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**Economic Commission for Europe**

Committee on Sustainable Energy

**Group of Experts on Gas**

**Tenth session**

Geneva, 23-24 March 2023

 Report of the Group of Experts on Gas

 I. Introduction

1. The tenth session of the Group of Experts was held on 23-24 March 2023.

2. This report summarizes the discussions of the Group of Experts at its tenth session. All the documents and presentations of the session are available on the United Nations Economic Commission for Europe (ECE) website.[[1]](#footnote-2)

 II. Attendance

3. The session was attended by more than ~~130~~ experts from the following United Nations Economic Commission for Europe (ECE) member States: ~~Albania, Armenia, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, France, Finland, Germany, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta, Moldova, the Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, Spain, Ukraine, and the United States of America~~.

4. Experts from ~~Cameroon, Islamic Republic of Iran, and Nigeria~~ participated under Article 11 of the Commission’s Terms of Reference.

5. Representatives of the United Nations Economic Commission for Europe (ECE) attended. The European Union was represented. Representatives from the European Commission (EC) Directorate-General (D.G.) for Energy also participated.

6. Representatives of the following organizations participated: ~~Organisation of Arab Petroleum Exporting Countries (OAPEC), Gas Exporting Countries Forum and Global Methane Initiative (GMI)~~.

7. Representatives of non-governmental organizations, academia and the private sector, as well as by independent experts, attended the meeting.

 III. Adoption of the agenda (agenda item 1)

8. The Expert Group adopted the agenda as circulated previously (ECE/ENERGY/GE.8/2023/1).

 IV. Opening remarks (agenda item 2)

9. In welcoming participants to the session, the Chair noted that 2022 was an eventful and pivotal year the natural gas sector. Geopolitical tensions in the region, the need for new infrastructure, including LNG terminals, price volatility, a highlighted imperative of decarbonization, the deepened climate crisis, and other drivers, created a new landscape in Europe. The industry and the ECE member States have been adjusting to this new normal.

10. The Chair stressed that the Group of Experts helps ECE member States deliver on key political commitments such as the 2030 Agenda for Sustainable Development or the Paris Agreement on climate action. Focusing on concrete action, the Group of Experts explores how to reduce methane emissions, improve system resilience and security of supply, achieve net zero through decarbonized gases such as hydrogen, harness synergies with renewable energy, or use depleted gas fields for carbon dioxide storage.

11. Reconciling the continuing use of natural gas with the urgent need to achieve net zero means in practice to navigate a delicate course between energy security and the climate action. In this regard, the Group of Experts could consider the possibility of changing its name to Group of Experts on Gases. “Gases”, in such context, would be a collective name for natural gas and other, increasingly decarbonized gases such as biogas, biomethane, and hydrogen. Such a name change, if accepted would boost a closer collaboration in exploring synergies between renewable energy and renewable gases, including hydrogen, across the UNECE region.

12. In his opening remarks the Director of Sustainable Energy Division welcomed the partnership with the Global Methane Initiative of the US EPA. He announced co-hosting of the next Global Methane Forum, scheduled to take place in Geneva in March 2024 and invited the gas community to take an active role in the event and in forgiing its outcomes.

13. The Director noted that hydrogen is a key topic of not only this Group of Experts but of the whole Committee. In 2022, the Committee discussed a “Comprehensive and science-based terminology, classification and taxonomy for hydrogen”, which envisions a future UNECE taxonomy based on the United Nations Framework Classification for Resources (UNFC). UNECE is now looking how to expand the work on hydrogen within the Group of Experts on Gas and the Hydrogen Task Force.

14. Another important topic that emerged in 2022 was the system resilience and the security of supply. In September 2022 the Committee set up a Platform on Resilient Energy Systems for inclusive dialogue. In this regard, the Director singled out the event: “Energy system resilience: The future of gas supply in Europe”, organized by the Group of Experts in October 2022, as a good example of what the work under the Platform should focus on.

 V. Elections of officers (agenda item 3)

15. The current Bureau, elected in March 2022 to serve from the close of the ninth session for two years, comprises: 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 Uwe Wetzel (Germany), Mr Amir Foster (Israel), Mr Torstein Indrebø (Norway), and Mr Andrew Meluch (United States) as Vice-Chairs.

16. The Group of Experts noted the following changes to the Bureau (if any) and elected the following additional Vice-Chair(s): XXXX to serve until the end of the twelfth session in 2025.

17. The Group of Experts on Gas expressed its appreciation to the Bureau for its contribution to the deliverables of its 2022-2023 work plan.

 VI. Activities and priorities of the United Nations Economic Commission for Europe Committee on Sustainable Energy (agenda item 4)

18. The Director updated the Group of Experts on the outcomes of the thirty-first session of the Committee on Sustainable Energy (Geneva, 21-21 September 2022). He pointed out that ECE works to improve access to affordable and clean energy for all and help reduce greenhouse gas (GHG) emissions and the carbon footprint of the energy sector. The intent at the thirty-first session last September was to address the challenges we face in energy with products and activities that deliver measurable and tangible results. The Committee explored how best to support implementation of the 2030 Agenda and the Paris Agreement through …

 VII. Gas and Sustainable Development Goals (agenda item 5)

19. The Group of Experts explored how natural gas could accelerate the implementation of the 2030 Agenda for Sustainable Development. The discussion focused on the nexus natural gas-health and energy poverty caused by volatile energy prices in the ECE region and beyond.

20. The Group of Experts concluded that high and volatile energy, electricity, and heating costs, ~~caused to a great extent by supply constraints~~, have endangered the achievement of most Sustainable Development Goals (SDGs). After many years, energy and fuel poverty have emerged in many parts of Europe.

21. The Group of Experts further concluded that natural gas continues to play a key role in ensuring energy security in the short- ~~and~~ medium- *and long-*terms, ~~but in the long-term,~~ to create a sustainable path toward achieving SDGs ~~it will be important to develop an effective strategy to transition to cleaner energy sources such as low-carbon and renewable gases~~.

 VIII. Hydrogen (agenda item 6)

22. The Group of Experts highlighted that hydrogen is a gaseous energy carrier (vector) that can effectively contribute to decarbonisation of the energy supply. The Group of Experts remarked that the nascent hydrogen industry needs a rapid ramp up, and benefit from the opportunities offered by different and complementary pathways. The final shape of the hydrogen value chain may rely on an infrastructure based on blended gases to one fully dedicated to hydrogen, linking production and consumption sites, depending on the circumstances. Geographically, a hydrogen value chain may materialize in the shape of initial clustering up to a complete backbone development. Blends are both suitable for transmission across larges distances as well as for local consumption and production.

23. The Group of Experts specified that quick adoption of hydrogen, despite some technical and regulatory challenges and the need to ~~precisely determine~~ *give further detail* to its environmental impact, could reduce overall greenhouse gas emissions while facilitating the transition towards carbon neutrality in any of the pathways previously presented.

24. At its thirty-first session, the Committee requested that the Group of Experts on Gas lead the work on hydrogen, in collaboration with the other Groups of Experts. In response to this, the Group of Experts on Gas invited the Chair of the Committee, and the Chairs of the Committee’s subsidiary bodies to discuss synergies among the Groups and the way forward. The panel concluded that hydrogen is ~~a cross-cutting~~ *transversal* energy carrier (vector) that can generate important synergies across the energy supply chain. Hence, every Group of Experts under the Committee should consider how its activities could influence and be influenced by the emergence of hydrogen and how it could contribute its expertise.

25. The Group of Experts reviewed the proposed Terms of Reference of the future Hydrogen Task Force (ECE/ENERGY/GE.8/2023/4). The Group of Experts asked the Committee to review and update the Terms of Reference as presented in ECE/ENERGY/GE.8/2023/4, considering previous work done by the Group of Experts on Gas and with the participation of topic leaders from other Groups of Experts.

26. The Group of Experts reiterated the need to develop a classification for hydrogen that goes beyond colours and that accounts for the full life cycle of hydrogen production, transport, storage, trade, and use. This activity should cover the entire scope of hydrogen emissions through different production methods, including renewable and low carbon hydrogen.

*x. The Group of Experts invited ECE member States to conduct a study on the influence of hydrogen emissions on the greenhouse effect and climate change, taking into account the emerging processes that could violate the natural removal of natural methane from the atmosphere.*

27. The Group of Experts acknowledged the Delegated Regulations (2023/1087 and 2023/2086) of 10 February 2023 proposed by the European Commission to define what constitutes renewable hydrogen in the EU and on how to assess GHG emissions savings. These Regulations are tightly linked to other Directives and Regulations, such as the Renewable Energy Directive, and have implications for the development of the entire sector. The Group of Experts offered its expertise to disseminate the latest regulatory advances and their implications in ECE member States outside the EU.

28. The Group of Experts was informed about the outcomes of the event “Business case for hydrogen blending” held on 17 January 2023. The Group of Experts concluded that blending offers important opportunities for sector-coupling and decarbonisation, and it is particularly suitable where hydrogen production is decentralized and far from consumption centres. While hydrogen scale up may follow complementary developments (repurposing, retrofitting, clustering, newly dedicated assets), blending is a cost-effective option that takes advantage of existing infrastructure and hence gives immediate access to large delivery capacities. Blended hydrogen allows for an immediate reduction in GHG emissions for gas consumers and facilitates a market for producers. Challenges to blending are known and manageable (retrofitting, embrittlement, or hydrogen-sensitive demand). Almost 100 companies and associations highlighted the advantages of hydrogen blending and advocated for the technical and regulatory development of this pathway.

29. The Group of Experts invited ECE member States to support future extrabudgetary projects on hydrogen managed by the Sustainable Energy Division.

 IX. System Resilience and Security of Supply (agenda item 7)

30. On 18 October 2022, the Group of Experts organized, for the benefit of the Geneva-based Permanent Representations, a dialogue “Energy system resilience: The future of gas supply in Europe” ~~(ECE/ENERGY/GE.8/2023/3)~~. The event stemmed from the core mandate of the Group of Experts – to provide a forum for multi-stakeholder dialogue on sustainable and clean production, distribution, and consumption of gas in the ECE region.

*With reference to the deliberations at the dialogue, one delegation has stressed the need to ensure more balanced, objective and comprehensive consideration of existing pathways to ensure sustainable energy production and consumption in the UNECE region. It also expressed the view that the depoliticisation of energy trade and energy dialogue plays the key role in building energy security in the UNECE region and beyond.*

31. ~~The Group of Experts concluded that the affordability of energy, and particularly natural gas, has become a political issue of highest importance. This applies not only to residential consumers but, more importantly, to the industry users that rely on natural gas as a feedstock.~~

32. The Group of Experts highlighted the importance of building on new and existing supply chains to improve resilience and security, in regards of the climate agenda and economic competitiveness. This is to find an equilibrium between environmental sustainability and affordability.

33. The Group of Experts concluded that the key priorities for Europe continue to be how to: address possible interruptions in gas delivery; rebalance Europe’s energy gas supplies mapping possible alternatives; and take in account the urgent need to mitigate the impact of climate change while securing access to energy.

34. The Group of Experts acknowledged the role of renewable gases to enhance security of supply. *The renewable gases production process should include the most efficient available technologies and should not jeopardize food security and social justice.* A diversified portfolio on energy vectors, including biomethane, hydrogen and its derivatives, are central tools for a stable energy supply.

35. The Group of Experts offered its support to the work on just transition undertaken by the Group of Experts on Coal Mine Methane and Just Transition and requested the secretariat to explore opportunities for strengthening collaboration between the two Groups of Experts.

 X. Methane Emissions (agenda item 8)

36. The Group of Experts welcomed collaboration with the Global Methane Initiative and its Oil & Gas Sub-committee. The Group of Experts was informed about the growing interest from ECE member States to accelerate action to mitigate methane emissions, particularly from high emitting members that have signed the Global Methane Pledge, including the United States, Canada, and the EU.

37. The Group of Experts is committed to supporting methane management and emissions reduction activities along the entire gas value chain.

38. 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 22 March 2023 methane workshop co-hosted by the Group of Experts on Gas and the Global Methane Initiative. This includes the co-hosting of the next Global Methane Forum, scheduled to take place in Geneva in March 2024.

39. 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 through the OGMP, IMEO, the Global Methane Initiative and the Global Methane Pledge, to roll out the best available techniques to mitigate methane emissions.

40. The Group of Experts agreed that sharing knowledge and raising awareness is key to achieving further reductions of methane emissions along the complete gas value chain. To support this effort, the Group of Experts recommended fostering exchanges on methane management, mitigation, and policy-making best practices, such as through workshops, trainings, and webinars.

41. The Group of Experts welcomed the efforts of the European Commission to develop a regulation to address methane emissions in the coal, oil and gas sectors. Among its key objectives, the regulation sets mandatory monitoring, reporting and verification procedures, leak detection and repair campaigns as well as strict restrictions to venting and flaring. Being a technical regulation with potential implications not only within the European Union but for the whole supply chain, it is important to align with existing standards (e.g. OGMP 2.0). European regulation should allow operators to prioritize the most effective methane mitigation actions with regards of the type of asset and operation.

 XI. Carbon Capture, Use and Storage

42. The Group of Experts was updated on developments in carbon capture use and storage, including the use of depleted on- and off-shore gas fields for CO2 storage.

43. The Group of Experts reiterated that carbon capture, use and storage (CCUS) technology is essential to mitigating climate change and recommended to ECE member States to consider the following facts:

* The key to advancing CCUS technologies is a favourable governmental and regulatory framework that will incentivise the industry to embark on the path to net zero that makes use of CCUS-technologies.
* The regulatory framework should be developed taking in account the economic competitiveness of the ECE region in a global marketplace.
* Robust value chains must be established enabling CO2 emitters to dispose the carbon into safe storage sites.
* Partnerships between the emitters and service providers should be set up in a balanced way, taking into account all parties’ interests.
* Attractive business models must be developed building on the local, national, and regional circumstances.
* New modular technologies are being developed facilitating CCUS use in small-scale applications that are critical for accelerating technological development.
* The use of CCUS to mitigate emissions of GHGs will help hard-to-abate industries to maintain operations, provide job security and embark on the path of a just transition

44. The Group of Experts further concluded that some depleted gas fields have the potential to be used for CO2 storage, while some of the underground gas storage facilities could be converted to store an increasingly decarbonized mixture of natural gas and hydrogen.

 XII. Emerging issues and work plan for 2024-2025 (agenda item 10)

45. The Group of Experts noted that, thanks to robust activities in 2022, it is on track to implement successfully its 2022-2023 work plan.

46. The Group of Experts approved its draft work plan for 2024-2025 as presented (room document GEG-8/2023/INF.1), subject to incorporation of amendments as agreed at the meeting: xxxx.

47. As per the Committee’s request, the work plan for 2024-2025 contains additional activities that support the ECE Platform on Resilient Energy Systems. The activities under the Platform could involve a series of dialogues on resilient energy, similar to the event held on 18 October 2022.

48. The Group of Experts requested the secretariat to submit the draft work plan as a parliamentary document for 2024-2025 to the Committee on Sustainable Energy at its thirty-second session.

49. The Chair of the Group of Experts encouraged all members to actively engage in the work of the Group to assure timely and effective delivery of the tasks indicated in the 2024-2025 Work Plan.

 XIII. Preparations for the eleventh session of the Group of Experts on Gas (agenda item 12)

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

51. The Group of Experts recommended that the eleventh session of the Group of Experts be held in March 2024 during the ECE Methane Week.

52. The Group of Experts requested the Bureau, in cooperation with the secretariat, to develop an extrabudgetary funding strategy including list of potential donors to approach.

 XIV. Adoption of the report and close of the meeting
(agenda item 15)

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

1. https://unece.org/sustainable-energy/events/10th-session-group-experts-gas [↑](#footnote-ref-2)