

NEWS

Sunlabob Renewable Energy secures contract to build 11 villages micro-grids in Myanmar – 9th

October 2015

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Sunlabob Renewable Energy Ltd., the venture-backed company specializing in rural renewable energy and clean water solutions, recently finalized a contract to provide turnkey implementation of eleven solar-powered micro-grids in remote communities of Myanmar.

The micro-grids will provide reliable, clean energy access at the household level in eleven villages throughout Shan State and Chin State, Myanmar.

The project is under the guidance of Myanmar's Ministry of Livestock, Fisheries and Rural Development's (MLFRD) Department of Rural Development (DRD) and is funded by the Japanese International Cooperation System (JICS).

"Sunlabob is pleased to contribute to the sustainable electrification of Myanmar through the use of high-quality, international-standard solar technology," said Andy Schroeter, Sunlabob CEO.

Sunlabob, which has implemented off-grid renewable energy solutions in more than 25 countries of Southeast Asia, Africa and the Pacific region, will provide material supply, design, and construction of the battery-backed solar power systems. Sunlabob engineers and technicians will also provide hands-on training for local maintenance technicians and household end-users.

"All signs point to decentralized renewable energy, such as solar micro-grids, being an important ingredient to the electrification of rural communities and businesses in Myanmar for years to come," added Schroeter.

Myanmar's grid-based electrification rate currently stands at approximately 30 percent.

Sunlabob has had a full-time presence in Myanmar since mid-2014. For more information, please contact: Evan Scandling, Managing Director, Myanmar evan.scandling@sunlabob.com.

New articles: Updates and challenges to Myanmar's electrification

- [*Out of Darkness*](#) by Keith Rabin and Christina Madden published in Foreign Affairs – 1st October 2015

With extensive experience in Myanmar, the authors were able to provide a detailed analysis of the issues and stakes associated with Myanmar's power sector, particularly emphasizing its political dimension. The article also reports how the country is well positioned to address these challenges. A must read article!

- [*Myanmar's path to electrification : the role of energy distributed systems*](#) by Rachel Posner Ross for the Center for Strategic and International Studies (CSIS) – 30th October 2015

The report provides a comprehensive overview of Myanmar's electrification situation, details on its policy and regulatory environment and features of the financial sector. It highlights the role played by distributed energy systems and presents several ways to scale-up this approach of electrification. The report incorporates the latest publications related to Myanmar's electrification and is therefore a strong introduction to the field. [A shorter version of the report has been published on cogitASIA.](#)

WWF to launch the Power Sector Vision Report for Myanmar

In 2015, WWF has started a project to develop and promote a sustainable Power Sector Vision in Myanmar. The main objective is to trigger a discussion about the future of Myanmar's power sector and its impacts on society and the environment. WWF has launched "[The Global Energy Report](#)" in 2011. With drastic decreases in renewable energy prices, especially photovoltaic (PV) and wind energy, WWF believes it would be highly beneficial for Myanmar to consider the options of renewable and sustainable energy instead of traditional power generation technologies. WWF is working together with Intelligent Energy Systems (IES) to

develop a Power Sector Scenario until 2050 for Myanmar, Cambodia, Viet Nam, Thailand, Lao PDR and the Greater Mekong region as a whole. This particular science-based study will essentially serve as a support for a discussion on a different power sector.

The Power Sector Vision for Myanmar is set to launch on Earth Hour Day, 2016. WWF, together with REAM, has conducted a stakeholder consultation workshop in July 2015 on this Power Sector Vision. The draft report will be shared with MSEA members and consult their opinion and feedback by end of 2015 or beginning of 2016. Contact [WWF](#) for more information.

Source: Contribution from Mr. Shoon So OO, Energy Manager at WWF Myanmar

New online statistics portal made available by government – 23th October 2015

The Central Statistical Organization (CSO), under the Ministry of National Planning and Economic Development, together with support from the Korea International Cooperation Agency (KOICA) developed an online platform that provides national statistics on a wide range of sectors (i.e. trade, demographics, agriculture, transportation, production). The Myanmar Statistical Information Service can be consulted here: www.mmsis.gov.mm. Data available on electricity production, installed generation capacity and other features might be of interest to MSEA members.

Source: *Government introduces new online statistics portal*, Catherine Trautwein, Myanmar Times

First waste-to-energy power plant by March 2017 – 4th October 2014

The Yangon City Development Committee plans to commission the first waste-to-energy power plant in partnership with the Japan's Ministry of Environment. The total cost of the project will be approximately \$16.2 million. The YCDC will provide \$8 million while the engineering company JFE Engineering will provide \$8.2 million to the project. The plant aims to incinerate 60 tons of garbage per day to produce 700kW, of which 300kW will go towards its own energy consumption. At the moment, the price at which YESB will purchase the electricity is still in discussion.

Source: *Yangon to get first waste-to-energy plant by 2017*, Zin Thu Thun, www.mmbiztoday.com

Black & Veatch, partner of Green Earth Power, set to work on Myanmar's largest solar power plant – 13th October 2015

Black & Veatch recently revealed that it had been chosen by the Thai company Green Earth Power to design and provide consulting services for the solar power plant located in Minbu, Magwe region. According to the Black & Veatch press release, the construction of the power plant should start in the first quarter of 2016. The capacity of the project is expected to be 220MWp. Black & Veatch has designed a 55MW solar farm in Thailand and intends to be a major player in the growing interest for renewable energy investments in Asia. They just recently opened a new office in Myanmar.

Source: *Black & Veatch starts work in Myanmar on Southeast Asia's largest solar power plant*, www.bv.com

APR Energy extends contract for Kyaukse power plant – 19th November 2015

The US company APR Energy announced the signature of the contract's extension for their thermal power plant in Kyaukse near Mandalay. The plant installed in the spring of 2014 in only 90 days consists of more than 70 mobile gas-fired generators. After the addition of 20MW in early 2015, generation capacity is now 102MW. According to Myanmar Times, citing the managing director of Myanmar Electric Power Enterprise (MEPE), the price at which the electricity is purchased is US\$0.032 per kW, a lower amount from the previous terms.

Source: *APR energy signs extension of 102MW Myanmar Project through 2016*, Press release, www.apreenergy.com

APR signs Kyaukse power project extension, Aung Shin, Myanmar Times

IN DEPTH The Lotus: An Innovative Solar Irrigation Pump by Proximity Designs

It has been a decade now that Proximity Designs, a social enterprise based in Yangon, has been working to design and deliver irrigation solutions for rural families in Myanmar. They have come a long way since their first two treadle pumps in 2004 and a staff of just 35 people. Two international awards and about half a million satisfied customers later, they have succeeded to locally design and manufacture one of most affordable solar powered irrigation systems in the world.

Proximity Designs always bears their clients in mind as they seek to address needs of the rural poor and adapt their products accordingly. To foster this innovation and creativity, their design and manufacture teams are working in a unique 22,000 ft. (6 500 m²) workshop in the outskirts of Yangon. It is where they, conceive, test, adapt and iterate until they find an adequate solution. Setting up this impressive production in Myanmar did not come without challenges. They started from scratch and had to find trusting suppliers, develop internal quality procedures and constantly improve the fabrication process. One example of this commitment is the simple hydraulic robot that they conceived to simulate a human's effort on a treadle pump and efficiently test its lifespan. Beyond a certain pride to create products "Made in Myanmar", the bottom line is to keep their offerings affordable while remaining in touch with the environment in which they are delivering their services. Indeed, having real test fields just a few hours from the workshop and gather feedback directly from farmers is highly valuable!



The Lotus solar irrigation pump all started with two facts coming from field-realities. The first one is that farmers are mostly using water pumps powered by gasoline or diesel engines which is expensive, noisy, and damaging both to the environment and to their own health. The second one is that the majority of tube-wells in Myanmar are made from 2" (50mm) PVC pipes. From this foundation, they designed a submersible pump with a maximum diameter of 1.9" (49mm) that perfectly fits in the tube well. Everything comes from Myanmar except for a few elements requiring high precision (12V brushless DC motor, impeller). The pump is powered by two 130Wp solar panels that are supported by a frame with two small wheels allowing manual tracking of the sun. This simple innovation increases the efficiency of the panels up to 30%. At a depth of 24ft. (7.3 m), the pump can yield over 15,000 liter of water per day. With a retail price of 345\$, it is ground-breaking in comparison to other solar water pumps available on the market and demonstrates the determination of Proximity Designs to make their products affordable. Another innovation is the switch box that allows users to transfer the energy provided by the solar panel to other applications such as charging a battery. Finally, Proximity Designs provides other supplemental products for their irrigation system including a light water tank that holds 250 imperial gallons (1100 Liters) and a drip irrigation system that helps to make the best use of the available resource. Their products are not only very useful and technically impressive, they are also pleasant to look at.

Source: Workshop visit on November 2nd with Zachary Gould from Proximity Designs; Pictures by Proximity Designs; Adrien Cartillier

INSTITUTIONAL PARTNERS

First NEP implementation workshop

After the recent approval of the \$400 million loan for the Myanmar National Electrification Plan by the World Bank group as well as the Myanmar government, the 5-year plan is taking off. The first workshop took place in Nay Pyi Taw on October 21st and 22nd 2015. Involved parties were the World Bank, the MOEP and the MLFRD according the Energypedia webpage:

“Achieving universal access to electricity in Myanmar”.

The workshop was divided into 5 sessions:

- Procurement management
- Financial management and disbursement
- States/Regions perspectives (issues, challenges and priorities of electrification)
- NEP project overview
- Environmental and Social impact management.

Each regional MOEP office presented the electrification plan for their region/state within 2 miles of existing 11kV distribution lines. This preparation makes up the first stage of the NEP. Each township reported the number of villages that will be connected to the national grid, the number of benefiting households, the estimated cost and the number of transformers to construct. Detailed documentation of this first phase is available from the link above.

UPCOMING TENDERS/BUSINESS OPPORTUNITIES AND EVENTS

Renewable Energy Seminar Business – 27/28 November 2015

The “Renewable – Made in Germany” initiative and the Deutsche Gesellschaft für International Zusammenarbeit (GIZ) GmbH are organizing a series of sessions tailored to investors, end users and local firms to present how renewable energy can be developed in construction, manufacturing or telecommunication sectors.

German companies will conduct these trainings and the last session specifically targets local companies to discuss potential partnerships between Myanmar and German companies. This seminar is a side-event to the *Electric Power and Renewable Energy Exhibition* organized at the Myanmar Convention Center from November 26th to 28th. To register for the training or obtain more information, please click [here](#).

MSEA UPDATES

The second meeting of the MSEA members is to be determined in the coming weeks.

Please feel free to send me your articles directly if there is something you want to share within the network.