



Capacity Development Seminar "Powering the Future We Want - Recognizing Innovative Practices in Energy for Sustainable Development" 2015 UNDESA Energy Grant

14 -15 September 2015 Conference Room 8 United Nations Headquarters, New York, USA

SUMMARY NOTES

On Monday 14 September and Tuesday 15 September a Capacity Development Seminar was held following the Award Ceremony for the winner of the 2015 UN-DESA Energy Grant *Powering the Future We Want*. UN-DESA, Division for Sustainable Development organized the Seminar to provide an opportunity for the 9 grant finalists, 1 winner, and 2 Special Mentions to disseminate their experiences, knowledge and plans in the implementation of projects that promote energy for sustainable development. The Agenda for Session 1 and Session 2 of the Seminar and list of panellists are attached.

Session 1

Session 1 began with opening remarks by Mr. Nikhil Seth, Director, Division for Sustainable Development, UNDESA. Mr. Seth's introduction acknowledged the importance of the seminar for allowing the 12 organizations which reached the top of the evaluation process to disseminate knowledge and share best practices and experiences with other practitioners in providing energy access with clean, renewable, and environmentally friendly technologies. He reiterated that the dedication and commitment of each organization is already making progress toward the Post 2015 Development Agenda, including the dedicated Sustainable Development Goal on Energy that calls for "Ensuring access to affordable, reliable, sustainable and modern energy for all."

The Moderator for Session 1 was Mr. Mark Fulton, Founding Partner, Energy Transition Advisors Pty Ltd, and Advisory Council Member for the grant. Mr. Fulton invited the panelists to each give a 20 minute presentation. The first presentation began with Mr. Brendan Riley, Fleet Sales Vice President of BYD (Build Your Dreams). BYD received Special Mention for the grant. Mr. Riley's presentation focused around the company's "3 Green Dreams": affordable solar power, improved battery storage, and electrified transportation. He detailed how BYD is making huge strides in this field, with their high energy output and energy density batteries. They are based on non-toxic, and bidirectional charging technology and are used in their electric vehicles that have the additional benefit of allowing support to hospitals, police stations, and housing facilities in case of emergencies.

The next presentation came from Mr. Moses Sanga, Founder and CEO of Eco-Fuel Africa Ltd., representing a small but successful African company converting biomass waste into clean and affordable cooking fuel in rural Uganda. Mr. Sanga's presentation framed the main problems of charcoal use in Uganda: deforestation, indoor air-pollution and high cost. The company came up with the solution for a simple, better, cleaner and cheaper form of cooking fuel made from locally sourced agricultural waste. His presentation discussed how the company makes this fuel easily accessible to people at the base of the pyramid in Uganda through an inclusive distribution model.

The third presenter was Dr. Benon Mutambi, CEO of the Electricity Regulatory Authority of Uganda. Mr. Mutambi was the only participant representing an arm of government. The presentation centered on current Ugandan programs promoting safe, efficient, reliable and sustainable electricity supply, especially from renewable sources. Specifically he elaborated on the GET FiT program (Global Energy Transfer Feed-In Tariff). Dr. Mutambi explained the finance mechanism for this initiative and how it has allowed for diversifying the energy mix in Uganda and unlocking renewable energy potential, primarily from solar.

The following presentation was given by Dr. Nawal Al-Hosany, Director of Sustainability from MASDAR, the Renewable Energy Company of Abu Dhabi. MASDAR was the recipient of the Special Award. Dr. Al-Hosany's presentation detailed how MASDAR's projects aim to increase secure access to energy, reduce fossil fuel imports, and displace carbon emissions internationally. She explained the company business model, including their broad investments in renewable energy research and development. One exemplary accomplishment that she discussed was the construction of Masdar City, powered entirely by renewable energy and recognized as one of the most sustainable urban developments in the world.

Following MASDAR's presentation was Ms. Noara Kebir, Managing Director of MicroEnergy International GmbH, a consulting and project management firm for enduser energy solutions in developing countries. Her presentation explained how MEI addresses energy poverty by combining financial inclusion and energy inclusion, such as green loan design and smart engineering based on supply-chain analysis. Ms. Kebir detailed the concept of Swarm Electrification, which requires engineering foresight to allow customers with Solar Home Systems to become connectable to the grid in the future.

The final presentation for Session 1 came from Mr. Matthew Tiedemann, Chief of Party from Pact Institute, an international development institution that collaborates with local partners to improve health, livelihoods and natural resource management. His presentation detailed Pact's projects in Myanmar, focusing primarily on how they work with communities to establish high-functioning community governance processes through Village Development Committees, which manage Village Development Funds. The villages routinely set their own first priorities as energy access; accordingly Pact develops innovative mechanisms to deploy solar home systems throughout the communities.

Session 2

Session 2 of the Capacity Development Seminar began on 15 September 2015. The Moderator of the session was Mr. Zhang Guobao, Former Director of China's National Energy Administration, and Advisory Council Member of the grant. Mr. Guobao invited each of the panelists to give a 20 minute presentation.

The first presentation during Session 2 came from Mr. Christopher Hornor, President & CEO of Powerhive, a breakthrough microgrid utility company that is providing access to affordable and reliable electricity from solar power on an international scale. Mr. Hornor's presentation described the methodology for providing microgrid electricity access to over 100,000 Kenyan citizens in both residential and commercial spaces. Powerhive's smart metering technology allows for cloud-connected metering, theft detection, and demand management. Mr. Hornor also spoke of the company's goal to expand to other high-priority markets throughout the developing world such as India, Nigeria and the Philippines.

The next presentation was given by Mr. Sanjay Kumar, Director of the Self-Employed Women's Association in Bharat India, representing a trade-union of women workers in the informal economy. Mr. Kumar explained the energy needs and challenges faced by women workers in India, and the association's efforts to provide them with customized renewable energy products and energy access. He revealed that a crucial part of their success is in risk reduction strategies such as loan guarantors, flexible collection systems for loan repayment, and door-step financing.

The third presentation was given by Mr. Charles Miller, Head of Policy and Program Funding, Solar Aid, a combination non-profit and social enterprise. Mr. Miller's focal point was SolarAid's mission to eradicate the use of kerosene lamps in Africa by 2020. He explained how the organizations social enterprise, SunnyMoney, has made significant progress in distributing solar lights across eastern Sub-Saharan Africa, with 1.7 million sold thus far. He illustrated the unique distribution model that begins with school campaigns for community outreach and marketing.

Following Solar Aid, Mr. Jeffrey Lahl, Project Director of Solar Electric Light Fund (SELF) presented. Mr. Lahl's presentation focused on the non-profit development institutions efforts to address food insecurity in rural Benin as a result of irrigation challenges faced by citizens during the dry season. The organization's innovative solution is the use of solar-powered pumps. Mr. Lahl detailed how SELFs Solar Market Gardens have achieved community benefits in food security, nutrition, income generation and gender equality.

The proceeding presenter was Mr. Jay Patel, Vice President of Business Development, representing the partnership of Strathmore Energy Research Centre, Centre for Research in Energy and Energy Conservation, and Village Energy. Mr. Patel elaborated that the lack of after-sales servicing options in rural areas of Uganda and Kenya has led to a crisis of consumer trust in off-grid solar products. His presentation focused on the partnerships work in creating a regional network of solar technicians for distributing and maintaining a variety of solar innovations and technologies for those in need.

The final presentation was from Dr. Laura Stachel, Executive Director & Co-Founder of We Care Solar, winner of the 2015 UN-DESA Energy Grant. Her presentation recounted the difficulties experienced by expecting mothers and doctors during childbirth due to the lack of electricity in medical facilities in remote areas of the developing world. She described her small non-profits innovative solution in the form of the Solar Suitcase, a compact solar powered device that carries the basic necessary medical tools for facilitating safe child birth and saving lives. Dr. Stachel gave brief insight into We Care Solar's future plans for expanding impact and boosting performance of the Solar Suitcase.

After the completion of all presentations, closing remarks were given by Dr. Patrick Ho, Secretary-General of the China Energy Fund Committee (CEFC) and Advisory Council Member for the grant. Dr. Ho warmly thanked all those who participated, and expressed gratitude for the candid remarks about challenges, successes and ambitions for the future in introducing sustainable energy products and services in rural isolated areas of the developing world. He commended the work of the 12 organizations and reiterated CEFCs excitement to continue to be a part of the Energy Grant process.

Open Discussion and Seminar Outcomes

At the end of each session 40 minutes remained for open discussion among the moderator, panellists, and audience members. Many panellists noted the similarities among their work and the moderator pointed out opportunities for knowledge transfer and even potential collaboration.

Some of the challenges discussed by the panelists were supply constraints, demand constraints, duty tariffs when importing technologies across borders, difficulties transitioning from Solar Home Systems to larger grid connection, overcoming the high risk of investment, and providing long-term quality products and services that can last 10 or more years. Participants in the room suggested having more than one Capacity Development Seminar per year for those involved in the UN-DESA Energy Grant. Another suggestion was the creation of a website knowledge platform that can allow the successful participants of the grant to continue open dialogue and share information.

Lastly, the two-day Capacity Development Seminar ended with UN-DESA mentioning that the office will be requesting a ten-page report from the participants that will seek to: describe the organization, detail their current projects in energy for sustainable development, elaborate on future plans for increasing scale and impact, and present the technical, managerial, and financial barriers that they face. UN-DESA will compile the submissions into a publication that will summarize the first year of the Powering the Future We Want Energy Grant and the innovative work of the 12 organizations that reached the top of the evaluation process. This publication can help to further support for capacity development initiatives in promotion of providing access to affordable, reliable, sustainable and modern energy for all.





Attachment 1 PROGRAMME

Capacity Development Seminar

"Powering the Future We Want - Recognizing Innovative Practices in Energy for Sustainable Development" 2015 UNDESA Energy Grant

| Monday, 14 September 2015 | |
|----------------------------|--|
| 15:00 - 15:10 | Opening Remarks: Mr. Nikhil Seth, Director, Division for |
| | Sustainable Development, UNDESA |
| 15:10 - 18:00 | Session 1 |
| 15:10 - 15:20 | Moderator: Mr. Mark Fulton, Founding Partner, Energy |
| | Transition Advisors Pty Ltd, Member Advisory Council |
| | • Welcome |
| 15:20 – 17:20 | Panel Presentations (20 minutes each) |
| | -BYD (Build Your Dreams) |
| | -Eco-Fuel Africa Ltd |
| | -Electricity Regulatory Authority of Uganda |
| | -MASDAR |
| | -MicroEnergy International GmbH |
| | -Pact Institute |
| 17:20 - 18:00 | • Discussion |
| Tuesday, 15 September 2015 | |
| 10:00 - 12:50 | Session 2 |
| 10:00 - 10:10 | Moderator: Mr. Zhang Guobao, Former Director of China's |
| | National Energy Administration, Member Advisory Council |
| 10:10 - 12:10 | Welcome |
| | <u>Panel Presentations (20 minutes each)</u> |
| | -Powerhive |
| | -Self-Employed Women's Association, Bharat, India |
| | -SolarAid |
| | -Solar Electric Light Fund (SELF) |
| | -Strathmore Energy Research Centre, Centre for Research |
| 12:10 - 12:50 | in Energy and Energy Conservation, Village Energy |
| 12:10 - 12:50 | -We Care Solar |
| 40 00 40 00 | Discussion |
| 12:50 - 13:00 | Closing: Dr. Patrick Ho, Secretary-General, China Energy |
| | Fund Committee, Member Advisory Council |





Attachment 2 LIST OF PANELLISTS

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"Powering the Future We Want - Recognizing Innovative Practices in Energy for Sustainable Development" 2015 UNDESA Energy Grant

Session 1

Moderator

Mr. Mark Fulton Founding Partner of Energy Transition Advisors Pty Ltd. Member of Advisory Council UNDESA Energy Grant

Panellists

Mr. Brendan Riley Fleet Sales Vice President BYD (Build Your Dreams)

Mr. Moses Sanga Founder and CEO Eco-Fuel Africa Ltd.

Dr. Benon Mutambi CEO Electricity Regulatory Authority of Uganda

Dr. Nawal Al-Hosany Director of Sustainability MASDAR

Ms. Noara Kebir Managing Director MicroEnergy International Gmbh

Mr. Matthew Tiedemann Chief of Party Pact Institute

Session 2

Moderator

Mr. Zhang Guobao Former Director of China's National Energy Administration Member of Advisory Council UNDESA Energy Grant

Panellists

Mr. Christopher Hornor President & CEO Powerhive

Mr. Sanjay Kumar Director Self-Employed Women's Association (SEWA) Bharat

Mr. Charles Miller Head of Policy & Programme Funding Solar Aid

Mr. Jeffrey Lahl Project Director Solar Electric Light Fund (SELF)

Mr. Jay Patel Vice President of Business Development Representing the Partnership of: *Strathmore Energy Research Centre, Centre for Research in Energy and Energy Conservation, Village Energy*

Dr. Laura Stachel Executive Director & Co-Founder We Care Solar