

ECONOMIC COMMISSION FOR EUROPE

EXECUTIVE COMMITTEE

Ninety-fifth meeting

Geneva, 11 December 2017

Item 3 (a) of the provisional agenda

Informal document No. **2017/61**

Meeting with the Chair of the Committee on Sustainable Energy

Report by the Chair

Report from the Chairperson of the Committee on Sustainable Energy

1. In its eighty-third meeting (Geneva, 14 March 2016), the Executive Committee (EXCOM) approved the programme of work of the sustainable energy subprogramme for 2016-2017 and renewed mandates and work plans for the subsidiary bodies of the Committee on Sustainable Energy (the Committee), as contained in documents ECE/EX/2016/L.5 and ECE/EX/2016/L.6.
2. This report outlines the main achievements of the Committee in implementing its programme of work for in the period between March 2016 and November 2017.

I. Achievements since the twenty-fifth session

3. Since its twenty-fifth session (28-30 September 2016 and 19 January 2017), the Committee has continued to assess how member States of the United Nations Economic Commission for Europe (UNECE) can attain the energy-related Sustainable Development Goals (SDGs). While SDG 7¹ is most relevant for the work of the sustainable energy subprogramme as it is directly related to energy access, renewable energy and energy efficiency, attainment of a number of other SDGs also depends on energy. Progress to these goals is falling short of what is needed to meet global objectives and targets by 2030, which is why the Committee chose “Accelerating the delivery of energy for sustainable development” as the theme for its latest session. A mapping of the sustainable energy subprogramme processes and activities that support countries in achieving the SDGs is contained in document ECE/ENERGY/2016/16.

4. Key achievements since March 2016 comprise:

(a) Organising the Eighth International Forum on Energy for Sustainable Development and Energy Ministerial in Astana, Kazakhstan on 11-14 June 2017, in partnership with the other four United Nations Regional Commissions (ECE/ENERGY/2017/2), the Government of Kazakhstan, and other key international organisations working on energy topics;

(b) Contributing to the World Bank Group’s “Global Tracking Framework” report in the context of Sustainable Energy for All (SEforAll)²; preparing a more detailed regional assessment of the progress of the UNECE region in attaining energy for sustainable development; engaging the energy community in a broader reflection on appropriate indicators and data for energy for sustainable development;

(c) Further broadening the application of the United Nations Framework Classification for Resources to renewable energy (bioenergy resources (ECE/ENERGY/2017/5));

(d) Based on the second edition of the “UNECE Renewable Energy Status Report 2017”³, conducting so-called hard talks in Azerbaijan, Georgia, and Ukraine⁴ to

¹ <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

² <http://www.worldbank.org/en/topic/energy/publication/global-tracking-framework-2017>

³ <http://www.unece.org/energy/welcome/areas-of-work/renewable-energy/unece-renewable-energy-status-report.html>

⁴ <http://www.unece.org/energy/welcome/areas-of-work/renewable-energy/unece-hard-talks.html>

explore the findings of the report and to discuss its lessons for the host country in concrete terms;

(e) Launching a major movement to enhance the energy performance of buildings, including endorsement of the Framework Guidelines on Energy Efficiency Standards in Buildings (ECE/ENERGY/GE.6/2017/4) jointly with the Committee on Housing and Land Management (ECE/HBP/2017/3);

(f) Initiation of a programme to address methane management in the extractive industries including: development of draft best practice guidance on monitoring, reporting and verification of emissions and launching Centres of Excellence on Coal Mine Methane in Poland and China under the auspices of the UNECE Group of Experts on Coal Mine Methane;

(g) Holding a policy dialogue on the critical role of carbon capture, use and storage and high-efficiency, low emission technologies in achieving climate objectives involving the private sector; and

(h) Further increasing the visibility of UNECE's regional impact through implementing the project "Application of a biogas technology model for rural areas in Kyrgyzstan" and organizing a series of capacity building events under the Development Account project in Azerbaijan, Georgia and Kazakhstan.

II. Main outcomes from the twenty-sixth session of the Committee

5. To deepen the conversation about attaining the 2030 Agenda on Sustainable Development (2030 Agenda), the Committee focused its twenty-sixth session on overcoming barriers and accelerating the move to a sustainable energy future. The 2030 Agenda requires countries to pursue concerted and accelerated action to reconcile the world's growing need for energy services with mitigating the impacts of energy resource development and use. Through a series of multi-stakeholder panels and discussion, the Committee explored what sustainable energy means for the ECE region and how regional cooperation and concerted action could help accelerate the delivery of the 2030 Agenda and SDG 7.

6. As national circumstances vary significantly, countries will choose different pathways to meet commitments they have made, including under the 2030 Agenda and the Paris Climate Agreement. Nevertheless, some common aspects have emerged from the Committee's deliberations, summarized below.

7. Recent research from the International Panel on Climate Change (IPCC) indicates that the world is on a pathway closer to four than to two degrees Celsius. This reinforces the urgency of the Committee's programme of work. Many countries and people still depend on fossil energy. There are to-date no economically rational scenarios to 2050 in which the share of fossil energy in total primary energy supply falls substantially. This has to be recognized. For the Committee, technology options that reduce the net carbon intensity of the energy system have an important role to play in future energy systems.

8. While the costs of renewable energy may be falling, the cost of integrating intermittent sources of energy into the grid is not. The challenge goes beyond financing investments and involves approaching a sustainable energy mix from a different angle and applying broad thinking to a net zero-carbon energy system.

9. There is no commonly agreed definition for what sustainable energy is, and hence there is no common global goal or target. Choices must be economically and socially

rational for each country and be made in the broader context of an economy as a whole. The primary objective of all nations' governments ostensibly is to enhance the quality of life of their citizens. In that sense the integration of energy objectives for sustainable development is broader than access.

10. Energy security does not necessarily mean self-sufficiency. As with any common good, there is value in mutually beneficial economic interdependence. The challenges of the 2030 Agenda are best met through the integrative nexus areas that the notion of energy for sustainable development offers. For energy, it is critical to think in terms of a wholly interconnected complex system in which supply, demand, conversion, transport/transmission interact freely and flexibly. This perspective applies within regions and sub-regions but also between regions and economic sectors.

11. All nations are committed and are in the process of developing or implementing their approach to achieving their interpretation of sustainable energy and the 2030 Agenda. It is necessary that each recognize the perspectives and the drivers of the others, that there is not a single approach but a multitude of approaches. What truly matters is that the collective outcome delivers the needed results and that this collective approach can achieve these targets faster than individual national or sectoral actions.

12. The Committee sees itself as a platform that drives towards action at a national level. It seeks ways to reinforce this role in the future. During the twenty-sixth session, UNECE member States supported a number of activities that could be implemented immediately through the Committee's subsidiary bodies.

13. These actions were discussed at the Eighth International Forum on Energy for Sustainable Development and Energy Ministerial (see also para. 4.a)), endorsed by participating ministers, endorsed by the Committee, and are now reflected in the work plans of the six subsidiary bodies, often in ways that cut across individual mandates (ECE/ENERGY/2017/2):

- (a) Accelerating the transition to a sustainable energy system;
- (b) Accelerating the uptake of renewables;
- (c) Improving energy efficiency in buildings;
- (d) Improving energy efficiency in industry;
- (e) Understanding the role of natural gas in the 2030 Agenda for Sustainable Development;
- (f) Valuing coal mine methane;
- (g) Extending deployment of United Nations Framework Classification for Resources;
- (h) Reducing the environmental footprint of fossil energy through deployment of high efficiency, low emissions technology and carbon capture use and storage;
- (i) Building on international cooperation and collaboration; and
- (j) Improving data quality and indicators.

14. The full list of conclusions and recommendations arising from the twenty-sixth session of the Committee can be found in document ECE/ENERGY/113.

III. Major activities planned for 2018 and beyond

15. The world is falling short of the objectives it has set itself in energy. The Committee has already addressed issues around the gap between what countries have committed to and what they are actually doing, as well as the second gap between their commitments and what is truly needed to deliver outcomes in its two previous sessions. Given the outcomes from the twenty-sixth session, the Committee intends to continue this dialogue both at the political and technical levels.

16. Focus areas arising from the twenty-sixth session are listed below:

Ninth International Forum on Energy for Sustainable Development

17. The Committee endorsed the international forum process as an effective collaboration among the five Regional Commissions and key international partners for each Commission to support its respective member States in attaining objectives.

18. Preparations to hold the Ninth International Forum on Energy for Sustainable Development have begun. The Committee welcomed and appreciated the efforts currently underway by host-country Ukraine.

19. The focus of the event, planned for fall 2018, will be about closing the gap between action and ambition in the context of accelerating the implementation of the 2030 Agenda. The agenda will unite all technology options with regional cooperation, investment and financing aspects. Emphasis will be given to the resilience of energy infrastructure and the nexus arena in the context of a circular economy. The intent is to agree on a balanced set of options of what countries could do concretely and effectively and to inform the programme of work of the UNECE sustainable energy subprogramme.

Strengthening the capacity of UNECE member States to achieve the energy-related Sustainable Development Goals (Pathways to Sustainable Energy)

20. Modelling efforts and workshops have started to implement the extrabudgetary project “Pathways to Sustainable Energy”, approved by EXCOM on 16 September 2016 (informal document 2016/55). The project aims to increase capacities of UNECE member States to create a solid base for policy dialogues on different options through the development, implementation and tracking of national sustainable energy policies that are aligned with international agreements, see also document ECE/ENERGY/2016/7.

21. The project is expected to deliver initial results in the first quarter of 2018. The Committee recommended strong emphasis on parallel policy and technology dialogues to strengthen the modelling results and encouraged countries to contribute. The Committee will be consulted on results and political messages at its twenty-seventh session.

The Global Tracking Framework and review of SDG 7

22. The five United Nations Regional Commissions collaborated with World Bank and the International Energy Agency (IEA) on the third edition of the “Global Tracking Framework” to assess the world’s progress in achieving SDG 7, this time with a regional focus. The project concluded that more practical, measurable, and timely indicators are needed to track progress. The Committee considered an UNECE companion report to the

“Global Tracking Framework” report that explores regional dynamics in detail. The companion report will be published by the end of this year.

23. Planning has now started of the fourth edition of the “Global Tracking Framework”. The Committee plans to be closely involved in the review of SDG 7, which will be assessed in the United Nations High-level Political Forum on Sustainable Development (HLPF) in 2018⁵. The Committee has also requested involvement in the Regional Sustainable Development Forum to be held in Geneva in 2018.

24. Given the overarching theme of the review “Transformation towards sustainable and resilient societies” involving Sustainable Development Goals 6, 7, 11, 12, 15, and 17, the Committee stressed the importance of a holistic approach for implementing the 2030 Agenda and recommended a broader view of energy for sustainable development, as is reflected in the international fora process.

Modernisation of energy infrastructure

25. Most of the energy infrastructure in the UNECE region is aging as it was built in the first half of the twentieth century. Since countries are in the process of modernizing their energy sectors to embrace the challenges of future energy systems described above, it is in countries’ best interest to undertake these transitions in the most holistic, cost-effective and sustainable way. The more profound the transition towards low-carbon energy and green economy that is undertaken by a member State, the more competitive and sustainable the state’s economy can become.

26. The Committee has welcomed the initiative by the Group of Experts on Coal Mine Methane to embark on a project that brings together the expertise of all the subsidiary bodies to create a replicable and flexible transformational business model. The objective is to explore the great potential that lies in the transformation of large industrial complexes. In the UNECE region, there are a number of complexes where mining, power generation, metallurgy, manufacturing and shipping facilities were integrated into dense, interrelated businesses. Nearby population centers provide the workforce for these complexes and both benefit from employment opportunities and render themselves vulnerable to secondary impacts on the local economy, including exposing their communities to a degraded local environment.

27. The project will develop a tool for assisting UNECE member States in delivering an effective transition to low-carbon energy systems and a greener economy by optimised planning to modernise their mining and energy sectors. It is expected that the expertise provided by the Committee’s subsidiary bodies can contribute to integrating energy efficiency and renewable energy solutions while cleaning the fossil based structures. Thus, the project will contribute to the development of innovation-led socially and environmentally responsible sustainable national energy strategies.

28. Once a host-country from the region has been identified, the project will engage with partner organisations and international financial institutions to ensure that a credible long-term investment plan will be developed to sustain the transformation. More information can be found on the website of the project.⁶

⁵ <https://sustainabledevelopment.un.org/hlpf>

⁶ <http://www.unece.org/energy/welcome/areas-of-work/energysedocscmmx-long/cross-cutting-activities/transition-of-the-energy-sector.html>

United Nations Framework Classification

29. The United Nations Framework Classification for Resources (UNFC) is now operational for application to minerals, petroleum, renewable energy generically, geothermal energy, bioenergy and injection projects for the geological storage of CO₂. Work is progressing to apply it to hydropower, solar energy and wind energy and this will intensify in 2018. Significant progress has also been made to apply UNFC to anthropogenic resources (secondary resources).

30. Growing awareness and interest in renewable energy resources has highlighted a need to normalize the way in which renewable energy potential is classified, reported and managed. A shared framework to evaluate renewable energy resources will also provide a foundation for investors, regulators and governments to implement renewable energy projects.

31. Interest in applying UNFC continues to grow worldwide. The Nordic countries (Finland, Norway and Sweden) have developed standard sub-regional guidelines for applying UNFC to their minerals sector. China continues to work on developing bridging documents for minerals and petroleum. The African Minerals Development Centre (AMDC), of the African Union, has decided to adopt UNFC as the sustainable management tool for the whole of Africa. The Coordinating Committee for Geoscience Programmes in East and South-east Asia (CCOP) will develop guidelines for adoption of UNFC as the unifying framework for minerals and petroleum in the 14 CCOP member countries. Cooperation with the Regional Commissions on UNFC will be strengthened in 2018.

The critical role of carbon capture, use and storage in achieving climate objectives

32. The Group of Experts on Clean Electricity has agreed to update its name at the request of the Committee. Its previous full title was the Group of Experts on Cleaner Electricity from Fossil Fuels. The change in name in no way diminishes the group's work on carbon capture, use and storage or high efficiency, low emissions (HELE) technology, but does extend the perspective to recognize the role that fossil will play in accelerating the uptake of renewable energy and the role that information technology can play in enhancing overall system efficiency.

IV. Possible changes to the subsidiary structure of the Committee

33. The subsidiary bodies requested a review of the subsidiary structure of the Committee to reflect the cross-sectoral nature of the challenges of the 2030 Agenda and to enhance opportunities for greater cooperation among the subsidiary bodies. The topic will be on the agenda of the twenty-seventh session of the Committee.

V. Follow-up to the 2017 session of the Economic Commission for Europe

34. All of the activities of the Committee on Sustainable Energy and its subsidiary bodies are designed to help member States to achieve SDG 7 and to reduce the environmental footprint of the energy sector.

VI. Intersectoral activities: new activities and/or progress in existing intersectoral activities

Framework Guidelines for Energy Efficiency Standards in Buildings

35. Buildings are responsible for approximately one-third of total energy consumption and account for almost 40 per cent of CO₂ emissions from combustion. Standards are an effective instrument for addressing energy efficiency in buildings and supporting the achievements of the targets set by several international initiatives, including the Sustainable Development Goals, Sustainable Energy for All (SEforAll), and the Geneva United Nations Charter on Sustainable Housing.⁷

36. At its twenty-fifth session, the Committee endorsed the activities to develop standards related to energy efficiency in buildings (ECE/ENERGY/107). Experts have worked to develop a principles-based performance standard, ultimately leading to an UNECE building guidance for government, industry, and thought leaders. The Committees on Sustainable Energy and Housing and Land Management have endorsed the Framework Guidelines for Energy Efficiency Standards in Buildings (ECE/ENERGY/GE.6/2017/4), based on the recommendations from the Eighth International Forum on Energy for Sustainable Development and Energy Ministerial. The Framework Guidelines include a substantial programme for dissemination, training, and education that is being launched in 2017. The Committees also extended the terms of reference for the joint Task Force for two years, as recommended by the Group of Experts on Energy Efficiency.

Nexus between energy and environment

37. The nexus among energy and other key development challenges (e.g. water, food, health, education, and gender) suggests that numerous opportunities can arise from wider cross-sector perspectives and more holistic decision-making. Work will continue on a number of fronts, in particular with the Environment Division.

VII. Technical cooperation activities

38. Regional advisory services are key in the eyes of the Committee to respond to the needs of member States going forward. It requested the post-session document “Regional advisory service programme in the field of energy and housing” (ECE/ENERGY/2017/16) and would like to enhance the role of the Regional Advisor in the context of the 2030 Agenda.

VIII. Cooperation with other organizations

39. The importance of collaboration to achieve sustainability cannot be overstated. Partnerships and multi-stakeholder collaboration at all levels are essential for achieving the 2030 Agenda, and such activities will be needed at scale. A successful sustainable development agenda must be built on multi-stakeholder collaboration, uniting funders with the United Nations system, governments, civil society, and the private sector to leverage

⁷ <http://www.unece.org/housing/charter.html>

expertise and available resources. These partnerships are needed at global, regional, national and local levels to meet the complex and interlinked challenges of sustainable energy.

40. Member States are aware of this and endorsed the collaboration with the other four United Nations Regional Commissions, the World Bank Group, the IEA, the International Renewable Energy Agency (IRENA), SEforAll, and the International Energy Charter on tracking progress towards attainment of the energy-related SDGs. It further encouraged the secretariat to engage with other organizations and groups with relevance for UNECE energy activities to ensure complete coverage of relevant data and analysis, including deepened collaboration with organizations comprising UN Energy⁸ and with other intergovernmental, industrial, and civil society organizations.

41. Especially the private sector is important to achieve the goals and target of 2030 Agenda. The Committee renewed its wish to involve the private sector substantially in its activities and meetings, referring not only to SDG 7, but also to 6, 8, 9, 11, 12, 13, and 17.

⁸ <http://www.un-energy.org/>