IFC International Finance Corporation
World Bank Group

GSMA Green Power for Mobile

In partnership with the Netherlands

Highlights from Indonesia Specific Working Group

The Green Power for Mobile Indonesia-specific Working Group was held at the Discovery Kartika Plaza Hotel in Bali on the 13th of December 2012. The event was co-hosted by Telkomsel and the programme continues to be supported by the International Finance Corporate (IFC, a World Bank group) in partnership with the Netherlands.

The event turned out to be one of the best yet, with over 55 delegates from 32 organisations participating actively. One of the reasons we conducted the event outside of Jakarta was to ensure we had 100% engagement from the delegates. Thanks to all the participating organisations the event was fully attended the whole time.

The day-long event showcased the Government's role in promoting green deployments, MNO initiatives to promote energy efficiency and green power for telecom, new technology developments, and energy outsourcing for telecom. The break-out discussion was conducted into two sessions, one in the morning and one in the afternoon, discussing the topic of challenging of going green, and CAPEX vs. OPEX preferable options for greening the network. The delegates felt the break-out sessions were a buzz of activity and were glad for the opportunity to speak out to fellow stakeholders.

The day was kicked of by Ferdous Mottakin, **Green Power for Mobile** Programme Manager, introducing of GSMA's role to promote green power for mobile and describing the activity plan for an Indonesia-specific market.

Government Roles on Promoting Green Industry

Delegates from the Government of Indonesia were represented by the Ministry of Communication and Information Technology, Ministry of Energy and Mineral Resources, Agency for the Assessment and Application of Technology (BPPT) and Indonesian Telecommunication Regulatory Authority (BRTI).

Dr. Titon Dutono, Director of Resource Management, **Ministry of Communication and Information Technology (MCIT)** presented their role in promoting green network deployment and bringing it to scale. Dr. Ir. Djadjang Sukarna, Secretary of Directorate General of Renewable Energy & Energy Conservation, **Ministry of Energy and Mineral Resources**, mentioned that Indonesia has committed to reduce GHGs emission by 767 million tons by 2020. He thinks telecom should play a vital role and should contribute to the GHG emission reduction target. Dr. Ir. Soni Solistia Wirawan, Chairman of Centre for Energy Technology, **BPPT**, described the green technology potential in Indonesia. He showed the progress of green deployments thus far across the country and the projected plan for green power contribution toward national grid. The last speaker from the Government of Indonesia was Dr. Riant Nugroho, a member of the **Indonesian Telecommunications Regulatory Authority (BRTI)**. Dr. Riant described the BRTI's role in promoting green technology and more holistically about the go-green picture that may fit the Indonesian market.

MNO Showcases on Greening the Network and Energy Efficiency

Abdus Somad Arief, Network Director of **Telkomsel** talked about their GHG emission reduction short, mid and long term plans. He also described their so-far deployed green site and cumulative achievement through that. Telkomsel is currently the biggest deployer of green sites in Indonesia and have tried and tested most of the telecom suitable green solutions available. Abdus Somad also mentioned their community power initiative which not only enables rural lighting, but also increases telecom site security.

Energy efficiency discussions were brought to the table by Azwani Dadeh, Division Head, Power O&M and Utilities of **Indosat**. He showed that 5% of their sites are consuming 40% of their total energy budget due to extensive DG usage. He also explained the current grid power availability scenario for their network. Azwani discussed Indosat's various energy efficiency initiatives and achieved saving through these initiatives.

Technology Development

Jhody Arya, CEO of **BIMA Green Energi** presented Micro Hydro technology on behalf of **Smart Hydro Power**. He explained various possibilities of utilising such a solution for the Indonesian market. Robert Pounder, Business Development Director of **Eltek** briefed the group about the importance of optimising the network to minimise the energy requirement. He spoke in detail about various energy efficiency methods as well as about TCO for various green-hybrid energy solutions, the performance of various solutions and the best approach to getting the best performance. Ben Craft, Technical Director Asia of **Northstar Battery** talked about the battery technologies they have available to fit various grid situations. He also showed the road map of their battery technology.

Green Energy Outsourcing for Telecom

Marshall Towe, President Director of **Cascadiant**, explained the feasibility of their offered energy outsourcing model for the Indonesian market. He mentioned their fixed rental cost can provide guaranteed uptime and SLA for network operators.

Yahya bin Abdul Latief, MD APAC of **Exicom**, was the last speaker and he talked about their OPEX business concept by managing the end to end energy power system for their clients. He also described the offer of Exicom for the Indonesian market.

Break-out Sessions

During the first break-out session, the group discussed the main challenges of going green. Though the feedback was mixed, a number of similar comments were received from the participants, which included the lack of recognition and fiscal support, and a lack of competent service providers.

The second break-out session was held in the afternoon to discuss preferred models for going green: CAPEX vs. OPEX. Some of the network operators declared their preference towards the CAPEX model as it can increase the value of the company making them the owner of the assets. They also pointed out that the cost of the OPEX model is often similar to their current cost of operation which does not encourage them to make use of the OPEX model. The capacity of scaled deployments by existing energy outsourcing companies was a concern from some of the stakeholders. The energy outsourcing service provider think the model can be successful if the contract duration is longer and a good number of sites can be put in a single cluster.

About Green Power for Mobile

Green Power for Mobile is a joint IFC and GSMA Mobile for Development programme which, in partnership with the Ministry of Foreign Affairs of the Netherlands, promotes the use of green power, such as solar and wind, at mobile network tower sites in remote rural areas around the world, where there is limited or no grid power. There are about 640,000 off-grid sites globally, primarily powered by diesel generators, out of which 120,000 could be eligible for green power solutions. IFC, a member of the World Bank Group, is the largest global development institution focused exclusively on the private sector. GSMA is the industry association which represents the interests of nearly 800 mobile operators worldwide, serving more than 6 billion connections and 4 billion individual subscribers.

Mobile for Development