



Eighth Environment for Europe Ministerial Conference

**Batumi, Georgia
8–10 June 2016**

Report of the Eighth Environment for Europe Ministerial Conference

Addendum

Chair's summary of the Conference



Economic and Social Council

Distr.: General
12 August 2016

Original: English

Economic Commission for Europe

Eighth Environment for Europe Ministerial Conference

Batumi, Georgia, 8–10 June 2016

Report of the Eighth Environment for Europe Ministerial Conference

Addendum

Chair's summary of the Conference

I. Introduction

1. The Eighth Environment for Europe Ministerial Conference, held from 8 to 10 June 2016 in Batumi, Georgia, was chaired by the Minister of Environment and Natural Resources Protection of Georgia. In a welcoming address, the Prime Minister of Georgia emphasized the unique role of the Environment for Europe process, as a platform for all countries to identify urgent environmental issues, set priority directions and make concerted efforts to promote sustainable development in the pan-European region. He described the Georgian Government's efforts to address the two main themes of the Conference — “Greening the economy in the pan-European region” and “Improving air quality for a better environment and human health” — and underscored the country's commitment to grow green and develop sustainably by facilitating resource-efficient consumption and production, boosting renewable energy, supporting the development of green transport, green buildings and ecotourism. The Conference's discussion on education for sustainable development was also of immense significance for the country, as the first Intergovernmental Conference on Environmental Education had been held in Tbilisi in 1977.

2. The Executive Secretary of the United Nations Economic Commission for Europe (ECE) noted the importance of the Environment for Europe process for building partnerships, as well as for finding strong political solutions and furthering environmental progress in countries and between countries. The process could become a strong pillar for achieving the Sustainable Development Goals by turning those global Goals into concrete policies, principles and practices. It could also become a valuable mechanism for keeping

GE.16-14014(E)



* 1 6 1 4 0 1 4 *

Please recycle



track of progress towards the Sustainable Development Goals by means of the Shared Environmental Information System (SEIS) and the review mechanisms.

3. The Chair of the government of the Autonomous Republic of Ajara welcomed delegates to Batumi. The city of Batumi was engaged in promoting sustainable development through concrete actions and projects to improve the environment of the Ajara region. A climate change strategy for the region guided the related activities, such as reducing greenhouse gas emissions and promoting sustainable and green development, serving as good example for other regions of Georgia. Specific policies were being developed to protect the region's forests, water, air and biodiversity. With support from the United Nations, Batumi was engaged in the Green City project, including activities to improve the city's environment by implementing sustainable urban and transportation policies.

4. Looking back on 25 years of pan-European cooperation, which had started in Dobříš (Czech Republic), the Ambassador of the Czech Republic to Georgia observed that the Environment for Europe process had emerged as a platform for bringing States and their leaders closer in order to cooperate on restoring the priceless natural heritage in the region and protecting human health and the environment. The process had responded to the demand that environmental concerns be addressed by generating multilateral environmental agreements, facilitating transboundary cooperation, shaping a vision for the environmental dimension of sustainable development and identifying and addressing the challenges ahead. Its achievements had marked history, and would serve as the building blocks of the regional contribution to the 2030 Agenda for Sustainable Development (2030 Agenda). The process needed to be kept relevant for all by ensuring its adaptation and contribution to the achievement of the Sustainable Development Goals — a challenge that also provided an opportunity for new joint activities and enhanced regional cooperation. Integration remained a huge challenge in attaining sustainable development. In that regard, using the already established and well-functioning platform offered by the Environment for Europe process would be effective and cost efficient in supporting the delivery of the 2030 Agenda. The process had already been reformed to adapt it to the changing needs of the region; for it to remain relevant for all countries it now needed to be made fit for the 2030 Agenda, by enhancing its holistic approach, creating more synergies and increasing its effectiveness. The Czech Republic expressed interest in hosting the next ministerial conference in 2021, as it would mark the thirtieth anniversary of the process begun in Dobříš.

5. The Deputy Executive Director of the United Nations Environment Programme (UNEP) stressed that integrating the environment across the Goals in the 2030 Agenda and the Paris Agreement on Climate Change reflected a wider momentum for change at the national, municipal and community levels and, increasingly, in the private sector. He outlined the outcomes of the second session of the United Nations Environment Assembly with regard to the 2030 Agenda, climate change, clean air and inclusive green economy, drawing links to the two main themes of the Batumi Conference. He drew attention to worrying trends regarding climate change and the loss of biodiversity flagged in the sixth *Global Environment Outlook Assessment for the Pan-European Region*,¹ and striking findings of recent UNEP research on environmental crime.

¹ UNEP and ECE (Nairobi, 2016). In the context of the Assessment the term “pan-European” applies to the ECE region with the exception of Canada and the United States of America.

II. The environment dimension of the 2030 Agenda for Sustainable Development — moving forward in the pan-European region

A. Multilateral environmental agreements, mechanisms, policies and institutions supporting the 2030 Agenda for Sustainable Development

6. The 2030 Agenda and the Paris Agreement on Climate Change were hailed as landmark frameworks by participants, with several delegations pointing out synergies between the two instruments. Many noted the complexity of the 2030 Agenda, combining the three dimensions of sustainable development, and the need for an integrated approach to its implementation. Political commitment was crucial for achieving the Sustainable Development Goals. It was also important to promote ownership of actions at all levels and to involve various actors in their execution. It was stressed repeatedly that economic growth had to be decoupled from environmental degradation and could not be expected without greening the economy. Societies should move towards sustainable consumption and production patterns, implying the rational use of natural resources.

7. The implementation of the global and regional multilateral environmental agreements in synergy would provide strong support to countries in reaching the Sustainable Development Goals. Speakers also stressed the role of international cooperation in supporting the implementation of the 2030 Agenda, along with the importance of regional initiatives — such as the Astana Water Action. Only through joint action could progress be made. A number of delegations noted their efforts to harmonize national legal and policy frameworks to serve the implementation of the 2030 Agenda, with many mentioning also national policy documents adopted to guide their implementation efforts. In addition, several countries reported the formation of new — or the conversion of existing — interministerial, multi-stakeholder or other platforms to coordinate implementation at the national level. The integrated nature of the new Agenda meant that challenges had to be addressed across sectors and it was no longer possible to work in silos. Sectoral policies should be aligned to ensure progress across the Sustainable Development Goals and the creation of win-win opportunities.

8. A number of delegations pointed to the need to build partnerships, ensure stable investment and share green technologies. The requirement for policy advice and capacity-development to support the implementation of the 2030 Agenda was also flagged. However, differences should be taken into account and practices tailored to local circumstances. Representatives of several countries and organizations provided concrete examples of measures taken to support implementation of Sustainable Development Goals and expressed their readiness to share their experiences.

9. Several delegates underlined that environmental ministers should take the lead in ensuring implementation of the environmental dimension of the Sustainable Development Goals. They should raise knowledge and convince other ministers and other actors, such as civil society and the private sector, of the importance of the environmental aspects of the Goals. Notably, they should work in cooperation with ministries of economy and finance to advance the use of economic instruments for environmental protection and create economic incentives for the private sector to use innovative technologies that minimized negative impacts on the environment and health. The importance of cooperation between scientists and policymakers was also underscored.

10. Many participants emphasized the central role of ECE in supporting implementation of the 2030 Agenda and providing platforms for cooperation. ECE had solid experience in integrating agendas in an effective manner and in serving as a cooperation platform, fostering the exchange of experience. The Environment for Europe ministerial process was

playing a role in driving environmental policy and could therefore support the implementation of the 2030 Agenda in the ECE region and be used for follow-up and review. The process also provided an opportunity for civil society to influence ministerial discussions. ECE was able to offer a number of mechanisms to support the implementation of the Sustainable Development Goals and monitor progress towards reaching them, in particular its multilateral environmental agreements, the Environmental Performance Review Programme and the UNECE Strategy on Education for Sustainable Development, as well as through its work on environmental information, indicators and statistics.

11. The use of the ECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) as a cross-cutting tool to support the implementation of the 2030 Agenda was also underscored, with several speakers noting the importance of public access to information and public participation. The ECE Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) and its Protocol on Strategic Environmental Assessment enabled the integration of environmental considerations in sectoral policies and projects. The Espoo Convention, the ECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) and the ECE Convention on the Transboundary Effects of Industrial Accidents were seen as important for promoting transboundary cooperation in the achievement of the Sustainable Development Goals. The strong alignment of the Water Convention and its Protocol on Water and Health with the Goals was also noted by several speakers. Concerted action between the Conventions, seeking substantive and institutional synergies at both the international and national levels, would improve the effectiveness and efficiency of those instruments.

12. Participants furthermore underlined the importance of integrating the principles of education for sustainable development into national policy frameworks. The Strategy on Education for Sustainable Development provided a useful tool to integrate sustainable development into education, one of the greatest challenges in the 2030 Agenda. ECE, UNEP, the United Nations Development Programme, the Regional Environmental Centres and other organizations had to continue their valuable support to countries. In particular, the role of the Organization for Economic Cooperation and Development (OECD) Environmental Action Programme Task Force in developing capacities, supporting policy reform and transferring good practices and advanced knowledge to the countries of the Caucasus, Central Asia and Eastern Europe was highlighted. A representative of OECD expressed the organization's renewed commitment to host the Task Force under a new name, the GREEN Action Programme Task Force, to better reflect the theme of greening the economy.

13. Finally, there was particular praise for the ECE Environmental Performance Review Programme, with its proven record of getting results. It could support implementation of the 2030 Agenda through the exchange of experience, the peer review process and in follow-up and review. Several reviewed countries had committed to using review recommendations to implement the Sustainable Development Goals.

14. Closing the discussion on tools to support the achievement of the Sustainable Development Goals, a festive event was held to celebrate 20 years of successful implementation of the Environmental Performance Review Programme. The event brought together representatives of countries that had either been reviewed or provided expertise or financial support and international organizations that had provided expert support to the Programme, illustrating the remarkable cooperative spirit and nature of that peer review mechanism.

B. Keeping the pan-European environment under review

15. The Minister of Natural Resources and Environmental Protection of Belarus presented the follow-up to the decision by ministers at the Seventh Environment for Europe Ministerial Conference (Astana, 21–23 September 2011) to establish SEIS across the pan-European region. In measuring progress, focus had been placed on the online availability of data sets relevant to SEIS and the range of reporting obligations under multilateral environmental agreements, where access to environmental information and data were key to informed and effective policymaking. The progress report by the Working Group on Environmental Monitoring and Assessment provided the basis for the Working Group to continue evaluating the establishment of SEIS and providing access to environmental information and data in support of regular environmental reporting.

16. The Executive Director of the European Environment Agency presented the 2015 state of the environment report,² noting the great importance of the traceability of data and information contained within it. The SEIS concept together with the European Environment Information and Observation Network was a unique model of cooperation and knowledge exchange, including the collaboration between ECE, UNEP and the European Environment Agency. Significant progress had been achieved over recent years in improving the online accessibility of data and indicators, including the improvement of infrastructure. Among other examples, the European Union had a new air quality electronic reporting system. The use of both regional and global knowledge platforms, such as the European state of the environment reports and the Global Environment Outlook, was essential to monitor progress on the Sustainable Development Goals.

17. The State Secretary of Environment of the Republic of Moldova said that inter-institutional cooperation was essential so that environmental information and data could be shared and reused. She highlighted the link between SEIS and green economy projects, with specific examples to emphasize that the sharing of data and the multiple use of already existing indicators would reduce the costs of the development of indicators and the burden of reporting with a view to better supporting policymaking. The Director General of the Federal Ministry of Agriculture, Forestry, Environment and Water Management of Austria noted that open public access to up-to-date air quality data was a core element of the national SEIS. Challenges included the provision of affordable monitoring equipment and data management devices. Targeted capacity-building, involving international organizations and national administrations and regional and country-specific activities, was needed to achieve substantial progress in online availability of information and data. The Director of the Informational and Analytical Centre for Environmental Protection of Kazakhstan highlighted the national report on the state of the environment, which focused on the use of natural resources using ECE environmental indicators. Kazakhstan was promoting the green economy through the Green Bridge partnership. To address various environmental issues, in particular related to water and energy, Kazakhstan had developed a five-year framework programme on partnership for development based on the Sustainable Development Goals. A Senior Policy Adviser of the United States of America noted the country's support of the work on SEIS through the Committee on Environmental Policy, particularly in the context of the 2030 Agenda and national reporting on the Sustainable Development Goals. SEIS should evolve to integrate economic and social information and data. That could be done by further engagement with the Conference of European Statisticians in its work on implementing the United Nations System of integrated Environmental and Economic Accounting.

18. The Executive Secretary of ECE and the Director of the UNEP Regional Office for Europe launched the sixth *Global Environment Outlook Assessment for the Pan-European*

² *The European environment — state and outlook 2015* (Copenhagen, 2015).

Region as the regular pan-European³ environmental assessment. The Regional Coordinator of the UNEP Division of Early Warning and Assessment presented the state and trends in the region, effective policies, means to strengthen environmental governance and outlooks. The report provided a comprehensive, integrated environmental assessment of the region, which offered a foundation for improving environmental policy, identifying emerging issues and enhancing the science-policy dialogue.

19. The launch was followed by a panel discussion on the outcomes of the assessment and the importance of state of the environment reporting for decision-making and for the achievement of the Sustainable Development Goals. Opening remarks were made by the moderator, the Minister of Environment, Waters and Forests of Romania, followed by interventions by the Minister of Environmental and Nature Protection of Croatia and the State Secretary of Environment of Slovakia. It was noted that the assessment was timely now that Governments and society were focusing their attention on the implementation of the 2030 Agenda. Furthermore, the assessment stressed the need to reverse environmental degradation and reduce pollution to ensure a sustainable future; strong and resilient ecosystems would enable sustainable development. The outlook component emphasized important mega trends. Among regional challenges were the need to integrate data better, improve data analysis and make better use of environmental data and statistics, especially within the framework of the Sustainable Development Goals. Moreover, the assessment process should facilitate taking actions and decisions at the national level and enhance cooperation to manage shared environmental problems.

20. On the national level, the Deputy Director of the State Agency on Environmental Protection of Kyrgyzstan noted the country's recent inventory on biodiversity and the online version of its State of the Environment Report, as well as an upcoming Environmental Performance Review. A representative of the European Union welcomed the newly launched assessment, noting that the coherent and high-quality summary of key findings and policy messages provided a useful analysis of the thematic priorities for the region. The European Union also encouraged the use of SEIS principles. A representative of the Russian Federation expressed the support of his country for the assessment process and expressed its great appreciation for the involvement of the Working Group on Environmental Monitoring and Assessment. The Russian Federation also supported the progress report on SEIS, and the need to maintain the reporting and expand on the SEIS core indicators. In comments on a few technical aspects of the assessment, it was noted in particular that monetary approaches to the evaluation of the health impacts of poor air quality could be misleading. A representative of the European ECO Forum stressed that the assessment process, as a participatory and cross-disciplinary process, could play an important role in informing decision-making and helping to improve the environment. A representative of UNEP provided some clarifications on the air quality data in the assessment, and the importance of monetary valuation to raise awareness of the costs of inaction.

III. Towards a new society: 10 years of education for sustainable development

21. A High-level Meeting of Education and Environment Ministries, co-chaired by the Minister of Education and Science and the Minister of Environment and Natural Resources Protection of Georgia, was held within the framework of the Batumi Conference to consider progress in implementing the first 10 years of the UNECE Strategy for Education for Sustainable Development and reaffirm participating States' commitment to the future implementation of the Strategy.

³ See footnote 1.

22. At the conclusion of the Meeting, ministers and heads of delegation adopted the framework for the future implementation of the UNECE Strategy for Education for Sustainable Development and the Batumi Ministerial Statement on Education for Sustainable Development providing a way forward for further implementation of the Strategy in the region. Also, a representative of Georgia declared the country's intention to discuss the possibility of developing a new binding agreement on education for sustainable development with the international community.⁴

IV. Greening the economy in the pan-European region

23. The State Secretary for the Environment of Switzerland chaired a session on greening the economy in the pan-European region. In opening remarks, he noted the commitment of Switzerland to green economy transition through the adoption of the 2013 Green Economy Action Plan, as well as the country's active engagement in supporting the elaboration of the Pan-European Strategic Framework for Greening the Economy and the Batumi Initiative on Green Economy (BIG-E). Scarcity of resources, security of supply and competitiveness were key reasons for all economies to move towards a green economy. Countries should move swiftly towards a greener economy, by adopting the right policy mix. The green transition offered opportunities for new markets for business and to build more stable and resilient economies. It was also a means to achieve the Sustainable Development Goals and to implement the Paris Agreement.

24. Bertrand Piccard, Swiss aviation pioneer, Solar Impulse pilot and UNEP Goodwill Ambassador, called for urgent action from the political leaders gathered in Batumi, including the adoption of ambitious policies and programmes to move the green economy transition forward. Many of the technologies required for that transition were already available and it was time for strong political will and commitment for the changes required, so that greening the economy would be an attractive option for everyone.

25. The Secretary General of the Club of Rome noted the shortcomings of the current economic growth model and provided evidence to show that it had failed to reduce the gap between rich and poor as well as poverty. The answer lay in a new economic approach, such as greening the economy. In view of the potentially high costs associated with the transition to a greener economy, there was a need to provide the right incentives, legislation and market interventions to make the transition more affordable.

26. The Minister of Environment, Waters and Forests of Romania observed that the environment was an engine of economic growth. Greening the economy was not only about changing economic models, but also changing models of governance and mentalities. Obstacles in the minds of decision makers and society needed to be removed. Society was at a point of no return in the context of climate change, and the cost of inaction was far too high. She called for renewed efforts and actions that matched each countries' specific needs, cultural contexts and resource endowments.

27. The Minister of Natural Resources and Environmental Protection of Belarus announced the country's commitment to strategically improve its environment and economy and to achieve the Sustainable Development Goals and targets through the development of a Green Economy Action Plan, which targeted transport, energy, agriculture and education. Specific actions included the improvement and simplification of taxation, implementation of extended producers' responsibility, development of new green infrastructure and transport, support for greener agriculture and the creation of a network of green schools.

⁴ For more details on the High-level Meeting, see the co-Chairs' summary (ECE/BATUMI.CONF/2016/2/Add.4).

28. A short video produced by ECE and UNEP, including interviews with six ministers and senior representatives of ECE and UNEP, was screened for participants.

29. Following its presentation by the Secretary-General of the Ministry of Environment of Portugal, on behalf of the Chair of the ECE Committee on Environmental Policy, delegates endorsed by acclamation the Pan-European Strategic Framework for Greening the Economy. The Framework equipped countries with a common vision and three broad objectives to reduce environmental risks and ecological scarcities, enhance economic progress and improve human well-being and social equity for the transition to a green economy. The Strategic Framework included nine focus areas for the transition to a green economy and to contribute to the achievement of the Sustainable Development Goals targets.

30. BIG-E was also launched. The initiative consisted of 101 voluntary actions committed to by 34 countries and organizations, and remained open to additional commitments. Representatives of two additional countries announced that their Governments would submit pledges soon.

31. The plenary closed with a video prepared by the European ECO Forum, calling for ministerial leadership, engagement in support of a green economy transition and mutually reinforcing trade and environment policies. The session then split into two parallel round tables to discuss green economy issues, with a focus on: (a) opportunities and challenges; (b) paths to sustainability; (c) green incentives; and (d) cooperation.

32. In the discussion, delegates acknowledged green economy as a key path towards sustainable development, and referred to numerous approaches and initiatives that countries of the region were undertaking in that direction. Transitioning to a green economy to stay within planetary boundaries did not mean greening at the margins, but required a fundamental change in economy and society, underpinned by political commitment and leadership, including in countries that relied on large oil and gas resources. Adjustments and new approaches should account for different interests and mentalities of societies.

33. The real challenge was not the novelty of the green economy concept, but rather its complexity. Numerous issues remain to be addressed, with limited financial resources and policy fragmentation among the most cited. Green investments and innovation, research and development of new technologies, technology transfer between countries and support for small businesses all required financing. However, investment choices could have long-term implications and should thus avoid the lock-in of existing technologies and not limit options or hinder the development of substitutes. To achieve green economy it was necessary to use market-based instruments, remove harmful subsidies, including fossil-fuel subsidies, and shift from taxing labour to taxing the use of natural resources. Government funding to leverage green private financing was a good approach and opportunities to further scale-up those activities should be pursued.

34. Participants urged policymakers to carry out natural capital accounting and valuation of ecosystems services, using, for example, the United Nations System of integrated Environmental and Economic Accounting, working with the Conference of European Statisticians, the World Bank and OECD. There was a need to go beyond gross domestic product (GDP) and to work on countries' ecological footprints, based on alternative indicators and ways of measuring progress. Regular review and long-term analysis of the environmental and social impacts of policymaking and decision-making, as well as holistic thinking, were necessary for a successful green economy transition.

35. Delegates also emphasized the need for the effective integration of environmental considerations into legal and regulatory frameworks, institutional mechanisms that allowed for cross-sectoral coordination and the harmonization of conflicting interests of different stakeholders. Strategic environmental assessment and environmental impact assessment, based on the Espoo Convention and its Protocol, were helpful tools for that purpose.

36. Decoupling economic growth from environmental degradation required behavioural change towards more sustainable lifestyles, including food choices. Speakers considered education for sustainable development, public awareness and good communication to stakeholders on the benefits of a green economy to be essential. The role of civil society in monitoring progress towards green economy was stated.

37. A green economy had to be inclusive and create new green jobs. Delegates reported that in some countries green jobs were increasing at a rate of 3 per cent per year, especially in sectors like solar energy and cycling. Furthermore, a green economy needed to be climate resilient and address the social impacts of climate change, which were expected to be particularly acute for the most vulnerable. As they were often dependent on natural resources, it might be necessary to establish safety nets for vulnerable groups, as well as to link global risks to local circumstances.

38. On paths to sustainability, delegates reflected on successful approaches for the efficient use of natural resources and the enhancement of ecosystem services, citing among others: reuse and recycling; strengthened producer responsibility; eco-labelling; new business models, such as collaborative consumption and circular economy solutions; and the role of art in promoting a sustainable value chain.

39. Sustainable agriculture, forest management and the water-food-energy nexus were also key focus issues, with delegates from Central Asia noting their commitment to energy efficiency, effective waste management, sustainable transport and water-efficient irrigation technologies to reduce water intake. Energy lay at the heart of the green transition and achieving the right clean energy mix to meet the commitments under the Paris Agreement was of paramount importance. Moving away from the traditional energy sector for some countries, however, was proving to be difficult due to the social implications and possible job loss. The use of fiscal incentives and standards to stimulate energy efficiency in the building sector were highlighted as effective market-based instruments. The need to integrate corridors and cities into sustainable infrastructure and urbanization patterns and ensure good environmental governance was expressed.

40. It was noted that some Governments were already leading by example, by greening their own activities and reporting on environmental performance. Mandatory sustainable public procurement, for example for catering services, office equipment or street lighting, and increased use of renewable energy in public buildings were some steps in that direction.

41. To move from a linear to a circular economy would require life-cycle cost analysis, improvement in the quality of the secondary raw materials and addressing environmental and social considerations throughout entire supply chains, including at the design stage. The circular economy package of the European Union aimed at achieving that. Creating a circular economy had significant benefits: it could represent a 7 per cent GDP gain by 2030.

42. Inclusive platforms for dialogue to share good practices and lessons learned at the local level were necessary. Delegates also mentioned the need to enhance the engagement of businesses and to expand scientific networks and research. They further highlighted the role of regional cooperation, along with the need to build on important existing programmes, processes and partnerships, such as the Environment for Europe process, the Environmental Performance Review Programme, the UNECE Strategy for Education for Sustainable Development, the Pan-European Strategic Framework for Greening the Economy, the BIG-E, the Partnership for Action on Green Economy, the European Union Greening Economies in the Eastern Neighbourhood project and the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns. A regular forum should be convened to support and take stock of implementation of BIG-E, as well as to promote BIG-E beyond the pan-European region. It was also suggested to promote and use the environmental and social standards agreed within the ECE region when developing the Silk

Road Economic Belt. An initiative on mapping, monitoring and engagement to build a broader stakeholder community was proposed to foster civil society participation.

43. Delegates agreed that there was a need for a strong knowledge base and effective knowledge sharing mechanisms, such as the Green Growth Knowledge Platform. The Platform would promote national BIG-E commitments, provide knowledge-sharing support for the region and communicate BIG-E actions globally. Switzerland pledged 100,000 Swiss francs as a contribution to the activities of the Green Growth Knowledge Platform in support of BIG-E.

V. Improving air quality for a better environment and human health

44. In a session on improving air quality, delegates noted that, despite substantial progress in the region over recent decades, air pollution continued to pose threats to health, the environment and economies. Joint efforts should continue to ensure a healthy future for the next generations. The ECE Convention on Long-range Transboundary Air Pollution (Air Convention) and its protocols provided the leading example of a regional multilateral platform to tackle complex air pollution challenges.

45. The Minister of Natural Resources and Environmental Protection of Belarus informed participants about progress in expanding the national monitoring network, the emission reductions that had been achieved through the implementation of various policies and plans for further measures.

46. The Deputy Mayor of Tbilisi outlined the key challenges related to air quality in the city, in particular those related to the transport sector, which was responsible for about 90 per cent of emissions. She proposed to mitigate the problem by reorganizing the transport system.

47. The Director of the World Health Organization Regional Office for Europe stressed the gravity of the health impacts of air pollution and urged political leaders to implement fully the commitments already made, globally and regionally. She called for a better use of the latest evidence, data and tools provided by the environment and health sectors. There was a need to capitalize on the synergy and coherence provided by relevant regional processes and on the partnerships that they enabled.

48. The Environment Ambassador of Sweden reconfirmed the commitment of Nordic countries to working towards improved air quality and introduced the Batumi Action for Cleaner Air. The endorsed initiative, together with the commitments by ECE member States and interested stakeholders, aimed to inspire action on air pollution issues that were not currently being addressed, as well as further the implementation of countries' obligations under the Air Convention and its protocols. The initiative was launched in a festive ceremony with the participation of children from Batumi, as a reminder of the commitment to ensure that future generations could breathe fresh air and live in a healthy environment.

49. The session then split into two parallel round tables to discuss issues related to improving air quality, with a focus on: (a) pollutants and policies; (b) sectors and funding; (c) public awareness and participation; and (d) cooperation.

50. During the discussions, participants noted that fine particulate matter, nitrogen oxides, ground-level ozone, ammonia, persistent organic pollutants, heavy metals, methane and hydrofluorocarbons threatened human health and the environment. Delegates mentioned a number of regulatory, institutional and technical measures that had proven effective in tackling air pollution. It was specifically underlined that the use of the end-of-

pipe technologies and renewable sources of energy had brought about significant reductions in emissions.

51. The Director of Environment of OECD presented a recent study on the economic consequences of outdoor air pollution. Environment ministers should be able to defend expenditure to reduce emissions of air pollutants by drawing attention to the huge economic costs of air pollution. Globally, by 2060, the costs of inaction on air pollution could amount to 1 per cent of GDP on average — with the highest rate in the ECE region, where it might reach 3 per cent of GDP. Those costs included market costs, associated with health expenditures, agriculture yields and labour productivity. Non-market costs associated with mortality and morbidity were estimated as being about seven times higher. Premature deaths resulting from air pollution could rise from 3 million in 2010 to 6–9 million per year in 2060. Some speakers provided evidence from their countries supporting the very significant costs of air pollution to their economies, including human health costs. Several delegates pointed out that the benefits of improved air quality exceeded by far the cost of pollution-reduction measures.

52. Speakers remarked that, to decouple economic growth from air pollution it was essential to link the process of standard setting with health-related indicators and targets. Many countries had adopted measures and there had been some notable successes in reducing emissions, in particular for sulphur. The implementation of economic instruments, such as congestion and pollution charges, green deals and subsidies for industry, had proven to be effective. The introduction of integrated environmental permits, the review of emission standards for stationary and mobile sources and stricter environmental control and penalties for main polluters were also mentioned.

53. Many speakers called for swift action to address emissions from key sources, including transport, domestic heating, industry, agriculture, energy, waste and mining. Many participants noted the impact on human health of particulate matter, nitrogen dioxide and ozone, with ozone also affecting ecosystems and agriculture. Particular attention should be paid to the impact of air pollutants on vulnerable groups, such as children, pregnant women and the elderly, and on those living in pollution hotspots, including the area affected by the Aral Sea disaster.

54. Of particular concern was black carbon, a component of particulate matter, which had a severe impact on both human health and the environment, and also an important driver of climate change in the Arctic. One delegation wanted to see global action taken on black carbon. Another speaker called for action on methane, which in addition to being an air pollutant, was a potent greenhouse gas. In that regard, a number of countries mentioned that in the oil and gas sector measures were being taken to reduce methane emissions from flare gas. In agriculture, efforts to curb ammonia emissions still faced challenges. There was also reference to other pollutants present in air, such as pesticides, polychlorinated biphenyls and dioxins. In addition, attention was drawn to toxic substances in construction materials, the burning of plastics in domestic stoves and the open burning of waste, particularly in the countries of the Caucasus, Central Asia and Eastern Europe.

55. Several speakers referred to persistent problems in relation to the sectors and pollutants mentioned. Technological advances in monitoring had increased countries' ability to both measure and trace pollutants, such as persistent organic pollutants. That information served as the basis for both policy development and for informing the public, as well as to assess the effectiveness of measures. Nonetheless, challenges remained in monitoring, both for indoor and outdoor air quality, and in the expansion and harmonization of emissions inventories.

56. Some delegations referred to policy targets, notably to bring air pollution down to levels that no longer harmed people and the environment. Countries had developed strategies, and speakers noted synergies between air and climate strategies. The need for integrated action across sectors and at all levels was also mentioned. Several countries were

revising national legislation to incorporate international standards, and several delegations underlined the importance of coherently addressing climate change and air pollution also in the context of achievement of Sustainable Development Goals.

57. Speakers reported on measures being taken in the transport sector: vehicle and fuel standards; spatial and urban planning that took account of mobility needs; banning of the most polluting vehicles from parts of cities; financial incentives for the exchange of old vehicles; compensation for the use of bicycles; and measures to encourage the use of electric vehicles. However, challenges remained, notably with regard to emissions from diesel vehicles, calling for additional measures, such as the removal of subsidies and tax differentials between fuel types. With regard to the industrial sector, several delegations mentioned the importance of adopting emission limit values for different installations and the use of best available techniques, also as an instrument to modernize and refurbish existing facilities. Countries were making efforts to increase energy efficiency in various industries.

58. Several delegations pointed to challenges in the residential sector, in particular in rural areas, related to the use of solid fuel for cooking and heating. That sector significantly contributed to indoor and outdoor air pollution in a number of countries. Other measures suggested were the removal of subsidies in other polluting sectors, such as fossil fuel subsidies, especially for coal; the extension of district heating; and smart spatial planning in relation to both mobility and exposure to polluting sources. It was observed that the polluter pays principle had yet to be fully implemented.

59. One delegation noted that its Government had introduced a tax on nitrogen dioxide emissions. Companies were able to obtain an exemption from the tax by agreeing on abatement measures and contributing to a fund to support enterprises in implementing such measures. The scheme had led to technical innovations, such as ships switching from marine diesel to liquefied natural gas. Another country delegation said that both public and private funds had been used to finance air pollution reduction measures. A civil society speaker proposed a levy on the chemical industry to finance measures for safe waste management, while further measures could be taken to move away from the production of materials that could cause air pollution later in their life cycle.

60. A speaker noted the public perception that industry was the largest source of air pollution, whereas that was not generally the case. People were not sufficiently aware of the environmental impact of their personal choices, notably concerning mobility. The full engagement of an informed and empowered public was a prerequisite for the success of policies aimed at good air quality. Several delegations emphasized that that would require transparency, better dissemination of comprehensive information and outreach. It was also noted that the implementation of the Protocol on Pollutant Release and Transfer Registers to the Aarhus Convention and similar tools facilitated access to information on pollution generated by specific installations. Some countries shared their experience in ensuring public awareness and access to information, specifically by means of information technologies and advanced platforms collecting nation-wide monitoring information and providing it to public in a user-friendly manner in real time.

61. Representatives of civil society expressed concern about the level of access to information and public participation in air quality management in some countries. Specifically, information on emission inventories and concentrations of key air pollutants in the most populated areas was not always readily available in all countries of the region. The public should be educated on the impacts of air pollution, specifically on health, and non-governmental organizations could play a decisive role in that process. Education should also be provided to the general public on the ways and means to decrease emissions in the household, for example, by proper burning of solid fuels.

62. It was highlighted that, in some countries, over 50 per cent of certain pollutants came from transboundary sources, not necessarily within the ECE region. Many speakers

underscored the need to take measures at the international as well as national and local levels. Given the transboundary character of air pollution, international cooperation was of paramount importance, as well as the exchange of information and the sharing of experiences, including beyond the ECE region, coordinated action and technical assistance. Most delegations referred to the ECE Air Convention and its protocols, with several urging the ratification of the three most recent revised protocols. Valuable policy tools had been developed under the Convention. Other important instruments of cooperation included the Climate and Clean Air Coalition to Reduce Short-lived Climate Pollutants, the United Nations Framework Convention on Climate Change and the Minamata Convention on Mercury. Participants also pointed to the United Nations Environment Assembly resolution on strengthening the role of UNEP in promoting air quality in the context of UNEP global efforts in that area.

63. Several delegations referred to their voluntary commitments under the Batumi Action for Cleaner Air and praised the initiative.

VI. Presentation of other initiatives, agreements, pledges or policy tools on subjects related to the Conference themes

64. The Joint Statement in support of the Efforts on Reforestation and Afforestation in the Aral Sea Basin, between ECE and the Executive Committee of the International Fund for Saving the Aral Sea, was signed by the ECE Executive Secretary. The Joint Statement drew attention to the need for concerted action and international assistance to enable the improvement of the environment and human health in the Aral Sea region.

VII. Adoption of the Conference outcomes

65. Ministers and heads of delegation adopted by acclamation the Ministerial Declaration: "Greener, cleaner, smarter!".
