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Report of the Committee on Sustainable Energy on its twenty-fourth session

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I. Introduction and attendance

1. The Committee on Sustainable Energy focussed its twenty-fourth session on pathways to sustainable energy. As an underlying element of all of the Sustainable Development Goals, sustainable energy combines environmental, economic and social aspects to ensure a sustainable energy system in the future. Such a system would address all aspects of the sustainable development pillar in line with national priorities and concerns, including climate change and natural resource use, job creation and energy security, social tolerance, health and energy access, among others. This year's session offered an opportunity to member States to explore what sustainable energy means for the United Nations Economic Commission for Europe (ECE) region, both from the perspective of reducing the environmental footprint of energy and from the perspective of assuring needed energy for sustainable development.

2. The twenty-fourth session of the Committee on Sustainable Energy was held on 18–20 November 2015 in Geneva.

3. Close to one hundred representatives from the following ECE member States participated: Armenia, Azerbaijan, Belarus, Canada, Croatia, France, Germany, Greece, Hungary, Italy, Kazakhstan, Poland, Portugal, Romania, Russian Federation, Switzerland, the former Yugoslav Republic of Macedonia, Turkey, Turkmenistan, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America. A representative of the European Union also participated. Further, the following representatives from non-ECE member States attended: India and Malaysia.

4. Representatives of the following United Nations programmes and specialized agencies attended: United Nations Framework Convention on Climate Change (UNFCCC), International Sustainable Energy Organization (ISEO), and UNEP DTU Partnership Global Network on Energy for Sustainable Development (GNESD).

5. The following intergovernmental and non-governmental organizations as well as academic institutions were in attendance: Copenhagen Centre on Energy Efficiency, International Atomic Energy Agency (IAEA), International Committee for Coal and Organic Petrology (ICCP), International Gas Union (IGU), Marcogaz, Renewable Energy Policy Network for the 21st Century (REN21), World Petroleum Council, Coastal and Marine Union (EUCC), Forum for Nature Protection NGO, Global Sustainable Electricity Partnership, Ingénieurs du Monde, International Centre for Trade and Sustainable Development (ICTSD), International Investment Center, and the Global Carbon Capture and Storage Institute (GCCSI). Independent experts and representatives of academia and the private sector also attended.

II. Opening and adoption of the agenda (agenda item 1)

Documentation: ECE/ENERGY/98 – Annotated provisional agenda.

6. The Acting Chair of the Committee, Mr. Jürgen Keinhorst (Germany), opened the meeting and presented the provisional agenda, which was adopted without any changes.

7. The Acting Chair informed the Committee that Mr. Jean-Christophe Füeg (Switzerland), Vice-Chair, would chair Items 12 to 16 of the provisional agenda.

8. The Acting Chair further proposed to the Committee that for efficiency reasons recommendations and conclusions be adopted as specific agenda items are discussed, rather

than at the end of the Committee session on Friday morning, 20 November 2015. The delegation of the Russian Federation reminded that a report must be adopted as a whole document, not partially, at the end of the session, and therefore proposed to consider recommendations and conclusions after relevant agenda items, followed by the adoption of the report of the Committee at the end of the twenty-fourth session, as appropriate.

9. The Committee agreed to this proposal.

III. Election of officers (agenda item 2)

10. The Committee elected Mr. Jürgen Keinhorst (Germany) as the Chair and Mr. Nazir Ramazanov (Azerbaijan), Sergio Garribba (Italy), Mr. Talyat Aliev (Russian Federation), Mrs Jelena Simovic (Serbia), Mr. Jean-Christophe Füeg (Switzerland), Yagshygeldi Kakaev (Turkmenistan), and Mr. Ihor Didenko (Ukraine) as Vice-Chairs until the end of the twenty-sixth session of the Committee on Sustainable Energy. The term of office of the already elected official Mr. Jarad Daniels (United States) was for two years from the date of his election until the end of the twenty-fifth session of the Committee on Sustainable Energy.

11. The Committee further underscored the desirability, for the sake of ensuring continuity of the Bureau, that not all officers be elected at the same time.

12. The Committee thanked the Chairs of the Committee's subsidiary bodies for their valuable contributions to the Bureau since the twenty-third session of the Committee on Sustainable Energy, of which they remain members *ex officio*.

IV. Adoption of the revised draft report of the twenty-third session of the Committee on Sustainable Energy (agenda item 3)

Documentation: ECE/ENERGY/2015/L.1/rev.1 – Revised draft report of the twentythird session of the Committee on Sustainable Energy

13. The Chair reported that at the end of the twenty-third session of the Committee on Sustainable Energy the Acting Chair decided to adopt the report of the twenty-third session (ECE/ENERGY/96) by written procedure, based on the Guidelines on procedures and practices for ECE bodies (ECE/CES/2014/53, para. 21). The Bureau of the Committee on Sustainable Energy decided to adopt the report at the next formal meeting on 18-20 November 2015 and to inform the Committee accordingly. Member States received notification on 12 February 2015 for comments until 16 March 2015.

14. The Committee adopted the report of the twenty-third session of the Committee on Sustainable Energy (ECE/ENERGY/96; ECE/ENERGY/2015/L.1./rev1).

V. Reports of Subsidiary Bodies

Documentation: ECE/EX/7 – Decision on matters relating to the Committee on Sustainable Energy

ECE/ENERGY/91 – Report of the twenty-second session of the Committee on Sustainable Energy

ECE/ENERGY/2015/4 – Summary report on concrete and action oriented activities undertaken and results achieved by the ECE in sustainable energy

15. The Committee was briefed on the activities undertaken by the Committee and its subsidiary bodies since its twenty-second session and the plans for the coming two years 2016–2017.

16. The secretariat stressed key achievements related to i) recommendations to the UNFCCC about carbon capture and storage, ii) best policy practice on energy efficiency; national case studies, iii) dissemination of Best Practice Guidance on Coal Mine Methane and steps to operationalize an International Center of Excellence for Coal Mine Methane in Poland, iv) a status report of renewable energy in the ECE region, v) United Nations Framework Classification (UNFC): Application of UNFC to injection projects for geological storage of CO_2 and guidelines for application of UNFC to uranium and thorium resources, vi) the Sixth International Forum on Energy for Sustainable Development, resulting in the Yerevan Action Agenda, vii) the Sixth Gas Industry Forum, and viii) a memorandum of understanding (MOU) with the International Gas Union as part of the engagement of the energy industry in ECE work on sustainable development goals and climate change.

A. Group of Experts on Gas (agenda item 4)

Documentation: ECE/EX/7 – Decision on matters relating to the Committee on Sustainable Energy

ECE/ENERGY/GE.8/2014/2 - Report of the First Session of the Group of Experts on Gas, including the recommended work plan of the Group of Experts on Gas for 2014–2015

ECE/ENERGY/GE.8/2015/2 - Report of the Second Session of the Group of Experts on Gas

ECE/ENERGY/2015/1 – Methane management in extractive industries

17. The Chair of the Group of Experts on Gas reported on the implementation of the work plan for 2014–2015, Bureau work and the main developments since the twenty-third session of the Committee on Sustainable Energy. He focused on the work of the four Task Forces: (a) Best Practice Guidance in Reducing Gas Leaks in the Gas Value Chain; (b) Best Practices 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; (c) Best Practice Guidance for Liquefied Natural Gas; and (d) Removing Barriers to the Use of Natural Gas as a Transportation Fuel. He stressed current challenges of the Group of Experts on Gas related to the ambitious work plan and modest resources for implementation. He further noted the difficulty of coordinating work with the meeting cycle of the Committee.

18. A multi-stakeholder panel discussed coal versus gas in global sustainable energy systems. The panel comprised of international thought leaders on natural gas and representative of the Group of Experts on Gas shared views on bottom up approaches for life-cycle greenhouse gas emission estimates based on a presentation from Imperial College. The panel underscored the importance of energy security, access and quality of service given different national resource endowments and needs. All technologies and energy sources are needed in the context of comprehensive and country specific solutions

and given the rising global energy demand, so it is not a question of coal versus gas but of finding solutions for cleaner energy production and distribution.

19. In light of the discussion, the Committee:

20. Noted with appreciation the progress made by the Group of Experts on Gas on the implementation of the concrete activities of the mandate and the Work Plan of the Group of Experts on Gas for 2014–2015.

21. Took note of the report of the second session of the Group of Experts on Gas (ECE/ENERGY/GE.8/2015/2), endorsed the extension of the Work Plan of the Group of Experts on Gas for 2014–2015 until the end of 2016, and requested the Group of Experts on Gas to prepare a Work Plan until the end of the mandate of the Group of Experts.

B. Expert Group on Resource Classification (agenda item 5)

Documentation: ECE/EX/7 – Decision on matters relating to the Committee on Sustainable Energy

ECE/ENERGY/GE.3/2015/2 - Report of the Sixth Session of the Expert Group on Resource Classification, including the recommended work plan of the Expert Group on Resource Classification for 2016–2017

ECE/ENERGY/2015/7 – Guidelines for Application of UNFC-2009 for Uranium and Thorium Resources

22. The Chair of the Expert Group on Resource Classification reported on the implementation of the work plan for 2013–2014¹, the recommended work plan for 2016–2017, Bureau work and the main developments since the twenty-third session of the Committee on Sustainable Energy.

23. The representative of the Russian Federation questioned if peat could be covered under UNFC-2009. The secretariat noted that UNFC-2009 has been designed to apply to all extractive activities and work is underway to broaden application to encompass renewable energy.

24. The representative of ISEO emphasized the need for the Expert Group to cooperate and collaborate closely with the International Organization of Standardization (ISO) and the International Electrotechnical Commission (IEC). The ISEO representative further requested that the Expert Group focus on waste management and methanol. The secretariat noted that the Working Group on Application of UNFC-2009 to Bioenergy of the Expert Group would capture biomethanol in the specifications being developed for bioenergy. The secretariat further noted that the Expert Group at its sixth session acknowledged the importance of waste management and landfill mining but recommended that the applicability of UNFC-2009 to landfill mining not be pursued at this time nor included as part of its 2016–2017 Work Plan. The Expert Group confirmed that it encourages ongoing independent review of the potential use of UNFC-2009 for anthropogenic resources and other applications such as methanol from organic waste.

25. In the light of the discussion, the Committee:

¹ The Committee at its twenty-third meeting in November 2014 endorsed the extension of the Expert Group's Work Plan for 2013–2014 to the end of 2015. This was subsequently approved by the EXCOM at its seventy-fifth meeting.

26. Noted with appreciation that the Expert Group on Resource Classification had delivered on the concrete activities of the mandate and the Work Plan of the Expert Group on Resource Classification for 2013–2015.

27. Endorsed the Guidelines for Application of UNFC-2009 for Uranium and Thorium Resources (ECE/ENERGY/2015/7).

28. Took note of the report of the sixth session of the Expert Group on Resource Classification (ECE/ENERGY/GE.3/2015/2), endorsed the Work Plan of the Expert Group on Resource Classification for 2016–2017, and requested the secretariat to submit the Work Plan of the Expert Group on Resource Classification for 2016–2017 for subsequent approval by the Executive Committee.

29. Endorsed the recommendation of the Expert Group on Resource Classification at its sixth session that an update of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 (UNFC-2009) should not be undertaken before 2018.

30. In line with Economic and Social Council (ECOSOC) Decision 2004/233, encouraged all United Nations regional commissions to support global application of UNFC-2009 noting that it can incorporate and unify all existing classification systems, including national systems.

31. Further noted that UNFC-2009 can enhance international communications by providing a uniform, strong and rigorous classification system that offers a factual basis for general resource studies and strategies, government resource management, industry business process management, capital allocation and for reporting in existing classification systems that have been bridged to it.

32. Requested that the Expert Group on Resource Classification prepare an extrabudgetary project proposal to fund needed secretariat support and other activities such as outreach and dissemination to ensure full and proper continued development and deployment of UNFC-2009.

C. Group of Experts on Cleaner Electricity Production from Fossil Fuels (agenda item 6)

Documentation: ECE/EX/7 – Decision on matters relating to the Committee on Sustainable Energy

ECE/ENERGY/GE.5/2015/2 - Report of the Eleventh Session of the Group of Experts on Cleaner Electricity Production from Fossil Fuels, including the mandate and recommended work plan of the Group of Experts on Cleaner Electricity Production from Fossil Fuels for 2016–2017

33. The Chair of the Group of Experts on Cleaner Electricity Production from Fossil Fuels reported on the implementation of the work plan for 2014–2015, Bureau work and the main developments since the twenty-third session of the Committee on Sustainable Energy. He stressed the importance of involving the private sector in continuing discussions of fossil fuels in the ECE as fossil fuels are likely going to remain part of the future energy system for the foreseeable future. Remarks alluded to work by the Group of Experts on carbon capture and storage, the recommendations made to the UNFCCC about carbon capture and storage and recent contributions to the Carbon Sequestration Leadership Forum, held in Saudi Arabia in November 2015. He further emphasised the need to

promote results and recommendations coming out of the Group of Experts on Cleaner Electricity Production from Fossil Fuels.

34. The Global Carbon Capture and Storage Institute presented extracts from their latest annual report Global Status of Carbon Capture and Storage (2015) about the costs of this and other low-carbon technologies and the state of play globally. Mitigation costs more than double in scenarios with limited availability of carbon capture and storage technologies. Key messages included that a global portfolio of operating carbon capture of storage projects is emerging and that in a 2 degree world by 2050 carbon capture and storage will contribute to 13% cumulative reductions compared to business as usual scenarios.

35. In the light of the discussion, the Committee:

36. Noted with appreciation that the Group of Experts on Cleaner Electricity Production from Fossil Fuels had delivered on the concrete activities of the mandate and the Work Plan of the Group of Experts on Cleaner Electricity Production from Fossil Fuels for 2014–2015.

37. Took note of the report of the eleventh session of the Group of Experts on Cleaner Electricity Production from Fossil Fuels (ECE/ENERGY/GE.5/2015/2), and endorsed the extension of the mandate of the Group of Experts on Cleaner Electricity Production from Fossil Fuels to 31 December 2017 for subsequent approval by the Executive Committee.

38. Endorsed the Work Plan of the Group of Experts on Cleaner Electricity Production from Fossil Fuels for 2016–2017 and requested the secretariat to submit the Work Plan of the Expert Group on Cleaner Electricity Production from Fossil Fuels for 2016–2017 for subsequent approval by the Executive Committee.

39. Endorsed that the Group of Experts on Cleaner Electricity Production from Fossil Fuels extend the duration of its future annual meetings to two days given the challenge to complete its work in one day. Annual meetings of the Group of Experts on Cleaner Electricity Production from Fossil Fuels could be held when possible back to back with Committee sessions.

D. Group of Experts on Coal Mine Methane (agenda item 7)

Documentation: ECE/EX/7 – Decision on matters relating to the Committee on Sustainable Energy

ECE/ENERGY/GE.4/2015/2 - Report of the Group of Experts on Coal Mine Methane, including the mandate and recommended work plan of the Group of Experts on Coal Mine Methane for 2016–2017

ECE/ENERGY/2015/1 - Methane management in extractive industries

40. The Chair of the Group of Experts on Coal Mine Methane reported on the implementation of the work plan for 2014–2015 and the main developments since the twenty-third session of the Committee on Sustainable Energy. He focussed on the activities that promote the reduction of greenhouse gas emissions from coal mines through recovery and use of methane, as described in detail in ECE/ENERGY/GE.4/2015/3, on the recent establishment of an International Centre of Excellence on Coal Mine Methane in Poland in October 2015, and on an extrabudgetary project for dissemination of best practices in the emission abatement, recovery and use of coal mine methane. He observed that traditional mining companies are transitioning to integrated energy companies and services providers that are increasingly interested in the impact on energy for sustainable development.

41. A panel comprised of international thought leaders on methane management and representatives of the Groups of Experts on Coal Mine Methane and on Gas discussed

methane as a significant driver of short-term global warming. Experts confirmed that reducing methane emissions could help slow the rise in global temperatures, but noted that globally, there is no truly complete picture of the amount of methane being emitted. Very few companies are measuring and reporting leakages. Methane emissions from coal, oil and natural gas production are substantial and occur at every stage of the fossil fuel chain. The panel commented on the knowledge gap and shared views on measuring, managing and reducing fugitive methane along the value chain. Focus was given to the difficulty of obtaining and comparing data on methane emissions. There is a need for common evaluation methodologies for each part of the fossil energy chain across the world and for enhanced dialogue and cooperation at international levels. The discussion was enhanced by the report ECE/ENERGY/2015/1 about methane management in extractive industries.

42. In the light of the discussion, the Committee:

43. Noted with appreciation that the Group of Experts on Coal Mine Methane had delivered on the concrete activities of the mandate and the Work Plan of the Group of Experts on Coal Mine Methane for 2014–2015.

44. Took note of the report on methane management in extractive industries (ECE/ENERGY/2015/1), requested the establishment of a task force under the Committee on Sustainable Energy with representatives of the Groups of Expert on Gas and Coal Mine Methane and other stakeholders to undertake further work to assess baseline, benchmarking and scale of current methane emissions in those industries, with the aim of giving clear guidance for report back at its twenty-fifth session.

45. Suggested the study be based on the recommendations made in ECE/ENERGY/2015/1 with a focus on standards and technologies for monitoring, recording, and reporting methane emissions at each stage of production, processing, storage, transmission, distribution, and use of fossil fuels, whether coal, oil, or natural gas, and on appropriate mechanisms for mobilizing needed resources for deployment of methods to reduce methane emissions. Agreed that such a study of the methane challenges and opportunities in the extractive industries would be subject to availability of extrabudgetary resources.

46. Requested the Group of Experts on Coal Mine Methane to make a proposal at the twenty-fifth session of the Committee on Sustainable Energy on how to expand the current mandate of the Group of Experts to encompass work on the transition of traditional mining companies to become integrated energy providers and services companies and to explore the impact this transition might have on energy for sustainable development.

47. Took note of the report of the tenth session of the Group of Experts on Coal Mine Methane (ECE/ENERGY/GE.4/2015/2), and endorsed the extension of the mandate of the Group of Experts on Coal Mine Methane until 31 December 2017 for subsequent approval by the Executive Committee.

48. Endorsed the Work Plan of the Group of Experts on Coal Mine Methane for 2016–2017 and requested the secretariat to submit the Work Plan of the Group of Experts on Coal Mine Methane for 2016–2017 for subsequent approval by the Executive Committee.

49. Endorsed the recommendation to not publish an update of the Best Practice Guidance for Effective Methane Drainage and Use in Coal Mines (ECE Energy Series No 31) before 2016.

50. Endorsed that the Group of Experts on Coal Mine Methane extend the duration of its future annual meetings to two days given the challenge to complete its work in one day. Annual meetings of the Group of Experts on Coal Mine Methane could be held when possible back to back with Committee sessions.

E. Group of Experts on Renewable Energy (agenda item 8)

Documentation: ECE/EX/7 – Decision on matters relating to the Committee on Sustainable Energy

ECE/ENERGY/GE.7/2015/2 - Report of the Group of Experts on Renewable Energy on its second session, including the mandate and recommended work plan of the Group of Experts on Renewable Energy for 2016–2017

ECE/ENERGY/2015/8 – ECE Renewable Energy Status Report - Key messages and progress

51. The Chair opened the session with a summary of the activities and discussions from the previous day, emphasising the progress made in the implementation of the 2014–2015 programme of work, agreed upon at the Committee's twenty-second session (ECE/ENERGY/91).

52. As requested by the Committee in its twenty-third session, an ECE Renewable Energy Status Report has been prepared in collaboration with the International Energy Agency (IEA) and the Renewable Energy Policy Network for the 21st Century (REN21) as a tool for closing data gaps and tracking the uptake of renewable energy in the region. Findings and key messages from the report were presented to the Committee for information and discussion. The 17 countries reviewed in the report is home to over 300 million people but only represents 0.5% of global renewable energy investments, with a noticeable downward trend. Investment is also unevenly distributed throughout the countries. There is considerable potential in the region to reverse this trend.

53. A panel comprised of partners and Bureau members of the Group of Experts on Renewable Energy discussed the future prospects of renewable energy in the region, focussing on declining investments and the need for increased outreach to allow exchange of renewable energy information, best practices and lessons learnt. Discussion also comprised barriers to entry for investors and the role of pilots for renewable energy projects.

54. The Chair of the Bureau of Group of Experts on Renewable Energy reported on the implementation of the work plan for 2014–2015, Bureau work and the main developments since the Open-ended consultations on ECE work on sustainable energy.

55. In the light of the discussion, the Committee:

56. Noted with appreciation that the Group of Experts on Renewable Energy had delivered on the concrete activities of the mandate and the Work Plan of the Group of Experts on Renewable Energy for 2014–2015.

57. Took note of the document ECE/ENERGY/2015/8 about key messages and progress on the ECE Renewable Energy Status Report in collaboration with the Renewable Energy Policy Network for the 21st Century (REN21) and the International Energy Agency and stressed the importance of increasing the impact of the findings through outreach at the national level. Invited member States to host such outreach activities in collaboration with the secretariat and partners in 2016.

58. Invited the secretariat to expand the Renewable Energy Status Report for the ECE Region to cover all ECE member States, and further invited governments and other organizations to provide financial and/or in-kind expert support for its preparation and for the implementation of the Work Plan of the Group of Experts on Renewable Energy for 2016–2017.

59. Took note of the report of the second session of the Group of Experts on Renewable Energy (ECE/ENERGY/GE.7/2015/2), and endorsed the extension of the mandate of the Group of Experts on Renewable Energy to 31 December 2017 for subsequent approval by the Executive Committee.

60. Endorsed the Work Plan of the Group of Experts on Renewable Energy for 2016–2017 and requested the secretariat to submit the Work Plan of the Group of Experts on Renewable Energy for 2016–2017 for subsequent approval by the Executive Committee.

F. Group of Experts on Energy Efficiency (agenda item 9)

Documentation: ECE/EX/7 – Decision on matters relating to the Committee on Sustainable Energy

ECE/ENERGY/GE.6/2015/2 – Report of the second session of the Group of Experts on Energy Efficiency, including the mandate and recommended work plan of the Group of Experts on Energy Efficiency for 2016–2017

ECE/ENERGY/97 – Analysis of National Case Studies on Policy Reforms to Promote Energy Efficiency Investments

ECE/ENERGY/100 – Best Policy Practices for Promoting Energy Efficiency. A Structured Framework of Best Practices in Policies to Promote Energy Efficiency for Climate Change Mitigation and Sustainable Development.

61. At the request of member States, ECE recently published two studies that highlight best practices and incentives needed to stimulate and ensure successful energy efficiency policy outcomes. These publications – "Best policy practices for promoting energy efficiency²" and "Analysis of national case studies on policy reforms to promote energy efficiency investments³" – provide recommendations on measures that can catalyse new energy efficiency investments in countries and make significant improvements in energy efficiency in the ECE region and beyond. A panel comprised of contributors to the reports and members of the Group of Experts on Energy Efficiency offered views on how energy efficiency can be accelerated, examples of successful national energy efficiency initiatives, and discussed how the publications can be used as a basis for exchange of know-how and best practices on energy efficiency.

62. The Chair of the Group of Experts on Energy Efficiency reported on the implementation of the work plan for 2014–2015, Bureau work and the main developments since the Open-ended consultations on ECE work on sustainable energy. The Committee was also informed of progress on cooperation with the ECE Committee on Housing and Land Management on energy efficiency standards in buildings.

63. A representative of Conning Asset Management referred to the company's previous involvement in the energy efficiency work of the Committee since 2004, including the launch of the EUR 354 million European Clean Energy Fund in 2007. He inquired whether the Committee would support an earlier project to facilitate public and private financing for energy efficiency and renewable energy investment projects under the Group of Experts on Energy Efficiency.

² http://www.unece.org/index.php?id=39817

³ http:// http://www.unece.org/index.php?id=40546

64. In the light of the discussion, the Committee:

65. Noted with appreciation that the Group of Experts on Energy Efficiency had delivered on the concrete activities of the mandate and the Work Plan of the Group of Experts on Energy Efficiency for 2014–2015.

66. Took note of the publication "Best Policy Practices for Promoting Energy Efficiency" (ECE/ENERGY/100) and recommended to use it as a basis for providing technical assistance and training programmes in collaboration with other partners to member States at their request and upon the availability of resources. These efforts will support member States to increase the uptake of energy efficiency and support achieving the target of doubling the global rate of improvement of energy efficiency by 2030 that is captured under the Sustainable Development Goal 7.

67. Noted the outcomes of the survey on building standards and building regulations in the ECE region. Endorsed the proposal to establish a joint Task Force on Energy Efficiency Standards in Buildings with the ECE Committee on Housing and Land Management with participation of the ECE Working Party on Regulatory Cooperation and Standardization Policies, other ECE bodies and international partner organizations. Draft terms of reference for the Joint Task Force on Energy Efficiency Standards in Buildings of the ECE Region for 2016–2017 are specified in the Annex of this report.

68. Mandated the Group of Experts on Energy Efficiency to lead the activities on energy efficiency standards in buildings for the Committee on Sustainable Energy, including evaluation of options for their development, adoption or promotion, and to regularly report progress to the Bureau and to the Committee's twenty-fifth and twenty-sixth sessions.

69. Noted the request by the Group of Experts on Energy Efficiency to move activities related to smart grids and other advanced transmission and distribution technologies as a cross-sectoral activity reporting directly to the Committee on Sustainable Energy, and requested the secretariat to implement the change.

70. Took note of the report of the second session of the Group of Experts on Energy Efficiency (ECE/ENERGY/GE.6/2015/2), and endorsed the extension of the mandate of the Group of Experts on Energy Efficiency to 31 December 2017 for subsequent approval by the Executive Committee.

71. Endorsed the Work Plan of the Group of Experts on Energy Efficiency for 2016–2017 and requested the secretariat to submit the Work Plan of the Group of Experts on Energy Efficiency for 2016–2017 for subsequent approval by the Executive Committee.

72. Invited governments and other organizations to provide financial and/or in-kind expert support to strengthen the implementation of the Work Plan of the Group of Experts on Energy Efficiency for 2016–2017.

VI. High-level Segment

A. Panel discussion: Pathways to sustainable energy in the United Nations Economic Commission for Europe region (agenda item 10)

73. The Chair opened the high-level segment of the meeting with remarks on a sustainable energy future based on the theme of the twenty-fourth session of the Committee: Pathways to sustainable energy.

74. He focused his statement on the broadly varying conceptions of sustainable energy that are leading to diverse expressions in national and regional energy strategies and, as a

consequence, multiple approaches and outcomes can be found. The result is a lack of common understanding of sustainable energy, what is meant by pathways towards a future sustainable energy system or even how to move to such a pathway. He stressed the important opportunity presented to member States to explore what sustainable energy means for the ECE region, both from the perspective of reducing the environmental footprint of energy and from the perspective of assuring needed energy for sustainable development.

75. After a presentation about Energy Darwinism by the moderator, an international high-level panel comprised of representatives from member States and the private sector as well as Bureau members of the Committee and its subsidiary bodies provided the Committee with an occasion to exchange views on the role of the ECE region in attaining the international energy and climate objectives, notably the energy related Sustainable Development Goals. Selected panellists presented national energy policies and private sector initiatives to inform the subsequent dialogue. Participants considered the challenges and opportunities of the accelerating transition of energy systems and the national pledges that are being made in the context of the sustainable development and climate agendas, and recommended the exercise as an important milestone towards reaching objectives, for example through exploring the challenges and consequences of alternative energy futures and the implications of choices member States could make.

76. Reference was made to the outcomes of the Sixth International Forum on Energy for Sustainable Development, held in Yerevan, Armenia, from 29 September to 2 October 2015, to the World Bank's Global Tracking Framework⁴, and to the Readiness for Investment in Sustainable Energy (RISE)⁵ initiative as examples for how progress might be tracked on energy access, energy efficiency and renewable energy. Further suggestions included a proposal by the delegate from Ukraine to investigate taking stock of the latest scientific achievements in the area of clean energy and informing the member States of the results of this research.

77. Panels discussed the proposed project Pathways to Sustainable Energy as an important opportunity to explore a common understanding of sustainable energy in the region in a holistic way, and thus deepen and broaden understanding of the perspectives and motivations of the membership to support a sustainable energy subprogramme that meets its needs. Simply the fact of conducting such a wide-ranging and engaged conversation would enhance decision-making with respect to the work programme under the Committee on Sustainable Energy. National energy planning and the work on sustainable energy could greatly benefit from transparent, inclusive processes and the possibility to compare alternative energy futures in various contexts. Results would contribute to the ability to better understand the transition to a sustainable energy future by allowing for course corrections, acceleration and scale up over time.

78. In the light of the discussion, the Committee:

79. Noted the recommendations of its Bureau and the high-level panel on pathways to sustainable energy and endorsed the overall concept of the proposed project. Requested further analysis on sustainable energy policy drivers in ECE member States that will help attain the objectives of energy for sustainable development. Such analysis should include developing instruments for transparent model-based analysis of pathways for sustainable energy in the ECE region and establishing an early warning system if the achievement of sustainable energy objectives is not on track. Requested the Bureau and the secretariat to

 $^{^{4}\} http://www.worldbank.org/en/topic/energy/publication/Global-Tracking-Framework-Report$

⁵ http://rise.worldbank.org/

submit the project proposal for approval to the Executive Committee with all supporting documentation.

80. Requested the secretariat in close collaboration with the Bureau to begin to explore methods for dissemination of the results of the project including potentially through a high-level meeting on enabling the transition to a sustainable energy future.

81. Endorsed the proposal to strengthen the capacity of the ECE member States to achieve the sustainable development goals related to energy under the supervision of its Bureau and requested a review of activities at its twenty-fifth and twenty-sixth meetings. Invited governments and other organizations to provide financial and/or in-kind expert support to assist with the implementation of the Work Plan. The secretariat was requested to present the proposal to the Executive Committee at the next opportunity.

B. International Forum on Energy for Sustainable Development (agenda item 11)

82. The Fifth International Forum on Energy for Sustainable Development was held in Hammamet, Tunisia in 2014, jointly organised by the Government of Tunisia and the five United Nations Regional Commissions. The Committee at its twenty-third session endorsed the intent of the Joint Statement of the Executive Secretaries of the United Nations Regional Commissions⁶, and requested that the ECE sustainable energy subprogramme deliver concrete results on the different elements of the statement in accordance with existing mandates and work plans of its subsidiary bodies.

83. The Committee was informed of the outcomes of the Sixth International Forum on Energy for Sustainable Development, held in Yerevan, Armenia on 29 September–2 October 2015⁷. It was jointly organized by the Government of Armenia, the United Nations Regional Commissions, the United Nations Development Programme (UNDP) Office in Armenia, the United Nations Industrial Development Organization (UNIDO), the Copenhagen Centre on Energy Efficiency (C2E2), the Climate Technology Centre and Network (CTCN), and Habitat for Humanity International.

84. The Statement of Common Action⁸ to initiate implementation of the provisions of the Hammamet Declaration specifies 5 priority action areas, proposed for action by the United Nations Regional Commissions and other international organizations.

85. The Committee was invited to discuss the impact of the Statement of Common Action and to recommend steps for its implementation, in particular in relation to the regional implementation of the Global Tracking Framework.

86. A representative of Kazakhstan informed the Committee of the preparations to EXPO 2017 "Future Energy" to be held in Astana from 10 June to 10 September 2017 and invited ECE to hold a Ministerial Conference and International Forum on Energy for Sustainable Development in the framework of the event.

87. In the light of the discussion, the Committee:

⁶ http://www.unece.org/energywelcome/areas-of-work/energy-efficiency/meetings-andevents/energy-efficiency/energy-efficiency-21/2014/fifth-international-forum-on-energy-forsustainable-development/docs.html#/

⁷ http://www.unece.org/index.php?id=39915#/

⁸ http://www.unece.org/fileadmin/DAM/energy/se/pdfs/eneff/6th_Forum_Yerevan_Sept.2015/ IFESD.6_Action.Plan_Joint.Statement.pdf

88. Took note of the Statement of Common Action to support implementation of the provisions of the Hammamet Declaration, adopted at the Sixth International Forum on Energy for Sustainable Development, held in Yerevan on 29 September– 2 October 2015. Took note of the five priority action areas and invited ECE to report to the annual session of ECOSOC on the outcome of the Sixth International Forum on Energy for Sustainable Energy. Further invited countries to host the Seventh International Forum on Energy for Sustainable Development in 2016 in collaboration with Regional Commissions and other partners.

89. Welcomed and supported the offer by Kazakhstan to host a Ministerial Conference and International Forum on Energy for Sustainable Development in 2017.

VII. Future work of the Committee on Sustainable Energy

A. Programme of Work for 2016–2017 and Draft Strategic Framework 2018–2019 of the United Nations Economic Commission for Europe Subprogramme on Sustainable Energy (agenda item 12)

Documentation: ECE/EX/7 – Decision on matters relating to the Committee on Sustainable Energy

ECE/ENERGY/2015/2 – Programme of work for 2016–2017 of the ECE subprogramme on sustainable energy

ECE/ENERGY/2015/9 – Draft strategic framework 2018–2019 of the ECE subprogramme on sustainable energy

ECE/ENERGY/2015/3 – Draft publication plan for 2016–2017

ECE/ENERGY/2015/6 – Provisional calendar of meetings for 2016

90. The Chair opened the session with a summary of the activities and discussions from the previous two days, emphasising the achievements of the Groups of Experts on Renewable Energy and Energy Efficiency over the past two years and the outcomes and recommendations from the high-level segment.

91. The Committee took note of the information provided by the secretariat about extrabudgetary projects, including the ECE Gas Centre and projects of the United Nations Development Account Projects (UNDA).

92. The Committee stressed the importance of linkages between the gas industry and ECE's work on gas.

93. The Committee took note of the information provided by the secretariat about the sustainable subprogramme and the progress made in the implementation of the programme of work for 2014–2015.

94. Based on the discussion with the subsidiary bodies the previous days and the progress made, the Committee was invited to agree the proposed programme of work for 2016–2017 (ECE/ENERGY/2015/2), including the draft publication plan for 2016–2017 (ECE/ENERGY/2015/3) and the provisional calendar of meetings for 2016 (ECE/ENERGY/2015/6), and to recommend their submission to EXCOM for subsequent approval.

95. The Strategic Framework 2018–2019 is the principal policy directive for the ECE subprogramme on sustainable energy. It follows results-based approach and articulates the subprogramme's objective, expected accomplishments, indicators of achievement,

performance measures, strategy and external factors. The Strategic Framework was prepared in accordance with the Secretary-General's bulletin "Regulations and Rules Governing Programme Planning, the Programme Aspects of the Budget, the Monitoring of Implementation and the Methods of Evaluation" (ST/SGB/2000/8). The Committee was invited to comment.

96. In the light of the discussion, the Committee:

97. Offered to contribute to the discussion underway at EXCOM, with participation of member States, the Group of Experts on Gas, member companies of the ECE Gas Centre (as currently constituted) and the International Gas Union, to identify the best possible mechanism for the ECE to engage with the gas industry in its work. Expressed support for EXCOM to make a decision on this issue before the next Committee session, if possible.

98. In view of the conception of the ECE Gas Centre agreed that a number of planned documents will not be issued and a number of planned meetings were not held during the biennium 2014–2015.

99. Took note of the summary report on concrete and action oriented activities undertaken and results achieved by the ECE in the area of sustainable energy (ECE/ENERGY/2015/4).

100. Endorsed the programme of work for 2016–2017 on the ECE subprogramme on sustainable energy with the requested change as reflected in ECE/ENERGY/2015/2.Rev.1, including the terms of reference of the Committee on Sustainable Energy and mandates and terms of reference of its subsidiary bodies, the publication plan for 2016–2017 (ECE/ENERGY/2015/3) and the revised calendar of meetings for 2016 ECE/ENERGY/2015/6.Rev.1.

101. Requested the secretariat to prepare the draft programme of work for 2018–2019 for consideration at its twenty-fifth meeting.

102. Endorsed the strategic framework 2018–2019 of the ECE subprogramme on sustainable energy in its revised format (ECE/ENERGY/2015/9.Rev.1).

103. Requested the secretariat to proceed with the preparations of the twenty-fifth session of the Committee on Sustainable Energy on 28–30 September 2016 in Geneva.

104. Asked EXCOM to look into the matter of parliamentary documents and servicing the meetings of the subsidiary bodies of the Committee. In the interim, and without setting precedent, endorsed the request of the subsidiary bodies of the Committee that their annual sessions be supported by parliamentary documents, including a relevant agenda and reports, as needed in relation to the implementation of their work plans for 2016–2017. Invited the secretariat to continue supporting the work of the subsidiary bodies by, *inter alia*, the following: organizing planned work plan activities, preparing formal documentation required for the development, approval, implementation and reporting of work plan activities, arranging the translation of official documents into the three official ECE languages (English, French, Russian) by the Division of Conference Management of the United Nations Office at Geneva to service the meetings of the subsidiary bodies.

105. Invited governments and other organizations to provide financial and/or in-kind expert support to strengthen the implementation of its programme of work for 2016–2017.

B. Regional advisory services (agenda item 13)

106. The Committee noted the information provided on regional advisory services by the secretariat and requested a report on regional advisory services at its twenty-fifth session.

C. Cooperation with international organizations (agenda item 14)

Documentation: ECE/ENERGY/2015/5 – Cooperation and coordination with other intergovernmental and non-governmental organizations

107. The Committee was invited to advise on ongoing cooperation with intergovernmental and non-governmental organizations, including industry associations, international energy agencies, and the business community, with a view to achieving synergies and complementarity of efforts and to avoid overlap and duplication.

108. The Committee noted the report on cooperation and coordination with other 6intergovernmental and non-governmental organizations (ECE/ENERGY/2015/5) and requested an update at its twenty-fifth session.

D. Any other business (agenda item 15)

109. The Committee took note of the request by its Bureau to increase the participation of representatives and experts from the capitals of the ECE member States in its activities and meetings.

110. In order to allow more targeted outreach and information flow in preparation for its twenty-fifth session in 2016, the Committee requested member States of the ECE, and other bodies, including additional United Nations organizations and participants of the meeting to provide expert contact points to the secretariat and requested the secretariat to implement this request.

111. The Committee requested a discussion about resourcing and budget of the activities of the subprogramme on sustainable energy at its twenty-fifth session.

112. The delegation of the Russian Federation emphasised the need that all parliamentary documents be translated into Russian language to allow timely preparation of the meeting.

113. The Committee reiterated its commitment to further raising the efficiency of its work, including through the preparation of shorter reports of its sessions.

VIII. Adoption of the report and close of the meeting (agenda item 16)

Documentation: ECE/ENERGY/99 – Report of the Committee on Sustainable Energy on its twenty-fourth session

114. The Chair summarized the major decisions, conclusions and recommendations taken by the Committee.

115. The Committee reviewed the report based on a draft provided by the secretariat and adopted the report of the twenty-fourth session of the Committee on Sustainable Energy (ECE/ENERGY/99) subject to any necessary editing and formatting.

116. The meeting continued without interpretation from 13.04 hours. The meeting was closed by the Chair at 14.50 hours on 20 November 2015.

Annex

Draft Terms of Reference for the Joint Task Force on Energy Efficiency Standards in Buildings of the UNECE Region for 2016–2017⁹

I. Background

1. The United Nations Economic Commission for Europe (ECE) Committee on Housing and Land Management (CHLM) agreed on its seventy-fourth session the programme of work for 2014–2015, which included the preparation of a study on energy efficiency standards in buildings, and on facilitating the maintenance, management and refurbishment of existing housing stock (item 1.5. of the programme of work) (ECE/HBP/2013/10). The CHLM programme of work was approved by the Executive Committee (EXCOM) on 6 February 2014.

2. After its seventy-fifth session, the CHLM Bureau and the secretariat discussed cooperation with the ECE Working Party on Regulatory Cooperation and Standardization Policies (Working Party 6), the ECE Committee on Sustainable Energy, and other international organizations. During these discussions, the secretariat of the CHLM suggested establishing a Joint Task Force on Energy Efficiency Standards in Buildings and invited these organizations to join forces in the establishment thereof.

3. According to its Terms of Reference, the Group of Experts on Energy Efficiency (GEEE), a subsidiary body of the ECE Committee on Sustainable Energy concentrates on: (a) Regulatory and policy dialogue addressing financial, technical and policy barriers to improve energy efficiency; and (b) Sharing experience and best practices in the field of energy efficiency in the ECE region, including on strengthening institutional capacity in energy efficiency to reduce greenhouse gas (GHG) emissions. The GEEE, according to its mandate, is well positioned to guide the proposed Joint Task Force on Energy Efficiency Standards in Buildings based on the mandate from the Committee on Sustainable Energy.

4. In March 2015, the secretariats of the CHLM and the Committee on Sustainable Energy sent a questionnaire on building standards and building regulations to member States with the aim to identify areas and activities in the field of building standards and regulations where the ECE can support member States. The results of the survey suggest that ECE should focus on the following topics: thermal performance of buildings and their building components, construction materials, and minimum habitable standards for healthy and safe living. The survey also identified activities that the Joint Task Force may perform.

5. To analyze and discuss the results of the survey, the CHLM and the Committee on Sustainable Energy organized an Expert Consultation on Energy Efficiency Standards in Buildings in Geneva on 20–21 April 2015 to discuss ECE's activities related to energy efficiency standards in buildings. The participants of the Expert Consultation strongly supported the proposal to establish a Joint Task Force on Energy Efficiency Standards in Buildings.

⁹ See also Annex 2, Report of the Group of Experts on Energy Efficiency on its second session (ECE/ENERGY/GE.6/2015/2).

6. The Joint Task Force on Energy Efficiency Standards in Buildings is established by the CHLM and the Committee on Sustainable Energy with the participation of the Working Party 6 for the period of 2016–2017 with a possibility of extension.

II. Reporting

7. The Joint Task Force will report to its parent bodies, the CHLM and the Committee on Sustainable Energy. According to the ECE procedures, the Committee on Sustainable Energy will be invited to approve the proposal for the establishment of the Joint Task Force at its twenty-fourth session, on 18-20 November 2015. The CHLM will be invited to approve the proposal for the establishment of the Joint Task Force at its seventy-sixth session, on 14–16 December 2015.

III. Objective

8. The objective of the Joint Task Force is to enhance the harmonization of the markets for products and technological appliances that increase energy efficiency in buildings of the ECE member States. It broadens the exchange of experiences and approaches to increased uptake of energy efficiency measures in buildings among the member States. The Joint Task Force is guided by recommendations and decisions of the Committee on Sustainable Energy and the CHLM.

9. The Joint Task Force will facilitate the ECE's support towards the achievement of the targets set by international initiatives such as the Global Goal 7, the Sustainable Energy for All Initiative, and the Geneva UN Charter on Sustainable Housing. All of these initiatives stress the importance of energy efficiency to ensure energy security, mitigate GHG emissions and ensure access to affordable, reliable, sustainable and modern energy for all.

IV. Planned activities and outputs

10. To achieve its objectives, the Joint Task Force will undertake the following activities:

- (a) Mapping energy efficiency standards in buildings and preparing gap analyses;
- (b) Evaluating options for the development, adoption or promotion of energy efficiency standards in buildings;
- (c) Preparing guidance materials;
- (d) Promoting partnerships with other international organizations;
- (e) Establishing a network of experts on energy efficiency in buildings;
- (f) Developing and organizing training programmes.
- 11. The Joint Task Force will deliver, in particular, the following outputs:
 - (a) Mapping of existing energy efficiency standards in buildings in the ECE region;
 - (b) An online database of experts on energy efficiency in buildings tailored for the needs of the ECE region;
 - (c) A roadmap for future ECE activities on standards.

12. All of the above mentioned activities and outputs are subject to regular consultations with and between the parent bodies, the CHLM and the Committee on Sustainable Energy,

the Working Party 6, partner organizations, donors and members of the Joint Task Force and might be subject to adaptations.

V. Funding

13. The activities of the Joint Task Force are supported by extrabudgetary funds and inkind contributions. The listed activities will be implemented depending upon the availability of funds.

VI. Timetable

14. The mandate of the Joint Task Force will cover the period from 2016 to 2017 with a possibility of extension.

VII. Methods of work

15. The Joint Task Force is expected, subject to availability of funds, to have four faceto-face meetings during its mandate. The Joint Task Force will also work via various means of electronic communications. Donors are invited to provide voluntary contributions to support its work.

VIII. Membership

16. The Joint Task Force will be open to all ECE member States. Other UN member States are also welcome to participate. The Joint Task Force comprises experts from the CHLM, the Committee on Sustainable Energy, and the Working Party 6, other ECE bodies, international organizations, such as the International Organization for Standardization (ISO), International Electrotechnical Commission (IEC), the International Partnership for Energy Efficiency Cooperation (IPEEC), the Copenhagen Centre on Energy Efficiency (C2E2), the Consortium for Energy Efficiency (CEE), the Pacific Northwest National Laboratory, the National Renewable Energy Laboratory (NREL), the Buildings Performance Institute Europe (BPIE), the Global Buildings Performance Network (GBPN), and other relevant experts, to ensure a cross-sectoral approach to addressing energy efficiency standards and building codes. Independent technical experts on building standards and state of the art technologies will be invited to support the work of the task force by providing written contributions and participating in its meetings.

IX. Secretariat support

17. The Joint Task Force will have two co-chairs representing the CHLM and the Committee on Sustainable Energy. The CHLM and the Committee on Sustainable Energy will jointly service the Joint Task Force. This will include:

- (a) Servicing the Joint Task Force meetings (with interpretation and translation), including the preparation of meeting agendas and reports;
- (b) Preparing background documents and studies for the Joint Task Force at its request;
- (c) Arranging for financial support for members of the Joint Task Force from ECE member States, so that they can participate in its meetings.

18. Provision of the secretariat support is dependent on the availability of additional resources as described in Section V.