to the final purchase price. Once fully paid, the system unlocks permanently and produces free electricity for the expected life of the product. For the rural consumer, the pre paid interface and the easy instalment financing model makes this solar solution affordable.

The Progressive Purchase™ pricing model is enabled by the Simpa Regulator, a tamper-proof, system-integrated micro-controller and user interface that regulates the

### BENEFITS

This innovative solution provides better lighting facility leading to reduced usage of kerosene, better communication through phone charging and extended light-hours that enhance education and local business. The business model makes solar solutions affordable and accessible for rural households and institutions. If this solution is replicated at a large scale in the developing world, it has the potential to reach out to 18 million people by the year 2024.



Pre-paid Energy Service provided by Simpa Networks

Simpa Regulator - A tamper-proof system integrated micro controller

function of the solar home systems based on proof of payments. The Simpa Revenue Management System, a centralised software solution on the “cloud”, accessible via SMS gateway and over the internet, also facilitates the payment processing and accounts settlement.

To widen the reach and expand the availability of solar systems to energy deprived rural households, Simpa also uses a direct sales model, recruiting local, village-level entrepreneurs (VLEs), known as “UrjaMitras” to be its sales agents. They also recruit and train rural people to become Simpa Certified Solar Technicians. This helps in customer service, and generates employment as well. This business model reduces the transaction costs of collecting small payments from highly distributed customers as well as mitigates the risk of serving often unbanked customers.

### ABOUT THE COMPANY

Simpa Networks is a venture-backed technology company with an aim to make modern energy simple, affordable, and accessible for everyone. Simpa Energy India Pvt. Ltd. started its operations in 2011 with a prime focus in eight districts of Uttar Pradesh. As on May 2015, the company has reached out to over 10,000 customers in the state of Uttar Pradesh alone and almost half of the Simpa beneficiaries have been women.



Simpa enabling access to sustainable solar solutions through its products



# CLIMATE SOLVER 2014 AWARDEE

## Energy Access: Decentralised Energy Solutions for Underserved Households and Institutions

Developed by: ONergy (Punam Energy Pvt. Ltd.)

### INNOVATION

Solar energy is pivotal to a world where lack of access to electricity is still amongst the many looming challenges. And yet, the rate of successful adoption of solar energy based solutions has been limited due to a dearth of successful replicable models for energy access, lack of financing options for the consumers, poor product quality and inadequate after-sales services. Therefore, there is a need for innovative ideas for scaling up clean solar energy solutions by connecting technology, outreach and finance in a manner that can manage the needs and aspirations of rural beneficiaries.

ONergy, a social enterprise company, is facilitating the penetration of decentralised energy solutions to underserved households and institutions by setting up last mile energy distribution and service networks.

Through innovation in products and services, ONergy provides complete energy solutions with a range of products such as solar lanterns and home electrification products, solar inverters, solar water heaters, micro grids, irrigation systems, etc.

ONergy deploys a 'Hub & Spoke' strategy that demonstrates innovation in delivery and financing through a network of Renewable Energy Centres (RECs) and successful partnerships for facilitating consumer financing. RECs act as the 'Hub', and create a unique full service distribution infrastructure through a network of trained rural entrepreneurs. 'Spokes' comprise self help groups (SHGs), NGOs, microfinance institutions (MFIs), entrepreneurs, rural banks, direct marketing and training programmes, and act as modes of distribution and outreach of ONergy's products and services.

The RECs operate as a nodal point and leverage the existing networks of local NGOs, SHGs and MFIs for wider outreach. Besides serving as a physical presence for the company in the community, the RECs help address the distribution and financing gaps for the bottom of

### BENEFITS

Besides catering to the basic energy needs, this innovative business solution makes solar applications accessible and affordable for the bottom of the pyramid beneficiaries. If this solution is replicated at a large scale in the developing world, it has the potential to reach out to 23 million people by the year 2024.



ONergy's range of products through which it provides complete energy solutions

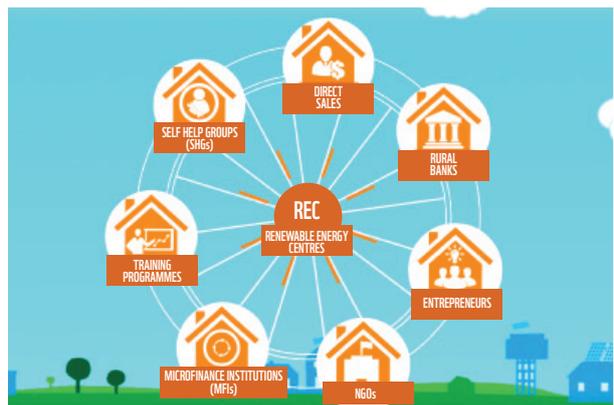
the pyramid market by providing awareness, training, servicing and financing options to beneficiaries.

This hub and spoke strategy enables easy accessibility of clean energy solutions in remote areas. In addition, it also maintains a low-cost, efficient distribution and servicing network, and ensures that grassroots partners, micro-entrepreneurs and REC staff are incentivised to distribute and service ONergy's renewable energy products.

By developing high quality products, strong after-sales service network, facilitating consumer financing for solar systems, ONergy is thus successfully developing an ecosystem for sustainable development and rural empowerment.

### ABOUT THE COMPANY

ONergy (Punam Energy Pvt. Ltd.) is a social enterprise established in 2009 providing decentralised energy solutions to underserved households and institutions. ONergy has impacted over 200,000 people in more than 1000 villages, with sales of over 40,000 solar systems. Currently, it operates across West Bengal, Odisha and Jharkhand through a network of RECs that reach out to remote areas. ONergy has also been listed as one of the channel partners under the Solar Mission of the Ministry of New and Renewable Energy (MNRE), Government of India.



The Hub & Spoke strategy of ONergy where Renewable Energy Centre acts as the hub, and spokes comprise various modes of distribution and outreach of ONergy's products and services

