



FIFTH IEF KAPSARC THOUGHT LEADERS' ROUNDTABLE

SUSTAINABLE AND COMPETITIVE ENERGY SUPPLY:
THE ROLE OF EFFICIENCY AND INNOVATION

Thursday 28 February 2019
IEF Secretariat, Riyadh, Saudi Arabia

The Secretary General of the International Energy Forum (IEF) and the President of the King Abdullah Petroleum Studies and Research Center (KAPSARC) invite you to participate in the Fifth IEF-KAPSARC Thought Leaders' Roundtable discussion on energy markets, and thereby contribute toward the understanding of developments that are shaping the producer-consumer dialogue on efficiency and innovation for sustainable and competitive energy supply

Outcomes will also help to inform the global energy dialogue including the 8th Asian Ministerial Energy Roundtable hosted by the United Arab Emirates on 9-10 September 2019 in Abu Dhabi with India as co-host, and the 17th International Energy Forum Ministerial hosted by China in 2020 with Morocco as co-host.

Attendance is by invitation only and panelist views and roundtable discussions will be governed by Chatham House Rule.





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ROUNDTABLE INTRODUCTION

Economic growth will continue to call for oil and gas investment with most projections forecasting robust demand well beyond 2030. Though demand growth rates may fall, supply will have to keep up with demand increases and compensate for decline rates in existing fields. So, while demand for renewable energy increases especially in power generation, oil and gas will still supply most global energy demand in the transport, refining, petrochemical and other sectors. To manage the resource base, eliminate waste, and mitigate adverse impacts on the environment, hydrocarbon resources will need to be used in an ever more efficient manner.

This energy efficiency drive is fuelled by technological developments in the upstream sector, such as through Enhanced Oil Recovery (EOR), Carbon Capture and Storage (CCS) or Carbon Capture Utilization and Storage (CCUS), where technologies can be implemented to reuse unwanted emissions or reduce these for instance through use of renewable energy technologies. This includes the prospect of creating innovative energy sources by combining CO₂ with hydrogen to make liquids and using that for clean power generation or as a transportation fuel in future.

The adoption of these technologies will allow the industry to provide affordable, clean, and high energy-density hydrocarbons and remain competitive under evolving market and policy conditions. As governments anchor long-term energy policy to higher environmental and health standards, new windows of opportunity open to innovate and deploy new technologies profitably. The investments required to adjust supply chain processes and industry clusters will be based on demand projections that allow for cost recovery and a fair return on investment. It is, therefore, imperative to understand the cost structure and the willingness of both users and producers to invest in more efficient hydrocarbon supplies through the use of new technologies.

This roundtable will focus on the opportunities for enhancing efficiency in the oil and gas value chain, the technological options available, the economic viability of such methods, investments needed, and finally, the impact on demand and supply.

Questions to help to guide discussions:

- What are the drivers of the adoption of energy efficiency and innovation in the oil and gas sector?
- Which technologies prove to be most promising on the short and medium-term?
- · What is the value of adopting technologies which reduce the carbon footprint of the producer?
- How will oil and gas demand evolve without low-carbon methods?
- What impact will investments in efficiency and innovation have on the competitiveness of the oil and gas sector?

Background

The Fifth IEF-KAPSARC Thought Leaders' Roundtable is an invitation-only event that follows up on the encouragement by IEF Ministers to pool efforts in globally integrated frameworks to accelerate energy efficiency gains across the full energy sector spectrum and leverage the IEF Energy Efficiency Knowledge Sharing Framework, in collaboration with relevant organisations, and governance platforms globally.





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AGENDA

08:30 to 09:00	Welcome Coffee
09:00 to 9:10	Opening Remarks Sun Xiansheng, Secretary General, IEF Adam Sieminski, President, KAPSARC
9:10 - 10:40	Session I Efficiency Drivers and Gains in Hydrocarbon Supply Chains What are the economic imperatives and constraints that energy markets face today? How will efficiency gains impact the way the oil and gas industry will operate in future? Session Moderator: Saji Sam, Partner, Global Energy Practice, Oliver Wyman Presentations by panelists: Ahmad Alkhowaiter, Chief Technology Officer, Saudi Aramco Jason Bordoff, Founding Director, Center on Global Energy Policy, Columbia University Leila Benali, Chief Economist, Head of Energy Research, APICORP Discussion / Q&A
10:40 - 11:00	Coffee Break and Networking
11:00 - 12:30	Session II Integrating Low-Carbon Energy Technologies in the Upstream and Mid-Stream Which parts of the value chain can be less carbon intensive and therefore cleaner, allowing the sector to operate in a more sustainable manner? Session Moderator: Steve Griffiths, Senior Vice President, Research and Development, Khalifa University Presentations by panelists: Ken Koyama, Managing Director, Chief Economist, Strategy Research Unit, The Institute of Energy Economics Japan (IEEJ) Kamel Ben Naceur, Chief Executive Officer, NOMADIA Consulting, Former Minister of Energy, Tunisia Anton Azlor Villa, Vice President, Marketing & Sales, Tubacex Group Martin Lambert, Senior Visiting Research Fellow, The Oxford Institute for Energy Studies (OIES) Discussion / Q&A
12:30 - 13:30	Light Lunch and Networking

13:30 - 15:00	Session III Innovation in Energy Systems The role of new technologies to remove and or make use of carbon in the value chain. How does policy intervention help innovation and deployment? Session Moderator: Kamel Ben Naceur, Chief Executive Officer, NOMADIA Consulting, Former Minister of Energy, Tunisia Presentations by panelists: Julian Perez, Strategy and Policy Director, Oil and Gas Climate Initiative (OGCI) Noé van Hulst, Special Adviser, Top Management Group & Hydrogen Envoy, Ministry of the Interior & Kingdom Relations, The Netherlands Morten Anker, Deputy Director General, Ministry of Petroleum and Energy, Norway Discussion / Q&A
	Session IV
15:00 - 16:00	The Evolution of the Oil and Gas Business Model What impact will investments in efficiency and innovation have on the competitiveness of the oil and gas sector and the evolution of oil and gas business models? Session Moderator: Axel Pierru, Interim Vice President of Research, KAPSARC Presentations by panelists: Dmitry Sokolov, Head, Energy Economics and Forecasting Department, Gas Exporting Countries Forum (GECF) Adnan Shihab-Eldin, Director General, Kuwait Foundation for the Advancement of Sciences Anas Alhajji, Managing Partner, Energy Outlook Advisors Discussion / Q&A
	Concluding Remarks and Next Steps
16:00 - 16:15	Sun Xiansheng, Secretary General, IEF Adam Sieminski, President, KAPSARC