

Industry Partnership Strategy Meeting Energy Programme

New York, USA 2 October 2013

Wednesday 2 October – Transformation of the Energy Industry

Overview

Under the theme “Transformation of the Energy Industry”, the Industry Partnership Strategy Meeting will engage Heads of Strategy from the energy industry in informal dialogues with a select group of policy-makers, experts and strategists from other industries. Participants will explore key trends of the evolving “energy map,” identifying boundary topics with other industries and assessing their implications on existing systems and business models. Outcomes of the discussions will help prioritize strategic issues for the Energy Community and set the agenda for the World Economic Forum Annual Meeting 2014 in Davos-Klosters.



Wednesday 2 October	
8.00-8.30 Energy Networking Breakfast	
8.30-10.00 Energy Update: Navigating the Energy Sector Transformation	
10.15-11.45 Oil & Gas Roundtable	10.15-11.45 The Future of the Electricity System
12.00-13.30 US Leadership in Climate Change: What next?	
14.00-15.45 The Gas Demand: Evolution or Revolution?	14.00-15.45 Risk and Resilience in Urban Power Systems
16.00-17.30 Energy for Society: Rebuilding the “Circle of Trust”	
18.00-19.00 Cross-Industry Reception	
19.00-22.00 Energy Community Dinner	

Session Descriptions

08.00 – 08.30 **Energy Networking Breakfast**

08.30 – 10.00 **Energy Update: Navigating the Energy Sector Transformation**

The electricity and oil and gas sectors are going through significant transformation, which offers new opportunities and business challenges. The development of unconventional gas and oil coupled with weakened global growth has taken us from a paradigm of resource scarcity to one of resource abundance with knock-on effects through the value chain. Traditional models in which utilities have operated are being challenged by new technologies and consumer needs. Innovation breakthroughs related to energy, such as ICT, automation, materials and biotechnology, open up new possibilities. At the same time, major economies such as in the United States, Europe, China and Japan are reworking energy and climate policies.

In this context, participants will discuss the most important trends and business issues currently affecting the electricity and oil and gas sectors and their implications. Sector transformation maps developed by the World Economic Forum will be presented and discussed.

10.15 – 11.45 Sessions in parallel: **The Future of the Electricity System**

The goal of any given electricity system is to deliver electricity to its users in an affordable, reliable and environmentally sustainable way. In national systems, this task has historically been accomplished by an incumbent party under a centralized grid. Recent advances and innovations from the technological, regulatory, economic and societal perspective have challenged the traditional system, raising questions on the future of the electricity system. In this context, key dimensions for discussion include:

1. What are the key technological, regulatory and economic trends driving the electricity system transformation?
2. What are the links and inter-relations between these trends?
3. Given these emerging trends, what are the potential scenarios for how the electricity system will evolve?

- 10.15 – 11.45 **Sessions in parallel: Oil & Gas Roundtable**
 This session will bring together key actors to brainstorm on the most important issues across the industry. Executives from NOCs, IOCs, Independents and Oil Field Services companies will discuss:
1. What are the key challenges in the industry?
 2. How can the World Economic Forum help address some of these challenges?
- 12.00 – 13.30 **US Leadership in Climate Change: What next?**
 Boosted by its switch from coal to gas, the United States has succeeded in reducing its CO₂ emissions to 1992 levels. In terms of climate regulation, however, to date the US has not demonstrated commensurate global leadership. This could change through recent initiatives taken by the Obama administration both domestically and internationally with countries such as China. As the world seeks new momentum in climate negotiations, the potential impact of US leadership on climate issues could be very significant on the energy sector and the climate challenge. However, questions remain on how ambition will translate into policies.
- This lunch session will offer participants an opportunity to debate:
1. What real climate-related policy shifts can be expected in the US and when?
 2. What will their implications be generally, and more specifically on different energy sectors?
- 14.00 – 15.45 **Sessions in parallel: The Gas Demand: Evolution or Revolution?**
 Energy Markets in the United States have been reconfigured by the supply revolution coming from unconventional sources. The abundance of cheap gas has reshaped demand particularly from the power sector, but the appetite for gas is expanding in traditional energy-intensive industries and beyond. In other parts of the world, demand of gas is uneven. Some countries have reduced their demand by shifting to coal for their electricity production while in others, demand for gas is growing, driven by GDP growth and explicit efforts to diversify into cleaner fuel sources such as gas. It remains to be seen what will happen if and when the development potential of both conventional and unconventional gas becomes possible outside North America. Key dimensions for discussion include:
1. How will environmental policy affect the flexibility to switch between gas and coal for electricity generation?
 2. What is the actual extent of reindustrialization in the United States in the industries where gas serves as feed-stock or as an important source of energy?
 3. Will use of gas become more prevalent in the transport sector? How will this vary across subsectors (shipping, automotive, etc.)?
 4. How will changing gas demand impact exploration and production activities in different regions?
- 14.00 – 15.45 **Sessions in parallel: Risk and Resilience in Urban Power Systems**
 Referring to the experience of New York City, whose energy infrastructure was put to the resilience test last year by Hurricane Sandy, this session will consider the increasing risks affecting urban power systems - both in terms of physical assets and information flow - and how new technologies and business models for energy distribution and consumption can impair or improve the resilience of urban grids in today's increasingly hyperconnected world. This cross-industry session will convene strategists from the Forum's Energy, Infrastructure and Information and Communications Technologies (ICT) communities and will include guest perspectives from the energy director of the New York City Mayor's Office. Key dimensions to address include:
1. How can emerging technologies for distributed generation and smart grids be better incorporated in urban planning? Can decentralized smart grids build the resilience of a city's energy system?
 2. In today's hyperconnected and digitized world, how has ICT innovation changed the way that energy companies interact with consumers in urban areas? What risks/opportunities does it bring?
 3. How can the Forum's Risk and Responsibility in a Hyperconnected World initiative be leveraged by Partner companies to advance key issues affecting the resilience of urban power systems?
- 16.00 – 17.30 **Energy for Society: Rebuilding the Circle of Trust**
 In the last decade, the relationship between energy companies and the communities they serve has changed dramatically – growing public distrust and scrutiny regarding environmental and political trade-offs has called industry's "license to operate" into question, while new technology in communications is poised to transform the relationship between the industry and its stakeholders. More than ever, there is a pressing need for the Energy Industry to engage key stakeholders – including customers, communities, NGOs, government officials, regulators and media – in a meaningful and sustained two-way dialogue. In this context, key dimensions for discussion include:
1. What key steps will ensure trust-based relations between energy companies and its stakeholders?
 2. Does the Energy Industry need to collectively set standards for the way it interacts with society?
- 18.00 – 19.00 **Cross-industry Reception**
- 19.00 – 22.00 **Energy Community Dinner**
 A community networking dinner for the Energy Industries with guests from outside the sector.