# **Economic and Social Council**

Distr.: General 18 November 2022

Original: English

# **Economic Commission for Europe**

Committee on Sustainable Energy

**Group of Experts on Energy Efficiency** 

Ninth session

Geneva, 3-4 October 2022

#### Report of the Group of Experts on Energy Efficiency on its ninth session

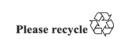
#### I. Introduction

- 1. The ninth session of the Group of Experts on Energy Efficiency (the Group of Experts) was held during two days from 3 to 4 October 2022. Due to continued impediments associated with COVID-19, the session was conducted in a hybrid format.
- 2. This report summarizes the proceedings of the Group of Experts at its ninth session. All the documents related to the session are available on the website of the United Nations Economic Commission for Europe (ECE).\*

#### II. Attendance

- 3. The meeting of the Group of Experts was attended by 122 participants. Of these, 80 were participating virtually and 42 in-person.
- 4. Experts from the following ECE member States participated: Belarus, Bosnia and Herzegovina, Bulgaria, Cyprus, Czech Republic, Denmark, Finland, France, Georgia, Germany, Greece, Ireland, Italy, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Republic of Moldova, Poland, Romania, Russian Federation, Slovakia, Türkiye, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, and Uzbekistan.
- 5. Experts from Argentina, India, and Islamic Republic of Iran participated under Article 11 of the Terms of Reference of the Commission (E/ECE/778/Rev.5).
- 6. The following United Nations specialized agencies, funds and programmes were in attendance: United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), UNEP Copenhagen Climate Centre (UNEP-CCC), United Nations Industrial Development Organization (UNIDO), and United Nations Human Settlements Programme (UN-Habitat).

<sup>\*</sup> Official documents, room documents, presentations delivered at the meeting, and other relevant materials are available on the ECE website (see https://unece.org/sustainable-energy/events/ninth-session-group-experts-energy-efficiency). Official documents of the session are also available at Official Document System of the United Nations (see http://documents.un.org/).





7. The meeting was also attended by representatives of non-governmental organizations, academia, and private sector, as well as by independent experts.

### III. Adoption of the agenda (agenda item 1)

Documentation: ECE/ENERGY/GE.6/2022/1 – Annotated provisional agenda

- 8. In accordance with the Rule 7 of the Rules of Procedure of the Commission (E/ECE/778/Rev.5), the first item of the provisional agenda is the adoption of the agenda.
- 9. The Co-Chair of the Group of Experts, Mr. Stefan M. Buettner, opened the meeting and presented the provisional agenda as contained in ECE/ENERGY/GE.6/2022/1, which was adopted provided interchange, in the interest of time, of items 6 and 7 with item 8.

# IV. Election of officers (agenda item 2)

- 10. The secretariat received the following nominations from the member States to stand for election at the ninth session of the Group of Experts: Mr. Stefan M. Buettner (Germany) as Chair; and Ms. Nurangiz Farajullayeva (Azerbaijan), Mr. Andrei Miniankou (Belarus), Mr. Omar Tsereteli (Georgia), Mr. Alexey Tulikov (Russian Federation), Ms. Ekaterina Kvasha (Russian Federation), and Mr. Calvin Johnson (United States of America) as Vice-Chairs.
- 11. The secretariat also received from respective organizations nominations of Mr. Zlatko Pavicic (Croatian Inventors Network) and Mr. Serhiy Porovskyi (Professional Association of Ecologists of Ukraine) to join the Bureau of the Group of Experts (the Bureau) as Vice-Chairs (without the right to vote).
- 12. The Bureau invited Mr. Martin K. Patel (University of Geneva) and Mr. Benoit Lebot (French Ministry of Ecological Transition) to continue their service on the Bureau as Vice-Chairs (without the right to vote) and strengthen its activities. The Bureau also invited Mr. Hannes MacNulty (Green Growth Knowledge Partnership) and Mr. Vahram Jalalyan (United Nations Development Programme) to continue their service on the Bureau as Co-Chairs of the Task Force on Industrial Energy Efficiency and the Joint Task Force on Energy Efficiency Standards for Buildings, respectively, and *ex officio* Vice-Chairs (without the right to vote). The elected Chair of the Group of Experts, Mr. Stefan Buettner, was invited to continue co-chairing the Task Force on Energy Efficiency in Industry.
- 13. The Chair of the Task Force on Digitalization in Energy of the Group of Experts, Mr. Piyush Verma (United Nations Development Programme), informed the Group of Experts of his early resignation from the office effective conclusion of the ninth session, and recommended, following the consultations held with the Task Force on Digitalization in Energy and its favorable opinion, that the following members of the Task Force on Digitalization in Energy assume the office as Co-Chairs: Ms. Elizabeth Massey (The Energy Authority) and Mr. Andrei Covatariu (Energy Policy Group). The recommended candidates were therefore proposed to stand for election at the ninth session of the Group of Experts as Co-Chairs of the Task Force on Digitalization in Energy and *ex officio* Vice-Chairs (without the right to vote).
- 14. The Group of Experts elected Mr. Stefan Buettner (Germany) as Chair, and Ms. Nurangiz Farajullayeva (Azerbaijan), Mr. Omar Tsereteli (Georgia), and Mr. Calvin Johnson (United States of America) as Vice-Chairs. The Chair of the Group of Experts is *ex officio* Vice-Chair of the Committee on Sustainable Energy.
- 15. The Group of Experts also elected the following candidates as Vice-Chairs (without the right to vote): Mr. Zlatko Pavicic (Croatian Inventors Network) and Mr. Serhiy Porovskyi (Professional Association of Ecologists of Ukraine) nominated by the respective organizations; Mr. Benoit Lebot (French Ministry of Ecological Transition) and Mr. Martin K. Patel (University of Geneva) invited by the Bureau, and; *ex officio*, Mr. Hannes MacNulty (Green Growth Knowledge Partnership) as Co-Chair of the Task Force on Energy Efficiency in Industry, Mr. Vahram Jalalyan (UNDP Armenia) as Co-Chair of the Joint Task Force on

Energy Efficiency Standards for Buildings), and Ms. Elizabeth Massey (The Energy Authority) and Mr. Andrei-Silviu Covatariu (Energy Policy Group) as Co-Chairs of the Task Force on Digitalization in Energy.

- 16. The term of office for the elected members of the Bureau is two years, i.e. from the close of the ninth session until the close of the eleventh session of the Group of Experts.
- 17. The Group of Experts has therefore the following members to serve on the Bureau:
- (a) Until the conclusion of the tenth session: Mr. Romanas Savickas (UNEP-CCC, Copenhagen Climate Centre) as Vice-Chair (without the right to vote) and Ms. Irena Perfanova (Real Estate Tribune / AIIC Ltd.)¹ as Vice-Chair (without the right to vote) and Co-Chair of the Joint Task Force on Energy Efficiency Standards for Buildings;
- (b) Until the conclusion of the eleventh session: Mr. Stefan Buettner (Germany) as Chair, and Ms. Nurangiz Farajullayeva (Azerbaijan), Mr. Omar Tsereteli (Georgia), and Mr. Calvin Johnson (United States of America) as Vice-Chairs; as Vice-Chairs (without the right to vote): Mr. Zlatko Pavicic (Croatian Inventors Network), Mr. Serhiy Porovskyi (Professional Association of Ecologists of Ukraine), Mr. Benoit Lebot (French Ministry of Ecological Transition), Mr. Martin K. Patel (University of Geneva). Further, as Vice-Chairs *ex officio* (without the right to vote): Mr. Hannes MacNulty (Green Growth Knowledge Partnership, as Co-Chair of the Task Force on Energy Efficiency in Industry), Mr. Vahram Jalalyan (UNDP Armenia, as Co-Chair of the Joint Task Force on Energy Efficiency Standards for Buildings), Ms. Elizabeth Massey (The Energy Authority, as Co-Chair Task Force on Digitalization in Energy), and Mr. Andrei-Silviu Covatariu (Energy Policy Group, as Co-Chair Task Force on Digitalization in Energy).

#### V. Opening remarks (agenda item 3)

18. The acting Co-Chairs of the Group of Experts, Mr. Stefan M. Buettner, Mr. Vahram Jalalyan, and Mr. Piyush Verma delivered opening remarks and presented an overview of activities of the Group of Experts and its thematic Task Forces in line with the Work Plan of the Group of Experts on Energy Efficiency for 2022-2023 (the Work Plan 2022-2023, ECE/ENERGY/2021/10) and with the activities and priorities of the ECE Committee on Sustainable Energy (the Committee).

# VI. Activities and priorities of the Committee on Sustainable Energy and matters for consideration by the Group of Experts (agenda item 4)

- 19. The secretariat provided an overview of recent activities of the Committee following its thirty-first session, 21-23 September 2022, as well as key takeaways and decisions taken related to the work of the Group of the Experts.
- 20. Involvement of the Group of Experts in organization of, and contribution to the following sessions of the Committee at its thirty-first session, was highlighted:
- (a) Building resilient energy systems in the ECE region: achieving greater energy security, affordability, and net-zero (high-level segment);
- (b) Delivering on sustainable energy: subprogramme accomplishments since the thirtieth session of the Committee on Sustainable Energy;
  - (c) Achieving high performance in buildings;
  - (d) Technical assistance, regional outreach and collaboration activities;
  - (e) Preparing for the seventieth session of ECE;
  - (f) Looking ahead: Future work of the Committee on Sustainable Energy.

<sup>&</sup>lt;sup>1</sup> Nominated by the Committee on Urban Development, Housing and Land Management.

- 21. As concerns matters directly related to the mandate of the Group of the Experts, the following observations were made:
  - (a) On resilient energy systems in the ECE region, the Committee:
  - (i) Acknowledged that implementation of energy efficiency measures offers increase of energy systems resilience, as well as the importance of integrating efficiency strategies to reinforce the durability and flexibility of energy systems and thus improving their ability to absorb shocks and recover, among other taking advantage of advancements in applicable digital solutions;
  - (ii) Argued that at its core, energy efficiency is about reducing the demand for energy to perform the same task or achieve the same outcome, while contributing to reduction of energy costs;
  - (iii) Proposed, underscoring an expeditious beneficial impact of energy efficiency deployment on improving energy resiliency, to take account of how improvements in energy efficiency across buildings, industry, transport, and other energy consuming systems can reduce the end-use energy demand as well as the need for redundancy to maintain resiliency;
  - (iv) Noted that the Work Plan 2022-2023 directly supports increased resilience of energy systems and, in the framework of the ECE Platform on Resilient Energy Systems, invited the Group of Experts to contribute its knowledge and expertise to increase attention to energy conservation from a system level perspective to improve resilience through cross-sectoral action on energy efficiency and continue hosting inclusive dialogue to help building energy resilience across the ECE region.
  - (b) On activities on high-performance buildings, the Committee:
  - (i) Noted with appreciation the accomplishments to date and requested the secretariat continue its efforts to develop the network of International Centres of Excellence on High Performance Buildings to support and advance the principles of the Framework Guidelines for Energy Efficiency Standards in Buildings (the Framework Guidelines, ECE/ENERGY/GE.6/2020/4);
  - (ii) Requested the Group of Experts to report on the progress at the thirtysecond session of the Committee.
  - (c) On preparing for the seventieth session of ECE on the theme "Digital and Green Transformation for Sustainable Development in the UNECE Region", the Committee:
  - (i) Noted three key areas where it could actively support the theme, namely digitalization, high-performance buildings, and low- and zero-carbon technology;
  - (ii) Acknowledged that the Group of Experts is best positioned to directly support the theme in the areas of digitalization in energy (Task Force on Digitalization in Energy) and high-performance buildings (Joint Task Force on Energy Efficiency Standards for Buildings), and that issues of low- and zero-carbon technology also fall within the scope of expertise of the Group of Experts (Task Force on Energy Efficiency in Industry).
- 22. The secretariat also informed the Group of Experts on the decision by the Committee to extend the mandates of the Task Force on Energy Efficiency in Industry and the Task Force on Digitalization in Energy to 2023-2024.<sup>2</sup>

The mandate of the Joint Task Force on Energy Efficiency Standards for Buildings runs out in 2023 and would require renewal by the Committee at its thirty-second session.

# VII. Plenary session on the role of energy efficiency in building resilient energy systems in the United Nations Economic Commission for Europe region (agenda item 5)

Documentation: CSE-31/2022/INF.2 – Building Resilient Energy Systems in the United

Nations Economic Commission for Europe Region: Achieving Greater

Energy Security, Affordability, and Net-zero

23. Experts participated in a moderated discussion entitled "Increasing resilience of the energy system: action on energy efficiency in industry and in buildings, on digitalization in energy, and on transport and infrastructure" on contemporary issues of the resilience of energy system in the ECE region, facilitated by the thematic Task Forces. Unofficial room document "Building Resilient Energy Systems: Technical Considerations and Actions for Achieving Greater Energy Security, Affordability and Net-zero in the ECE Region" (CSE-31/2022/INF.2), developed by the Bureaux of the subsidiary bodies of the Committee, served as a basis for discussion under this agenda item.

#### 24. The Group of Experts:

- (a) Acknowledged that a noticeable amount of energy is wasted due to energy system-wide inefficiencies, and suggested refocusing from technology, which is one of many aspects of energy efficiency, to integrated thinking, policymaking, and governance, and to helping enable larger scale implementation of existing solutions by energy system actors, as related challenges are often more of an adoption nature;
- (b) Argued that in many instances, tangible action on buildings is not enabled, including is such aspects as: alignment of building codes with high-performance buildings targets and their application in construction and renovation techniques; improving supply chains for the construction business, including recovery of materials; and financial mechanisms that offer incentives for building and renovation in line with best available technologies and practices;
- (c) Underscored that development of pathways for a balanced integration of electric mobility, is a unique interface between the energy and transport sectors requiring a new level of coordination across historically siloed stakeholders. It may help turning electric mobility into a grid asset, maintaining electricity system resilience, and taking advantage of distributed energy resources operated with the support from applicable digital solutions;
- (d) Noted that digitalization may serve as an instrument for equilibration, when policy balance between (i) energy security, (ii) ensuring affordable, reliable, sustainable and modern energy services, and (iii) environmental sustainability of energy use, is challenged by the changing energy landscape. Technology compatibility issues, standardization, data privacy and cybersecurity, and contribution of digitalization to reliability of the energy system were discussed, among other. The Group of Experts observed that digitalization in energy is complex, as it potentially impacts economies and societies and implies disruptive changes along the process of providing the necessary infrastructure and interfaces to act intelligently and efficiently;
- (e) Acknowledged a relatively low awareness of many energy system actors of the potential of energy efficiency as energy resource of its own right, of the resource use optimization that energy efficiency offers, and in many instances also lack of the needed skillset to implement the existing energy efficiency solutions. The Group of Experts underscored the need to strengthen knowledge sharing and capacity-building activities, to facilitate fundamental embeddedness and prioritization of energy efficiency in energy policies and development strategies to achieve higher systemic efficiencies, and to ensure overall net benefits to the energy system and its actors throughout the value chain;
- (f) Further discussed practical ways of how to help significantly improve energy efficiency in the ECE region, among other by means of hosting a technical dialogue addressing matters related to implementation of energy efficiency measures in industry, buildings, transport, and other energy end-uses, including through promoting digital technologies, and the associated implications and requirements on the regulatory framework.

25. In support to the activities on the ECE Platform on Resilient Energy Systems overseen by the Committee, the Group of Experts requested the Bureau, with support from the secretariat, to formulate activities that might further contribute to efforts to increase resilience of the energy systems in the ECE region and consider their inclusion in the future Work Plan of Group of Experts on Energy Efficiency for 2024-2025.

#### VIII. Improving energy efficiency in industry (agenda item 6)

Documentation: GEEE-9/2022/INF.2 - Study "Potential for Improving Industrial

Energy Efficiency in Kazakhstan and Ukraine"

GEEE-9/2022/INF.4 – Leveraging Financial Mechanisms for Increased

Investment in Energy Efficiency

Study "Potential for improving energy efficiency in the refrigeration and air-conditioning sector of Uzbekistan"

- 26. The work of the Group of Experts on industrial energy efficiency is carried out by its Task Force on Energy Efficiency in Industry, which implements activities in line with the Work Plan 2022-2023 and the Industrial Energy Efficiency Action Plan (ECE/ENERGY/GE.6/2020/3).
- 27. The Task Force on Energy Efficiency in Industry reported on its activities in the intersessional period and presented its unofficial documents that assess the potential for improving industrial energy efficiency and discuss the means of leveraging financial mechanisms for increased investment in energy efficiency. These unofficial documents will serve as an input for official documents that will be developed and presented to the Group of Experts at its tenth session in 2023.
- 28. A subsequent panel discussion assessed the matter of energy service contracting in industry and buildings, notably selected countries' experience in financing investments in energy efficiency, including through public-private partnerships and involvement of energy service companies.
- 29. The Group of Experts also assessed the status of implementation of the Work Plan 2022-2023 as it pertains to concrete activities of the Task Force on Industrial Energy Efficiency and elaborated on concrete steps to implement any outstanding activities.
- 30. The Group of Experts:
- (a) Recognized the progress of the Task Force on Industrial Energy Efficiency in implementing the activities in line with the Work Plan 2022-2023 and the Industrial Energy Efficiency Action Plan;
- (b) Recommended to continue research and analysis of international practices and the existing instruments to leverage financial mechanisms for increased investment in energy efficiency;
- (c) Welcomed the regular exchanges of know-how and best practices on improving energy efficiency in the industrial sector in the ECE region organized by the Task Force on Energy Efficiency in Industry in the form of information sharing sessions (online, on 1 December 2021, 10 February 2022, 4 April 2022, and 16 June 2022), as well as its efforts to enhance involvement of industry in achieving more sustainable and energy-efficient production, logistics, and consumption;
- (d) Acknowledged the continued engagement of the Task Force on Energy Efficiency in Industry in, and its substantial contribution to, sustainable energy projects, activities, and initiatives, including on cross-cutting issues within the scope of its expertise such as systemic efficiency improvements;
- (e) Welcomed extension of the mandate of the Task Force on Industrial Energy Efficiency for 2023-2024;
- (f) Encouraged ECE member States to support the activities of the Task Force on Energy Efficiency in Industry, including through provision of extrabudgetary resources.

### IX. Improving energy efficiency in buildings (agenda item 7)

Documentation: ECE/ENERGY/GE.6/2022/3 – Report on enhancing national capacities

to develop and implement energy efficiency standards for buildings in

the ECE region

31. The work of the Group of Experts on energy efficiency in buildings is carried out by the Joint Task Force on Energy Efficiency Standards in Buildings, established under the Committee on Sustainable Energy and the Committee on Urban Development, Housing and Land Management, and hosted by the Group of Experts.

- 32. ECE implemented a project "Enhancing National Capacities to Develop and Implement Energy Efficiency Standards for Buildings in the UNECE Region" overseen by the Joint Task Force on Energy Efficiency Standards in Buildings.
- The Group of Experts at its eighth session (20-21 September 2021) took note of the progress made towards implementation of the activities of the project, notably the conducted gap analysis between the performance objectives set forth in the Framework Guidelines (ECE/ENERGY/GE.6/2020/4) and the current energy efficiency standards and their implementation in the countries of South-Eastern and Eastern Europe, the Caucasus, Central Asia, and in the Russian Federation, and in-depth national studies with a detailed gap analysis in Armenia, Kyrgyzstan, and the Republic of Moldova. The Group of Experts then requested the secretariat (ECE/ENERGY/GE.6/2021/2) to report on the results of project implementation, including on trainings on high-performance energy efficiency standards in buildings and outcomes of an impact study on how member States could better use and implement best practices and guidelines developed by ECE to improve energy efficiency in buildings, at the ninth session of the Group of Experts. In response, the Joint Task Force on Energy Efficiency Standards in Buildings developed and presented a document entitled "Report on enhancing national capacities to develop and implement energy efficiency standards for buildings in the ECE region" (ECE/ENERGY/GE.6/2022/3) highlighting the results of implementation of the project.
- 34. Activities undertaken by the Group of Experts and its Joint Task Force on Energy Efficiency Standards in Buildings to help achieve high performance in buildings in the member States, in line with the Framework Guidelines, are strengthened through the ECE High Performance Buildings Initiative. The current progress and accomplishments, as well as the vision of ongoing and future regional cooperation in the area of high-performance buildings, were reported by representatives of the International Centres of Excellence on High-Performance Buildings.
- 35. The Group of Experts also assessed the status of implementation of the Work Plan 2022-2023 as it pertains to concrete activities of the Joint Task Force on Energy Efficiency Standards in Buildings and elaborated on concrete steps to implement any outstanding activities.

#### 36. The Group of Experts:

- (a) Took note of the findings of the extrabudgetary project, funded by the Russian Federation, "Enhancing National Capacities to Develop and Implement Energy Efficiency Standards for Buildings in the UNECE Region" contained in the Report on enhancing national capacities to develop and implement energy efficiency standards for buildings in the ECE region (ECE/ENERGY/GE.6/2022/3);
- (b) Invited member States to implement recommendations from the project to overcome barriers to effective achievement of the potential of energy efficiency policies, to bridge the existing gaps, and to enhance national capacity to develop and implement energy efficiency standards for high-performance buildings. Expressed its readiness to support ECE member States in their efforts to ensure implementation of energy efficiency standards in buildings in conformity with the Framework Guidelines;
- (c) Recognized the support from the Regional Advisory Services and took note of the delivered training workshops on energy efficiency standards in buildings and highperformance buildings addressed to building sector practitioners, policymakers, and trainers

that were held as mandated activities of the Joint Task Force on Energy Efficiency Standards for Buildings (workshop on Best practices to address the issues of energy efficiency in buildings and their implementation in ECE member States, 11 March 2022, Yerevan, Armenia and online; workshop on Regional and National Studies on a Gap Analysis between the Performance Objectives of the Framework Guidelines for Energy Efficiency Standards in Buildings and Implementation of Current Building Energy Efficiency Standards, 20 September 2021, Palais des Nations, Geneva, Switzerland and online; workshop to validate the gap analysis between the performance objectives set forth in the Framework Guidelines for Energy Efficiency Standards in Buildings and current energy efficiency standards and their implementation in the countries of South-Eastern and Eastern Europe, the Caucasus, Central Asia, and in the Russian Federation, 9 April 2021, Geneva, Switzerland, Chisinau, Republic of Moldova, and online; national training seminars on high-performance energy efficiency standards in buildings in the project focus countries: Armenia, 25-26 October 2021; Kyrgyzstan, 29-30 November 2021, and Republic of Moldova, 20-21 January 2022).3 The Group of Experts recommended continuation of such trainings subject to the availability of extrabudgetary resources and provided that circumstances permit;

- (d) Acknowledged the contribution by the Joint Task Force on Energy Efficiency Standards in Buildings, made within the scope of its expertise, to activities of the Committee on Sustainable Energy and its subsidiary bodies, notably on the issues of buildings' energy supply. The Group of Experts commended the Task Force for its efforts to promote application of a holistic systems approach to building design, delivery, and operation, that helps align buildings with the highest standards of health, comfort, well-being, and sustainability, thus improving energy productivity and reducing carbon dioxide emissions;
- (e) Encouraged ECE member States to pay attention to technologies and legislation for the development and implementation of energy efficiency measures in the context of the ongoing geopolitical crises that are disrupting the reliability of the energy system and impeding the energy flows across the ECE region and beyond;
- (f) Also encouraged ECE member States to support the activities of the Joint Task Force on Energy Efficiency Standards in Buildings, including through provision of extrabudgetary funding.

# X. Unlocking energy efficiency potential through digitalization (agenda item 8)

Documentation:

ECE/ENERGY/GE.6/2022/4-ECE/ENERGY/GE.5/2022/4

Digitalization: Accelerating the Electricity System Transformation Joint Paper by the Task Force on Digitalization in Energy of the Group of Experts on Energy Efficiency and by the Group of Experts on Cleaner Electricity Systems

ECE/ENERGY/GE.6/2022/5 – Addressing behavioural barriers to Energy Digitalization

GEEE-9/2022/INF.3 – Policy discussion – Challenges of big data and analytics-driven demand-side management

ECE/TRANS/WP.5/2022/2 – Taking stock of new trends towards electric vehicle charging infrastructure

- 37. The work of the Group of Experts on digitalization is carried out by its Task Force on Digitalization in Energy, which also serves as an umbrella for the subsidiary bodies of the Committee to conduct relevant research and assess sectoral opportunities and challenges.
- 38. In the intersessional period, the Task Force on Digitalization in Energy conducted research focusing on opportunities that digitalization presents to improve systemic energy efficiency and particularly that of electricity systems (in cooperation with the Group of Experts on Cleaner Electricity Systems), on behavioural barriers to broader deployment of

<sup>&</sup>lt;sup>3</sup> See: https://unece.org/sustainable-energy/regional-advisory-services/about-project

digital solutions, and on challenges of big data analytics in the context of distribution grid and demand-side management. The respective results of this work were presented to the Group of Experts. Document entitled "Taking stock of new trends towards electric vehicle charging infrastructure" (ECE/TRANS/WP.5/2022/2), developed by the ECE Sustainable Transport Division and to which the Task Force on Digitalization in Energy contributed, was also brought to the attention of the Group of Experts.

- 39. Noticing growing recognition of the importance of digitalization and its contribution to sustainable energy development, the Task Force on Digitalization in Energy organized a discussion in the form of a roundtable, where the findings from its research, including conclusions and recommendations, were presented. The debate encouraged participation of policymakers from ECE member States and was aimed to take a better account of national circumstances in the ongoing analysis of the Task Force on Digitalization in Energy of opportunities and challenges that digitalization represents across the energy system, and to develop a systematic roadmap embedding digitalization in the work of the Committee and its subsidiary bodies.
- 40. The need for focused research on certain areas withing the digitalization domain was further brought to attention, including on big data technology advancement (e.g., natural language processing, digital twin modelling, demand and load forecasting, optimized machine learning, progression of artificial intelligence capabilities), energy system resilience, infrastructure investment as it relates to data access, storage, management, and real-time analytics.
- 41. The Group of Experts further assessed the status of implementation of the Work Plan 2022-2023 as it pertains to concrete activities of the Task Force on Digitalization in Energy and elaborated on concrete steps to implement any outstanding activities.

#### 42. The Group of Experts:

- (a) Took note of the documents prepared by the Task Force on Digitalization in Energy and of the conclusions and recommendations contained therein;
- (b) Urged representatives of ECE member States to participate in greater numbers in the activities of the Task Force on Digitalization in Energy and encouraged them to provide their support through development of national case studies and conceptual application of findings, conclusions, and recommendations contained in the documents prepared by the Task Force on Digitalization in Energy, as well as through provision of extrabudgetary funding facilitating such work;
- (c) Welcomed extension of the mandate of the Task Force on Digitalization in Energy for 2023-2024.

# XI. Report on the status of implementation of the Work Plan of the Group of Experts on Energy Efficiency for 2022-2023 (agenda item 9)

- 43. The secretariat reported on the status of implementation of the Work Plan 2022–2023, as well as on the support of the Regional Advisory Services in the area of energy efficiency.
- 44. The Group of Experts reviewed the activities implemented over the intersessional period mandated by the Work Plan 2022-2023, as well as other sustainable energy activities and initiatives that the Group of Experts was involved in, and exchanged views on practical implementation of outstanding activities of the Work Plan 2022-2023.

#### 45. The Group of Experts:

- (a) Took note of the progress of implementation of the Work Plan 2022-2023 as concerns the Task Force on Industrial Energy Efficiency, the Joint Task Force on Energy Efficiency Standards in Buildings, and the Task Force on Digitalization in Energy;
- (b) Recognized, noting the growing complexity of energy efficiency issues, the value of the ongoing Regulatory and Policy Dialogue Addressing Barriers to Improve Energy

Efficiency that is being carried out through cross-sectoral cooperation and interdisciplinary research, notably within the trade, environment, housing, and transport domains of ECE;

(c) Underscored that energy efficiency should be valued as energy resource of its own right. Possibilities and solutions to improve systemic efficiency, optimize resources use, and reduce associated carbon footprint (including by means of digitalization), should be prioritized, duly assessed, and implemented if feasible for economic recovery, and when planning building new, modernization and restoration of older or existing, and reconstruction of damaged and destroyed buildings, industry, and infrastructure. Urged this be borne in mind when planning future activities of the Group of Experts.

#### XII. Other business (agenda item 10)

46. No issues were raised under this agenda item.

#### XIII. Dates of the next meeting (agenda item 11)

47. The tenth session of the Group of Experts is scheduled to take place in Geneva on 5 and 6 October 2023. The Group of Experts confirmed its proposal from the previous sessions that its meetings may take place in venues outside Geneva.

# XIV. Adoption of the report and close of the meeting (agenda item 12)

Documentation: GEEE-9/2022/INF.1 – Draft conclusions and recommendations arising

from the ninth session of the Group of Experts on Energy Efficiency

ECE/ENERGY/GE.6/2022/2 - Report of the Group of Experts on

Energy Efficiency on its ninth session

- 48. Draft conclusions and recommendations arising from the ninth session of the Group of Experts on Energy Efficiency (GEEE-9/2022/INF.1) were circulated to participants and Geneva Permanent Representations.
- 49. The Co-Chairs of the Group of Experts, with the assistance of the secretariat, summarized the discussions, reflecting in a concise and factual manner the views expressed by participants.
- 50. The Group of Experts adopted the draft conclusions and recommendations arising from the ninth session of the Group of Experts on Energy Efficiency, which are included under the relevant agenda items highlighted in this report.
- 51. The report of the meeting was adopted, including conclusions and recommendations, subject to any necessary editing and formatting. Following that, the meeting was closed.