Asia and the Pacific is experiencing massive energy challenges due to an unprecedented increase in energy demand in terms of both scale and speed as well as high dependence on fossil fuels. This trend is likely to continue in the foreseeable future to sustain high economic growth trajectory and will pose significant energy security and climate change risks to the region.

On the other hand, the global energy market is currently shifting from commodity-based solutions to technology-based solutions. Development and commercialization of innovative clean energy technologies will reduce energy consumption, lower greenhouse gas emissions, ease the pressure on existing fossil fuels, and thereby improve energy security.

As part of the 2015 Paris Agreement, each country in Asia and the Pacific has announced its commitment to increasing energy efficiency by two to three times over the next 10-20 years and replacing more than 20% of total energy consumption with renewable energy sources.

Accelerating deployment of innovative clean energy technologies is at the center of solving many challenges and is key to unlocking the full potential for sustainable energy future in the region.

This Deep Dive Workshop (DDW) is being jointly organized by the MOTIE, the Korea Energy Agency (KEA), Korea Plant Industries Association (KOPIA) and the Asian Development Bank. Since 2012, these organizations have been jointly and steadily pursued efforts to promote clean energy initiatives in Asia and the Pacific countries through knowledge sharing, joint project undertakings, technical advisory services, and facilitating investments.
Objective

- Korea’s development knowledge sharing in the energy sector for sustainable and inclusive growth in ADB developing member countries (DMCs).
- Enhancing the understanding of clean energy policy & status of emerging countries.
- Developing collaboration projects between ADB and MOTIE.

Agenda

09.00 a.m. – 09.10 a.m. **Opening Session**
Opening Remarks: Yongping Zhai, Chief of Energy Sector Group, ADB
Congratulatory Remarks: Seongjun Bae, Director, MOTIE

09.10 a.m. – 10.30 a.m. **Topic: Demand Side Management/ Demand Response (DSM/DR)**

Presenter 1: DSM/DR in Korea
Joong-Shik Kim, Byucksan Power

Presenter 2: DSM/DR in Singapore
Yang Liu, National University of Singapore

Presenter 3: DSM/DR in Bangladesh
Helal Uddin, Power Division, MPEMR, Bangladesh

Presenter 4: DSM/DR in Viet Nam
HyunJung Lee, ADB

10.30 a.m. – 10.50 a.m. **Coffee Break**

10.50 a.m. – 12.10 p.m. **Topic: Clean Energy Financing**

Presenter 5: Promoting Clean Energy Project through PPP
Eui-Jong Jeong, Global PPP Forum

Presenter 6: UCCRTF Fund and Clean Energy
Virinder Sharma, ADB

Presenter 7: Sustainable and Locally Optimized Clean Energy through ODA
Seong-Ryoung Kang, KIAT

Presenter 8: New Social Impact Financing Model for Renewable Energy Project Development in Developing Countries
Young-Jae Jo, Envelops

Presenter 9: Digitization to Finance Tomorrow’s Clean Energy
Vincent Bakker, Positive Energy Ltd.

12.10 p.m. – 12.30 p.m. **Q&A**
12.30 p.m. – 14.00 p.m. Luncheon

14.00 p.m. – 15.30 p.m. **Topic: Innovations in Clean Energy Technologies and Business Models I**

Presenter 10: High-Level Technology and ADB
Yoonah Lee, ADB

Presenter 11: Hydrogen Economy Roadmap of Korea
Hae-Won Lee, Korea Institute of Science and Technology

Presenter 12: Retail to Wholesale Power – How to get There with Rooftop Solar +
Storage
Rukiye G. Altun, ABB

Presenter 13: Clean DC Revolutions to Standardize All Renewable Energy
Henry Lee, ADC Energy Inc.

Presenter 14: Towards a Solar Map for the Asia-Pacific region
Jae-Oh Seo, Haezoom

15.30 p.m. – 15.50 p.m. Q&A

15.50 p.m. – 16.10 p.m. Coffee Break

16.10 p.m. – 17.40 p.m. **Topic: Innovations in Clean Energy Technologies and Business Models II**

Presenter 15: Innovation Landscape for a Renewable-Powered Future
Yong Chen, IRENA

Presenter 16: Virtual-Power Plant Technology
Chae Sung Lee, Korea Management Association Consulting

Presenter 17: High-Efficient Waste-to-Energy Combined with recycling
Sietse Anne Agema, AWECT

Presenter 18: EV Sharing System for the Growth of Sharing Economy
Su-Won Rim, OTOSOne

Presenter 19: Innovation in Thermal Energy Storage
Alexander Post, MGA Thermal

17.40 p.m. – 18.00 p.m. Q&A and Wrap-up
The Asian Development Bank (ADB), based in Manila, is dedicated to reducing poverty in Asia and the Pacific through inclusive economic growth, environmentally sustainable growth, and regional integration.

Ministry of Trade, Industry and Energy (MOTIE), was established at the birth of the Republic of Korea in 1948 with the mission to coordinate the nation's industries. Now better equipped to deal with the challenges of the 21st century, MOTIE is committed to providing a foundation for economic growth by combining its efforts to fulfill its wide range of responsibilities in the areas of commerce, investment, industry, and energy.

The Korea Energy Agency (KEA), established in 1980, has been at the center of the transformation into a new energy era. It implements projects to foster the efficient and rational use of energy, thereby reducing carbon dioxide emissions and contributing to sound economic development.

Korea Plant Industries Association (KOPIA), promises to make every effort to continue improving its services for the member companies and communicating with government authorities and key stakeholders, so the plant industry remains a main driving force in Korea.