



Green Power for Mobile and Community Power from Mobile



Energy+Mobile at Mobile World Congress 2012

Our Seminar

Energy is the backbone of the mobile industry: without it the mobile network would not exist and we could not turn on our mobile phones. Nowhere is this truer than in emerging markets, where mobile operators have become proficient at operating in areas of unreliable and nonexistent grid electricity. Facing rising costs of energy and a vast number of customers without access to reliable power, the mobile industry is starting to think differently about energy.

Come hear from the mobile giants driving innovation around energy. This session involves short presentations with an audience-driven Q&A.

Tuesday 28th February 16:00 -17:00
GSMA Seminar Theatre, Hall 2.1

Confirmed Panelists

- Sairam Prasad – CTO at Bharti Infratel
- Marco Signorini – CEO at Econet Solar
- Maarten Boute – CEO at Digicel Haiti

The Green Pavilion, located in Hall 2.1, will once again be dedicated to the industry and representing top vendors in the market.

Sustainable Energy for All

UN Secretary-General Ban Ki-moon introduced the International Year of Sustainable Energy for All for 2012.

The GSMA Development Fund is a firm believer that the mobile industry is uniquely positioned to drive this opportunity forward. The following objectives, to be achieved by 2030, align to the aims and objectives of the energy programmes of the GSMA: Energy Efficiency, Green Power for Mobile and Community Power from Mobile:

- To ensure universal access to modern energy services
- To double the rate of improvement in energy efficiency
- To double the share of renewable energy in the global energy mix

About the Programmes

Green Power for Mobile

The Green Power for Mobile Programme aims to extend mobile beyond the grid simultaneously reducing energy costs and minimising environmental impacts. We are committed to promoting the development of renewable energies for mobile telecom networks to power new and existing off-grid base stations in emerging countries. In doing so, an estimated 2.5 billion litres of diesel per annum would be saved and annual carbon emissions would be cut by up to 6.8 million tonnes.

Recent technological improvements and cost reductions in green power solutions have made this alternative more commercially attractive. Coupled with the environmental benefits of reduced diesel use and subsequent emissions, green power solutions provide a promising opportunity for operators.



Since its inception, the Green Power for Mobile team has conducted 20 feasibility studies in developing countries, in which a team member studied an operator's network and assessed the opportunities for renewable energy usability. The team is also involved in identifying new technologies, services or trends that could impact the energy component of telecom networks in order to reduce greenhouse gas emissions and optimise mobile operators' business models. This is then disseminated to the industry through knowledge sharing and convening sessions, reports, blogs and our social media networks.

Mobile Energy Efficiency

GSMA's Mobile Energy Efficiency Benchmarking (MEE) is a management tool that helps MNOs measure and monitor the relative efficiency of their radio access networks, identifying underperforming networks and quantifying the potential efficiency gains available, typically around 10 per cent to 25 per cent across a MNO's portfolio. MEE Optimisation (MEEO), which has successfully completed its first project, works with MNOs and third parties, e.g. vendors, to identify individual energy saving measures and assess the business case of each in order to reduce network energy costs and greenhouse gas emissions. MEE now has 35 MNO participants accounting for more than 200 networks across 145 countries.

Community Power from Mobile

The Community Power from Mobile Programme aims to leverage the scale of mobile technology and infrastructure to provide millions of underserved communities with access to improved energy services. Mobile penetration has quickly outpaced the growth of the electricity grid with 548 million mobile subscribers living beyond the grid.

The wide adoption of mobile services by underserved populations provides an opportunity to develop energy solutions at a scale never before seen, leveraging both human and physical infrastructure and innovative

payment technologies.

The mobile industry's upside in bringing the best models to scale is massive. If customer phones can be more easily and affordably charged, they are almost certain to spend more money on airtime. Likewise, if incomes in off-grid areas can be increased through access to services like irrigation or lighting, mobile subscribers will be quite likely to increase their spending on communication.

Finally, mobile operators have the opportunity to create far deeper brand loyalty and equity by tangibly improving the lives of their customers beyond just communications. Winning the hearts and minds of customers is the best long-term strategy in any market, and community power provides an exciting way for mobile operators to do just that.

Enhanced Utility Access

We are currently investigating a new area of research, enhanced utility access. The revolution of mobile access in developing countries could help address some of their oldest challenges – sustainable energy and water services; 1.4 billion people do not have access to energy and almost 1 billion people do not have access to safe water. The increased mobile phone penetration and decreased cost of cellular components is spurring innovation from vendors to find solutions to the biggest challenges of decentralised energy and water services - increasing payment collection to ensure services are sustainable for both service providers and low-income consumers.

Several projects have been launched in recent years using intelligent meters to allow consumers to 'pay as you go' for energy or water the same way they would top up for mobile airtime. The combination of embedded devices with mobile money services where subscribers pay to access to energy or water opens up new grounds to provide reliable and affordable solutions to the population who currently has unreliable access to vital services.

About the GSMA Development Fund

The GSMA Development Fund brings together our mobile operator members, the wider mobile industry and the development community to drive commercial mobile services

for underserved people in emerging markets. We identify opportunities for social, economic impact and stimulate the development of scalable, life-enhancing mobile services.

For information on the Green Power for Mobile Programme, please email: greenpower@gsm.org

For information on the Community Power from Mobile Programme, please email: cpm@gsm.org