



Mobile Enabled
Community Services

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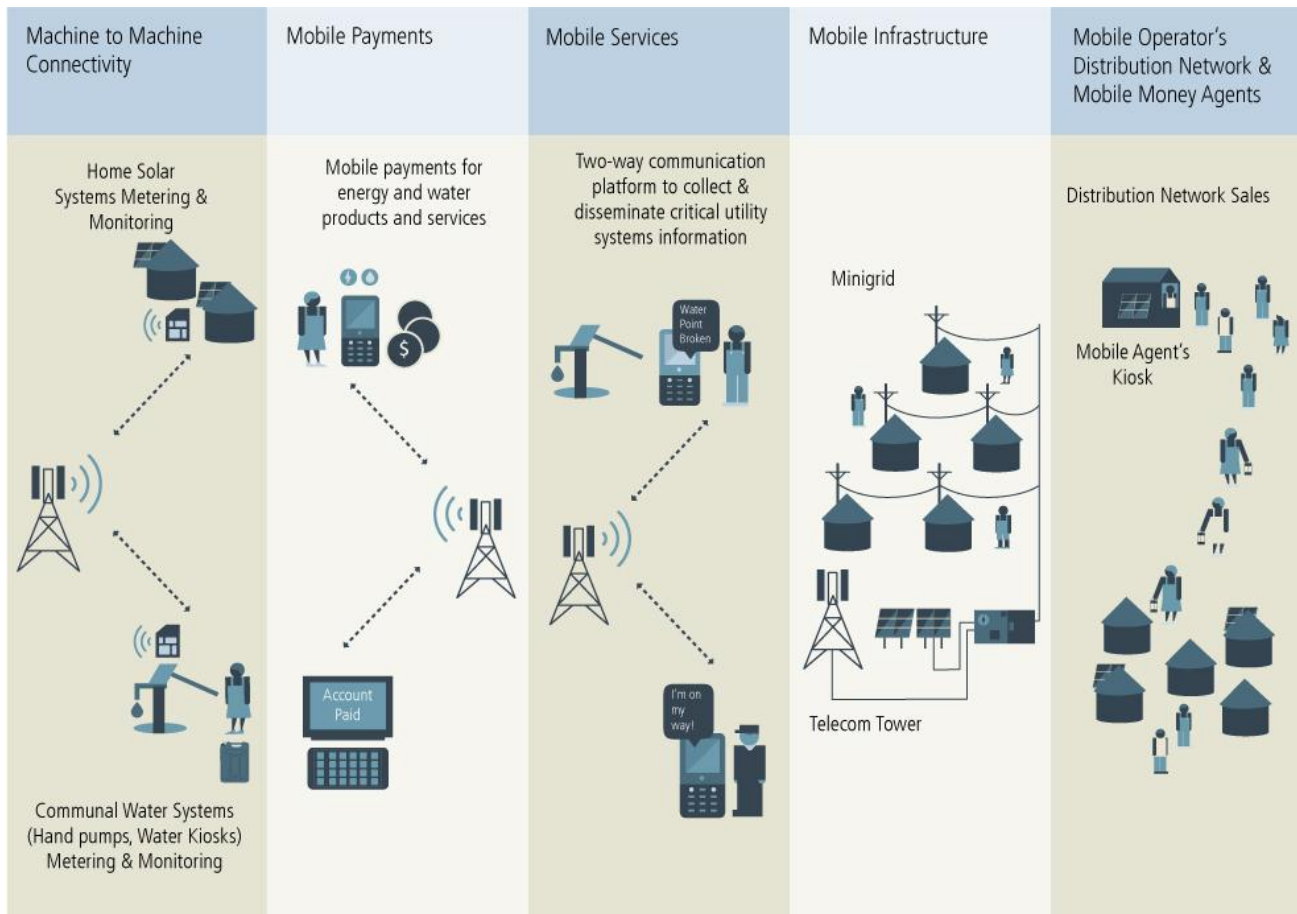
Mobile Enabled Community Services

Improving access to energy and water services in underserved communities by leveraging mobile technology and infrastructure

Programme Activities:

- **Knowledge Sharing and Convening** – Bring together industry stakeholders for the purpose of knowledge sharing and networking
- **Advisory Services**– Provide technical assistance to network operators
- **Innovation Fund** – Disburse £2.4m in R&D grants to support deployment of trials
- **Market Development** – Bring awareness of the commercial opportunity to attract capital to the sector to support growth and scale

How mobile can support service delivery



- Machine-to-Machine
- Mobile Payments
- Mobile Services
- Mobile Infrastructure
- Agent & Distribution Networks

MECS Innovation Fund Grantees in Africa & Asia



Key Trends:

- 187 Concept Notes received from 35 countries, including 7 from Latin America
- 77% of grantees have partnerships with operators
- 44% of concept notes proposed to use Mobile Payments
- 35% of concept notes proposed to Machine-to-Machine technology

MECS Innovation Fund Grantees - Examples

Telenor Easypaisa – Easypaisa Solar

- Country: Pakistan
- Amount: £200,000
- Sector: Energy
- Description: A trial to introduce an affordable, solar energy service to low income groups through an Islamic leasing model. The Seed grant will help Easypaisa to validate the business case for its unique offering and test its credit scoring methodology for leasers of high value systems.



Portland State University – Cellpump

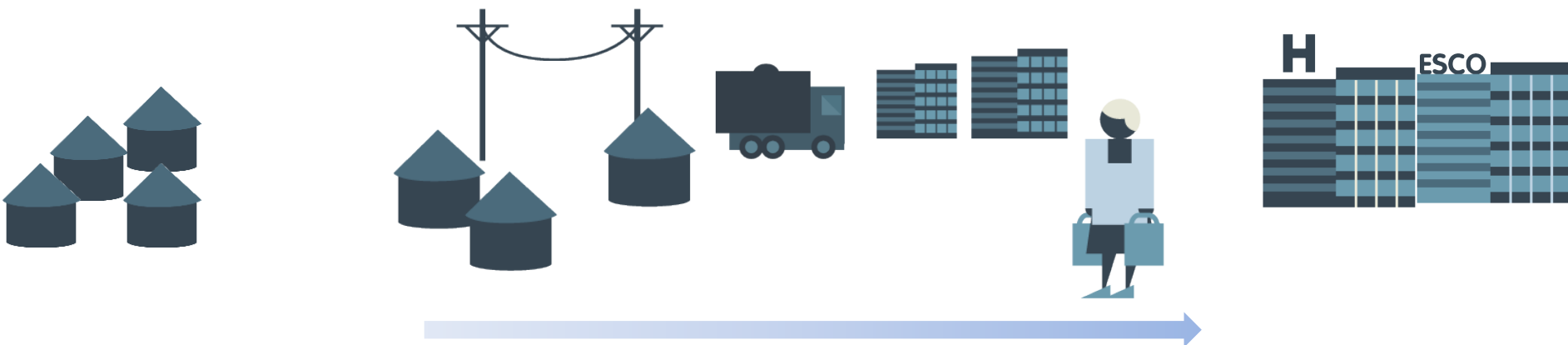
- Country: Rwanda
- Amount: £198,167
- Sector: Water
- Description: A trial in partnership with Living Water International and MTN, will conduct a national level roll out of Machine-to-Machine enabled sensors. The seed grant will study if sensors are able to improve the cost effectiveness of delivering water through reducing operational downtime across hand pump programs.



Mobile-Enabled Utility Services in the Latin American context



From Rural to Urban Areas



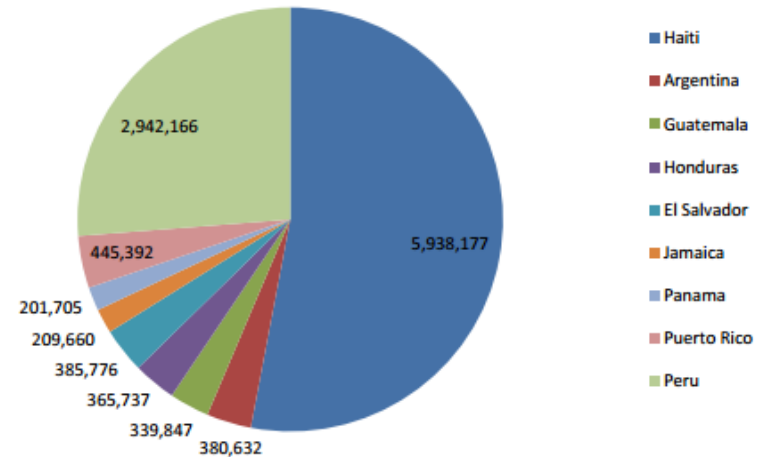
	Rural	Urban
Energy Access	Poor quality, inconvenient and very expensive. Sources are unhealthy	Grid energy is cheap and available even if unreliable.
Water Access	Improved sources are often unreliable, alternative sources are often unsafe and inaccessible	Generally intermittent and expensive to buy in small quantities

Opportunities in Latin America – New Access

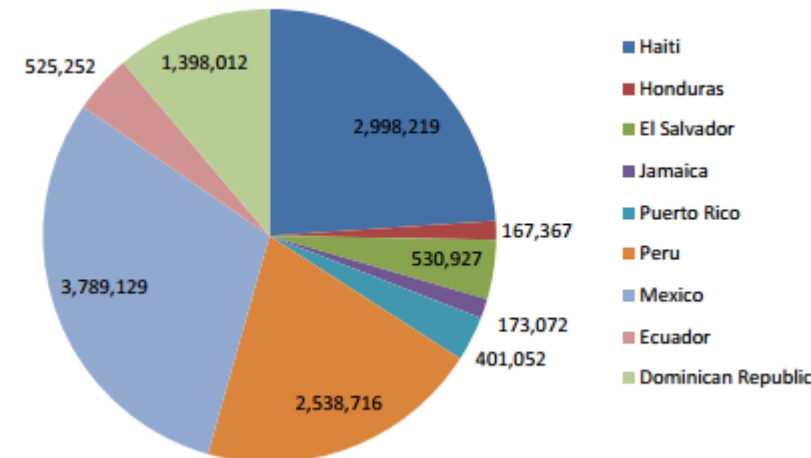
Energy Access

- 31 million Latin Americans without access to energy but 11 million of them live with GSM coverage

Energy Addressable Market



Water Addressable Market



Water Access:

- 30 million Latin Americans are without an improved water source but 12 million of them live with GSM coverage

Opportunities in Latin America – Improved Access

The opportunity for mobile to support infrastructure delivery in urban areas is focussed on improving the quality of the service to the end consumer & improving the commercial viability of the utility.

Urban Water Challenges

- Poor service quality which puts the population's health at risk
- Old infrastructure
- Tariffs that do not cover the CAPEX & OPEX
- High non-revenue water in many cities



Urban Energy Challenges

- Illegal connections & electricity theft are common, as many households are not able to pay cost-reflective tariffs or do not meet the requirements to be regular customer of the electricity company



1. <http://www.power-technology.com/features/featuresmart-grid-energy-theft-power-brazil-latin-america>
2. <https://openknowledge.worldbank.org/bitstream/handle/10986/12530/690620ESW0whit0s0Gap0Final0Version.pdf?sequence=1>

Nicaragua Feasibility Study



In May 2012, the GSMA with the support of the Multilateral Investment Fund of the IADB began working with Telefonica Group and Movistar Nicaragua to evaluate the opportunity for operating companies in the region to improve access to energy services for their customers while improving the business case to serve off-grid areas

Background information:

- Population: 5.8 M, 43% live in rural areas
- 28% of the population is without electricity
- Mobile Coverage Area: 21% ¹
- Mobile Coverage Population: 75% ¹



Conclusions/ Recommendations

- 25% of population is without mobile access and 28% of population is without electricity grid are dispersed across 79% of the country
- Infrastructure: Explore innovative business models to grow mobile coverage beyond the limits of the grid and provide access to basic services such as phone charging
- Distribution Channels: Explore distribution and marketing partnerships with providers household solar products. Movistar has an impressive sales force with far rural reach

Next Steps



Opportunities for Mobile Enabled Utility Services in Latin America

The GSMA is currently in discussions with the FOMIN to develop a Latin American focussed programme and are seeking input from mobile operators and other M4D stakeholders.

In your opinion:

- What are the challenges that your country faces in regards to energy and water services in either urban or rural environments?
- What challenges exist for utilities in your country of operation that mobile technology can help to overcome?