

### ACEF 2018 DDW Infosheet: USAID Clean Power Asia



# Renewable Energy Auctions: A New Paradigm for Asia

### Overview

The world will recognize 2016 and 2017 as years of remarkable progress and growth for renewable energy (RE) auctions in both developed and developing countries. In recent years, auctions have achieved low prices for wind and solar power, which are already at or nearly cost-competitive with power from fossil fuels. Market conditions have enabled a transitioning from feed-in tariffs to an auction mechanism for certain technologies such as wind and solar and this trend is continuing.

The goal of this Deep Dive Workshop is to introduce emerging trends in auctions and discuss lessons learned and potential future directions for RE auctions in Asia, providing insight into a new paradigm for RE auctions in more advanced countries, and analysis of how to address challenges in introducing RE auctions through effective auction design.

Topics to be discussed include:

- International examples of how renewables systems have been integrated into auctions and how to address integrated resource planning approaches and sector-coupling promotion into auction design. Highlights design options to promote community driven projects.
- Analysis of the private sector experience in the recent auction in Thailand, including first-hand perspectives from private investors on lessons learned and recommendations to improve future renewable energy auctions.
- Highlight the recent trends of renewable energy auctions in Asia, including the potential of hybrid projects and firm power requirement for auctions.
- Discuss opportunities and challenges in designing renewable energy auctions, highlighting key consideration for introducing renewable energy auctions through effective auction design.

### Agenda

Time	Activity
9:00 - 10.30	Opening remarks: Christopher La Fargue (USAID Regional Development Mission for Asia) Emerging Trends in Auctions
	<ul> <li>Overview and Highlights of USAID's Auction Experience: Sithisakdi Apichatthanapath (USAID Regional Development Mission for Asia)</li> </ul>
	<ul> <li>From Renewables Cost Reduction to System Cost Reduction: Fabian Wigand (Navigant)</li> </ul>
	<ul> <li>Designing Tenders to Promote Community Driven Renewable Energy Projects - Hugo Lucas (Factor)</li> </ul>
10:30 -11.00	Break
11:00 -12:30	<ul> <li>Recent Renewable Energy Auctions in ASEAN: From the perspective of private investors</li> <li>Renewable Energy Policies in Southeast Asia: Diala Hawila (IRENA)</li> <li>Analyzing the Private Sector Experience in Renewable Energy Auctions in ASEAN: Mikell O'Mealy (USAID-funded Climate Economic Analysis for Development, Investment and Resilience [CEADIR] Activity)</li> <li>Preliminary Findings from Interviews with Private Sector Participants in Thailand's Recent Auction: Tanat Sangarasri (USAID-funded CEADIR Activity)</li> <li>Private Sector Recommendations and Lessons Learned: Mr. Visait Harnsawad, Managing Director, Blue Solar Ltd.</li> <li>Facilitated discussion – sharing of additional perspectives and experiences in ASEAN renewable energy auctions: All attendees (Mikell O'Mealy facilitating)</li> </ul>
12:30 -14.00	Lunch
14:00 -15.30	Renewable Energy Auctions for Hybrid Projects and Firm Power: A new paradigm in
	<ul> <li>Asia</li> <li>Overview and Trends of Renewable Energy Auctions in Asia: Supawan Saelim (USAID Clean Power Asia)</li> <li>Case study - Thailand: Experience from Competitive Biddings for Renewable Energy Projects in Thailand and the Recent SPP Hybrid-Firm: Khomgrich Tantravanich (Thailand's Office of the Energy Regulatory Commission)</li> <li>Case study - India: Perspectives on the Draft National Wind-Solar Hybrid Policy: Gu-Yoon Chung (Enel Green Power)</li> <li>Cost Trends in Solar PV and Wind: A Real Paradigm Shift in the Competitiveness of Renewables: Diala Hawila (IRENA)</li> </ul>
15:30 -16:00	Break
16:00 -17:20	<ul> <li>Introducing Renewable Energy Auctions through Effective Auction Design:</li> <li>Opportunities and Challenges <ul> <li>Case study – Lao PDR:</li> <li>Opportunities for Solar Power Projects and a Solar Pilot Auction: Mr. Chantho Milattanapheng (Institute of Renewable Energy Promotion, Ministry of Energy and Mines, Lao PDR)</li> <li>Designing Renewable Energy Auctions – Key considerations for Lao PDR: Fabian Wigand (Navigant)</li> </ul> </li> <li>Analysis of Recent Auctions in El Salvador, Mexico, Peru, Brazil, India, and South Africa: Mikell O'Mealy (USAID-funded CEADIR Activity)</li> <li>Key Takeaway from Design and Assessment of Renewable Electricity Auctions in Sub-Saharan Africa: Hugo Lucas (Factor)</li> </ul>
17:20 -17:30	Closing remarks: Dana Kenney (USAID Clean Power Asia)

### Speakers:

# Sithisakdi Apichatthanapath, Program Development Specialist, USAID Regional Development Mission for Asia, Regional Environment Office

Sithisakdi ("Seng") is a Program Development Specialist at the USAID Asia regional office based in Bangkok. He is responsible for the planning, managing, and reporting of USAID's regional clean energy programs in Asia -- providing technical assistance, tools, and lessons learned for scaling up renewable energy. Prior to USAID, he worked as an auditor at one of the UNFCCC's Designated Operational Entities, where he was involved in the validation and certification of over 40 emission reductions projects across the region. He graduated from the University of Leeds with a Bachelor's degree in International Relations, and from the Asian Institute of Technology with a Master's degree in Energy Economics and Planning.



### Fabian Wigand, Associate Director, Ecofys, a Navigant Company, based in Berlin.

Fabian Wigand has 10 years of experience in energy sector strategy, markets and regulation and 7 years of experience with energy auctions. His expertise includes renewable energy policy, electricity markets and regulation and he is a co-lead of the government client segment. Fabian is leading the consulting project on renewable energy auctions as part of the reform of the German Renewable Energy Law, and consulted a number of public and private clients on the design, implementation and participation in renewable energy auctions (among them the governments of Lao PDR, Luxembourg, Ethiopia, Turkey, Bosnia, Denmark and the EU). He is also a frequent speaker and trainer on auctions at policy and industry conferences, among others for the IRENA, Energy Community and European Union. Previously, Fabian was a Senior Analyst Regulation and Markets for the Desertec Industrial Initiative (Dii), an international initiative for renewable energy in North Africa and the Middle East. He holds a MSc in International Political Economy from the London School of Economics.

#### Hugo Lucas, Head of the Energy Department at Factor

He has 19 years of experience in the private sector, the government and multilateral institutions, working in the design and implementation of support mechanisms for the promotion of renewable energy and energy efficiency technologies. He has been deeply involved in the establishment of the International Renewable Energy Agency (IRENA) and the discussions for the European Renewable Energy Directive 2020. Recently, he has provided advice on tendering design for renewable energy electricity to governments in Cyprus, Philippines, Madagascar, Mali, Mexico and Peru. He is an Adjunct Professor at the Faculty for Environmental Studies of the York University in Canada.

# Diala Hawila, Associate Programme Officer at International Renewable Energy Agency (IRENA)

Diala has been working in the Policy Unit of the International Renewable Energy Agency (IRENA) since 2012, on topics related to policy assessment including the study on Renewable Energy Auctions: Analysing 2016 and Renewable Energy Auctions: A Guide to Design, and to the socio-economic impacts of renewable energy, on projects including Renewable Energy Benefits: Leveraging Local Capacity of solar PV and onshore wind. Diala has obtained her Master's degree in Engineering Systems and Management from the Masdar Institute in Abu Dhabi, focusing on sustainability and renewable energy. Before that, she worked as a consultant at PricewaterhouseCoopers, offering advisory services to government entities in fields including energy and waste management.





#### Mikell O'Mealy, USAID-funded CEADIR Activity Manager

Mikell O'Mealy manages the Climate and Economic Analysis for Development, Investment and Resilience (CEADIR) Activity, funded by the U.S. Agency for International Development (USAID), working to accelerate finance and investment for clean energy, sustainable landscapes, and climate change adaptation in the Asia-Pacific region and worldwide. Mikell is a Senior Associate in Climate Change with Abt Associates, where she leads global and countryspecific climate change projects. Prior to joining Abt, she served as USAID's Eastern Caribbean Climate Change Advisor, with focus on strengthening the resilience of small island nations. She has also served in USAID's Regional Development Mission for Asia and in USAID's Russia Mission, designing and managing clean energy, climate change, biodiversity conservation, and sustainable development initiatives.

#### Tanat Sangarasri, USAID-funded CEADIR Activity Consultant

Tanat Sangarasri is an entrepreneur and renewable energy expert with 13 years of experience in the clean energy sector. He has strong expertise and extensive experience in all aspects of renewable energy development, from inception to realization. Throughout his career, Tanat has been involved in many small and large-scale clean energy projects in Southeast Asia, including biomass power plants, rural electrification projects, and rooftop and ground mount solar power projects. Tanat is the founder of a 7.5MW biomass power and supply company in Thailand, and had worked in business development and consulting roles for leading energy organizations, including the Department of Alternative Energy and Efficiency of Thailand, E+Co, and AMP Solar Group.

#### Visait Harnsawad, Managing Director, Blue Solar

Visait has academic background in engineering, economics and business administration. After his graduation in 2005, Visait joined his family business running a 50-year-old mass transit company with more than 300 buses in Pathum Thani, Thailand. During oil price crisis since 2006, Visait carefully studied CNG (compressed natural gas) technology and best practices from many countries and converted all his buses to run on CNG fuel instead of diesel oil as well as expanded a diesel-to-CNG conversion business for general customers. He also set up a high-efficiency CNG refueling station that has very low power consumption rate in 2011. However, he realized that even though CNG has better emission than diesel and other fuel oils, the natural gas resource is still depletable and its burning or combustion continuously emit greenhouse gas into the atmosphere. This led to his interest in renewable energy. Visait studied many types of renewable energy and founded Blue Solar Group in 2015. Currently, Blue Solar Group has developed solar power plants in many scales such as 66 small residential solar rooftops operated since March 2016, two 5MW VSPP solar farms operated since December 2016 and an SPP with 42MW installation capacity together with 54MWh energy storage system to be operated in December 2021.

# Supawan Saelim, Renewable Energy Policy Specialist, USAID Clean Power Asia

Ms. Supawan Saelim is currently the Renewable Energy Policy Specialist for USAID Clean Power Asia program, which encourages power sector investments in environmentally-friendly, grid-connected renewable energy sources. She has research experience with international organizations on energy and climate mitigation policies. She has several years of experience at PwC Thailand assisting the public and private sector on feasibility studies, valuation, and high-level market analysis. She has an MSc in Project Analysis, Finance and Investment from the University of York, United Kingdom and is currently a PhD candidate in Economics at National Institute of Development Administration in Thailand









# Khomgrich Tantravanich, Deputy Secretary General, the Office of the Energy Regulatory Commission, Thailand

Khomgrich Tantravanich is currently Deputy Secretary General at the Office of the Energy Regulatory Commission (OERC), Thailand where a state entity under the supervision of the Energy Regulatory Commission (ERC) that has the authority and duties to regulate energy industry operations in compliance with the policy framework of the government. The ERC is empowered to issue regulations, rules, announcements or criteria, procedures and conditions in order to regulate various issues in the energy industry. He graduated from West Texas A&M University, Texas USA in Master of Business Administration with a background of Bachelor of Engineering in Mechanical. Prior to working with OERC, he has 12 years of experience in Business Development at EGCO, which is one of the largest Thai power companies. He started working with the OERC as Director Licensing Department since 2009 after one year of ERC establishment. At present as a Deputy Secretary General, he administers 4 major departments which are (1) Licensing (2) Energy Tariff (3) Energy Plan and Procurement Regulation (4) Engineering and Regulatory R&D, implement all administrative strategies and develops all communication policies according to the Board (ERC) policies.



Gu-Yoon Chung is the Head of Business Development of the Asia Pacific region for Enel Green Power (EGP), the Enel division dedicated to the development and operation of renewable energy plants. With Enel focusing its growth investments in renewable energy and in emerging markets, he manages the team of developers scouting and developing projects in a region spanning South Asia, Southeast Asia, East Asia and the Pacific. He oversaw the acquisition and integration of a renewable company in India, EGP's first entry into Asia Pacific in 2015, and recently led the acquisition of the largest ready-to-build PV project Australia. He graduated from Seoul National University with a bachelor's degree in international relations and a Master of Public Administration (MPA) degree in public administration. He also received an MPA from the Kennedy School of Government at Harvard University. Mr. Chung served as an officer of the South Korean army during which he was an instructor at the Korea Military Academy.

### Chantho Milattanapheng, Director General, Institute of Renewable Energy Promotion, Ministry of Energy and Mines, Lao PDR

Mr. Chantho Milattanapheng is the Director General of the Institute of Renewable Energy Promotion (IREP) within the Lao PDR Ministry of Energy and Mines (MEM). He is responsible for overseeing the country's efforts on rural electrification, energy efficiency and conservation, and renewable energy development. Under Mr. Chantho's leadership, IREP has spearheaded implementation of the national Renewable Energy Development Strategy, which calls for harnessing Lao PDR's abundant renewable energy potential. Mr. Chantho holds a M.Sc. Electric Power Transmission and Substation from the Georgian University (former Soviet Union) and is currently pursuing a Ph.D. at Nanjing University (China). He has worked at MEM for over 24 years.







### About the Organizers

The United States Agency for International Development's Clean Power Asia program (USAID Clean Power Asia), implemented by Abt Associates, works with Lower Mekong countries and other Association of Southeast Asian Nations (ASEAN) member states to encourage power sector investments in environmentally friendly, grid-connected renewable energy sources. The program focuses on incorporating renewable energy into planning, promoting smart incentives, building an enabling environment for renewable energy policies and frameworks and mobilizing finance.

### For any questions, please contact:

Ms. Dana Kenney Chief of Party USAID Clean Power Asia Abdulrahim Place, Suite 501 990 Rama IV Road Bangrak, Bangkok 10500 T: +66-2026-3065 E: Dana\_Kenney@abtassoc.com