

In partnership with the Netherlands



## Highlights from Africa Regional Working Group

The last Green Power for Mobile Africa Regional Working Group was successfully hosted by the GSMA and Tigo (Millicom Group) on the 6th and 7th November 2012 in Accra. The Working Group was attended by 43 delegates from across the industry, including mobile network operators, tower companies, industry regulators, vendors, energy service companies, and other stakeholders.

The first day's sessions started with an introduction from Areef Kassam, the **Green Power for Mobile** Programme Director, followed by Garry Bridgewater from **Millicom Group**, who spoke about their energy optimisation and OPEX efficiency strategies. Millicom's approach to reducing energy OPEX involves load optimisation and equipment efficiency, cost reduction through the sale of towers and site sharing and green energy.

Arata Onoguchi, from the Sustainable Business Advisory Department at the **International Finance Corporation**, gave an overview of IFC's support for the Green Power for Mobile programme and various investment vehicles for investing in green power deployment for telecom infrastructure. Arata also gave an overview of the impact the Green Power for Mobile programme has had on the industry to date.

Patrick Ayivor of **Airtel Ghana** presented a case study on their solar deployment experiences. He demonstrated how their approach has enabled them to realise an energy OPEX saving of about 74% by replacing diesel power with solar. Airtel Ghana highlighted that remote monitoring, site security and commitment from project and managed services partners are essential elements to protect an investment in green power.

Sam Basson from **Eaton Towers** presented a case study from a tower company perspective and detailed their initiatives towards bringing energy efficiency to the forefront of their strategy and implementing energy saving solutions, including green power. Sam presented a case study on their Ugandan operations, which provided them savings of close to 30% in costs as a result of their OPEX and energy efficiency initiatives.

**General Electric's** Obinna Onuchuckwu shared the experience in deploying DG-battery hybrid solutions in Africa. Obinna highlighted that people, processes and products are key elements that make hybrid solutions a success or a failure.

On the ESCO model, Laurentius Human of **Inala**, talked about what an ESCO is and walked the Working Group through the ESCO model using interesting infographics. Laurentius highlighted that the "one size fits all" approach will not work across the globe and replicating a successful business model in one continent, does not guarantee its success elsewhere. He explained the key elements required for an ESCO model to work in Africa and stressed that site selection is important.

The second day started with **Helios Towers Africa** briefing the group on their operations and gave insight into what it's like to do business in Africa. Helios Towers highlighted that green power, including solar, wind and fuel cells, is part of their energy strategy and that they are actively considering these options for feasibility.

**HIP Consult's** Judah Levine took a strategic view of green energy and energy efficiency in the telecoms industry and

stressed an integrated approach for formulating energy related strategies and programmes. Judah highlighted that green/hybrid energy is showing traction with increasing deployments; however, the challenge is bringing this to a transformation scale. Judah's session looked at various frameworks to analyse and comprehend the multi-dimensional aspects of energy and strategies to adopt in order to develop and execute successful energy programmes.

Mary Roach of GSMA's **Community Power from Mobile** programme talked about the situation at present through drawing similarities between developing world and the developed world using Hurricane Sandy as an example of a nation dependent on energy and mobile. Highlighting the lessons learnt in 2012, Mary mentioned that the economic viability of community power depends on a country's government involvement and the strength of the innovation. Mary talked about the three channels that have evolved from the original concept of the programme and used case studies to highlight each.

Areef Kassam drew the Working Group's attention to GSMA's newest development: Mobile and Development Intelligence. As an online, publically available data-driven website for our member operators and the wider mobile for development community, MDI will cover many sectors including green networks and energy access and give users access to various metrics as well as hosting out deployment tracker.

ATC's (American Tower) Darren Crosse presented their progress since the Cape Town Working Group in Nov 2011. ATC demonstrated that through successful monitoring and analysis, they were able to maximise the utilisation of grid power and optimise site load through various energy efficiency initiatives. ATC acknowledged that customers are keen to have DC power onsite for reduced OPEX and fast rollout. ATC understands that long-term network evolution is essential in predicting future energy requirements as well as a fruitful strategy. Through their energy efficiency and optimisation initiatives, ATC saves on average 500,000 litres of diesel each year and reduces CO2 emissions by 1340 tonnes, the equivalent of 45 acres of forest.

Simon Beard of **Altobridge** followed with their experience in extending coverage to remote rural areas through their standalone solar powered Lite-Site solution. This solution is suitable for isolated areas including unreliable and off-grid locations with 1200 subscribers or less. Altobridge's Lite-Site implements satellite backhaul and provides MNOs a quick and low cost rollout in areas without microwave links.

**PowerOasis**, through their successful deployments across Asia Pacific, Middle East and Africa, emphasized the need for a structured approach through planning,



implementation and future proofing of deployed systems. John O'Donohue, demonstrated that scaled deployments would result in business returns and stressed that standard configurations and clustering of sites is key to enable scaled deployment of green power and other energy saving solutions.

## Breakout Sessions

### Day 1: Viability of the OPEX/ESCO Model for Africa

Both groups came to different conclusions; the first group felt that the ESCO model will not work in Africa and the second group felt that it will work, provided that there are some key enablers. These include, but are not exclusive to experience, scalability, having a large enough anchor client, the risk of demand, controlled community power usage, energy storage, variable pricing, credible evidence, as well as regulations.

### Day 2: Remote Monitoring and Security

The groups discussed the current challenge of remote site monitoring impacting cost of operations and the key role it plays in site security and management. It appears that standardisation is imperative to enabling successful integration and implementation. Site security is a challenge and needs to be addressed through strengthening operational processes and site access control. Various points of security vulnerabilities were highlighted and possible strategies were discussed to address the existing security issues at telecom sites.

## About GSMA Mobile for Development

GSMA Mobile for Development 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](mailto:greenpower@gsm.org)

For information on the Community Power from Mobile Programme, please email: [cpm@gsm.org](mailto:cpm@gsm.org)