

The 8th IEEJ/APERC International Energy Symposium ***Challenges for Carbon Neutrality and Energy Security*** ***-Searching for a realistic and pragmatic pathway-***

As Dr. Fatih Birol, IEA's Executive Director, has put it, the world is now in its "First truly global energy crisis". Compared with the two oil crises of the 70's, we are now facing crises of many forms of energies including oil, natural gas/LNG, and coal. Additionally, compared to the 70's, when the affected countries were limited to the advanced economies that were the major players/actors in the world economy, today's crisis is affecting the whole world from emerging/developing countries to advanced economies. This crisis has again highlighted the importance of energy security.

On the other hand, with more than 150 countries officially pledging to achieve carbon neutrality by around mid-century, the world is already on board a journey toward carbon neutrality. At the recent COP27 in November 2022, the participating countries just reaffirmed their commitment to pursue efforts to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels. Under the globally accelerating efforts towards carbon neutrality, upstream investments for natural gas/LNG, a relatively low carbon fuel, have not been secured enough.

As a consequence, over the past months, we have witnessed an extreme volatility in gas markets while for their energy security European majors have shifted away from Russia's pipeline gas under the Ukraine crisis. To the contrary, several developing countries have shifted to an expanded use of coal, which has been relatively cheaper under the current global energy market. As such, the tough challenges on carbon neutrality and energy security is standing tall in our pathway.

In this symposium, in order to redress the looming bottlenecks such as use of fossil fuels, supplies of critical materials, and Asian emerging countries' sustainable economic growth, APERC and IEEJ will offer global stakeholders with viewpoints on a realistic and pragmatic pathway to carbon neutrality and energy security through discussions among prominent experts from various nationalities and backgrounds regarding the following topics:

- Smooth and orderly energy transition policies to balance out use of fossil fuels
- Bolstering supplies of critical materials for decarbonization technologies
- Energy transition in Asia

In order to explore these questions, prominent experts will discuss.

1. Date/Time: April 27th, 2023 (Thursday) 10:00-16:35 (in Japan Standard Time (JST))

10:00-10:05	Opening Remarks
10:05-11:35	Session 1
11:35-13:00	Lunch Break
13:00-14:30	Session 2
14:30-15:00	Coffee Break
15:00-16:30	Session 3
16:30-16:35	Closing Remarks

2. Seminar type: Hybrid (In Person/Online (ZOOM) meeting)

Venue: Grand Prince Hotel Takanawa Prince Room (3-13-1 Takanawa, Minato-ku, Tokyo, Japan)

3. Theme of the Symposium : Challenges for Carbon Neutrality and Energy Security -Searching for a realistic and pragmatic pathway-

Program (in Japan Standard Time)

Language: Japanese/English (with simultaneous interpretation)

10:00-10:05	Opening Remarks	Mr. Tatsuya Terazawa , Chairman and CEO, IEEJ
10:05-11:35	Session 1 “Smooth and orderly energy transition policies in the context of optimum use of fossil fuels”	
	<ul style="list-style-type: none"> ➤ What should be the future of the upstream investments in the pathway to the ongoing energy transition while the world, for the years to come, will continue relying on fossil fuels for energy security? ➤ What is needed to promote “decarbonization of fossil fuels’ and the related investment in our energy transition? 	
	Moderator	Dr. Ken Koyama , Senior Managing Director and Chief Economist, IEEJ
	Presenter and Panelist	Mr. Fahad Alajlan , President, King Abdullah Petroleum Studies and Research Center (KAPSARC), Saudi Arabia
		Dr. Kenneth Medlock III , Senior Director, Center for Energy Studies, Rice University's Baker Institute for Public Policy, USA *on-line Prof. Jonathan Stern , Distinguished Research Fellow, Gas Research Programme, The Oxford Institute for Energy Studies (OEIS), UK
(10:05-10:50)	Presentation	(15min/person ×3 persons)
(10:50-11:35)	Panel Discussion & Q&A (45min)	

~11:35-13:00 Lunch Break~

13:00-14:30	Session 2 “Bolstering supplies of critical materials for decarbonization technologies”	
	<ul style="list-style-type: none"> ➤ How should a massive and balanced increase in supplies of critical materials be achieved? ➤ From the perspective of the best low-carbon technology mix, what policy supports and commercial activities will be required to diversify supplies, address material efficiency, and accelerate recycling? 	
	Moderator	Mr. Glen Sweetnam , Senior Vice President, APERC
	Presenter and Panelist	Dr. Michelle Foss , Fellow in Energy, Minerals and Materials, Rice University's Baker Institute for Public Policy, USA
		Mr. Takeshi Harada , Director, Research Division, Metals Strategy Department, Metals Unit, Japan Organization for Metals and Energy Security (JOGMEC), Japan Mr. Toru Muta , Senior Energy Analyst, Energy Supply and Investment Outlook Division, International Energy Agency (IEA)
(13:00-13:45)	Presentation	(15min/person ×3persons)
(13:45-14:30)	Panel Discussion & Q&A (45min)	

~14:30-15:00 Coffee Break~

15:00-16:30	Session 3 “Energy transition in Asia”	
	<ul style="list-style-type: none"> ➤ As the economic center of the future global growth, can Asian emerging countries pursue both carbon neutrality and energy security in a comprehensive manner? ➤ Can an Asian regional cooperation in the pursuit of both carbon neutrality and energy security also simultaneously contribute to sustainable economic growth? 	
	Moderator	Ms. Yukari Yamashita , Managing Director, IEEJ
	Presenter and Panelist	Dr. Nuki Utama , Executive Director, ASEAN Centre for Energy (ACE) Ms. Jo Evans , Deputy Secretary, Department of Climate Change, Energy, the Environment and Water, Australia *on-line Mr. Izuru Kobayashi , Deputy Commissioner for International Affairs, Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry, Japan
(15:00-15:45)	Presentation	(15min/person ×3 persons)
(15:45-16:30)	Panel Discussion& Q&A (45min)	
16:30-16:35	Closing Remarks	Dr. Kazutomo Irie , President, APERC