Group of Experts on Gas

Tenth session
Geneva, 23-24 March 2023
Item 10 of the provisional agenda
Emerging issues and work plan for 2024-2025

Work Plan of the Group of Experts on Gas for 2024-2025

Draft prepared by the Bureau of the Group of Experts on Gas

I. Introduction

The mandate of the Group of Experts on Gas (Group of Experts) is to provide a forum for multi-stakeholder dialogue on promoting sustainable and clean production, distribution, and consumption of gases 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 issues of regional relevance, including the ever-increasing share of gas in the total primary energy supply and its economic, social, and environmental impacts and the role of low carbon, decarbonized, and renewable gases.

The Group of Experts requests the Committee on Sustainable Energy to renew its mandate until 31 December 2025, with the possibility of extension.

II. Concrete activities

The concrete activities of the Group of Experts are intended to help ECE member States deliver on key political commitments, including the 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, and the Paris Agreement signed by the members of the United Nations Framework Convention on Climate Change (UNFCCC).

Following the successful implementation of the work plan for 2022-2023 and the recommendations from the Group of Experts and its Bureau, the Group of Experts will continue to undertake activities broadly related to the enabling role of gas in achieving carbon neutrality and other goals of the 2030 Agenda and will support the Committee's activities under the ECE Platform on Resilient Energy Systems.

Most of the activities listed hereafter represent a continuation, adjusted as needed, of past activities. Several new and cross-cutting activities, in line with the mandate of the Group of Experts and emerging priorities, are also included. Of the below listed activities are subject to availability of resources.

A. Gas and Sustainable Development Goals

Description:

This activity, at the core of the Group of Expert's mandate, is a long-term, holistic exploration on how gas can help attain the Sustainable Development Goals (SDGs). In addition to the central themes – SDG 7 (Access to affordable, reliable, sustainable, and modern energy for all) and SDG 13 (Take urgent action to combat climate change and its impacts) – in every two-year cycle the Group of Experts focuses on a subset of SDGs. In 2024-2025 the Group of Experts will take a deeper dive into SDG 9 (Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation), and SDG 11 (Make cities and human settlements inclusive, safe, resilient, and sustainable).

The Group of Experts activities foreseen under this work plan are deeply connected with the development of renewable energy and the reduction of greenhouse gases emissions, including methane emissions. As in the previous cycles, the Group of Experts will continue to focus on how gas can help attain SDG 5 (Achieve gender equality and empower all women and girls).

Work to be undertaken:

Explore and promote the role of gas and liquefied natural gas (LNG) in attaining SDGs in the ECE region, with a focus on SDGs 5, 7, 9, 11, and 13.

Deliverables and timeline:

- (a) Policy dialogues on the enabling role of gas in attaining SDGs 5, 7, 9, 11, and 13, by December 2025;
- (b) Policy briefs on the enabling role of gas in attaining selected SDGs, by December 2025.

B. Methane management

Description:

During previous work cycles, the Group of Experts successfully developed, published, and disseminated the principles-based Best Practice Guidance for Methane Management in the Oil and Gas Sector (BPG). This work has been supported by the United States Environmental Protection Agency (USEPA) on behalf of the Global Methane Initiative (GMI). In the current cycle the Group of Experts will support an "International Decade for Methane Management" as the principal intergovernmental framework for action.

Work to be undertaken:

- (a) In collaboration with USEPA, GMI, Environmental Defense Fund (EDF), Oil and Gas Climate Initiative (OGCI), Climate and Clean Air Coalition (CCAC), IPIECA, Gas Infrastructure Europe (GIE), Marcogaz, the European Gas Reseach Group (GERG), Eurogas, the United Nations Environmental Programme (UNEP) and other stakeholders, solicit, collect, edit, publish and disseminate illustrative case studies on reporting, measuring and reducing methane emissions;
- (b) Identify other potential partners that undertake methane emissions action beyond the ECE region.

Deliverables and timeline:

- (a) Case studies on reducing methane emissions from the gas sector in the ECE region, by December 2025;
- (b) If the initiative for an International Decade for Methane Management is endorsed by the United Nations General Assembly, support its activities, by December 2025.

C. Net zero through synergies between renewable electricity and gases

Description:

The Group of Experts has recognized that a solution to achieving a sustainable and decarbonized energy system could be found within the triangle "gases-renewable energy-energy efficiency". In this sense, the Group of Experts concluded that the least-cost and fastest path to creating a sustainable energy system of the future requires: (i) increasing energy efficiency to reduce energy requirements, and once this is done (ii) meeting the remaining energy requirements through a combination of gas (including natural gas, low carbon, decarbonized, and renewable gases) and renewable energy. The Group of Experts offers its support to ECE member States in developing policies needed to harness synergies between renewable electricity and gases. This activity will be undertaken in cooperation with the Group of Experts on Renewable Energy and the Group of Experts on Cleaner Electricity Systems.

Work to be undertaken:

Case studies and policy dialogues.

Deliverables and timeline:

In cooperation with the Group of Experts on Renewable Energy and the Group of Experts on Cleaner Electricity Systems,

- (a) Policy dialogues on synergies between renewable electricity and gases in the future energy system, by December 2025:
- (b) Case studies on gas as an enabler of the integration of variable renewable energy sources, by December 2025.

D. Hydrogen

Description:

Hydrogen is widely recognized as the means to achieving carbon neutrality, especially in hard-to-abate sectors. At its thirty-first session (Geneva, 21-23 September 2022), the Committee on Sustainable Energy concluded that hydrogen could play a key role in building resilient energy systems and reaching carbon neutrality. The Committee asked the Group of Experts on Gas to lead the work on hydrogen, in close collaboration with the other groups of experts.

The work performed in relation with Hydrogen will be structured under the Group of Experts on Gas, and could be further complemented through the Hydrogen Task Force.

Work to be undertaken:

In collaboration with other Groups of Experts as relevant, discuss, develop, and promote good practices and recommendations on:

- The build-up of a resilient hydrogen supply chains, finding an equilibrium between environmental sustainability and affordability for the rapid ramp up of a nascent industry.
- The business case for blending hydrogen with natural gas
- Hydrogen gas asset readiness in the ECE region
- Hydrogen purity requirements for its production, transmission, and use
- The role of gas infrastructure in accelerating development of hydrogen projects
- Issues related to hydrogen emissions in the context of climate change

In collaboration with the Expert Group on Resource Management:

- Develop specifications for the application of the United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS) to hydrogen projects and production technologies
- Work towards developing a classification for hydrogen that accounts for the full life cycle impact of the hydrogen value chain, considering all production factors
- Assist in developing pilot hydrogen production projects applying UNRMS principles

Deliverables and Timeline:

- (a) Good practices and recommendations on blending hydrogen with natural gas, gas asset readiness, hydrogen purity requirements, and the role of gas infrastructure to accelerating hydrogen projects, by December 2025;
- (b) Specifications for the application of the United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS) to hydrogen projects, by December 2025;
- (c) Classification for hydrogen that accounts for the full life cycle impact of the hydrogen value chain, considering all production factors, by December 2025.

E. System resilience and security of supply

Description:

The Committee on Sustainable Energy at its 31st session held in September 2022 discussed how to achieve greater energy security, affordability, and net-zero at the same time. To assist the Committee in this endeavour, the Group of Experts will host a series of dialogues on resilient energy systems and the future of gas supply in Europe.

Work to be undertaken:

The activity stems from the core mandate of the Group of Experts on Gas – to provide a forum for multi-stakeholder dialogue on sustainable and clean production, distribution, and consumption of gas in the ECE region. To this end, this activity will focus on:

- Possible interruptions in the gas supply to Europe
- Rebalancing Europe's energy gas supplies

- Mapping alternative supplies for natural gas
- Security of supply and climate agenda

Deliverables and Timeline:

- (a) Policy dialogues on the role of gas in improving system resilience and security of supply, by December 2025;
- (b) Dissemination of case studies and best practices on system resilience and security of supply, by December 2025.

F. Carbon capture, utilisation, and storage: The role of gas infrastructure

Description:

To meet the objectives of the Paris Agreement and deliver on the 2030 Agenda for Sustainable Development, ECE member States need to capture 90Gt of CO₂ by 2050. The Committee on Sustainable Energy, through its Group of Experts on Cleaner Electricity Systems has for several years been engaged in carbon capture and storage (CCS), as a process of capturing CO₂ emissions from fossil power generation and industrial processes, for its re-use or subsequent storage in underground formations.

Today, over 80 per cent of primary energy in the ECE region come from fossil fuels. Achieving carbon neutrality will require a rapid deployment of CCS. Gas infrastructure, including underground gas storage and the possible use of depleted fields, on- and off-shore, may accelerate the development of technologies needed to transport and sequester CO₂. Undertaken in collaboration with the Group of Experts on Cleaner Electricity Systems, this activity would complement activities of the Group of Experts on Cleaner Electricity Systems which will continue to be the ECE lead on CCS.

Work to be undertaken:

This work will focus on the role of gas and gas infrastructure in pilot and commercial scale CCS projects. It will deal mostly with the downstream aspects of CCS – namely, sequestration.

Deliverables and timeline:

- (a) Policy dialogues on the role of gas and gas infrastructure in CCS, by December 2025;
- (b) Presentations of case studies on the use of gas infrastructure, depleted gas fields, and underground storage for carbon sequestration, by December 2025.

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