

## **Economic Commission for Europe**

### **Committee on Sustainable Energy**

#### **Group of Experts on Gas**

##### **Fourth session**

Geneva, 27 and 28 March 2017

Item 11 of the provisional agenda

**Renewal of mandate and work plans for 2014–2017 and 2018–2019**

### **Discussion Document:**

## **Draft Work Plan of the Group of Experts on Gas for 2018-2019**

### **I. Introduction**

1. The Group of Experts on Gas is mandated to provide a forum for multi-stakeholder dialogue on promoting the sustainable and clean production, distribution, and consumption of gas in the United Nations Economic Commission for Europe (ECE) region. The areas of work of the Group of Experts are policy dialogue and exchange of information and experiences among ECE member States on gas-related issues of regional relevance, including the ever-increasing share of gas in the total primary energy supply and its social and environmental impacts.

2. In late 2016 and early 2017, the Group of Experts' Bureau engaged in wide consultations on the future activities of the Group of Experts. Taking into account the achievements of the 2014–2017 work plan and the challenges encountered, the Bureau compiled a list of possible activities for the Group of Experts' 2018–2019 work cycle. Section II of this document provides a detailed description as well as deliverables and timelines for the proposed activities of the 2018–2019 work plan. Among these activities, two represent a continuation, adjusted as needed, of the 2014–2017 cycle. A number of new initiatives and emerging topics that are in line with the mandate of the Group of Experts are also proposed.

3. Using this document as a starting point and taking into account good practices and lessons learned from the previous cycles, the fourth Session the Group of Experts on Gas will review and select activities for the 2018–2019 work cycle. In doing so, the Group of Experts should note that under the current resource constraints successful implementation of the work plan requires dedicated task forces committed to delivering on time. When deciding on which activities to focus, the Group should consider the willingness of experts to take an active role in the task forces and other Group of Experts' work between sessions as one of the key criteria for success.

4. At its fourth session, the Group of Experts will also agree on the written procedures needed to submit its 2018–2019 work plan timely to the Committee on Sustainable Energy, so that the Committee could review, amend and approve the work plan at its twenty-sixth session in September 2017.

## II. 2018-2019 Activities

### A. Best policy practices on managing methane emissions along the gas value chain<sup>1</sup>

**Description:** In many ECE member States, there is an opportunity to improve efficiency in the gas supply chain from source to use. The differences between the volumes of gas produced at the source and the volumes delivered to end users show significant variances across ECE member States. Reducing the differences by improving the performance among laggards will improve the overall energy efficiency, gas affordability and producers' competitiveness. It will also reduce methane emissions from leaks in the gas value chain. Since methane is a potent greenhouse gas, reducing emissions will have a significant positive impact on the environment. The proposed activity is therefore to prepare a report on the Best Policy Practices on Managing Methane Emissions in the Gas Value Chain.

**Deliverables:**

- Case studies on reducing on reducing methane emissions from the gas sector in the ECE region (May 2018)
- Report on best policy practices on managing methane emissions along the gas value chain (December 2019)

### B. Best policy practices on the role of gas in supporting variable renewable energy generation<sup>2</sup>

**Description:** In order to increase the uptake of variable renewable energy sources, there is a need to have a reliable source of energy and capacity when the renewable energy sources are not available. There is also a need for rapid-response capacity to maintain balance in power networks in light of oscillations in the output of intermittent energy sources. Gas could be such a source. This activity would be based on a policy dialogue and exchange of experiences and practices on the role of natural gas in enabling renewable energy policies. That dialogue could lead to the assessment of the best practices and policies on the role of natural gas in significantly increasing the uptake of renewable energy in the ECE region and helping achieve the objective of access to energy for all in the ECE region. This work, undertaken from the perspective of the natural gas industry and gas-fired power plant operators, would complement and take into account the work to be undertaken by the Group of Experts on Renewable Energy in developing best policy practices for renewable energy. Relevant lessons could be learned from the development policies carried out by a majority of ECE countries in the past years.

**Deliverables:**

- Policy dialogue on the role of natural gas in enabling renewable energy deployment (April 2018)
- Best policy practices on the role of gas in supporting variable renewable energy generation (December 2019)

### C. Role of gas in increasing energy efficiency

**Description:** There are significant opportunities to increase energy efficiency along the entire gas value chain and its specific segments, including exploration, production, transportation, liquefaction, distribution, power generation, or the end use sectors such as appliances in buildings and the use of gas as road or marine transportation fuel. This could be assessed through a round table and/or a report. The report might also take a wider perspective and consider the role of gas in improving the energy efficiency of the energy system, or the economy at large, highlighting comparative advantages of gas in terms of thermodynamic efficiency over other fuels. In addition, since gas is one of possible energy vectors, the report might explore the concepts of power via pipeline versus power via wire, distributed generation, gas versus other fossil fuels, or the trade-offs between gas- and electric-powered vehicles. Depending on the specific areas

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<sup>1</sup> This activity has been carried over from the 2014–2017 work plan. If completed in 2017, the activities in 2018–2019 may focus on dissemination of the best policy practices on managing methane emissions along the gas value chain.

<sup>2</sup> This activity represents a follow up to the deliverable of the 2014–2017 work plan.

chosen, this cross cutting work could be undertaken in collaboration with other groups of experts under the Committee of Sustainable Energy or other bodies within ECE.

**Deliverables:**

- Policy dialogue on increasing energy efficiency along the gas value chain (April 2018)
- Policy dialogue on the role of gas in increasing energy efficiency of the overall energy system (April 2019)
- Report on the opportunities to increase energy efficiency along the gas value chain and/or on the role of gas in increasing the energy efficiency of the energy system (November 2019)

#### **D. Role of gas in improving urban air quality**

**Description:** Urban and indoor air quality is negatively affected by increased concentrations of nitrogen oxides, carbon monoxide, methane, volatile organic compounds, sulphur dioxide, and particulate matter. Combustion of natural gas produces significantly lower concentrations of these pollutants than the combustions of other fuels, such as coal, biomass, diesel or petrol. Natural gas-fired power plants are more flexible than those using solid fuels. Replacing some of these fuels – both in electricity generation and transportation – with natural gas may help improve air quality, in particular in urban areas of the economies in transition of the ECE region and developing countries beyond the ECE region. This activity would focus on the role of gas in improving urban and indoor air quality. The work could be carried out in collaboration with the World Health Organization (WHO) and the International Gas Union (IGU), which recently published a number of case studies on air quality. Building upon these case studies, the Group of Experts may develop a policy paper summarizing the lessons learned and, using the case studies as a starting point, provide policy recommendations to ECE member States and other United Nations Member States. This cross-cutting activity is relevant to attaining a number of Sustainable Development Goals, such as Goal 5 (Achieve gender equality and empower all women and girls), Goal 7 (Ensure access to affordable, reliable, sustainable and modern energy for all), Goal 11 (Make cities inclusive, safe, resilient and sustainable), and Goal 12 (Ensure sustainable consumption and production patterns).

**Deliverables:**

- Policy dialogue on the role of gas in improving urban and indoor air quality (April 2018)
- Policy recommendations on the role of gas in improving urban air quality (December 2019)

#### **E. Removing obstacles to development of economic carbon capture and storage**

**Description:** Carbon capture and storage (CCS) falls under the mandate of the Group of Experts on Cleaner Electricity Production from Fossil Fuels, so this activity would be carried out in partnership with this Group. The natural gas industry presents both challenges and opportunities for development of CCS. On the one hand, carbon capture from gas-fired power plants is more challenging and requires different technical approaches than coal; on the other, the vast experience in gas exploration, extraction and underground storage provides valuable lessons for developing the storage component of CCS.

**Deliverables:** Policy dialogue on the role of gas removing obstacles to development of economic carbon capture and storage (April 2019)

#### **F. Promoting sustainable and clean production, distribution, and consumption of gas in the ECE region**

**Description:** An annual policy dialogue on the ways to promote the sustainable and clean production, distribution, and consumption of gas in the ECE region. This activity stems from the core mandate given to the Group of Experts.

**Deliverables:** An annual policy dialogue on gas supply, transit and demand (December 2019)

### **G. Policy Papers for In-Depth Consideration**

**Description:** The annual session of the Group of Experts, and occasional meetings and workshops held in the ECE region, offer a venue to present and disseminate relevant short policy papers on various gas topics.

**Deliverables:** Presentations at annual sessions of short policy papers on topical issues, for in-depth consideration

### **H. Role of gas in attaining Sustainable Development Goals**

**Description:** This activity may combine, or be carried out in lieu of, several cross cutting activities described previously that analyse the enabling role of gas in combating poverty, energy poverty, improving air and water quality, mitigating climate change, gender inequalities, sustainable cities, or sustainable consumption and production. In addition, the exact scope of this activity could depend on the interpretation of the mandate of the Group of Experts on Gas. For example, if the mandate of the Group of Experts is interpreted to cover natural gas liquid products (in other words, liquefied petroleum gas – LPG), gas may play a more prominent role in energy access.

**Deliverables:**

- Policy dialogue on the enabling role of gas in attaining the Sustainable Development Goals (April 2018)
  - Policy recommendations of the role of gas in attaining the Sustainable Development Goals (December 2019)
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