Mobile Enabled Community Services

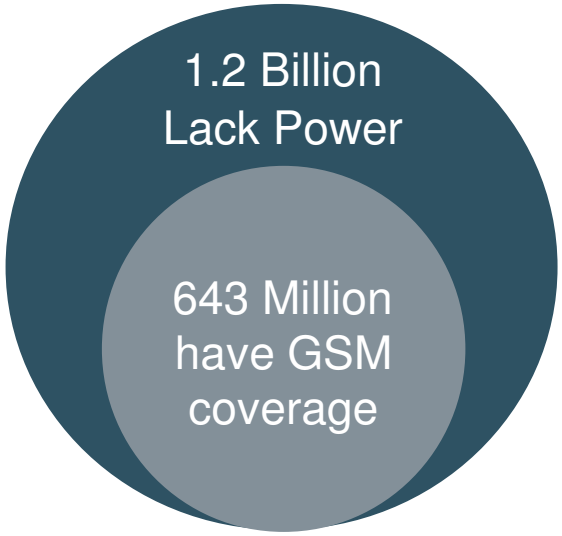
August 2014
Tanzania

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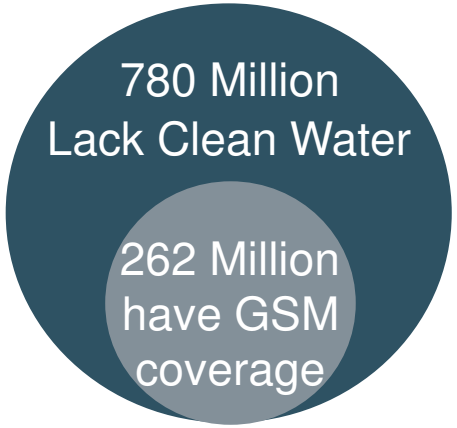
The size of the Opportunity

Energy



- Off-grid citizens spend significant amounts on lower quality services:
  - Phone charging costs $25/kWh
  - AA Battery costs $120/kWh
- 250M off-grid subscribers spend $2-3/month on phone charging alone
- Utilities struggle with theft and repayment

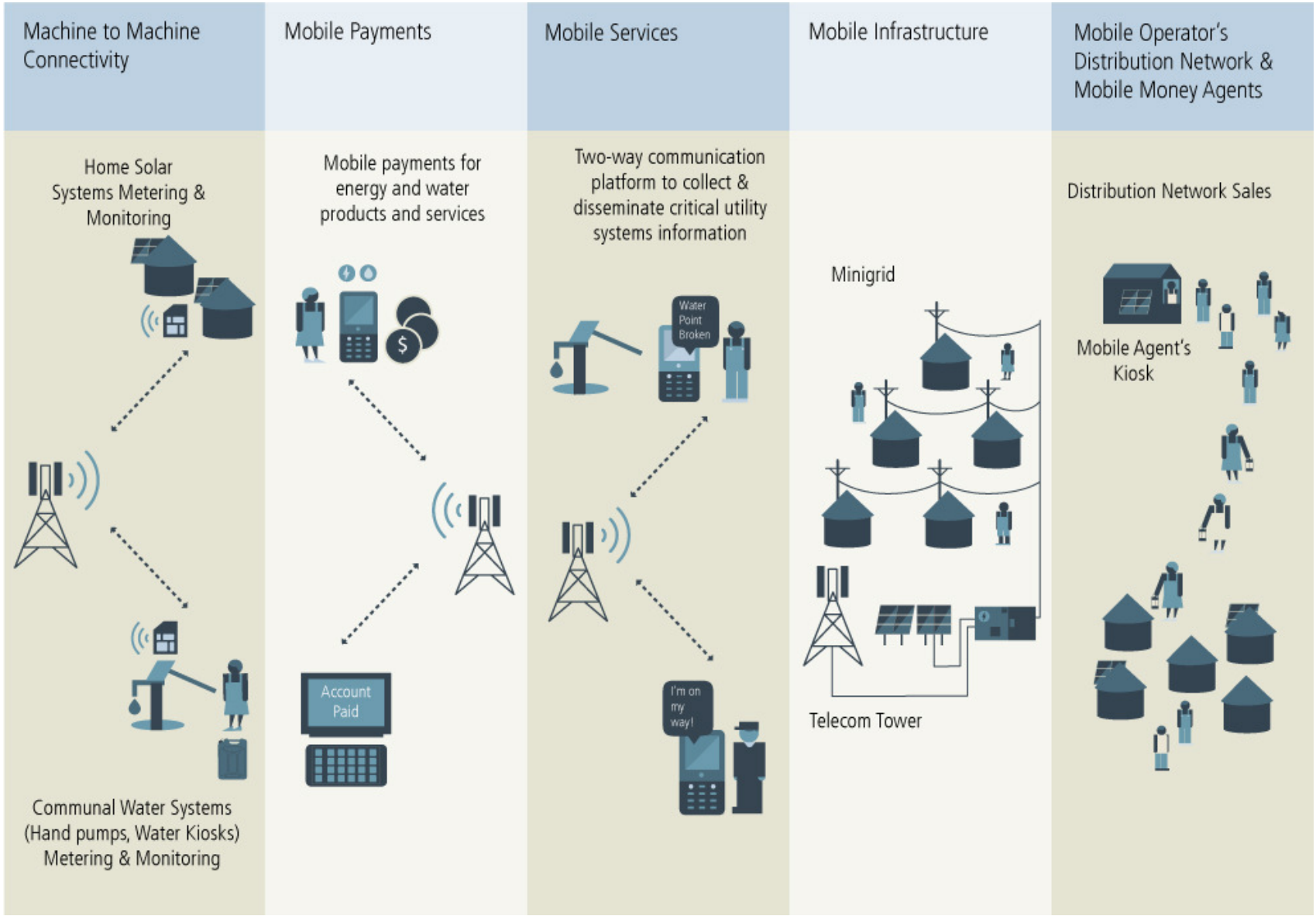
Water



- Unimproved water access is associated with 1.5 million unnecessary deaths of children under five
- For people with supposed access, installed infrastructure is unreliable: 40% of hand-pumps in Africa are in disrepair
- Utilities struggle with leak detection and repayment

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Mobile can impact energy & water access via 5 channels



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Value to the Stakeholders



Value to Mobile Network Operators

- Service partnerships have direct benefit to the MNO through increased: Airtime, brand loyalty, site security, mobile money transactions and operating efficiencies



Value to Mobile Industry

- Catalyse the development of commercially viable new technologies and business models, and disseminating the lessons learnt to drive scale



Value to Society

- Improve the livelihoods of people in underserved communities by increasing reliable access to (centralised/decentralised) energy and water

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Programme Overview

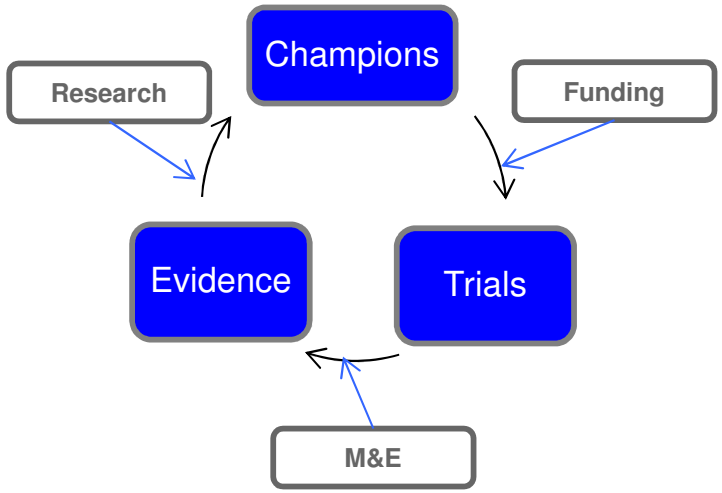
The GSMA Mobile Enabled Community Services (mUtilities) programme leverages mobile technology & infrastructure to improve access to basic energy and water services

Funding & Timeframe:

£4.1M in funding (including £2.4M Innovation Grant fund) from DFID's Climate & Environment Team to be deployed in 2013-2014

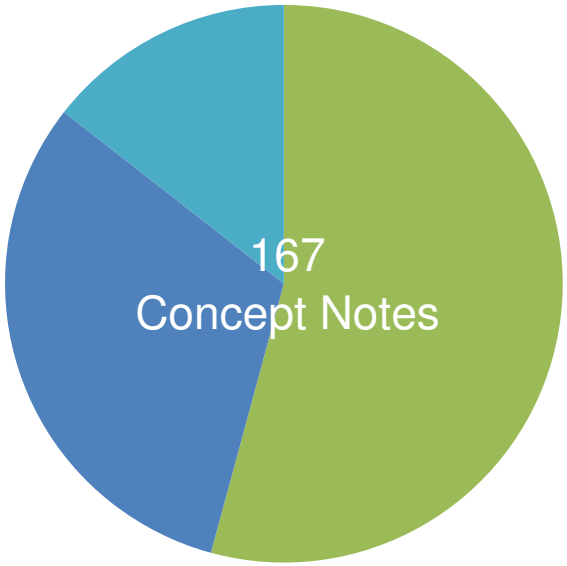
Programme Activities:

- **Knowledge Sharing and Convening** – Bring together industry stakeholders for the purpose of knowledge sharing and networking
- **Technical Assistance** – Provide technical assistance to network operators and grant applicants
- **Innovation Fund** – Disburse £2.4m in seed and market validation grants to support deployment of trials
- **Financing** – Bring awareness of the commercial opportunity to attract capital to the sector to support growth and scale

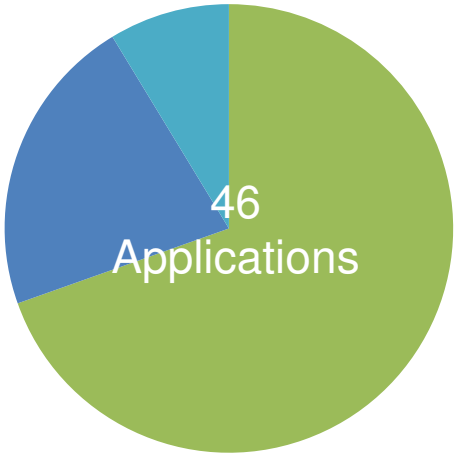


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Pipeline of opportunities



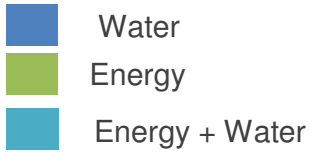
Asia 65, Africa 89, Latin America 7, Other 6



Asia 19, Africa 24, Latin America 3



Asia: 5, Africa: 8

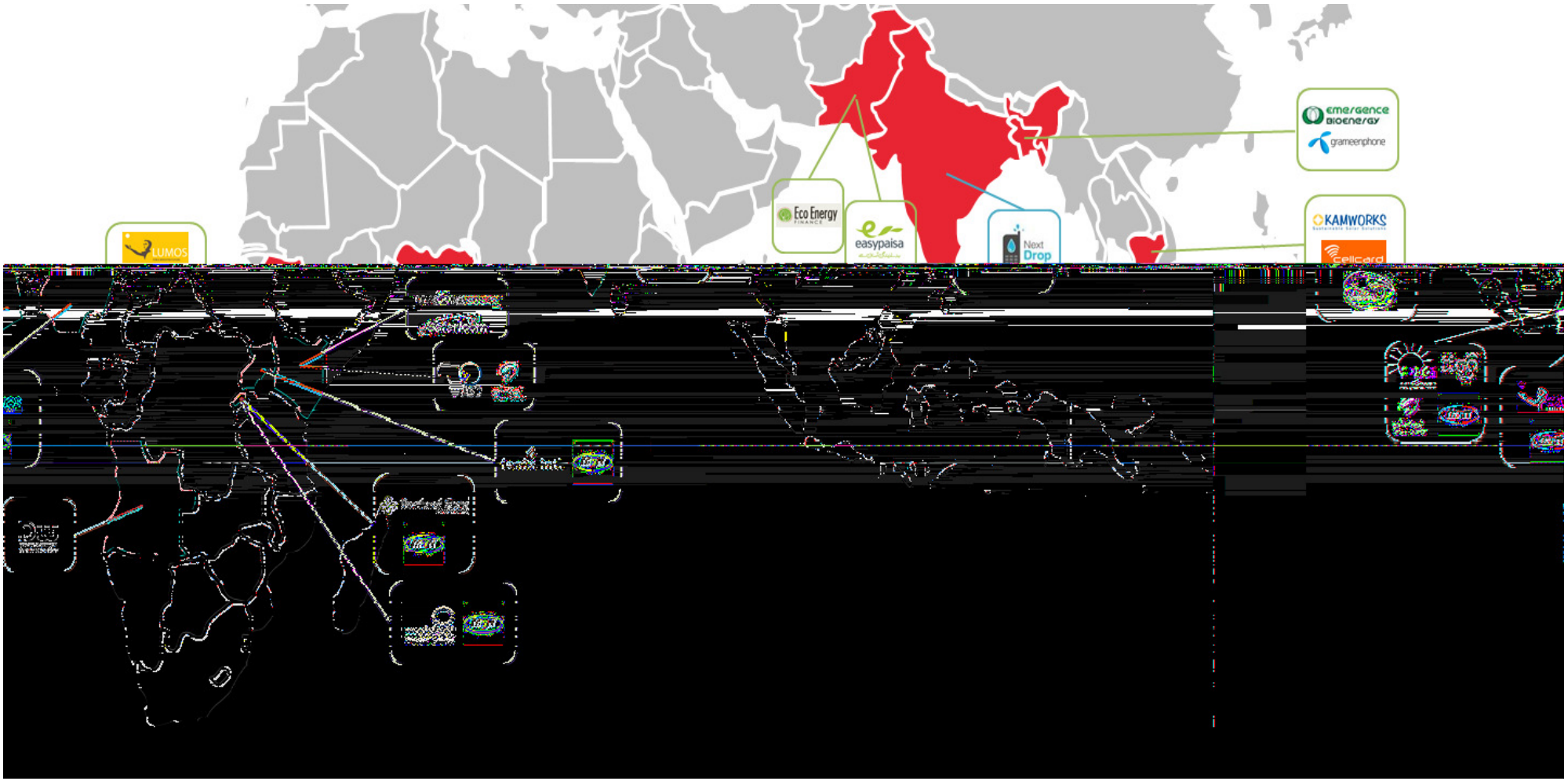


Key Trends from Pipeline

- 40% of concept notes proposed to use Mobile Payments
- 35% of concept notes proposed to Machine-to-Machine technology
- Energy sector driven by rural market failures
- Water sector driven by urban market failures
- Mobile Operator Partnerships:
  - Concept Notes: 36% proposed partnerships with operators
  - Grants: 77% of grantees have partnerships with operators

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Examples of Innovation Grant



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Examples of Innovation Grant

Leveraging presence of mobile infrastructure to support Energy Access

Mobile infrastructure can support energy access initiatives:

- Inside the fence: Leveraging existing power equipment to provide services to the community
- Outside the fence: 3rd party energy service companies can use the mobile tower as an anchor customer and provide services to the community

Example: OMC Power in India and Bharti Infratel
http://www.youtube.com/watch?feature=player_embedded&v=SykYvj-Hb60#!

24/7 Power to tower



Leases product to customers





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Examples of Innovation Grant

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.



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