# CEO ROUND-TABLE SERIES

Abdullah Bin Hamad Al-Attiyah International Foundation for Energy & Sustainable Developmen







### **AGENDA**

Tuesday - March 19<sup>th</sup> 2019 The Four Seasons Hotel Doha, Qatar

09:30	AM	Coffee and Networking
10:00	AM	Welcome and Opening
10:15	AM	Roundtable Discussion
12:15	PM	Closing
12:30	PM	Lunch



# **CEO** Roundtable Series

His Excellency Abdullah Bin Hamad Al-Attiyah, Chairman of the Al-Attiyah Foundation, launched the CEO Roundtable Series and Dialogues to provide a platform for knowledge exchange and support for the global community in the quest towards a sustainable energy future. All guests have the opportunity to share their opinions and insights in what is always a lively and thought-provoking discussion.

\* The series of events take place under the Chatham House Rule and will not be attributed to any individual.



#### **THEME**

# Methane Emissions from the Oil & Gas Industry

# Burning natural gas produces less greenhouse gas emissions (GHG) than burning coal and crude oil.

For this reason, natural gas is considered the cleanest fossil fuel. However, the principal component of natural gas, methane, is a potent greenhouse gas. Although short-lived in the atmosphere, methane contributes more than ten per cent to the overall anthropogenic emissions thus reducing methane emissions is considered one of the low-hanging fruits of climate change mitigation.

The main sources of anthropogenic methane emissions are the oil and gas industry, agriculture, landfills, wastewater treatment, and emissions from coal mines, with the oil and gas sector generally considered the largest emitter of methane after agriculture. In 2012, 3% of gas produced were emitted to the atmosphere, an equivalent of total gas production of Norway that year. Fossil fuel production, distribution and use are estimated to emit 110 million tonnes of methane annually. Methane emissions from the production, transport and use of natural gas present a challenge to the sustainability credentials of the natural gas industry.



#### **KEY QUESTIONS**

- What does the future energy mix look like?
- Where will gas lie in the merit orders and to what extent would this be influenced by efforts to reduce methane emissions?
- What are the economic and technological challenges associated with detecting, reducing and managing methane leaks during production, processing, transportation and utilisation of natural gas?
- What policies, tools, and innovative approaches are available to spur methane emission reduction in oil and gas industry?
- How are these policies impacted by the current climate change processes under the UNFCCC?
- Can carbon pricing and carbon market mechanisms play any role?
- Are there roles for independent think thanks in the ongoing efforts to reduce methane emissions?

#### **DISCUSSION POINTS**

The meeting will provide the opportunity for international experts to share insights on recent and ongoing developments on the reduction of methane emissions from the oil and gas sector. The discussion will cover, but not limited to, the following aspects:

- Standardised approach to monitoring, measuring, and reporting of methane emissions from the gas industry.
- Advances in technology and improved operational efficiency, aimed at reducing methane emissions.
- Mitigation of methane emissions from the oil and gas sector, as an effective strategy for contributing to global effort to deliver on the Paris Agreement and to attain a number of the Sustainable Development Goals.
- Harnessing the opportunities to improve efficiency in the gas supply chain from source to use.
- Identifying and engaging the entire stock of knowledge available globally to achieve the economic benefits of good mitigation strategy for methane emissions.



#### **KEY MESSAGES**

- In order for gas to be widely accepted as more climate friendly than coal, companies producing, processing and transporting gas need to ensure that methane leaks are kept to a minimum. The International Energy Association (IEA) identified 'reducing upstream emissions as one of five key climate policy priorities in the energy sector if the world is to achieve the Paris Agreement goal of limiting earth temperature rise to less than 2 degrees Celsius above pre-industrial levels.
- Reducing methane emissions from energy-related extractive activities could be a win-win for delivering on the global promises on climate change and sustainable development. However, despite readily available technology, there is relatively a low effort in monitoring, reporting and abating methane emissions. This situation is changing, with several initiatives now been undertaking by industry and multi-stakeholder groups. In 2017, a group of eight companies signed a set of Guiding Principles on Reducing Methane Emissions across the Natural Gas Value Chain. The Preamble notes that the Guiding Principles are "complementary to and mutually reinforcing of other initiatives, including the Oil and Gas Climate Initiative and the Climate and the Oil & Gas Methane Partnership of the Clean Air Coalition"
- In this context, natural gas does face a promising future. Clean and versatile, it has the best prospect for growth of the three fossil fuels. Asian demand, in particular, is growing, with China's anti-pollution drive. With improvements in renewable energy, growing efficiency, and concern over the greenhouse emissions of coal, natural gas, coupled with renewables, presents a viable option for meeting the world energy needs in an economical and sustainable manner.

Since the principal component of natural gas, methane, is a potent greenhouse gas, in order for gas to maintain the appeal of being more climate friendly than coal, producers of LNG need to find ways to keep gas leakage to a minimum.



#### SPECIAL GUEST SPEAKERS



**Scott Foster** 

Director, Sustainable Energy Division, United Nations Economic Commission for Europe (UNECE)

Scott Foster has been Director of UNECE's Sustainable Energy Division since 2011. With more than 35 years' experience in energy, Mr. Foster has worked extensively with governments, industry, and international organisations on energy policy, market design and regulation, and climate change strategies.

Mr. Foster's particular focus recently has been assisting energy stakeholder's address the critical challenges of sustainability, technology choice, and investment mobilization. Before founding Nomad Energy Consulting in 2004, Mr. Foster was VP of Global Regulatory Affairs with AES Corporation, Senior Director for Global Power with Cambridge Energy Research Associates (CERA), and Senior Expert on Electricity for the International Energy Agency.



Braulio Pikman

Expert Advisor, Environmental Resources Management (ERM)

Mr. Pikman has been participating for more than a decade in international technical panels (UNFCCC and IPCC), working with representatives of several developed and developing countries (officials and private sector) towards the implementation of new low carbon technologies to promote clean and sustainable development. He combines knowledge of the international negotiation process, deep engineering understanding of climate and GHG anthropogenic emissions in all sectors of the economy (currently working with natural gas specifications and methane mitigation projects), extensive experience with mitigation, adaptation and life cycle thinking and analysis. Mr. Pikman is currently based in Sao Paulo, having worked for more than 4 years in USA (Washington DC and San Francisco).



Frederik Rengers

Chief Executive Officer, WTS Energy Netherlands B.V.

Chairman of the Board The Sniffers.

Mr. Frederik Rengers is the Chief Executive Officer of WTS Energy Netherlands B.V. since 2007. He served as General Manager and Chief Operating Officer of WTS Energy from December 2001 to January 2007. Before joining WTS Energy, he worked for Schlumberger Oilfield Services in Scotland, Venezuela and the US Gulf of Mexico in different technical and management positions in the Wireline & Well Testing Group. He was Consultant for Shell E&P from August to December 2001. He holds an MSc in Petroleum Engineering/Reservoir Engineering from Delft University of Technology, in the Netherlands.



Dr. Ioannis G. Economou

Associate Dean for Academic Affairs and Professor of Chemical Engineering at Texas A&M University

Dr. Ioannis G. Economou is the Associate Dean for Academic Affairs and Professor of Chemical Engineering at Texas A&M University at Qatar. Prior to this, he was the Associate Provost for Graduate Studies and Professor of Chemical Engineering at the Petroleum Institute, Abu Dhabi (2009 – 12). From 1995 to 2009, he worked at the National Center for Scientific Research "Demokritos" in Athens, Greece.

# **ABOUT THE FOUNDATION**

The Abdullah bin Hamad Al-Attiyah International Foundation for Energy and Sustainable Development is a non-profit think tank providing independent insights, in-depth research and informed debate on energy and sustainable development themes.





# THE FOUNDER AND BOARD OF TRUSTEES

The Foundation's Chairman, His Excellency Abdullah Bin Hamad Al-Attiyah's 40 years' experience is unprecedented. Over several decades he held many high-profile positions including Deputy Prime Minister for the State of Qatar, CEO, Qatar Petroleum, and President of OPEC. In addition, His Excellency was elected Chairman of the United Nations Commission on Sustainable Development in 2006 and six years later successfully served as the President of the United Nations Convention on Climate Change, COP 18.

H.E. Al-Attiyah's unique experience gave him first-hand knowledge of the challenges and opportunities faced by the global community in their quest to provide sustainable energy. He hopes the Al-Attiyah Foundation's work can support its members, partners and society with this quest.

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MR. REDA IBRAHIM ALI

Managing Director The Abdullah Bin Hamad Al-Attiyah International Foundation for Energy & Sustainable Development

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# **OUR MEMBERS**

Currently the Foundation has over fifteen corporate members from Qatar's energy, insurance and banking industries as well as several partnership agreements with business and academia.



































### **OUR PARTNERS**

Our partners collaborate with us on various projects and research within the themes of energy and sustainable development.



































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