



SOCIAL
ENTERPRISE
**WORLD
FORUM 2015**
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BUKSH FOUNDATION
gateway to life



BUKSH ENERGY

W20. Social Enterprise and Renewable Energy

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What is Social Enterprise?

The Triple Bottom Line Approach

Any for-profit or non-profit organization that uses a market-based approach to find demand driven solutions that further social and/or environmental goals

Social Enterprises include:

- Microfinance Institutions
- Renewable Energy companies
- Micro-enterprises
- Charity organizations
- Recycling companies
- Human Development Institutions
- Healthcare companies

Social Enterprises aim to:

- Create Impact Investments that solve environmental/social challenges in innovative ways
- Ensure generation of financial returns and reduce dependency on external financing



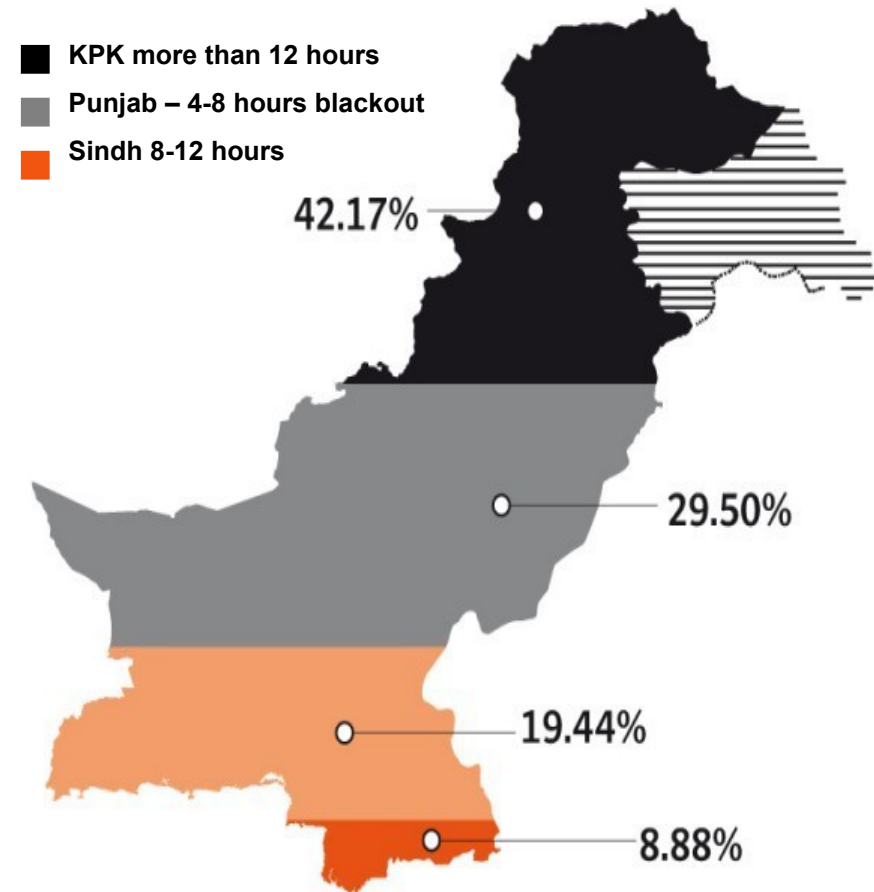
Renewable Energy Social Enterprise (RESE)

- 1.3 billion people worldwide living **without access to electricity**.
- In developing countries **some 2.5 billion people** are forced to rely on traditional biomass, biomass-fuelwood, charcoal, and animal dung for energy.
- **80% of the increase in greenhouse gases is from CO2 emissions**. In 2013 alone the levels increased by **2.9ppm** – the largest annual increase seen from 1984 to 2013.
- Renewable Energy sources are increasingly important as they:
 - Ensure energy **security**
 - **Reduce dependency** on fossil fuels
 - **Reduce carbon dioxide** emissions
- RESE adopt a true **triple bottom line approach** that is environmentally, socially, and economically sustainable.

Need for Renewable Energy

ELECTRICITY SHORTAGE IN PAKISTAN

- Pakistan is facing **acute energy shortages**; demand and supply gap has increased to almost 7000 MW
- Growth in population is exceeding 180 million.
- 63% individuals live in rural areas **in 50,000 villages completely detached from the national electricity grid.**
- Government cannot provide national grid to remote areas.
- Pakistan is forced to spend heavily on imported **fossil fuels** that generate **60.89% of the energy consumption** in the country.

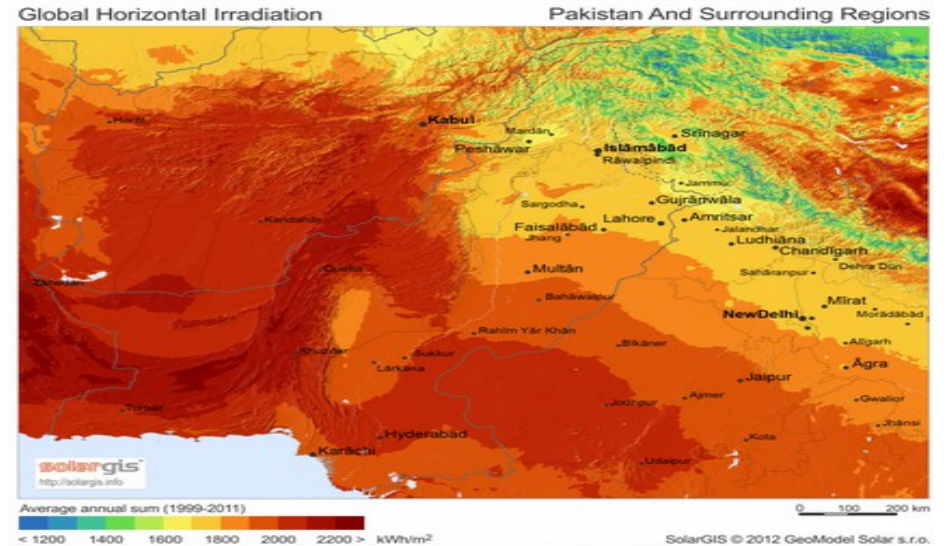


- This depicts electricity load shedding province wise.
- 41% of the respondents face 8 to 12 hours of load-shedding at home per day while 42% of employed professional face 4 to 8 hours of load-shedding at workplace every day.

Alternate Energy: Solar

Solar energy is the best alternate and the only solution for the current energy crisis in Pakistan:

- The solar energy intensity in the Sun Belt is approximately **1,800-2,200 KWh** per square meter (**95%** of total area) with an annual sunshine duration of **8 to 8.5 hours** approximately more than **2300–2700 hours** per annum



CAN BE MADE ACCESSIBLE TO REMOTE AREAS

SELF- RELIANT AND EFFICIENT

SUSTAINABLE & LONG TERM

ECOLOGICALLY FRIENDLY

TURNKEY MODELS-EASILY SCALABLE

STEP TOWARDS SOCIO-ECONOMIC DEVELOPMENT



Buksh Energy Private Limited

Renewable Energy Social Enterprise in Private Sector

POWER PLANTS (EPC)/ROOFTOP SOLAR PROJECTS

- Consultancy services – Solar PV Plant projects
- Customized captive power solutions
- Commercial/Industrial/Residential rooftop projects

SOLAR ENERGY CONSERVATIVE SOLUTIONS

- Financial institutions
- Industrial audits
- SMEs/Residential Solar Rooftop Solutions

TURNKEY PROJECT DEVELOPMENT

- Solar Power Plant
- Bioenergy projects
- Wind turbines
- Waste to Energy projects

BUILDING MANAGEMENT SYSTEM

- Energy Management System
- Energy Efficient transformers
- Smart metering

MICRO ENERGY SOLUTIONS

- Solar LED lighting solutions
- Customizable solar portable kits
- Solar tube wells
- Solar water filtration plants

RURAL PROJECTS FOR ACCESS TO ENERGY

- Solar electrification of off-grid villages
- Biogas/Solar smart mini grids
- Clean Energy Lending

Buksh Energy Footprints

2008-
2009

- Research & Development
- Identification of a Market Opportunity for Entering Renewable Energy Space
- Launched Buksh Energy PVT. LTD with ADB & USAID's strategic support

2010-
2011

- Seed Investment in R&D
- Established Global linkages, EU & World Bank
- Development of Turnkey Demand Driven Energy Business Models in Macro / Meso & Micro sectors
- Development of the Local Eco-System with Government Linkages, Development Bodies & FIs

2012

- Energy Audits
- First Solar Turnkey project - Bank Alfalah
- Rural Off Grid Electrification projects
- LOI achieved for 10 MW Solar IPP
- First Residential Solar Project launched

2015

- Launched of additional Energy Solutions - Rural Smart Mini Grids, Bio-Energy, Waste to Energy, Wind projects
- Scaled up Rural Off-Grid Electrification projects (LaML).
- 1MW Solar conversion of Lahore's largest University.
- Partnership with Nestle for solar conversion milk chillers.
- 300MW solar IPP project in pipeline.

2014

- Eco-System fully developed with the Government bodies & FIs
- New partnerships developed - Faysal Bank, JS Bank, MCB Bank
- Upfront Tariff Achieved for 10MW Solar IPP
- Partnership with Bank Alfalah - Solar Lease Financing (Green Finance)

2013

- Launched partnership with UBL & Soneri Bank
- MOU of 100 Solar ATMS - Bank Alfalah
- Industrial sector scaled up with Energy Audits
- Launched Solar Water Filtration Plants & Solar Tube Wells3
- Launched Solar Agri Finance Scheme

Existing Renewable Partners/Clients





Buksh Foundation

Renewable Energy Social Enterprise in the Development Sector

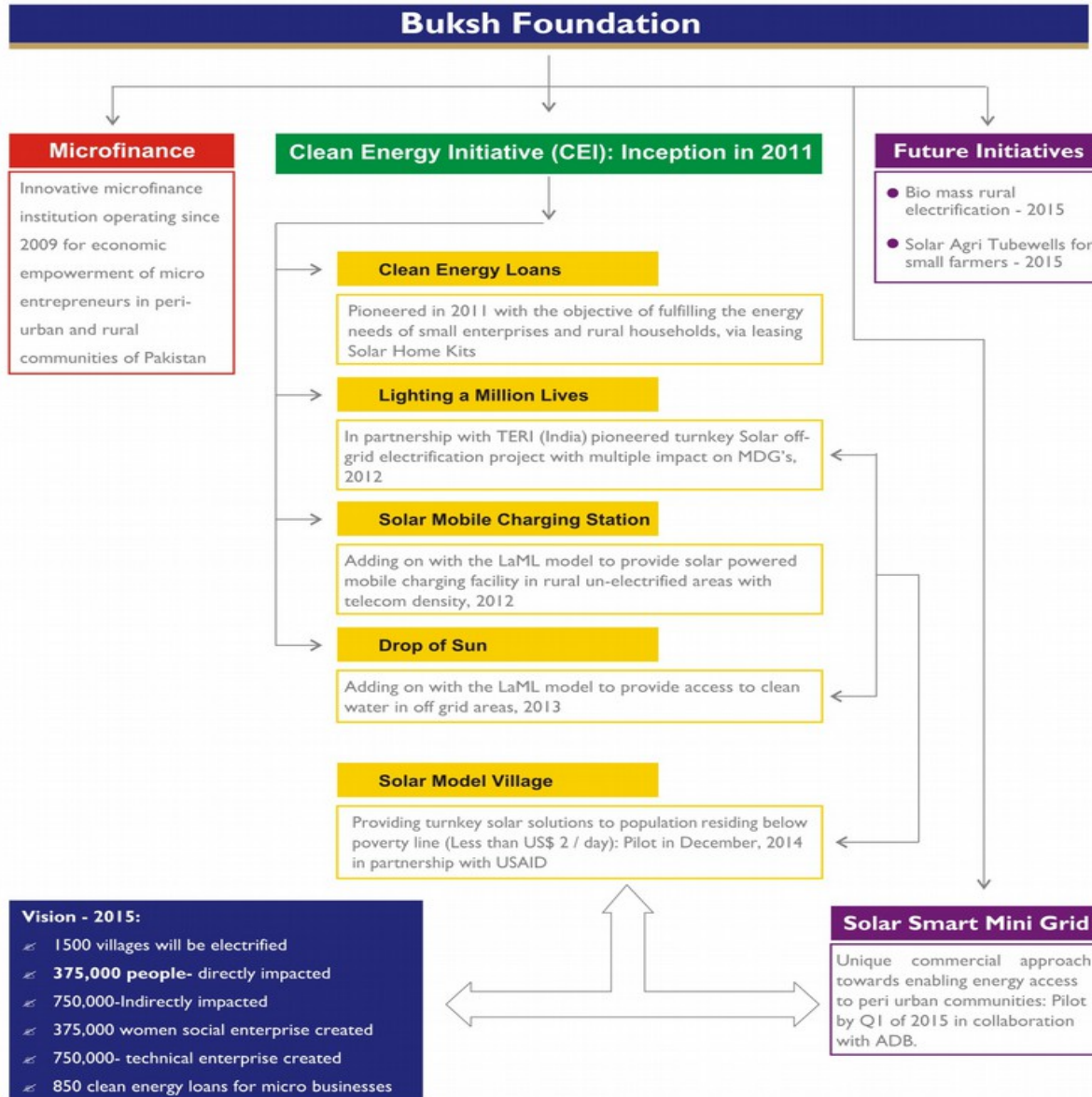
MISSION

‘Empower the underprivileged, to make them productive and to create equity in the society; to achieve scale sustainably, to be innovative in our approach and to create measurable impact on the global economy as a whole.’

VISION

Buksh Foundation believes in taking responsibility to improve all aspects of the world in which we operate- social, environment, economic by providing demand-driven solutions. Our aim is to work to create a better future every day.





Buksh Foundation Footprints

2008-2009

- Inception of Buksh Foundation as not for Profit MFI
- Partnership with Pakistan Poverty Alleviation Authority with initiation of MFI
- Dispersed Productive loans with most innovative psychometric model

2010-2011

- Partnership with Deutsche Bank NY
- Scaled up Micro entrepreneur Loan
- Started Credit life insurance
- Partnership with Agrow Pvt Ltd and Ravi Motors
- Dispersed Transport Loan
- Pioneered Clean Energy loans

2012

- Paradigm shift towards Impact Investment
- Launched 'Lighting a Million Lives' Project- for rural off grid electrification
- Scaled up to 100 + villages with Robin hood approach

2015

- CEO Fiza Farhan recognised by Forbes Top 30 Under 30 Social Entrepreneur.
- Partnered for the Clinton Global Initiative 2015.
- Partnership with Swiss and Dutch Embassy to electrify villages under LaML

2014

- Penetration into D I Khan for LAML
- Partnership with Kiva for clean energy loans
- Became proud member of Italian Development Committee Lahore Chapter

2013

- Pilot project of 'Drop of Sun'- solar filtration water plant for provision of clean water
- Implemented Solar Mobile Charging Stations
- Partnership with UBL Omni for Branchless Mobile Banking
- 12 districts covered by LAML

Existing Partners/Donors



Renewable Energy in Buksh Foundation

Clean Energy Lending

CLEAN ENERGY LOANS:

- Buksh Foundation pioneered in Clean Energy Loans with the objective of fulfilling the energy needs of small enterprises and rural households, via solar panels, solar lights, and solar fans.
- Affordable, sustainable and environmentally friendly solar solutions provided through a monthly repayment.
- Now, a poor client can have his own infinite energy supply to run his enterprise by only paying a monthly installment as low as \$6 per month.
- Partnership with KIVA International.





Renewable Energy in Buksh Foundation

Lighting a Million Lives Project

WOMEN LED SOLAR CHARGING STATIONS

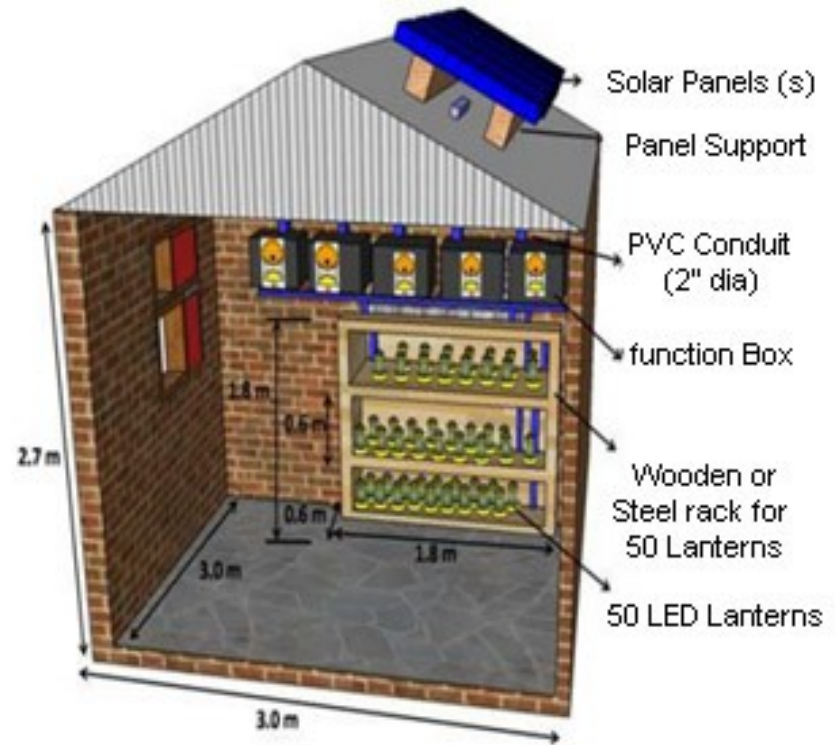
1 village = 50 households

1 female entrepreneur

50 lanterns

5 solar panels

5 junction boxes





Renewable Energy in Buksh Foundation

Lighting a Million Lives Project

After holistic field research and scoping studies sites for Solar Charging Stations are selected. Establishing 50 lanterns centralized station.





Renewable Energy in Buksh Foundation

Lighting a Million Lives Project

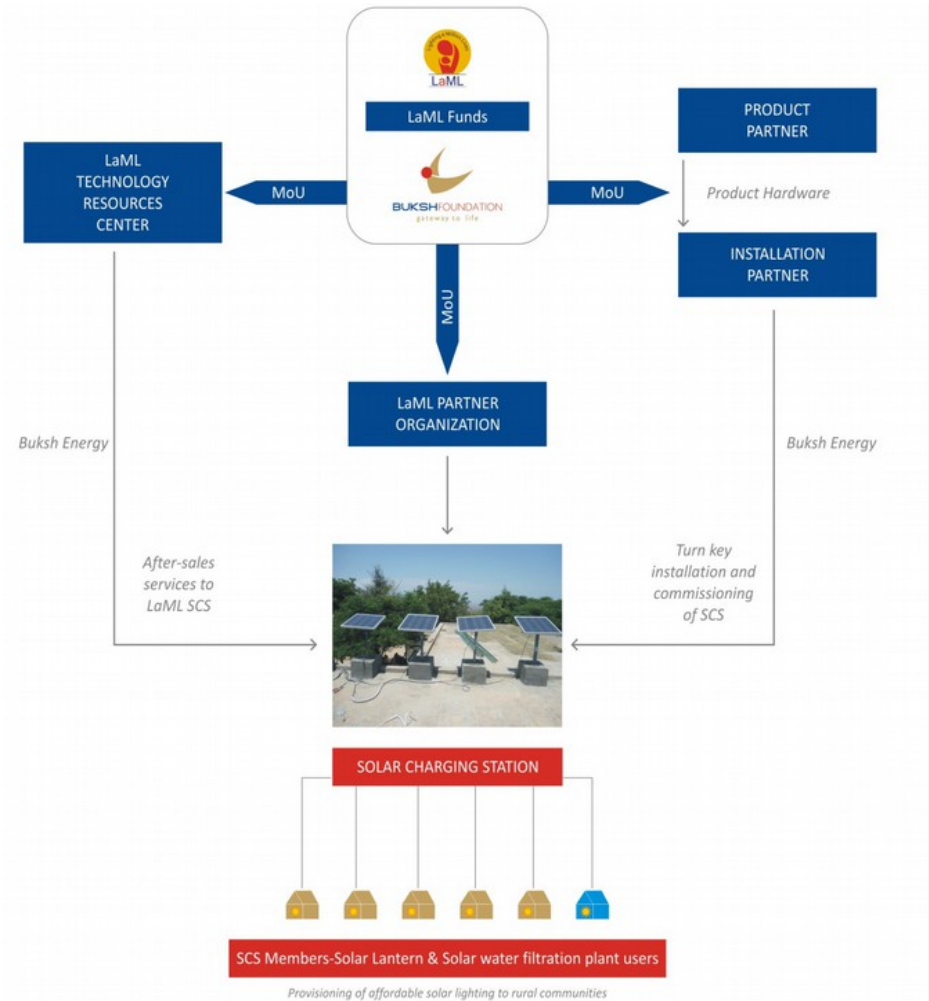
Female entrepreneurs are created through the construction of these solar charging stations, establishing a permanent and respectable source of income- resulting in women empowerment.



Renewable Energy in Buksh Foundation

Solar Water Filtration Model

- Solar Water Filtration Model based on reverse osmosis, providing clean and safe drinking water in areas with low water-table
- Two Models of water system, for smaller clusters of 50-100 households to larger commercial and scalable level covering 250-500 houses
- Sufficient supply of water for:
 - Cooking
 - Drinking
 - Cleaning
 - Irrigation



Renewable Energy in Buksh Foundation

Solar Water Filtration Model

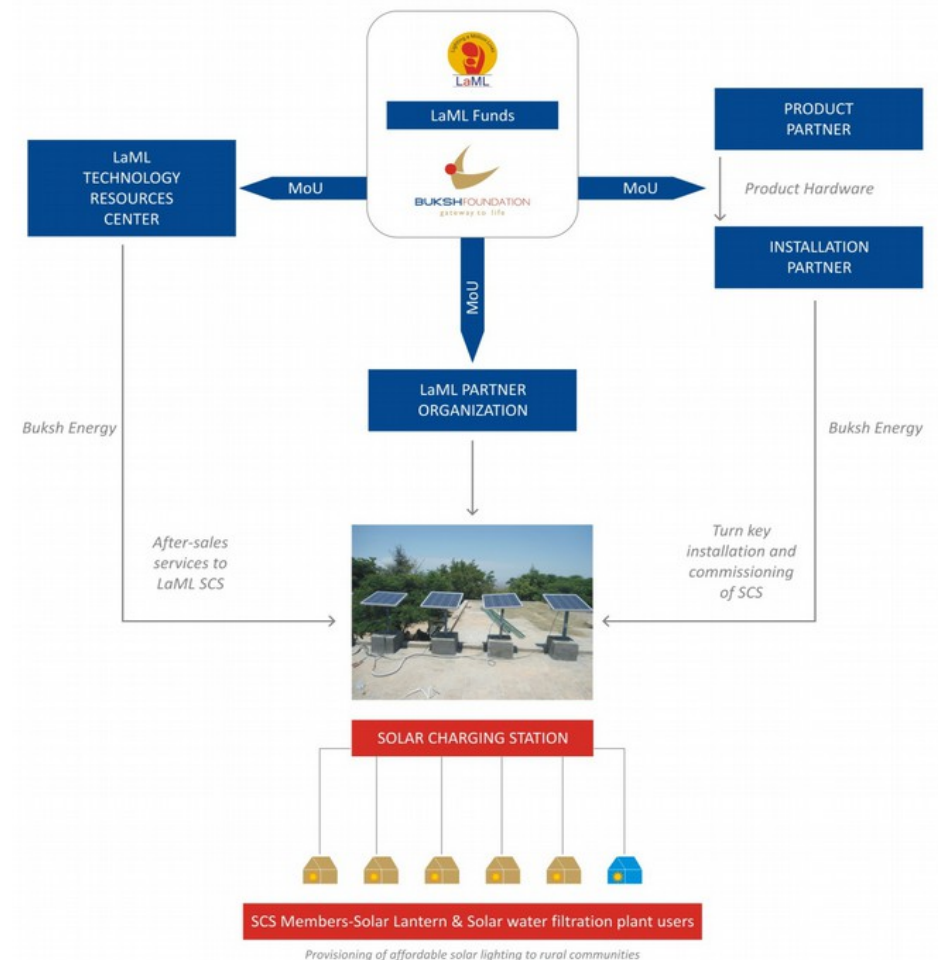
Community is directly involved in the project therefore, gaining ownership of the project and becoming aware various water born diseases. The success of Pilot project in Sahiwal has demonstrated the scale of opportunity in Punjab.



Renewable Energy in Buksh Foundation

Solar Mobile Charging Station

- Solar Mobile Charging Stations in junction with the LaML model will help provide mobile charging facilities in rural, un-electrified villages
- The model will be able to charge 10 mobile phones with a battery back up for 24 hours communication availability
- Providing direct connectivity to a population of 400 individuals, the mobile charging station costs Rs 60, 000 (USD 600)





Renewable Energy in Buksh Foundation

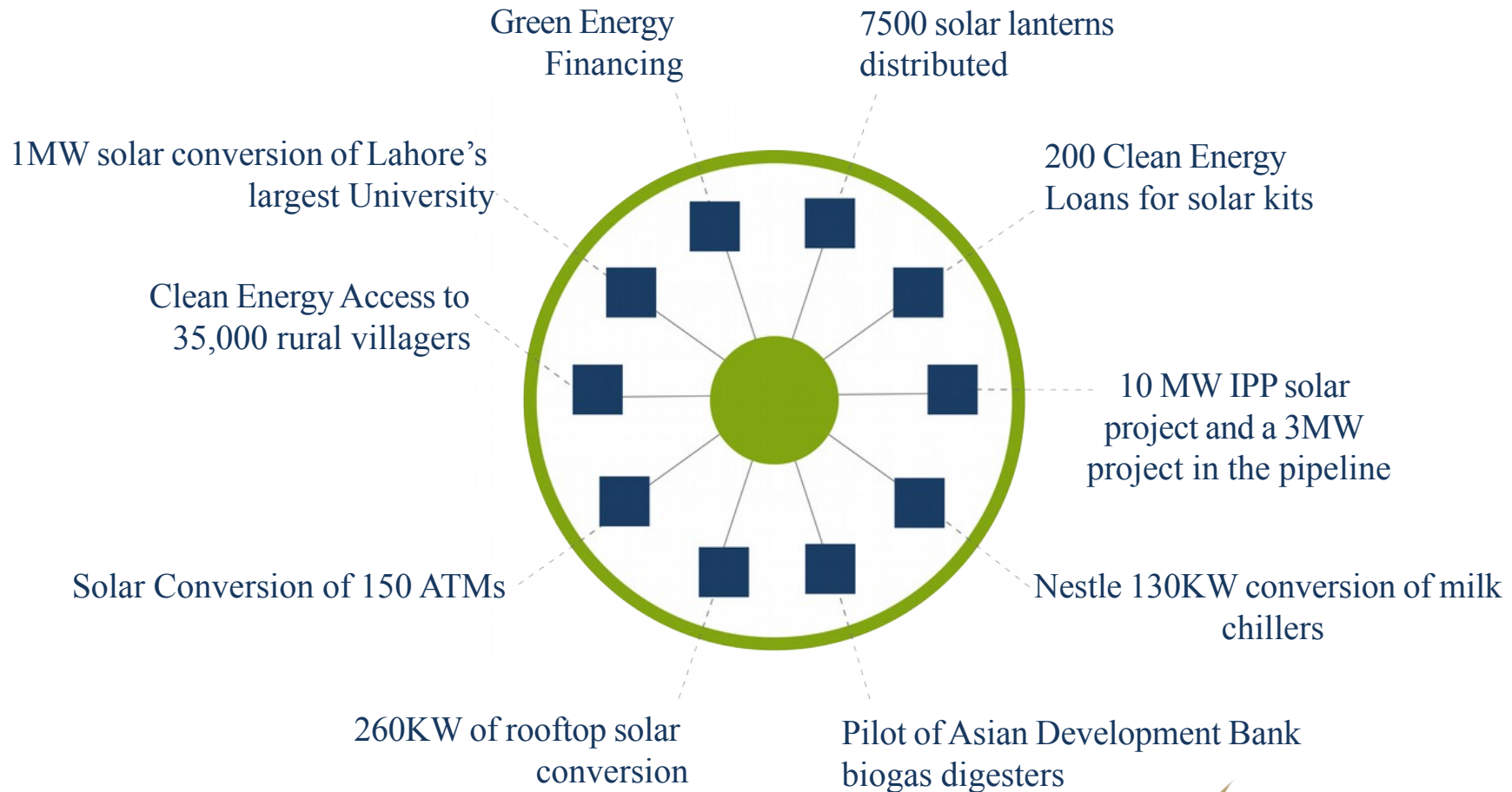
Solar Mobile Charging Stations

The implementation of solar mobile charging stations reduce travel time for villagers to other charging facilities, create economic opportunities, increase communication, and provide access to mobile banking.






Milestones in Renewable Energy





Conclusion



Social Enterprises aim beyond revenue generation and offer a model that provides multiple benefits to the community and environment. Buksh Energy Pvt Ltd and Buksh Foundation have adopted the triple line bottom approach to bring clean energy access and create entrepreneurs in the most underserved areas of Pakistan.



Thank you.

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