

## **Pathways to Sustainable Energy Deep-dive on Gas Workshop**

### **Improved understanding on the role of natural gas in achieving the 2030 Agenda**

#### **- Programme -**

24 September 2019

Room 26, E Building – Palais des Nations – Geneva

*Workshop language: English*

#### **Purpose:**

Harnessing synergies between renewable energy and gas

#### **Objectives:**

The objective of the Workshop is to improve the understanding of UNECE member States on the role of natural gas in achieving 2030 Agenda for Sustainable Development and the Paris Agreement and in the light of the ongoing decarbonization of the energy system to further explore the synergies between renewable energy and gas.

#### **Context**

Work done to date to track progress toward energy for sustainable development has made it clear that there is not a single pathway to the future energy system. Each country has its own starting point in terms of resources, infrastructure, legislative and regulatory framework, and cultural heritage. Consequently, each country has a distinct set of options for how to proceed. Natural gas is considered an essential element in the transition to a sustainable energy system and, under the right conditions, could play a continuing role going forward. However, much of the ECE region seeks increasingly to develop flexible systems that would limit the requirement for gas to fulfill such a role. Decarbonization projects such as power-to-gas, energy storage and renewable, decarbonized and low carbon gases (e.g. green/ blue hydrogen and biomethane) will decrease the environmental impact and carbon footprint of the energy system. Power-to-gas technologies use electricity that cannot be used directly or stored in batteries but can be instead stored as gas within the gas system at minimum cost. Decarbonised gases/fuels do not emit carbon to the atmosphere during their use in transport, heating or energy production. These gases /fuels can also be described as zero-carbon energy carriers. One of the most versatile energy carriers is hydrogen, as it can be produced from renewable energy or natural gas, be transported and stored. Hydrogen forms the basis of chemical industries and is having huge potential in decarbonising transport, heating or energy production across the ECE region.

**Tuesday, 24 September 2019**

TIME	SUBJECT	SPEAKER / MODERATOR
10.30-11.00	<b>REGISTRATION</b>	
11.00-11.20	<b>WORKSHOP OPENING</b>	
	Welcome Remarks <ul style="list-style-type: none"> <li>- Overview</li> <li>- Objective of the Workshop</li> </ul>	Scott Foster, Director, Sustainable Energy Division, UNECE
11.20-13.00	<b>Role of Natural Gas in Achieving 2030 Agenda for Sustainable Development and the Paris Agreement Project</b>	Moderator: Torstein Indrebo, Executive Director, TI Energy Advisory Services
50 min	<b>Natural Gas displacing Competing Fuels</b> <i>Presentation of Project Results and Q&amp;A</i>	John Roberts, Energy Security Specialist. Consultant, UNECE
50 min	<b>Potential of Natural Gas and New Markets</b> <i>Presentation of Project Results and Q&amp;A</i>	John Roberts, Energy Security Specialist. Consultant, UNECE
13.00-14.00	Lunch & Networking	
14.00-15.45	<b>Exploring Synergies between Natural Gas and Renewable Energy</b>	Moderator: Torstein Indrebo, Executive Director, TI Energy Advisory Services
50 min	<b>Natural Gas Supporting the Uptake of Renewable Energy</b> <i>Presentation of Project Results and Q&amp;A</i>	John Roberts, Energy Security Specialist. Consultant, UNECE
55 min	<b>How gas can help accelerate deployment of intermittent renewable energy sources?</b> <ul style="list-style-type: none"> <li>▪ Integration of renewable energy technologies into energy supply systems and different sectors – sector coupling</li> </ul>	All - Themed Discussion
15.45-16.00	Networking Coffee Break	
16.00-18.00	<b>Role of decarbonized gases or energy carriers in achieving 2030 Agenda</b>	Moderator: Scott Foster, Director, Sustainable Energy Division, UNECE
55 min	<ul style="list-style-type: none"> <li>▪ Synergies between gas and emerging concepts of green and blue hydrogen and Power2X to decarbonize the energy system</li> <li>▪ What is the potential of hydrogen economy in ECE regions?</li> </ul>	<p>Alena Fargere, Consultant, World Energy Council</p> <p>Florian Marko, Policy Officer, Federal Ministry for Sustainability and Tourism, Austria</p> <p>Tom Kober, Head, Energy Economics Group, Paul Scherrer Institute, Switzerland</p> <p>James Carton, Assistant Professor, Dublin City University / Hydrogen Ireland</p> <p>Yuriy Melnikov, Chief Analyst, Energy Center, Moscow School of Management Skolkovo, Russian Federation</p>

55 min	<b>Towards UNECE Hydrogen</b> <ul style="list-style-type: none"> <li>▪ How can UNECE help to address H2 supply and demand challenges?</li> <li>▪ What opportunities can we identify for member States?</li> <li>▪ How would you want UNECE to help organize for that?</li> </ul>	All - Themed Discussion
17.50-18.00	<b>Wrap-up and Closing of the Workshop</b>	Scott Foster, Director, Sustainable Energy Division, UNECE
19.00	Self-paid dinner organized for participants	