

**Economic Commission for Europe**  
**Committee on Sustainable Energy**

**Group of Experts on Gas**

**Ninth session**

Geneva and online, 24-25 March 2022

Item 10 of the provisional agenda

**Adoption of Conclusions and Recommendations**

**Draft Conclusions and Recommendations**  
**arising from the ninth session of the Group of Experts on Gas**

**Draft for discussion**

**Agenda item 3: Election of officers**

1. The Group of Experts will be invited to elect a new Bureau to serve until the end of the 11<sup>th</sup> session. The new members are: Mr Francisco de la Flor (Spain) as Chair and Mr Florian Marko (Austria), Mr. Loghman Damirli (Azerbaijan), Mr James Diamond (Canada), Mr. Boris Maksijan (Croatia), Mr Amir Foster (Israel), Mr Torstein Indrebø (Norway), Mr. Dmitriy Shvedov (Russian Federation), Ms Olga Yudina (Russian Federation), and Mr Andrew Meluch (United States) as Vice-Chairs.

**Agenda item 4: Activities and priorities of the United Nations Economic Commission for Europe Committee on Sustainable Energy**

2. The secretariat updated the Group of Experts on the outcomes of the 30<sup>th</sup> session of the Committee on Sustainable Energy held in September 2021.

3. The Group of Experts noted with appreciation that the Committee adopted the Group of Experts' work plan for 2022-2023.

4. The Group of Experts noted the Committee's endorsement of the strategic review of the ECE Sustainable energy subprogramme (ECE/ENERGY/2021/4). The Group of Experts is committed to reflecting the strategic review in its future work. The Group of Experts once again called upon the member States to provide resources needed to accomplish all the activities that cannot be delivered through regular budget resources.

**Agenda item 5: Implementation of the 2020-2021 work plan**

5. The Group of Experts noted with appreciation the work of the Bureau and the secretariat in successfully delivering on the 2020-2021 work plan.

**Agenda item 6: Implementation of the 2022-2023 work plan**

**(a) Gas and Sustainable Development Goals**

6. The Group of Experts was informed about the outcomes of the workshop on gas prices held in December 2021. The Group of Experts endorsed the outcomes and concluded the following:

- a. High energy prices and current energy policies, including higher demand as a consequence of the post-pandemic economic recovery, have jeopardised attainment of 16 of the 17 Sustainable Development Goals (SDGs). Particularly negatively affected are the goals on poverty, hunger, health, and gender.
- b. Securing affordable access to natural gas could enhance attainment of SDG7. Higher penetrations of intermittent renewable energy generation will require flexibility and back-up power to balance and integrate the electricity system, and natural gas could contribute these services if atmospheric methane emissions are remediated.
- c. Several risk new factors to achieving the United Nations 2030 Agenda for Sustainable Development have emerged as a consequence of high gas and energy prices:
  1. Slow economic recovery, diminished energy access and compromised industrial competitiveness.
  2. Derailed and postponed decarbonization, as long-term high gas prices may slow coal-to-gas switching and possibly even lead to gas-to-coal switching.
  3. The crisis in European gas and electricity markets is becoming an infrastructure and political crisis that may affect, *inter alia*, post-Covid economic recovery.
  4. As Europe faces unprecedented energy poverty, unsustainable energy prices threaten the climate agenda and its support in many social strata. An inclusive and informed dialogue on the relationship between climate mitigation and energy poverty is needed, and the Group of Experts offers a platform for such a conversation

**(c) Methane management in the gas sector**

7. The Group of Experts was informed about the growing interest from ECE member States to accelerate action to mitigate methane emissions. The Group of Experts is committed to supporting these activities along the entire gas value chain. The Group of Experts recommended to ECE member States to support a resolution at the United Nations General Assembly declaring an International Decade for Methane Management. The Group of Experts also recommended to continue co-hosting and coordinating events that foster dialogue and

---

information exchange about methane mitigation best practices, such as the 23 March methane workshop co-hosted by the Group of Experts on Gas and the Global Methane Initiative.

8. Concerning the declaration of an International Decade of Methane, the Group of Experts recommended to ECE member States to ensure robust and accurate monitoring, reporting and verification (MRV) processes based on comparable approaches, as well as to continue engaging with others active on methane mitigation, including the OGMP, IMEO, the Global Methane Initiative and the Global Methane Pledge, to roll out the best available techniques to mitigate methane emissions. Sharing knowledge and raising awareness is key to achieving further reductions of methane emissions throughout the gas value chain.

9. The Group of Experts highlighted the need to extend the understanding of the global warming potential (GWP) of all gases, including methane and hydrogen, on a full life-cycle basis and to build upon the ongoing research initiatives in the field, with the involvement of academia.

**(d) Climate neutrality through synergies between gas(es) and renewable electricity**

10. Gas and renewables gases play a key role in the energy system. The Group of Experts concluded that the potential role of gases has not been considered fully in the scenarios of the “Technology Interplay Report” and recommended further work to address the shortfall.

**(e) Hydrogen: production and consumption**

11. Given the importance of possible future work on hydrogen classification, the Group of Experts invited all ECE member States to support work on terminology, taxonomy, and classification through extra-budgetary and in-kind support.

12. The Group of Experts concluded that a hydrogen classification based on colours has limited value in international trade, since such colour coding can aggregate several projects or production methods that have quite different greenhouse gas (GHG) footprints. Colour coding often does not take in account the entire value chain when calculating GHG footprints.

13. The Group of Experts stressed the need to develop a scientifically based terminology for hydrogen that reflects the volume of carbon dioxide emissions throughout the life cycle (“carbon footprint”). Developing an internationally recognized terminology requires broad-based agreement on fundamentals.

14. The Group of Experts concluded that effective deployment of a Guarantee of Origin mechanism requires that clear and agreed common terminology be adopted in national legal definitions as a basis for the underlying taxonomy. ECE member States could develop their own classification systems using the thresholds and benchmarks based on common terminology set out by the EU Taxonomy for Sustainable Activities as a reference and a starting point. A future UNECE taxonomy could include other economic, social, and environmental considerations as set forth in UNFC framework.

15. The Group of Experts recommended to ECE member States to investigate further integrated hydrogen production, transport, and consumption in the ECE region. The Group of

## **GEG-9/2022/INF.1**

Experts further recommended to ECE member States to examine regional potentials for hydrogen production and use at a local scale.

16. The Group of Experts recommended to ECE member States to promote pilot projects that foster regional energy security and decarbonisation.

17. The Group of Experts recommended to ECE member States to investigate and highlight commercial showcase hydrogen projects in the ECE region and further develop best practices.

### **(f) Hydrogen: system development and gas asset readiness**

18. The Group of Experts examined alternatives for transport of hydrogen and found them relevant to facilitating the connection between growing supply and demand markets. These alternatives include transport by vessels, pipeline or trucks, as economic circumstances demand.

19. The Group of Experts concluded that the current natural gas infrastructure will play a significant role in ramping up and developing a hydrogen market. The Re-Stream project showed how the natural gas transmission network could be repurposed to transport hydrogen in a cost-efficient way at a small fraction of the cost of building a new hydrogen pipeline network.

20. The Group of Experts concluded that hydrogen blending provided a suitable pathway to developing the hydrogen economy in certain regions, notably in the ramp-up and transition phase. Blending enables a flexible location for injection, is not linked to clusters, facilitates hydrogen projects and is compatible and complementary with other hydrogen infrastructure deployment (local clusters development, core infrastructure and grid, etc.).

### **(g) Use of gas in transportation – challenges and opportunities**

21. The Group of Experts noted with appreciation the progress made in implementing the project “Improving capacities of the UNECE member States to decarbonize the transport sector by increasing the use of natural gas as a motor fuel”. The project produced a comprehensive study including (i) assessment of the state of development of compressed natural gas (CNG) and liquefied natural gas (LNG) refuelling and storage infrastructure in the project countries; (ii) case studies with effective regulatory, legal, economic, technical, and public perception promotional activities to increasing the share on CNG/LNG vehicles in the light- and heavy-duty road fleets; (iii) life cycle analysis of competing fuelling options (diesel, natural gas, electricity, hydrogen) in the project countries evaluating total energy use, fuel economy, energy efficiency and greenhouse gas emissions; (iv) comparative analysis of safety requirements for refuelling stations as one of the most serious barriers to market development; (v) public opinion research on introducing natural gas as a motor fuel; (vi) case studies on popularization of using natural gas for vehicles, such as advertising, video, films; and (vii) recommendations on removing regulatory, legal, economic, technical and public perception measures aimed at promoting the use of gas in transportation.

22. The Group of Experts appreciated the discussions on findings of the study, its recommendations, and the state of development of CNG and LNG markets during the

workshops on “Decarbonizing Transport with Natural Gas” on 8 October 2021 and “Support to Decarbonization of Transport in Kazakhstan” on 24-25 November 2021.

23. Transport remains a significant source of air pollution in many cities in the ECE region. The Group of Experts acknowledged the need to improve understanding by all stakeholders on the potential benefits of natural gas in transport as a viable and low-carbon option, especially in urban areas. The Group of Experts recommended conducting additional capacity-building activities on regional prospects for development of CNG and LNG market in the context of decarbonizing urban transport.

24. The Group of Experts highlighted the contribution that LNG could provide to decarbonising maritime transport. Ships using LNG in the future could be fuelled by bio-LNG and/or synthetic LNG. Worldwide development of bunkering infrastructure is essential for fostering development of the maritime market.

25. The Group of Experts noted that planned project activities are to be finalized in 2022 and requested the secretariat to report on final project outcomes at its tenth session.

#### **(h) Carbon capture, utilisation, and storage: The role of gas infrastructure**

26. The Group of Experts of Gas acknowledged the potential, described in the Re-Stream study, for using existing European oil and gas infrastructure, if necessary, to transport carbon dioxide. The Group of Experts agreed to review other studies on the topic and present their results.

27. The Group of Experts recommended to ECE member States to consider the following perspectives:

- a. Carbon capture, use, and storage (CCUS) technology is could set forth a pathway to carbon neutrality to meet emission targets while mitigating the potential social and economic downsides of reducing of fossil fuel use.
- b. The viability of CCUS must be weighed comparing: 1) Costs of closing down fossil fuel-based production facilities and 2) Social, economic, and environmental costs of continued reliance of the fossil fuels.
- c. CCUS technology likely will be important for energy intensive industries that are hard to decarbonise, such as the cement and steel industries.
- d. CCUS technology can provide negative emissions through Biomass Energy with Carbon Capture and Storage (BECCS) and Direct Air Carbon Capture and Storage (DACCS), though carbon dioxide removal should be distinguished from CCUS.
- e. Hydrogen produced from natural gas with CCUS may become a significant part of a future hydrogen economy. Utilisation of gas infrastructure, both existing and new, will be key to cost-effective commercialisation of CCUS technology. Existing gas pipelines, both transmission and distribution, can be repurposed to integrate renewable and biomethane, CO<sub>2</sub> and low carbon hydrogen in a cost-efficient way.
- f. Some depleted gas fields could be used for CO<sub>2</sub> storage and some gas storage facilities could be converted to store hydrogen.
- g. LNG vessels could be retrofitted to transport liquified CO<sub>2</sub>.

- h. Technical resources and competence in the gas industry will be key to commercialisation and use of the CCUS technology.

**(i) Promoting sustainable and clean production, distribution, and consumption of gas and liquefied natural gas in the ECE region**

28. The Group of Experts reiterated its recent conclusion that natural gas, compared to other fossil fuels, could reduce the GHG footprint of the energy sector.

29. The Group of Experts concluded that existing and, where justified, new gas infrastructure—including pipelines, LNG installations and storage facilities — are key to improving energy security in Europe. Diversification of sources, suppliers, and transport routes is key to maintaining the stability and reliability of the energy system.

30. The Group of Experts offered to organize, as soon as circumstances allow, an inclusive dialogue on supply and demand of natural gas in Europe, aimed at improving the security, sustainability, availability, and affordability of natural gas.

**Agenda item 8: Preparations for the tenth session of the Group of Experts on Gas.**

31. The Group of Experts recommended the following topics for the substantive portion of its ninth session: [to be decided at the meeting].

32. The Group of Experts recommended that the tenth session of the Group of Experts be held in March 2023 in Geneva with the possibility of hosting a portion of it in September 2023 during the Committee on Sustainable Energy meeting.

**Agenda item 11: Adoption of the report and close of the meeting.**

33. The report of the meeting was adopted, including the conclusions and recommendations, subject to any necessary editing and formatting.

---