Green Power for Mobile and Community Power from Mobile



Highlights from Doha Regional Working Group

Qtel Group co-hosted another successful Green Power for Mobile Regional Working Group. The session ran over the 18th and 19th April 2012 and was attended by 55 delegates from mobile network operators, to vendors, energy service companies, financiers and NGOs.

After a brief introduction from Areef Kassam, Green Power for Mobile Programme Director, Qtel's Brian Theaker spoke about the Group's Energy Efficiency Strategy. Qtel currently has 30,000 sites in its network: 2,500 (8%) off-grid; 11,000 (38%) poor grid; and the remaining 53%, good grid. Of the poor and off-grid sites, 120+ are powered by renewable energy. Qtel is in the midst of a modernisation project where 10,000 sites will be made more energy efficient with the support of GSMA's Mobile Energy Efficiency Programme.

The **International Finance Corporation**'s Investment Officer Yucui Sun gave an overview of the IFC and how it works, possible financing models along the value chain, barriers and challenges, and newly emerging business models. Insight was also given into the new phase of the GPM Programme, which was recently agreed on with the IFC.

Mats Vilander of **Zephyr Corporation**, the kind sponsors of the Working Groups farewell dinner, spoke about wind turbine solutions for telecom sites and the value proposition to mobile network operators. Vilander used a Vodacom site as a case study to highlight benefits of 50% cost reduction, savings of US$24,000 for hybrid and a 2 year payback period.

Delegates participated in a focus group survey for market research the GPM team requires about batteries, which was facilitated by **General Electric**. Delegates discussed a range of questions around current telecom networks, OPEX on cell sites, the role of batteries, the importance of Total Cost of Ownership and market adoption. The results of this survey will be published in our next biannual report, due in June.

This session evolved into a moderated discussion about whether vendors are able to meet the requirements that are being demanded of them by operators. As the size of deployments is scaling and the requests from operators are increasing in complexity, vendors are being forced to push their boundaries to deliver.

Additionally, with the increase in vendors leading to an increase in competition, there is further pressure on the vendor to challenge price points and pay back periods that are mutually beneficial. MNOs have pressures from the investment side and need to be more stringent to make sure they get the best deal.





On day two, GPM's Satish Kumar presented our recently completed GPM and CPM feasibility study with **TNM** in Malawi, who have a total of 365 sites: 300 on-grid and 65 off-grid. The results highlighted the reduction in reliance on a diesel generator, savings on diesel costs, OPEX savings, average pay back periods, CO_2 emission reduction and green power generation. From the community power perspective, market pressures were evaluated and potential sites evaluated.

Joshua Pierce, of **Off.Grid:Electric**—the only technology integrator in the group—outlined their services and nascent market opportunities before discussing the benefits of the ESCo Model for the operators, potential barriers, as well as the the four pricing models: no CAPEX, hybrid CAPEX, PPA and ESA. Pierce concluded with the ESCo's viewpoint on CPM using Tanzania as an example, where 80% of people have mobiles but only 20% have electricity – they don't feel like they can wait for the grid to catch up.

Charlotte Ward, Community Power from Mobile Manager, discussed in detail the opportunities for African operators.

Vodafone Group has been trialling a community power site in Emfihlweni, South Africa by utilising its infrastructure to power a local school. Mohammed Belfqih, Infrastructure Manager, explained how the installed roof top solar foil increased a nearby site to 14kW. This is enough to power a water pump, 60 laptops, a Webbox, and handset charging at a local shop. From Vodafone's point of view, community power provides mutal benefits for an operator and the community.

The idea of smart solutions for energy access was also discussed. Seena Rejal of **Eight19**—a company who produce pay-as-you-go personal solar electricity systems—explained Eight19's two models; scratch cards and mobile money. Rejal highlighted the benefits of the products for economic activity and for encouraging entrepreneurship within communities.

The Working Group closed with great feedback, new contacts made and a great idea's for both programmes to pursue in the next 6 months before the African Working Group meets again in Ghana, October 2012.

The Industry Task Force

The goal is to put together a unified design of aggregated demand to enable operators to scale more quickly and efficiently. The hope is that the commonality of products and requirements will drive costs down for the industry. This will be a continuously developing document based on KPI's, benchmarking and potentially star ratings for sites.

For more information about the Industry Task Force, contact greenpower@gsm.org.

Updating our Green Deployment Tracker

If you have an data for our Green Deployment tracker, please complete our template and email greenpower@gsm.org.

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

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