

- Topic:** Emerging Technologies for Small-Scale Grids
- Date:** Friday, 27 October 2017
- Time:** 9:00 am to 12:00 noon
- Venue:** Sands Expo and Convention Centre, Marina Bay Sands Singapore
- Speakers:**
- Mr. Beni Suryadi, ASEAN Centre for Energy
 - Mr. Michael Lochinvar Sim, OceanPixel Pte Ltd
 - Mr. Tony Regan, DataFusion Associates Pte Ltd
 - Professor M.V. Ramana, University of British Columbia
 - Dr. Maxensius Sambodo, Indonesian Institute of Science
- Moderator:** Dr. Philip Andrews-Speed,
Senior Principal Fellow and Head, Energy Security Division,
Energy Studies Institute, National University of Singapore

Please register your name, organisation and email address [here](#). For enquiries, please contact Ms. Jan Lui at 65162000.

Abstract:

Consistent with SIEW 2017's focus on seizing opportunities, this Roundtable will examine a selection of technologies that hold the promise of being able to provide energy supply to small-scale, community-based grids. This is particularly relevant to parts of Southeast Asia where significant populations live on islands or in other remote locations. These technologies are distinct from intermittent renewable energy technologies such as wind and solar that are already widely deployed on a commercial basis. Relevant technologies include: small-scale liquefied natural gas (LNG), small modular nuclear reactors (SMR), and different forms of marine energy. All of these technologies are under demonstration, but none have been deployed commercially on a large scale in the region, if at all. The aim of the roundtable is to assess the state of development and potential of such technologies and identify the policies required to support their widespread deployment in Southeast Asia.

This Roundtable will discuss:

- What is the need for such technologies?
- Which of these technologies are most appropriate to Southeast Asia: marine energy, small-scale LNG, or SMRs?
- What policy frameworks are needed to support the deployment of the most appropriate of these technologies?

About the Speakers:



Mr. Beni Suryadi
Acting Manager
Policy and Research Analytics
ASEAN Centre for Energy

Beni leads the research arm of ACE to fulfil its function as a regional centre of excellence that builds a coherent, coordinated, focused and robust energy policy agenda and strategy for ASEAN. He provides policy recommendation for the region in achieving its goals under the umbrella of the ASEAN Plan of Action for Energy Cooperation (APAEC) 2016-2025 which was launched at the 33rd ASEAN Ministers on Energy Meeting (AMEM), October 2015 in Kuala Lumpur, Malaysia. His recent works are, among others, the RE Outlook for ASEAN – a REmap Analysis, ASEAN Power Cooperation Report that was released at the 3rd East Asia Summit Clean Energy Forum in Kunming, China on 3 July 2017, and the flagship publication; the 5th ASEAN Energy Outlook (AEO5) which is launched at the 35th ASEAN Ministers on Energy Meetings (AMEM), September 2017 in Manila, provides policy makers with an understanding of the energy trends and challenges being faced by the region up to the year 2040.

Beni graduated from Universitas Indonesia, with a Master of Science in Gas Management. He also holds a Bachelor of Mechanical Engineering from Institut Teknologi Bandung.



Mr. Tony Regan
Managing Director
DataFusion Associates Pte Ltd

Tony Regan is a Singapore based oil & gas consultant. He has extensive international oil and gas experience, much of it gained during 25 years with Shell International and, more recently, with S&P Global, Platts and with Tri-Zen International, a Singapore based energy consultancy. Prior to that he was with Nexant where he was the Principal responsible for their gas practice in Asia. An LNG specialist who was first introduced to the world of LNG in the early 1990's when he held the position of Vice President, Energy with Shell Korea and arranged the first spot cargoes of LNG into Korea from Australia and Brunei. He has subsequently advised a wide range of clients on all aspects of the LNG business covering liquefaction, including FLNG, regasification terminals, including FSRU's, shipping, contracting, pricing and trading risk management



Mr. Michael Lochinvar Sim
Managing Director
OceanPixel Pte Ltd

Michael Lochinvar Sim is the Managing Director of OceanPixel Pte. Ltd, a Singapore-based company that is dedicated to the development of ocean renewable energy in the South East Asia Region. He is also a Research Fellow working with Wind and Marine Renewables Group of Energy Research Institute at Nanyang Technological University (ERI@N) in Singapore focusing on Marine Renewable Energy Systems. He currently handles tidal and wave renewable energy projects in various stages in South East Asia.



Professor M.V. Ramana
Liu Institute for Global issues
University of British Columbia

M. V. Ramana is the Simons Chair in Disarmament, Global and Human Security at the Liu Institute for Global Issues, University of British Columbia, Vancouver, Canada. His research has largely focused on topics related to nuclear energy and fissile materials that can be used to make nuclear weapons. His recent work has involved studying the multiple risks associated with the acquisition and expansion of nuclear power around the world, including the linkage with nuclear weapons, the financial risks stemming from the high capital costs of reactors, the environmental risks associated with spent fuel and long-lived radioactive waste, and safety risks as a result of the potential for severe accidents. He has also carried out critical assessments of new reactor technologies, especially Small Modular Reactors (SMRs). Ramana is the author of *The Power of Promise: Examining Nuclear Energy in India* (Penguin Books, 2012) and co-editor of *Prisoners of the Nuclear Dream* (Orient Longman, 2003). He is a member of the International Panel on Fissile Materials and the Global Council of Abolition 2000. He is the recipient of a Guggenheim Fellowship and a Leo Szilard Award from the American Physical Society.



Dr. Maxensius Sambodo
Head
Division for Management and Dissemination of Research
Indonesian Institute of Science

Maxensius Tri Sambodo is a researcher at the Indonesian Institute of Sciences (LIPI) -Economic Research Center. He is also a visiting fellow alumni from the Institute of Southeast Asian Studies (ISEAS)-Yosuf Ishak Institute, Singapore. His research interests are on economic development, energy, environment, and natural resources. He obtained a bachelor degree in Economics from Padjadjaran University, Indonesia; masters in International and Development Economic from the Australian National University, Australia; and Ph.D. in Public Policy from the National Graduate Institute for Policy Studies (GRIPS), Japan. His latest publications appeared in: (i) 'Developing a "green path" power expansion plan in Indonesia by applying a multiobjective optimization modeling technique' Journal of Energy Engineering ; (ii) From Darkness to Light: Energy Security Assessment in Indonesia's Power Sector published by ISEAS Yusof Ishak Institute, Singapore 2016; (iii) Indonesia's Outward Foreign Direct Investment (book chapter), published by ISEAS Yusof Ishak Institute, Singapore 2017.

About the Moderator:



Dr. Philip Andrews-Speed
Senior Principal Fellow and Head of Energy Security Division,
Energy Studies Institute at the National University of Singapore

Philip Andrews-Speed is a Senior Principal Fellow at the Energy Studies Institute, National University of Singapore. He has 35 years in the field of energy and resources, starting his career as a mineral and oil exploration geologist before moving into the field of energy and resource governance. Until 2010 he was Professor of Energy Policy at the University of Dundee and Director of the Centre of Energy, Petroleum and Mineral Law and Policy. His main research interest is the political economy of energy and resource governance, at national, regional and global scales. He is currently leading a major research project entitled "Policy and Law for Nuclear Safety and Security". Recent books include China, Oil and Global Politics (with Roland Dannreuther), The Governance of Energy in China: Transition to a Low-Carbon Economy, and Want, Waste or War? The Global Resource Nexus and the Struggle for Land, Energy, Food, Water and Minerals (with five co-authors).

Programme:

- 09:00 – 09:05 Welcome Remarks
Dr. Philip Andrews-Speed, Senior Principal Fellow &
Head of Energy Security Division,
Energy Studies Institute, National University of Singapore
- 09:05 – 09:20 The Need for New Energy Technologies for Small-scale Grids in
Southeast Asia
Mr. Beni Suryadi, Acting Manager, Policy and Research Analytics
ASEAN Centre for Energy
- 09:20 – 09:45 Marine Energy: Wave and Tidal
Mr. Michael Lochinvar Sim, Managing Director, OceanPixel Pte Ltd
- 09:45 – 10:10 Small-scale LNG
Mr. Tony Regan, Managing Director, DataFusion Associates Pte Ltd
- 10.10 – 10.30 Q & A
- 10:30 – 11:00 Coffee Break
- 11:00 – 11:25 Small Modular Nuclear Reactors
Professor M.V. Ramana, Liu Institute for Global Issues,
University of British Columbia
- 11:25 – 11:55 Panel Discussion
- 11:55 – 12:00 Closing Remarks
Dr. Philip Andrews-Speed, Senior Principal Fellow &
Head of Energy Security Division,
Energy Studies Institute, National University of Singapore