



Empowering opportunities



Name: ONergy

Date of creation : 2009

Location :

West Bengal, Odisha and
Jharkhand

Nb staff : 68 employees

Business model :

System integrator

Beneficiary :

More than 130 000 persons

Financial situation:

Currently breaking-even

Legal incorporation:

Private Limited Company

CASE STUDY

ONergy is providing complete energy solutions, by creating an ecosystem - to manage the needs, aspirations and resources of BoP beneficiaries, and applying appropriate renewable technology solutions effectively and creatively. ONergy creates a unique full service distribution infrastructure by establishing Renewable Energy Centres and by facilitating consumer financing and operates through a network of trained rural entrepreneurs making it decentralized, sustainable and scalable.

PROBLEM TACKLED AND MAGNITUDE OF THE PROBLEM

General overview of India

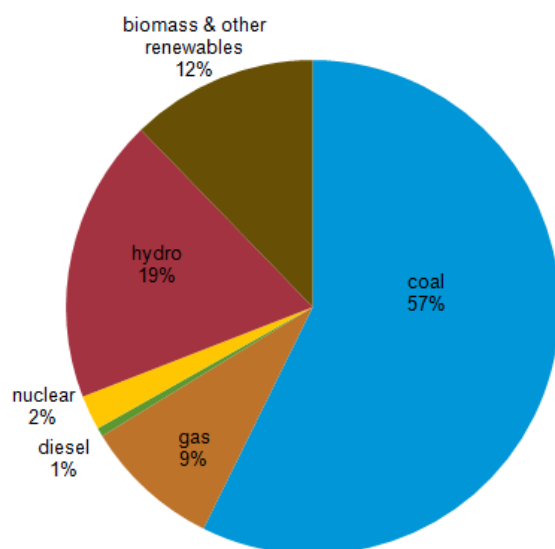
India has the world's 2nd largest population of 1.24 billion in 2011¹ and the world's 7th largest landmass². The Indian subcontinent is an ethnically and religiously diverse society with 23 official languages, whilst English is the subsidiary official language.

India has achieved rapid and remarkable economic development in the past two decades and became the world's 10th largest economy in 2011. With its relatively young population with a median age of 26.2 years, India is expected to take over China as the world's most populous nation around 2025³. The country, thus, has emerged as one of the most dynamic economic powers in the world. Yet there exist contradictions and complexities that posit considerable challenges to grasp the reality of India, among which, a widening income gap between urban and rural areas as well as among states.

Electricity in India: The challenges

The electricity sector in India had an installed capacity of 232 GW as of November 2013, the world's fifth largest, with a production mainly based on coal (57%) and hydro (19%). India's electricity sector is amongst the world's most active players in renewable energy utilisation. As of December 2011, India had an installed capacity of about 28 GW of renewal technologies-based electricity, exceeding the total installed electricity capacity in Austria by all technologies.

India installed power capacity, 2011



Source: U.S. Energy Information Administration, International Energy Statistics, India Central Electricity Authority

Electrification rate:

Despite this installed capacity, in December 2011, over 300 million Indian citizens had no access to frequent electricity. Over one third of India's rural population lacked electricity,

as did 6% of the urban population. While the Government of India has long made rural electrification a high priority, most rural Indian households still lack access to grid electricity. In addition, even though the electric power grid has reached into an estimated 85% of villages, the distribution network has yet to be extended to reach India's rural populations living outside village centers. As a result, there are an estimated 40 million households without access or with unreliable access to the electricity grid in East India.

Shortages:

India currently suffers from a major shortage of electricity generation capacity, even though it is the world's 4th largest energy consumer after United States, China and Russia. Utilization rates in Indian power plants have fallen steadily since 2004 because of insufficient fuel supplies. Daily power outages of 4-5 hours are common in urban areas. Rural areas face even higher frequencies of brownouts, power-cuts and load shedding. The growing demand for electricity in all sectors of the economy is outstripping the ability of the national government and State Electricity Boards to provide adequate or reliable power supplies. This electricity deficit is expected to increase dramatically in the near future.

Low per capita domestic consumption:

The per capita average annual domestic electricity consumption in India in 2009 was 96 kWh in rural areas and 288 kWh in urban areas for those with access to electricity, in contrast to the worldwide per capita annual average of 2600 kWh and 6200 kWh in the European Union.

High losses:

There are two components to the losses: technical and non-technical. Technical losses consist mainly of power supply dissipation because of faulty transmission and distribution lines, transformers and measurement systems. There are other losses incurred as a result of actions that are outside the control of the power supply system comprising electricity theft, non-payment by customers, and errors in accounting and record keeping.

When it comes to power theft, India loses billions of rupees because of unbilled consumption and unlawful usage of electricity and rank high on the list with Brazil. If you add unpaid bills to this loss, then the electricity supply companies and boards' losses are huge. Some estimates say that only half the revenue is realised⁴.

The International Energy Agency estimates India will add additional new power generation capacity before 2050 that will be equivalent to the total power generation capacity of European Union in 2005. The technologies and fuel sources India adopts, as it adds this electricity generation capacity, may make significant impact to global resource usage and environmental issues.

(1) (WDI, 2012)

(2) (IEA, 2011)

(3) Based on IEA population growth projections in WEO 2011

(4) Source : <http://www.thehindu.com/news/national/karnataka/the-smart-meter-solution-to-the-problem-of-power-theft/article5186952.ece>



Access to electricity: Existing solutions

In areas lacking access to the electrical grid, there are several methods by which rural off-grid families currently receive home lighting and entertainment communications (TV, radio-cassette players). These methods include kerosene lamps, rechargeable electric storage batteries, individual diesel generators (gensets), solar lanterns, or Solar Home Systems⁵.

Kerosene:

Small kerosene lamps are the most widely used form of household lighting for un-electrified families.

- They consume 3ml/ hour.
- Prices for kerosene average \$0.25/l (so generally low but can be considerably higher in more remote rural areas.)
- Light output from a kerosene wick lamp is low, offering only 40 lumens, compared to 400 from an 8w compact fluorescent light bulb.
- Kerosene lamps create undesirable smell and smoke, as well as being a constant fire hazard⁶

Dry-Cell Batteries:

Disposable dry-cell batteries are widely used throughout the developing world, primarily to power flashlights and radio-cassette players. While the electricity from these batteries is extremely expensive per kilowatt-hour, families are able to purchase electricity in small, affordable quantities.

Battery Charging:

Rechargeable car batteries are used by some rural un-electrified families to power televisions and electric lights. These batteries typically have capacities in the range of 60 to 120 Ah (720-1440 Wh). Batteries must be transported to recharging centers, typically powered by a diesel generator or the electric grid. This practice is not very common in India.

Individual Diesel:

In some many un-electrified areas, households are using small gasoline generators ("gensets") to power household loads. Small generators can be run for several hours to recharge a bank of

lead-acid batteries, or can be used directly to power larger loads. Generators must be refueled several times per day, requiring access to gasoline and oil. Often the cost of transporting fuel is higher than actual fuel cost itself. Gensets are generally inefficient, creating unpleasant local noise and air pollution. Furthermore, gensets must be rebuilt after a several hundred hours of use. Electricity from a small genset averages \$0.50 per kWh.

Average Household Monthly Consumption *

Light energy source	Units	Cost
Kerosene	9.5 litres	2.86 USD
Candles	4.4 candles	0.44 USD
Batteries	1.2 batteries	0.62 USD
Total:		3.92 USD

Average Household Monthly Energy Consumption - Selco - 2011

East India : Onergy target market

All the energy problems are particularly acute in East India, among the poorest of India's states, with the Human Development Index consistently ranking in the bottom 5. India's rural BoP or Bottom of Pyramid (considered 114 million rural households) spends 224 billion (US\$4.86 billion) per year just to meet their energy needs. These households often pay higher prices for lower-quality goods and services due to lack of options. These masses are characterized by unmet basic needs. The most challenging aspects are lack of ecosystem, purchasing power, lack of knowledge and information about the solar energy and clean technology availability, social and economic infrastructure, poor distribution system and predominance of conventional energy usage. There has been a high failure rate of solar and renewable energy systems in rural areas, which has led to a trust deficit.

Within this context, ONergy was spun off to address the significant gap in the rural energy situation. The failure of the grid to meet the energy expectations of the rural populace was clearly evident and attributable to the lack of development in these areas. People aspired for reliable energy beyond just lighting. Moreover, there was very poor after sales service provided for solar products and non-existent ecosystem for sustainable uptake of clean energy solutions. There was very little or non-existent effort to address the needs of the large numbers of households at the bottom of pyramid. There was a need to develop a sustainable model to address the gaps that existed.

(5) Source: ONergy Business Model 2006 - 2010

(6) Tens of thousands die or are disfigured from kerosene lamp fires every year.

Pricing Information (in USD)

Litre of kerosene	0.30 - 0.41
Candle	0.10 each
Kerosene lamp (glass cover)	5.80 each
Kerosene lamp (simple wick)	1.90 each
Torch (flashlight)	1.90 each
Batteries (for torch/flashlight)	0.50 per battery
Solar lantern (small)	18.00 each
Solar lantern (large)	35.00 each

Energy solutions Pricing information - Selco - 2011

ID CARD

General information

Name: ONergy (Punam Energy Pvt. Ltd.)

Location:

- Head Office : Kolkata
- 13 REC's located in Kolkata, Bagnan, Bolangir, Siliguri, Cooch Beehar, Lakhmikanthapur, Bhubeneshwar, Suri, Sonalhali, Ranchi, Jamshedpur, Nadia, Howrah (Warehouse & assembling unit)

Creation & Context:

ONergy started in 2009 as an offshoot of "SwitchON", an NGO which was instrumental in spreading awareness about climate change and sustainable living. In 2008, the founding team put together a film on India's energy security – 'Why New Coal' – to question India's growth based on fossil fuels and highlighting alternative to its sustainable and equitable development – and bicycled 1600km from Kolkata to Delhi along the coal belt. SwitchON reached out to over 60,000 people across India through its various projects and campaigns. Through extensive travelling, the gaps that existed in sustainable energy access were clear. At this juncture, in mid-2009, ONergy was registered as a for-profit enterprise not only to develop an ecosystem for uptake of complete energy solutions for rural India but also address the gap within distribution system and financing for such products.

Focus was on the solving of the last mile distribution problem within rural Indian villages. In development of economically backward and poor communities in India, ONergy understood that local people were more culturally sensitive to the needs of the community and utilize their own social networks to create better distribution channels. In 2010, ONergy set up Renewable Energy Centers (RECs) to create an ecosystem by connecting technology, finance and grass roots organizations. RECs managed the entire distribution process providing awareness, training, servicing, and financing options to the beneficiaries – which was the missing link in the rural BoP market.

Human Resources

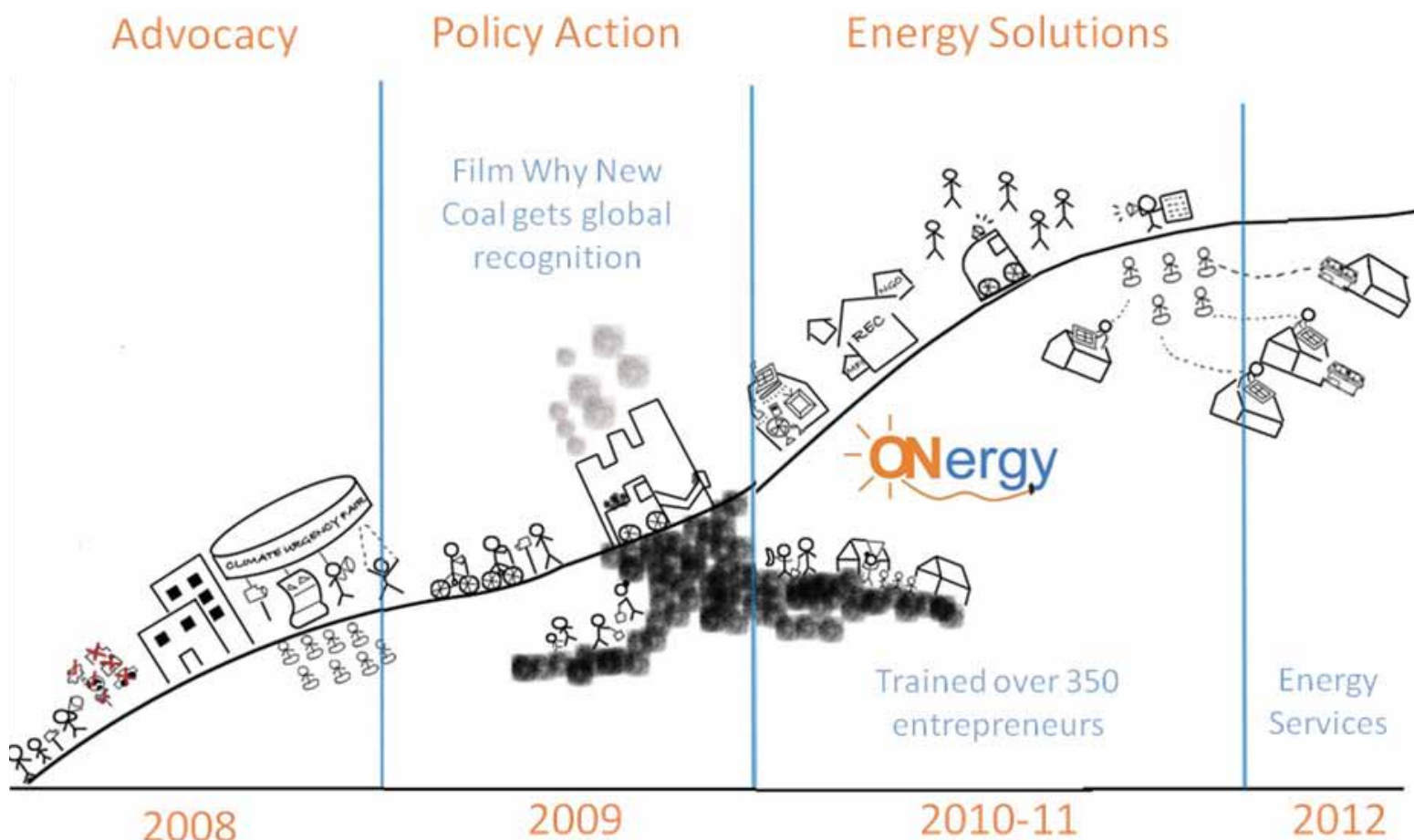
Number of employees:

- **Head Office:** 23 people in head office and 6 (warehouse & assembling)
- **Franchise/Branch:** in average 3 (1 Administrative Officer, 1 Sales&Marketing, 1 Technician)

Profile of Employees:

Franchise/Branch: REC's employees are usually people that are mostly graduated (or sometimes below for the technicians)

Conditions of Employment: Labour Contract & Insurance





Main product

The company offers a variety of products and operations including solar lights and lanterns, solar DC home electrification, solar AC inverter-based electrification systems, institutional solutions including solar water heater tanks, street lights, solar water heaters and others, clean cookstoves, microgrids, irrigation systems and solar computers.

Target market

ONergy's target market focuses primarily East India where 35% of India's total underserved households lives.

They have 4 main types of clients:

Primary type of client:

Consumers in rural settings without access to electricity - 45 % of ONergy clients fall into these categories:

- Small farmers - earning between \$1200 and \$1500 a year,
- Small businesses - earning between \$2 and \$4 a day,
- Individual Households with regular monthly incomes (postman, rural school teachers etc) - between \$100 to 150\$ a month;
- Home based workers – earnings between \$2 to \$4 a day.

Secondary type of clients:

Consumers in rural settings with access to grid electricity but with long power cuts during morning and evening hours 45 % of ONergy clients belong to the following categories:

- Farmers – earning between \$2500 to \$5000 a year,
- Individual houses – earning between \$250 to \$400 a month.

Third type of client:

Urban households that have a reliable supply of electricity but that want to reduce their electricity bill. 5 % of ONergy clients belong to the following categories.

Fourth type of client:

Institutional Clients - 5 % of ONergy clients belong to the following categories:

- Institutions – for example hospitals,
- Government institutions, training schools,
- Private Companies;
- NGO's, self help group.

Business Model

ONergy business model is the one of a hybrid social enterprise that operates through both vertical and horizontal integration: vertical by providing value through out the entire value chain and horizontal by providing a range of appropriate products. In that sense, ONergy can be seen as a "Systems Integrator". They work along the entire value chain, by combining sourcing, technical fundamentals such as installation of a solar home system, after-sales service, and financing that helps customers manage the larger up-front cost of that system. ONergy model is thus to combine door-step service with door-step financing.

To provide door-step service, ONergy opened 13 rural energy centers (RECs), run by local workers, over the last 5 years.

Main roles of these RECs: Oversee product assembly, provide training workshops to rural entrepreneurs, manage warehouses for inventory and provide after-sale services (product repairing facilities).

Main responsibilities of these RECS: Establish a distribution infrastructure to manage the supply chain, involve local communities and build trust.

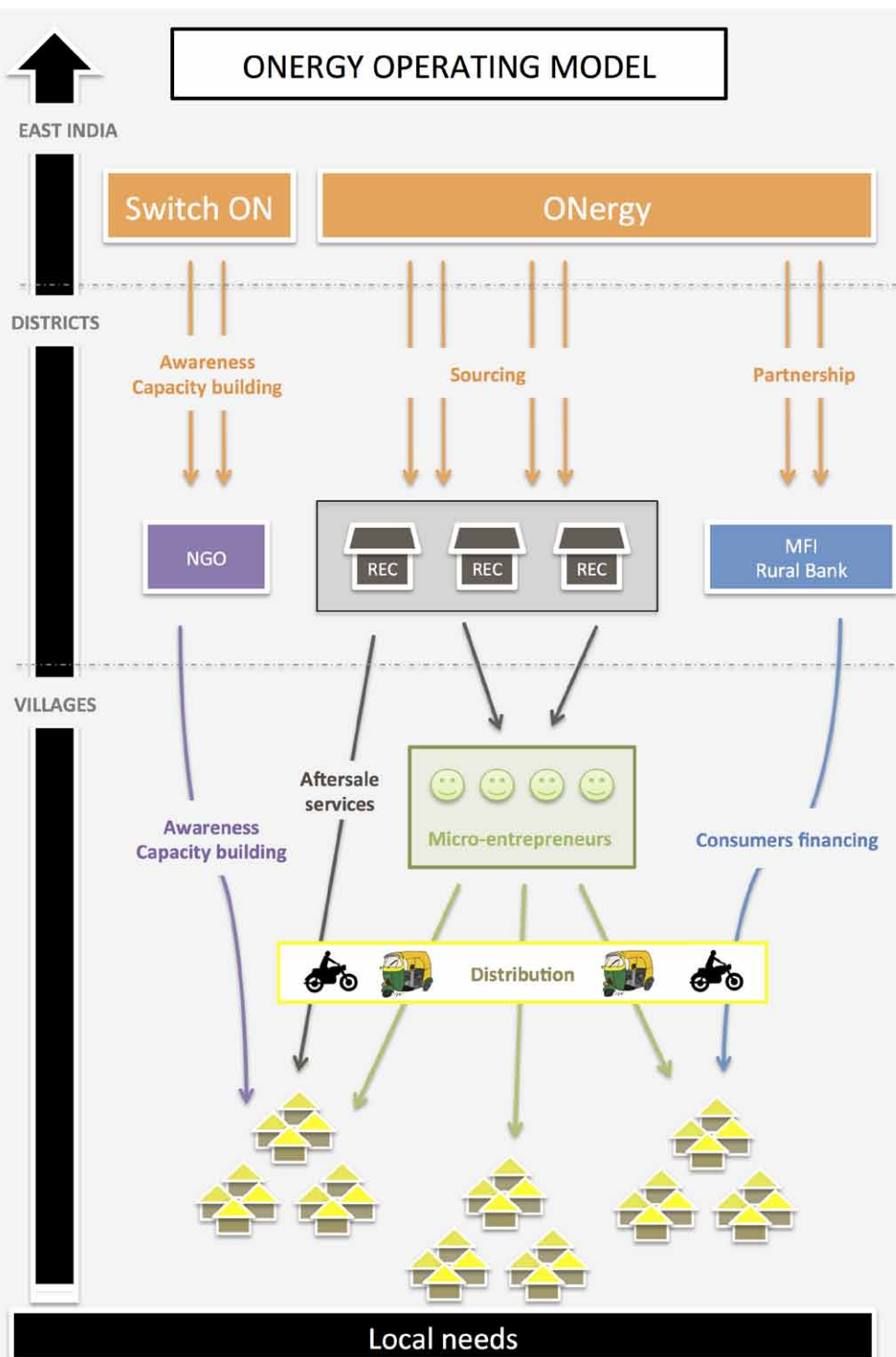
To further support the supply chain and reach the last mile rural households, these RECs work with local partners such as local micro-entrepreneurs and MFIs that get commissions on sales and leverage existing local networks such as Self-Help groups and NGOs

To provide door-step financing and turn the products affordable, ONergy works with MFIs and with rural branch networks to stimulate affordable loans to the poor and expand access to door step financing.

Finally, to tackle BOP market's entry level

energy needs, an important investment in capacity building, awareness raising and innovations incubations is required. To fulfill this, ONergy works in close collaboration with Switch ON. In this partnership, Switch ON is instrumental in building awareness within the rural population (there is a need for energy but few demand for energy products because of a lack of knowledge), developing entrepreneurial skills and building capacity of the local entrepreneurs (ONergy is responsible for the technical training of local entrepreneurs), and monitoring them. Additionally, Switch ON has set up **inONvation**, an incubator that pilots new business model and innovative technologies to determine energy sustainable solutions in education, agriculture and health.

ONERGY OPERATING MODEL



Revenue Model

Revenue Sources:

ONergy earns its revenue from the sales, installation and maintenance of renewable energy products.

Billing Principles:

ONergy products can be paid either cash at an REC or by using consumer financing offered by ONergy in partnership with MFI's & Banks. 70% of the Sales are through Cash and 30% of the Sales is through consumer financing.

Average monthly revenue:

- At ONergy's level Rs 60 lacs per month on an average growing 10% every month
- At REC's level 3 lacs to 6 lacs every month

Economic Sustainability

Profit Margin:

Financially the company registered a steady growth in its profit margin between 2009 and 2011

Break-even:

- At REC level : Each center takes ONergy approximately 2 years to pay off
- At ONergy's level: Currently Breaking Even

VALUE CHAIN OF BUSINESS

Suppliers

ONergy has designed various products. It procures, tests and assembles its own products sourced from multiple but well selected suppliers.

R&D & Innovation

ONergy's success of being sustainable company while promoting energy services to the poor, lay in its ability to innovate not only in the usage of technology, financing methodology, marketing, ect.. but also in ways of linking it all together. ONergy has pioneered in creating innovative linkages between technology, appropriate financing, energy services, income generation and quality of life in East India.

Flexibility in product's range:

By providing different range of products (from lowest price product with solar lantern to high quality full-home-lighting system or even to bulk energy products like electrification systems, refrigerators, solar inverters for institutional clients) and complementary options for each of these ranges, ONergy is able to offer customized solution based on costumer's energy requirement.

Customized financing scheme:

To facilitate sale, ONergy developed finance and instalment payments through MFIs for the un-bankable and through banks for the bankable (for more information, see. Consumer Financing)

Supply Chain and Tracking:

ONergy has developed an integrated supply chain management and tracking system to ensure timely and accurate services. This system is composed of a mobile app for their field team, a customized and integrated Sales Force for their operations, and a toll free number for the end-users.

This enables them to manage the entire supply chain going from one end, conducting surveys, to the others

Products

closing leads or even responding to service issues.

ONergy products and systems are customized to meet the expectations of the specific clients or particular segment of the society. The

systems are required to meet the needs (and budget) of each customer, and there are many variations which can be used. The installation of the system is carried out by ONergy's technicians.

Range of products:

• Solar LED Lamps & Solar Home Lighting Systems:

- » Panel: 5W to 10W
- » Lighting time : 3hr to 8hrs
- » Light: 1,5W -> 3W LED & 7W CFL
- » Options: Waterproof, Mobile Charging
- » Price : INR 1000 to 5000
- » Financing: Government Subsidy + MFI loans
- » Warranty: 5 years

• Solar Home Electrification Kits:

- » From 2 to 500W
- » Wide range of CFL & LED lights
- » Mobile charging facility + points to run DC fan & B/W TV
- » Price : INR 10000 to 25000
- » Warranty: 6 months to 1 year
- » Battery life : from 2 to 5 years & Panel life : 25 years
- » Charging time : ~8hrs+

• Solar Water Heating Systems:

- » 100 to 5000L
- » Price: >= INR 16000
- » Payback time: 2 years
- » Lifetime: 15 years

• Solar Inverters and Electrification Systems

• Solar Street Lighting

NB : ONergy has also launched new and innovative products such as solar TV, solar computer, solar micro grids and solar irrigation systems.

Marketing

ONergy has decided to use innovative and unconventional communication techniques as its marketing strategy. Indeed, such methods enables the company to communicate directly to BOP rural households and develop a true relationship and trust with them. ONergy uses for example, from time to time, mobile vans (with company logo and loudspeakers) to display its products, to conduct promotional activities and even sometimes to sell some of its solar products in rural villages.

Switch ON, on its side, uses skits, plays and audio/video materials to raise awareness regarding energy technologies and there benefits in terms on return on investment, health, security and productivity.

Sales & Distribution

Sales & Distribution

ONergy uses microentrepreneurs/MFIs to do its distribution and marketing, based around its Renewable Energy Centers (RECs). All it's distribution partners work on commissions on sales.

©ONergy



Each REC covers a 50/100 km radius, and functions as a direct sales point where ONergy stocks products, holds trainings, conducts demonstrations and offers installation services for all products at nominal charge.

Each REC has salaried staff, who identify entrepreneurs, and make partnerships with NGOs and microfinance institutions to help them become distributors of ONergy products. The partnerships give ONergy access to the NGOs' locally recognized brands and networks, and ONergy sources products, provides after-sales service and uses its entrepreneurs to push sales.

NB: One challenge ONergy sometimes has is that the entrepreneurs try to increase the prices or make false claims about the product. ONergy puts a large emphasis on training to discourage these practices.

Billing & Payment

Consumer Financing

Solar Lighting System are viewed as an asset and is appreciated by both the bank and the consumer. Market-research and experience has revealed that MFIs and cooperatives are eager to sanction loans to BOP families.

ONergy works with all the rural banks across 3 states of Eastern India and over 8 commercial banks to make necessary arrangement of credit for their customers, and also finance itself through pay-as-you-go solutions. ONergy has also been able to facilitate low cost financing to its MFI partners through partnerships. ONergy has indeed set-up a revolving corpus fund for MFIs with the support of Give2Asia (USA). Repayment by the end user is collected by the microfinance institution and is repaid into the fund.

Consumer financing solution for “un-bankables”¹: To offer instalments to people non eligible to bank loans, ONergy

partners with MFIs who share the same core values and prioritize those that are local and that have established connectivity and trust within local communities

e.g.: A typical ONergy solar lantern costs the user about 35\$, which includes the user training and service. The financing institutions finance for 80% of the costs of the system. Repayment is collected over 6 months to 1 year.

To date, ONergy has utilized this alternative funding model to facilitate financing to over 2000 households for solar solution though its MFIs partners throughout rural East India.

Consumer financing solution for the bankables: For this segment of costumers, loans are offered through banks.

The financing products are dependent on the type of clientele. Normally payments are collected on weekly or monthly basis by MFIs and on monthly basis by banks. Banks may also have flexibility in payment depending on the type of crop cycle the client has (For example, paddy farmers pay once a year as their crop cycle is once a year.)

e.g.: A typical ONergy solar lighting system costs the user about 270\$, which includes the installation and service. The financing institutions finance for 80% of the costs of the system. The loan period is for 3 - 5 years.

Consumer financing for Solar Microgrids: In case of solar microgrids, customer pays per point on a monthly basis. This is typically Rs. 120 - 200 per month

Financing support to partners

Establishing a Revolving Corpus for providing credit on solar lanterns to entrepreneurs and MFIs:

As a partner in The Climate Group's Bijli - Clean Energy for All initiative, Swith-ON - Onergy has established a revolving corpus fund to increase uptake of portable mobile charging solar lanterns to rural beneficiaries across West Bengal. Swith-ON - Onergy provides partner entrepreneurs and MFIs with a low cost line of credit allowing them to extend credit to potential beneficiaries. With the availability of small lines of credit, solar lanterns become more accessible for rural beneficiaries, meaning that student are able to study longer, shops and farmers are able to work longer, travelling the evening becomes safer and family rely less on kerosene and save money on costly energy requirements

After Sales Services

Maintenance

There are 3 levels of after sale services:

- 1st level - Rural Entrepreneur (as they are trained by us)
- 2nd Level - REC Technician
- 3rd Level - If the Rural Entrepreneur & REC technician is unable to solve, it is escalated to Kolkata REC

User Training

30-40% of the problem come from a lack of user knowledge or misuse. Therefor, Onergy has made user training manual which is used as guide to train users.

(1) Un-bankable: Person that does not have enough income, capital (or proof of income and/or capital) to be eligible for loans from traditional banks

5 YEARS OF IMPACT

Income Generation

Impact: Income increase for customers is about 200-500 Rs/month

Yousuf Molla installed a solar lighting system, and can now run his bakery for four more hours every day. The women in his family find solar lights very convenient for cooking and have increased their incomes working on traditional Zari hand embroidery. This family is just one example of many who have increased their monthly incomes through solar lighting.

Developing Entrepreneurs

Operational Partners: Switch ON

Impact: Over 400 entrepreneurs trained

Nikhil Mondal lives below the government's official poverty line. His previous source of income was providing tuitions to local students. With an energy loan and training from Switch ON, he started to sell solar lamps and home lighting system. He now has two local youth helping him sell products across 12 villages. He earns 3 times what he did before.

Charging Station

Impact: Entrepreneurs trained by Switch ON earn an additional income from sales and other projects of about 1000-3000 Rs/month

Debnath Halder, an ITI graduate who for lack of finding a job did some odd jobs, is now electrifying homes in his village by operating a solar charging station.

Solar Streetlights

Operational Partners: Women Interlink Foundation, Odisha Tribal Empowerment & Livelihoods Programme

Impact: Increased road safety and nighttime activity
ONergy installed more than 35 solar street light systems in West Bengal and in remote tribal areas of Western Odisha. The tribal community in this area is now safer to travel at night, and there are fewer threats from wild animals and more leisure time.

Revolving Corpus Fund

Operational Partners: DCBS

Funding Partner: Give 2 Asia, Milaap

With seed funding from Give 2 Asia, ONergy set up a revolving fund for MFIs to purchase solar products. The fund is currently being used to support another innovative financial partnership between Milaap and DCBS MFI. Many women have nearly paid off their loans and are looking to upgrade their existing systems.

ONergyizing Healthcare

Operational Partners: B.M. Birla Hospital

Impact: Expected savings on water heating

In 2013 ONergy installed a 4000 liter capacity solar water heating system for B.M. Birla Hospital, saving the hospital high water heating costs.

Solar Micro Grids and financing for rural entrepreneurs

Operational Partners: Switch ON

ONergy has set up over 100 AC and DC solar micro-grids in East India and has a pipeline to set-up more micro-grids within the current year. The micro-grids are set-up in un-electrified villages in partnership with a rural entrepreneur/local group and funding agency. ONergy provides continual technical support, grassroots mobilization support and servicing for all micro-grids systems. ONergy is piloting remote monitoring system and prepaid system along with the micro-grids thereby giving more control and flexibility in payments.

Low Cost Solar Computer Center

Operational Partners: Switch ON

ONergy has developed a highly energy efficient (80% less in terms of energy consumption) and low cost solar powered computer system to bridge the digital divide of remote regions of East India. Currently, they have set-up 2 pilots ICT centers equipped with 5 to 8 computers and projector and have plans to scale-up the model.

ONergyizing Agriculture

Operational Partners: Switch ON, NABARD

Impact: Rs 30 savings per hour of water for an initial cost of Rs 100/hour

ONergy is providing Sustainable & Integrated Farming Solutions powered by solar Energy, through the development of innovative solar powered irrigation system and solar micro-cold storages. Switch ON is promoting sustainable and natural farming practices, connecting farmers to market and improving the livelihoods of rural farmers and producers, for which Switch ON has set-up a separate farmer co-operative.

ONergyizing Education

Operational Partners: ASED, Round Table India...

ONergy has installed solar systems in 5 schools. Additionally, ONergy has provided and helped provide solar lanterns to thousand os school students who are now able to study longer into the evening without the harmful effects form kerosene lamps.



ECOSYSTEM CONDITIONS

Legal / Regulatory

The government began a program in 2005 called Rajiv Gandhi Grameen Vidyutikaran Yojana to provide villages electricity within 5 years through significant investments in rural electrification. While the program has succeeded in electrifying many rural areas, power supply is unreliable and frequent blackouts persist.

The Indian government has a ministry committed to develop renewable energies in India, the MNRE (Ministry of New and Renewable Energy). MNRE's role is to facilitate research, development and deployment of renewable technologies for all rural, urban, industrial and commercial sectors. In order to achieve its objective, the MNRE has, among other, since 2009 designed the Jawahar Lal Nehru National Solar Mission. One objective of this mission was to increase solar power generation from 2MW to 20,000MW by 2022 is to facilitate cheaper and more reliable access to energy to the non-electrified rural households. In addition to this solar mission, MNRE has launched the National Village Electrification Program and investment-friendly policies, including 100% foreign direct investment in renewables.

Corporate finance

The venture initially started with a seed capital of INR1 million and was formally established in January 2010.

Switch ON works with grants whereas Onergy is financed by equity investment and personal investment (debt in India is very difficult). In addition, all benefits are reinvested into the company to further nurture its growth.

Subsidies

One objective of the Solar mission created by the MNRE was to facilitate cheaper and more reliable access to energy for the non-electrified rural households. This has resulted in a large program of subsidy (not easily accessible but still existing). As a result, from 2010/2011 until 2012/2013, MNRE has reported supplying

more than INR117,8 million (US\$1,9 million) in subsidies for solar lights, solar water-pumping systems, off-grid solar plants and solar water heater. For 2013/2014, the MNRE has decided to keep-on subsidizing solar products.

For example, to facilitate bank consumer financing for solar products, MNRE has made funds available to Indian Renewable Energy Development Agency (IREDA) with no interest. In turn IREDA refinanced to primary lending institutions at a rate of interest not exceeding 2% per year (provided that interests rate charged by lending institution don't exceed 5% per year for a 3 to 5 years payback period.

Key Awards

- 1st prize – TiEger awards
- Top 100 small business of the year – Entrepreneur Magazine
- Won number of business plan competitions
- Selected by Yale University's (USA) Social Enterprise Program
- Selected by business accelerator programs of Unreasonable Institute (USA) and Global Social Benefit Incubator (USA)
- Invited as speaker at leading national and international forums – Pan IIT conference, Indiafrica Initiative (Kenya), GIZ cookstove conference (Germany), India Conclave (Poland), TEDx Chennai, Action for India conference, XLRI Social Enterprise conference, IIMC conclave, XIMB rural immersion program ect..
- Products certified by Electronics Regional Test Laboratory (East), Kolkata
- ISO 9001: 2008 certified by TUV SUD
- Selected as Channel Partner under the Jawaharlal Nehru National Solar Mission (JNNSM) of Ministry of New and Renewable Energy (MNRE)
- Selected under the MNRE-UNDP Access to Clean Energy Program
- Awarded by SIDA under the Innovations Against Poverty Program
- Selected by Give2Asia for projects supporting solar financing and solar micro grids





Key Success Factors

User needs based products:

ONergy offers high quality and reliable products that meet the energy needs of the client. ONergy's products fully meet the expectation of the poor, in a way that it directly leads to a better quality of life – in terms of health, savings and extra earnings. The grassroots presence of ONergy and inONvation, Switch ON's incubator help the binomial to design products that have a "bottom-up" approach than the other way around.

On the ground presence:

ONergy is actually in the rural areas, selling through REC, and partners (micro-entrepreneurs and MFIs) services directly to the clients. Only companies willing to undertake this effort, and do it well, will succeed in creating a sustainable venture in the rural areas of the developing world.

Installation and After-sales Service:

While ONergy is in the business of selling and installing its products; ONergy believes its core competency lies in its ability to deliver on-going service on its products. All ONergy technicians have been thoroughly trained in the installation and service of products.

Standardized Financing Packages:

In order to facilitate customer purchases of energy services, ONergy has partnered with numerous financial institutions and micro-finance institutions in the areas of its operations. Through financing programs of its finance partners, ONergy provides its clients the ability to purchase its products and services through payments that are affordable and adjusted to

every particular target group.

Brand Name, Trademarks and Logo:

In ONergy's service territory, customers already ask for a "ONergy". This product identification based on quality, reliability and its proximity to the actual clients.

Internal Branding: create an internal culture and continuously nurture the company's brand value

Initial incubation program:

ONergy got a great deal of support from solar energy pioneer. ONergy, and one of the founders spent several months at ONergy headquarters to understand how they operate.

Main Challenges

Develop the brand by expanding the brand proposition to a wider range of costumers and/or by scaling up in other parts of India.

Replicability

ONergy is looking at expanding both within its current state of West Bengal and beyond to Orissa and Bihar.

ONergy is also interested in expanding beyond lighting to explore other solutions to poverty problems.

Growth

Growth expectations: Scaling up 100% every year
Financing needs: \$ 1 Million.



SEVEA – Synergie pour l'Echange et la Valorisation des Entrepreneurs d'Avenir - is a not-for-profit organisation that strives for an improvement of the answers brought to energy and water issues (from an environmental, a social and a societal perspective) in developing countries.

Our partners



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