



Community Power

Creating Sustainable Societies

Joe Griffin
Group Environment Manager

Vodafone Group

February 2013



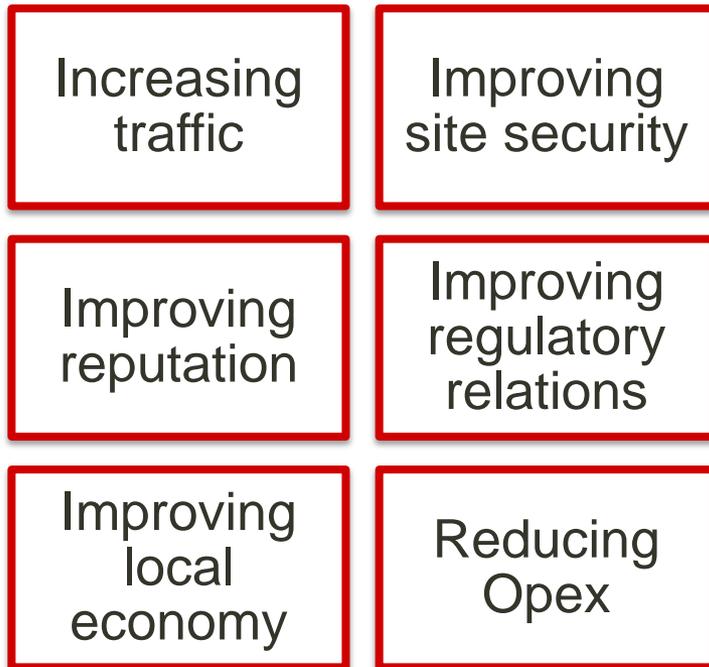
In 2011 Vodafone began looking at energy access in our markets and found very low levels...

Vodafone Operating Company	Population without access to modern electricity services (million)	Share of population
DR Congo	59	89%
Tanzania	38	86%
Kenya	33	84%
Other sub Saharan Africa	310	68%
India	289	25%
Worldwide	1,317	19%

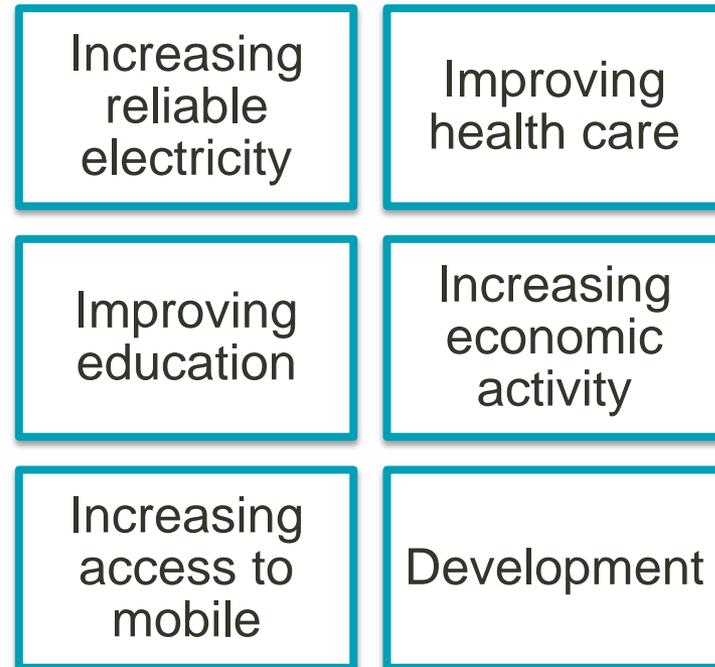


We considered the potential benefits of enabling communities to access a level of electricity from our solar base stations...

For Vodafone



For customers



...Vodacom began a process to establish a pilot site in Emfhilweni, Kwazulu Natal, South Africa.

- Extensive community consultation was carried out to understand real needs
- Replaced base station power source from diesel generators to 14kW solar foil (100m²) hosted on school roof
- Provided electricity to:
 - School (lighting and power)
 - Water pump (school and community)
 - Mobile charging (via small solar panel)
 - Additional Weboxes and laptops from Vodacom Foundation



...multiple shared benefits that supported our assumptions.

Vodafone	Community
<ul style="list-style-type: none">• 90% cost reduction diesel• 24% cost reduction maintenance• Overall 61.4% OPEX reduction• 90% reduction CO2• Free siting of solar panels• Enhanced security for the solar foil• Local reputation benefit and Good PR coverage	<ul style="list-style-type: none">• Longer school hours through power for lighting• Improved sanitation from reliable water pump• Community access to clean water• Internet access and laptops• Improved teaching outcomes thanks to technology• Improved outcomes for children who can access jobs thanks to the training now received at school• Reduction in cost of mobile charging and travel (from ZR45)

...and useful lessons for future site builds...

Establish clear lines of communication

Manage and meet community expectations

Assess social impact



In addition to feasibility studies for further network sites, in 2012 Safaricom and Vodacom began trialling and adopting other models of community power...

M-KOPA SOLAR



Simple
commercial
propositions

Benefits to
existing
Vodafone
businesses

Significant
addressable
market



MARANDU SHOP



Thank you.