

# **Deep Dive Workshop**

Friday, 21 June 2019, 09:00 a.m. – 5:30 p.m. Multifunction Hall 3

# Achieving Universal Energy Access in the Asia Pacific Region







#### Point of Contact:

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## **Background**

Energy access is a multidimensional problem that requires collaboration across disciplines and sectors. This Deep Dive Workshop on "Achieving Universal Energy Access in the Asia Pacific Region" will attempt to capture how far development agencies, governments and the private sector have come in solving energy poverty.

Throughout the workshop, both the speakers and the audience will be asked to examine the following questions: "What energy access solutions worked?", "What remaining problems should we focus on?", and "How far have we come?"

The Workshop will begin with an overview of the energy access situation in the Asia Pacific Region and the latest thinking on how governments can achieve their sustainable development goals systematically, at a national scale. This will be followed by an expert panel that highlights key areas of innovation that may have profound impact on the uptake and scalability of energy access solutions in Developing Asia. Next, the Workshop will discuss the impact of business acceleration and investment facilitation initiatives on the growth of high-impact companies in the energy access sector. Finally, the Workshop will conclude with case studies on successful private sector and government interventions that created pathways towards universal energy access.

## Objective

The DDW will benefit government agencies, specifically planning ministries, energy ministries and other attached agencies involved in national electrification. Companies that deploy energy access solutions in the Asia Pacific Region may also find this workshop useful.

The objectives of the DDW are:

- 1) To position distributed renewable energy systems and other energy access solutions as fundamental pillars of any strategy to achieve universal energy access.
- 2) To propose methodologies on how governments can determine the optimal combination of energy access solutions for their needs, and how to deploy them in a systematic and scalable manner.
- 3) To examine how far the Asia Pacific Region has come in eradicating energy poverty, and what persistent challenges remain.

### Agenda

09:00 - 09:15 **OPENING REMARKS** 

Mr. Robert Guild, Chief Sector Officer, SDCC, Asian Development Bank

o9:15 – 10:30 SESSION 1: Strategies to Achieve Universal Energy Access at a National Level. This session will discuss methodologies that Governments can apply to accomplish their sustainable development priorities.

Deploying Distributed Renewable Energy Systems in the Asia Pacific Region Dr. Kee-Yung Nam, Principal Energy Economist, Asian Development Bank

Integrated Electrification Pathways for Universal Access to Electricity
Mr. Mikael Melin, Senior Energy Access Specialist, Sustainable Energy for All

Status of Renewables in the Electrification, Cooking and Heating Sectors in the Asia Pacific Region

Ms. Vibhushree Hamirwasia, Community Manager, REN 21

Maximizing Demand-side Energy Efficiency to Accelerate National Electrification Mr. Yasushi Tanaka, Senior General Manager, Energy Conservation Center Japan

10:30 - 11:00 Networking Break

11:00 – 12:30 SESSION 2: Key Areas for Innovation in the Energy Access Sector. This session will discuss important technological, business model and market trends that can profoundly impact the uptake and scalability of energy access solutions in the Asia Pacific Region.

Techniques and Strategies to Deploy Sustainable Mini-grid Systems Mr. Susumu Yuneoka, Energy Specialist (Smart Grids), Asian Development Bank

Energy Management and Storage Solutions for Rural Electrification Mr. Seoung-Ha Shin, Consultant, Asian Development Bank

#### A Sustainable and Scalable Model for Clean Cooking and Heating

Mr. Carlo Talamanca, CEO and Founder, OTAGO Pte. Ltd.

# Reliable and Affordable Modular Grids that Enable Productivity in Off-grid Areas

Ms. Nithya Menon, Lead Firmware Engineer, Okra Solar

#### 12:30 - 14:00 Lunch Break

### 14:00 - 15:30 SESSION 3: Strengthening Private Sector Growth and Investment in the Energy Access

**Sector.** This session will discuss initiatives that enable small and medium enterprises to overcome technology, operational and financing challenges in the energy access sector.

#### Million Green Homes for Prosperous Vietnam

Ms. Nguy Thi Khanh, Executive Director, Green Innovation and Development Centre

#### CLEAN - Building a National Platform for SMEs

Mr. Chandrasekaran Raghuraman, Director, CLEAN

## Developing a Decentralized Energy Future for Private Enterprise in Myanmar

Mr. Richard Harrison, CEO, Smart Power Myanmar

#### Facilitating Market Access and Investment to Achieve Scale

Mr. Daniel Hersson, ADB Ventures

#### 15:30 - 16:00 Networking Break

### 16:00 – 17:00 SESSION 4: Overcoming Country-specific Barriers to Universal Energy Access. This

session will discuss unique policy, regulatory and market dynamics that inhibit the replication of proven energy access solutions at a country level.

#### **Energizing Myanmar**

U Aung Myint, General Secretary, Renewable Energy Association of Myanmar

#### Energizing the Pacific

Mr. Mark Fogarty, Director, First Energy Asia Pacific

#### **Energizing the Philippines**

Ms. Lumen Perey-Balboa, Senior Legal and Regulatory Expert, Access to Sustainable Energy Program

#### 17:00 - 17:30 CLOSING REMARKS

**Dr. Kee-Yung Nam,**Principal Energy Economist, Asian Development Bank



Mr. Mikael Melin, Senior Energy Access Specialist, Sustainable Energy for All

Over the past 18 years, Mr. Mikael Melin has been working for both the private and public sector. This includes a 13-year stint with the European Union to implement programs in the field of economic, environmental and regional cooperation in Africa, the Caribbean and Europe.

In September 2017 Mikael joined the Global Team of Sustainable Energy for All working with leaders in government, the private sector and civil society to drive further, faster action toward achievement of Sustainable Development Goal 7.



Ms. Vibhushree Hamirwasia, Community Manager, REN 21

Vibhushree is Community Manager at REN21, the Renewable Energy Policy Network for the 21st Century. She is responsible for managing, developing and strengthening REN21's international community of experts. Her other activities include managing the production of the Asia-Pacific Renewable Energy Status Report. She also coordinated the 2018 REN21 Academy.

Prior to REN21, she worked as a Management Consultant at Business Sweden, promoting trade and cooperation between India and Sweden for over 5 years, mainly in the renewable and clean energy, healthcare and transport sectors.

Vibhushree holds an advanced master's degree in International Public Management and Energy from Sciences Po - Paris School of International Affairs.



Mr. Yasushi Tanaka, Senior General Manager, Energy Conservation Center Japan

Mr. Yasushi Tanaka is the senior general manager in charge of International Collaboration Center at the International Corporation Division of the Energy Conservation Center, Japan (ECCJ). He graduated from Tokyo University in 1977.

From April 2015 onward Mr. Tanaka became involved with Sustainable Energy For All, an international NGO that started as a UN initiative. He has also coordinated and supported various projects by multilateral development banks, Japan International Cooperation Agency, and the Economic Development Board of Singapore.



Mr. Susumu Yuneoka, Energy Specialist (Smart Grids), Asian Development Bank

Susumu Yoneoka is the ADB energy specialist (Smart Grids). His major roles are the technical support of operations department and the development & management of knowledge in smart grid area including microgrids and minigrids. He has been supporting various smart grid-related projects in ADB such as island microgrids/minigrids, smart metering, and demand-side energy efficiency.

He also has over 10 years private sector working experience including a subsidiary of the largest telecommunications company in Japan, in planning and leading energy system projects, especially focusing on distributed energy systems (e.g., renewable energy based microgrids), with expertise in the electricity sector structure, regulation, regional power supply, and smart grid technology applications in renewable energy integration into grids, ICT system for grid network and demand-side management.

He holds a Master's degree of Mechanical Sciences and Engineering, and a Bachelor's degree of Mechanical Engineering and Science, both from Tokyo Institute of Technology.



Mr. Seoung-Ha Shin, Consultant, Asian Development Bank

Mr. Seoung-Ha Shin is a mini-grid expert working for ADB's Energy for All Initiative. He was instrumental in designing the solar PV – diesel hybrid minigrid in Cobrador Island, Philippines.

Mr. Shin received a masters and doctorate degree in Civil Engineering from the University of Surrey.



**Mr. Carlo Talamanca,** CEO and Founder, OTAGO Pte. Ltd.

Carlo Figà Talamanca is the CEO and founder of OTAGO PTE. LTD. Carlo obtained a Master's Degree in Industrial Engineering from the University of Rome and started his professional career in the consulting business in Italy. In 2005, he moved to Boston in the USA, where he worked on international technology transfer projects between Europe, United States and Latin America.

Since 2010, Carlo has been based in Cambodia, where in 2012 he started developing Khmer Green Charcoal (KGC), an award winning social enterprise producing eco-friendly charcoal briquettes, which thanks to its successful growth led in 2018 to the creation of OTAGO.



Ms. Nithya Menon, Lead Firmware Engineer, Okra Solar

Nithya Menon is a lead engineer, product owner, and part of the founding team of Okra, an Internet of Things (IoT) technology company developing a solution to get clean, reliable and affordable energy to off-grid communities across Asia. She has a diverse technology background in software, firmware, and electronics engineering. For most of her career, she has worked across sustainable development sectors in SE Asia, developing tools and services to empower rural communities.



Ms. Nguy Thi Khanh, Executive Director, Green Innovation and Development Centre

Ms. Nguy Thi Khanh is the founder and Executive Director of Green Innovation and Development Centre (GreenID). GreenID promotes sustainable energy development, good water and air governance and green development in Viet Nam.

Ms. Khanh is the first Vietnamese Goldman Environmental Prize recipient in 2018. Last March 2019, she was honored as one of the 100 most influential people in climate policy in the World by Apolitical. She is also the chair of Vietnam Sustainable Energy Alliance and is a core member of a number of national and international networks related to sustainable energy, climate change and environment.



**Mr. Chandrasekaran Raghuraman,** Director, CLEAN

Raghu is a first-generation social entrepreneur and an alumnus of Indian Institute of Technology (IIT) - Roorkee and Indian Statistical Institute, Calcutta. He launched E-Hands Energy in 2009 as an energy access venture. The insights from his first social venture founded in 2001 to provide telecom services to the remotest areas in the Himalayan region is the driving force behind E-Hands Energy. E-Hands Energy has installed capacity of almost 1.6 MWp of decentralized clean energy systems using micro wind turbine & solar PV, with over 700 installations across 500 Indian towns/villages, including 32 micro grids This effort to promote energy access-centric sustainable livelihood along Himalayan Trekking routes resulted in yet another social enterprise called Trek@10K Feet in 2018.



Mr. Richard Harisson, CEO, Smart Power Myanmar

Richard is the Chief Executive Officer of Smart Power Myanmar, a platform dedicated to catalyzing economic growth in Myanmar through improved access to reliable energy. With twenty years of professional experience in investment banking, social marketing, journalism and international development in multiple countries in Europe, South and SE Asia, and Africa,

Richard has successfully led the design, fundraise and evaluation of impactful development programs.

In Myanmar, Richard secured new business development initiatives worth in excess of \$200 million to date and acted as Country Director of one of Myanmar's largest INGO, managing complex integrated development portfolios.

Mr. Daniel Hersson, Asian Development Bank

U Aung Myint, Secretary General, Renewable Energy Association of Myanmar



**Mr. Mark Fogarty,**Director, First Energy Asia Pacific

Mark Fogarty has an extensive career in clean energy in the Asia-Pacific, which includes experience in regulatory, development and financing domains. Mark's technical qualifications include a postgraduate degree in Management; and a master's degree in law, with a major in clean energy regulation in Asia. He is also a member of the Australian Institute of Company Directors and Association of Corporate Secretaries in Singapore.

Mark is a Director of First Energy Asia Pacific and REEEP International, which has invested in 200 clean energy initiatives including many in SE Asia. Additionally, he is Chair of Investments at the CERF (Clean Energy Revolving Fund) Cambodia and Strategic Advisor for PFAN (Private Financing Advisory Network) in the Pacific.



Atty. Lumen Perey-Balboa, Consultant, Access to Sustainable Energy Program

Atty. Lumen Perey-Balboa is a lawyer by profession and has nearly 15 years of experience in transaction law and corporate structuring, regulation and compliance, and policy advocacy in the field of energy, construction, corporate and tax law. She held managerial and advisory positions providing corporate law and energy regulation advice in several energy companies such as the Alsons Power Group, the Powersource Group, Emerald Energy and Alternergy. She also served in government as legal advisor to two successive presidents of the National Power Corporation.

Prior to her legal practice, she worked in USAID's technical assistance program for the Department of Energy to usher the passage of the Biofuels Law and the Renewable Energy Act. She also served as head of communications of the

International Finance Corporation (IFC), the private sector arm of the World Bank Group, in Manila. She completed her law degree with honors from the University of the Philippines where she also obtained her undergraduate degree in Communications, graduating cum laude.

As a private law practitioner, she was engaged as senior regulatory and legal expert by the European Union - Access to Sustainable Energy Program (EU-ASEP) to craft a policy study on rural electrification including draft rules on Competitive Selection Process for power supply contracts in off-grid areas.

## About the Organizers

As part of the roadmap to enhance lending activities, ADB launched the Energy for All Initiative, also known as Energy for All. The initiative is a regional technical assistance program charged to work with various regional departments within ADB to help increase their lending in the energy access space. From 2008 to 2017, this effort resulted in investments that totaled US\$ 8.4 billion and benefited 121 million people.

In 2014, ADB was designated as the Asia Pacific Hub for Sustainable Energy for All (SEforALL). SEforALL is an International Organization working with leaders in government, the private sector and civil society to drive further, faster action toward achievement of Sustainable Development Goal 7, which calls for universal access to sustainable energy by 2030, and the Paris Climate Agreement, which calls for reducing greenhouse gas emissions to limit climate warming to below 2 degrees Celsius.