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Sixty-fourth session Geneva, 29–31 March 2011 Item 4 of the provisional agenda New directions and initiatives in the ECE programme of work

Seventh "Environment for Europe" Ministerial Conference, the Environment and Health Process, Measuring sustainable development

Note by the secretariat

I. Mandate

1. At its thirty-ninth meeting on 16 December 2010, the Executive Committee of the Economic Commission for Europe (ECE) endorsed the provisional agenda of the sixty-fourth session of the ECE. The rules of procedure of the Commission require basic documents to be prepared in relation to the agenda items as appropriate. This document is being submitted to support the discussions under item 4 at the sixty-fourth session of ECE.

II. Introduction

- 2. This paper covers initiatives undertaken by two subprogrammes: Environment and Statistics.
- 3. The Seventh "Environment for Europe" Ministerial Conference will be held from 21 to 23 September 2011 in Astana, Kazakhstan. The Conference is being prepared by the Committee on Environmental Policy in accordance with the Reform Plan of the "Environment for Europe" process.
- 4. The current focus of the Environment and Health Process is the follow-up to its Fifth Ministerial Conference held in Parma from 10 to 12 March 2010. One of the Conference's outcomes was the establishment of a European Environment and Health Ministerial Board to serve as a political driving force of the Environment and Health Process.
- 5. The Conference of European Statisticians has undertaken conceptual work to develop a framework for measuring sustainable development. The work should also lead to the elaboration of a small set of indicators to allow for comparisons across countries. The



work is undertaken jointly with Eurostat and Organization for Economic Cooperation and Development (OECD).

III. Preparations for the Seventh "Environment for Europe" Ministerial Conference

A. Background

- 6. The "Environment for Europe" (EfE) process was initiated 20 years ago and serves as a mechanism to:
 - (a) Improve the environment throughout the region;
 - (b) Enhance the implementation of national environmental policies;
- (c) Support convergence of environmental policies and approaches, and the prioritization of environmental objectives;
 - (d) Encourage participation of civil society and of private sector; and
 - (e) Promote broad horizontal environmental cooperation.
- 7. The EfE process is a unique partnership of member States within the ECE region, organizations of the United Nations system represented in the region, other intergovernmental organizations, regional environment centres, non-governmental organizations, the private sector and other major groups.
- 8. The EfE process and its Ministerial Conferences provide a high-level platform for stakeholders to discuss, decide and join efforts in addressing environmental priorities across the 56 countries of the ECE region. At the same time, the process focuses on helping countries of Eastern Europe, Caucasus and Central Asia and of South-Eastern Europe to raise their environmental standards towards a common regional standard.
- 9. Six Ministerial Conferences were organized thus far within the EfE process in 1991 (Dobris castle), 1993 (Luzern), 1995 (Sofia), 1998 (Aarhus), 2003 (Kiev) and 2007 (Belgrade).
- 10. Following a decision by the Sixth Ministerial Conference in 2007, the process underwent a reform in order to ensure that it remains relevant and valuable, and to strengthen its effectiveness as a mechanism for improving environmental quality and the lives of people across the region. The Reform Plan of the "Environment for Europe" process was developed by the Committee on Environmental Policy during 2008 and adopted in January 2009 (ECE/CEP/S/152 and Corr.1, annex I). The Plan was subsequently endorsed by ECE at its sixty-third session in spring 2009.
- 11. At present, the Committee on Environmental Policy is working on preparing the Seventh "Environment for Europe" Ministerial Conference, which will take place in Astana from 21 to 23 September 2011. Information and materials about the EfE process are available on the website at http://www.unece.org/env/efe/welcome.html .

B. Conference agenda

- 12. Following an agreement reached at the sixteenth session of the Committee in 2009, the two themes of the Conference are:
 - (a) Sustainable management of water and water-related ecosystems; and

- (b) Greening the economy: mainstreaming the environment into economic development.
- 13. At its seventeenth session, held on 2–5 November 2010, the Committee agreed on a time frame and questions for discussion (see annex to this report).
- 14. The Committee agreed to organize three ministerial level multi-stakeholder round-table discussions during the Astana Ministerial Conference. Outcomes of the round-table debates will be considered at the end of the Conference and will feed into the Chair's Summary of the Conference. The arrangements are as follows:
- (a) A first round table will consider how to ensure effective policies to protect water-related ecosystems and to address human health issues related to water quality and quantity, and will discuss in particular priorities and challenges in adapting management of water to extreme weather events and climate change.
- (b) A second interactive discussion will aim to identify policy mixes and tools that are most effective to improve water efficiency by different users, and ways to encourage investors to take into account the impacts on water quality and quantity, energy and resource efficiency, and vulnerable populations.
- (c) A third round table will debate policy mixes for enabling a green, inclusive, and competitive economy through an integrated approach, as well as approaches to resource efficiency, research, innovation and investment to help the transition towards a green economy. The Committee decided that the Astana Ministerial Conference would also contribute to the United Nations Conference on Sustainable Development 2012 (Rio+20) on the issue of greening the economy.
- 15. A Steering Group on Environmental Assessments established by the Committee in 2010 is guiding the preparations by the European Environment Agency for the Astana Conference of "Europe's Environment Assessment of Assessments" (EEAoA). The EEAoA will provide a critical review and analysis of existing national and international environmental assessments that are of relevance to the region and the two topics of the Astana Conference. It should identify gaps that need to be covered and priorities that should be addressed for conducting assessments to keep the pan-European environment under continuous review. Concrete proposals to this effect will be submitted to the Ministers in Astana, including recommendations on how to develop a shared environmental information system in the region.
- 16. The Committee invited the ECE secretariat to prepare, jointly with EfE partners, two background papers on each of the Conference themes to support multi-stakeholder discussions during the Conference and to facilitate decision-making. The Committee will consider draft papers at its next meeting in May 2011.
- 17. Also, this Conference aims to involve numerous representatives from the private sector to actively participate in discussions. The Committee welcomed the idea of organizing a fair on "green" innovation and technologies with a view to attract the private sector and suggested that the host country organize such a fair on the margins of the Conference.

C. Conference outcomes

18. The Conference outcomes will include a two-page Ministerial Declaration focused on follow-up and further actions required for a sustainable management of water and greening the economy in the region, as well as a number of initiatives that are expected to be launched.

- 19. Kazakhstan, for instance, has put forward the Astana "Green Bridge" Initiative, focusing on a Europe-Asia-Pacific partnership for strengthening cooperation on green development.
- 20. In addition, upon the initiative of the Bureau of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes, a Toolbox for Action on Sustainable Management of Water and Water-related Ecosystems will be developed by interested stakeholders to guide and support Governments' efforts in addressing this issue.
- 21. Also, a third cycle of Environmental Performance Reviews (EPRs) is currently under development with a view to launching it at the Conference. The third cycle would aim to evaluate the state of environmental media with a view to further improving policies. EPRs would include the following components: (i) environmental situation and progress (water resources, air pollution, waste and chemicals, lands and soils, mineral resources); (ii) environmental management (greening the economy, legal and policy-making framework, implementation, enforcement of international agreements and commitments, environmental governance); and (iii) integration of environment in selected sectors/issues (climate change, biodiversity conservation and nature protection, land management, waste management, health and environment).
- 22. With regard to the involvement of the private sector, the secretariat put forward a proposal to launch a series of public-private round-table series on green economy. These round tables would be organized in 2011 leading up to the Astana Ministerial Conference, which hopefully would lead to the development of an initiative to be launched at the Conference.
- 23. The Conference remains open for other similar initiatives and policy tools to be proposed by member States and other stakeholders at both regional and subregional levels.

IV. European Environment and Health Process

A. Background

- 24. The European Environment and Health Process was initiated in the late 1980s with a view to eliminating the most significant environmental threats to human health. Progress towards this goal is driven by a series of Ministerial Conferences held every five years. Thus far, five Conferences took place in 1989, 1994, 1999, 2004 and 2010. The World Health Organization Regional Office for Europe (WHO/Europe) serves as secretariat to the process.
- 25. ECE was traditionally a strategic "environment" partner of WHO/Europe in this process and a member of the European Environment and Health Committee. Within this process important concrete results have been achieved, such as WHO/ECE Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (adopted at the London Ministerial Conference in 1999) and, to some extent, the Transport, Health and Environment Pan-European Programme. The process is also relevant to ECE work under the Convention on Long-range Transboundary Air Pollution and provided a basis for the involvement of WHO in the negotiation of the Protocol on Strategic Environmental Assessment under the Convention on Environmental Impact Assessment in a Transboundary Context.
- 26. From the perspective of ECE, the process had a number of challenges, including: (a) lower profile of the environment issues vis-à-vis health; (b) lower participation and engagement of the environment sector in the process; and (c) non-inclusive nature of the

preparatory processes for the Conferences. The Parma Ministerial Conference 2010 has addressed these issues and adopted some relevant decisions.

- 27. ECE will continue to make efforts to maintain the interest of the environment side by informing it regularly of progress, involving the Committee on Environmental Policy closely in the preparations for the next Conference on Environment and Health, and strengthening efforts to implement the joint agreements and programmes.
- 28. Additional opportunities to further mainstream health aspects in the ECE work in the field of environment comprise for instance a proposal to include a chapter on environment and health in the third cycle of Environmental Performance Reviews that will be conducted in countries with economies in transition of the ECE region as of 2012.

B. Parma Ministerial Conference follow-up

- 29. The Environment and Health Process Fifth Ministerial Conference (Parma, 10–12 March 2010) adopted a Ministerial Declaration complemented by the Commitment to Act document, setting four regional priority goals with a view to reducing environmental risks to health by 2020. The four goals are: ensuring public health by improving access to safe water and sanitation; addressing obesity and injuries through safe environments, physical activity and healthy diet; preventing disease through improved outdoor and indoor air quality; and preventing disease arising from chemical, biological and physical environments. Each commitment goal was supported by action required to make that commitment a reality.
- 30. The Conference also adopted a new Institutional Framework for the European Environment and Health Process (2010–2016). The establishment of two bodies are foreseen within the new institutional framework as follows: (a) a task force an intergovernmental body composed of representatives of environment and health sectors and stakeholders as a leading body for implementing and monitoring the process commitments; and (b) a European environment and health ministerial board a political driving force of the process composed of eight ministers or their high-level representatives nominated by the WHO Regional Committee for Europe from the health sector and the ECE Committee on Environmental Policy from the environment sector. Other members of the Ministerial Board include the Regional Director of WHO/Europe, the Executive Secretary of the ECE, the Director of the UNEP Regional Office for Europe and the European Commission. The Board will be accountable to WHO/ and the ECE Committee on Environmental Policy.
- 31. At its seventeenth session, the Committee on Environmental Policy decided on the environmental sector representation for the European Environment and Health Ministerial Board (EHMB) and appointed Ministers of Environment from Azerbaijan, Belarus, Romania and Turkey for the first term of the Board (2011–2012).
- 32. From the health sector, the WHO Regional Committee has elected by consensus the Ministers of Health of France, Malta, Serbia and Slovenia for the first term of EHMB at its sixtieth session (Moscow, 13–16 September 2010). France offered to host the first meeting of EHMB in Paris in April 2011.

C. Water and Health

33. The main aim of the Protocol on Water and Health is to protect human health and well-being by better water management, including the protection of water ecosystems, and by preventing, controlling and reducing water-related diseases. The secretariat functions for

the Protocol are jointly carried out by ECE and the WHO/Europe secretariats. The Protocol has 24 Parties to date.

34. The second session of the Meeting of the Parties to the Protocol took place on 23–25 November 2010 in Bucharest. The Parties started to set aims and target dates. They agreed on measures to reach them, although there were widespread delays in the implementation of the Protocol. The Meeting of the Parties adopted a broad programme of work for 2011–2013 to tackle the common difficulties, including several capacity-building activities. To support countries in their efforts, the Parties adopted the Guidelines on the Setting of Targets, Evaluation of Progress and Reporting, a Policy and a Technical Guidance on Water-related Disease Surveillance, as well as the Guidance on Water Supply and Sanitation in Extreme Weather Events.

D. Transport, Health and Environment Pan-European Programme

- 35. The Transport, Health and Environment Pan-European Programme (THE PEP) is serviced by a joint ECE–WHO/Europe secretariat. THE PEP is a model of good intersectoral cooperation and collaboration as the work is carried out in nearly daily communication among the three sectors through the Transport and Environment, Housing and Land Management Divisions of ECE and the WHO European Centre for Environment and Health in Rome.
- 36. THE PEP received renewed impetus and political support from ministries across the three sectors at the High-Level Meeting on Transport, Health and Environment in 2009, which adopted the Amsterdam Declaration and its four priority goals, including reduction of air pollution and noise emissions from transport, investment and job creation in environment and health-friendly transport and promotion of safe and healthy walking and cycling. THE PEP work plan for 2009–2014 is targeted toward the implementation of these goals. One major challenge is to facilitate an integrated policy approach so that transport policymakers take environmental and health concerns into consideration in transport policies and planning.

E. Links with other ECE multilateral environmental agreements

- 37. The Protocol on Strategic Environmental Assessment (SEA) was developed with input from WHO/Europe and was based in part on the outcome of the London Ministerial Conference in 1999. The Protocol entered into force on 11 July 2010 and has 20 Parties to date. The ECE and WHO/Europe secretariats cooperate in promoting SEA through workshops, side-events and publications.
- 38. The Protocol requires the integration of environmental, including health, considerations into government decision-making on plans, programmes, and, as appropriate, policies and legislation. The Protocol is applied primarily to land-use or spatial planning, and to numerous sectoral plans in areas such as energy, industry, waste, water and transport. But the Protocol also places a special emphasis on health and it requires that the sectoral authority or ministry responsible for a plan consult relevant health authorities. This is an important opportunity for health authorities, but a particular challenge is whether they have the capacity to provide relevant input when given that opportunity.
- 39. ECE and WHO also work together through the Joint Task Force on the Health Aspects of Air Pollution established in 1997 to assess the health effects of long-range transboundary air pollution and provide supporting documentation. Assessments aim to quantify the contribution of transboundary air pollution to human health risks and help define priorities for guiding future monitoring and abatement strategies.

40. In particular, the Task Force reviews health impacts of particulate matter (PM), ozone (O₃), heavy metals and persistent organic pollutants (POPs). This helps to reach the third Regional Priority Goal of the Children's Environment and Health Action Plan for Europe, i.e. "Preventing disease through improved outdoor and indoor air quality". Besides assessing the health significance of the pollution as an important input to designing pollution abatement strategies, the Joint Task Force provides advice to monitoring and modelling activities under the Convention on Long-range Transboundary Air Pollution.

V. Measuring sustainable development

A. Background

- 41. Sustainable development is a complex concept that brings together the many strands of economic, human, social and environmental policies into the single objective to continually improve the quality of life and well-being of the present and future generations.
- 42. The concept of "sustainable development" was popularized as a normative goal by the World Commission on Environment and Development in their 1987 report to the General Assembly of the United Nations entitled "Our Common Future". The commission is commonly referred to as the Brundtland Commission after the chairperson, then Prime Minister of Norway, Gro Harlem Brundtland. There, sustainable development was defined as a development that "meets the needs of the present without compromising the ability of future generations to meet their own needs".
- 43. Defining the concepts of development and human well-being is necessary but not sufficient. Even more important is the question on how to measure sustainable development. Since the Brundtland report many researchers in universities, environmental organizations, think-tanks, national governments and international agencies have made efforts to measure sustainable development.
- 44. The adoption of the Agenda 21 at the United Nations Conference on Environment and Development held in Rio de Janerio in 1992 further triggered the work on sustainable development. As a consequence, several nations and intergovernmental organizations developed sustainable development strategies with varied sets of indicators. The wide variety of indicators in existing national and international policy-based sets testifies to the great challenge of measuring sustainable development.
- 45. The proliferation of approaches and indicators indicated the urgent need for a conceptual framework for measuring sustainable development. ECE started work, together with its main partners Eurostat and OECD, to develop such a conceptual framework. The work was mandated by the ECE Statistical Committee, the Conference of European Statisticians (CES).

B. Measuring welfare, well-being and sustainable development

- 46. In recent years in dealing with the measurement of sustainable development the statistical community focused its attention on the measurement of societal development from a broader perspective. A number of initiatives were launched, including the most recent Stiglitz-Sen-Fitoussi report, to tackle this measurement issue.
- 47. ECE has also been actively involved through its work on developing a conceptual framework for measuring sustainable development. A Joint ECE/Eurostat/OECD Task Force for Measuring Sustainable Development was set up by the CES in 2010. It follows up on the work of a previous Task Force which developed the basis for a conceptual approach

to the measuring of sustainable development. The objective of the new work is to further pursue a conceptual approach in identifying indicators to present the long-term, i.e. across generations, dimension of sustainable development. In addition, indicators to present the quality of life of the current and future generations are also being developed. Another goal is to develop a small set of indicators that could allow for comparison across countries.

- 48. The work of the Joint Task Force takes the concept of quality of life as acknowledged in the Stiglitz-Sen-Fitoussi report. The concept of quality of life has many different connotations because it is covered by different scientific fields like economics, psychology, "happiness" literature, etc. under different names. In general it refers to the life satisfaction of humans. To achieve a certain quality of life, resources or the so-called stocks of capital are required. These include economic capital and natural capital, but also human and social capital. If future generations are to have the same quality of life as in the present, they will require a sufficient amount of resources.
- 49. Are the stocks of our resources sufficient and how shall we use them to ensure the quality of life of future generations? Below are presented specific examples of measurement issues that pose great difficulties to statisticians and which the Task Force is trying to address and resolve:

1. Measuring economic wealth

50. Economic wealth is equal to the sum of the value of all assets that contribute to market production, including economic, natural, human and social capital. In practice, it is not possible to observe market values for all capital types directly, so calculating economic wealth by summing just the observed values is not possible. One well-known example is clean air, a natural resource which cannot be given a price. In addition, in the work to date, the sources of wealth have not been determined with a great deal of precision.

2. Physical indicators of critical resources

- 51. Some forms of resources are critical, and therefore statisticians are considering physical units of measure. Critical capital is common in natural resources. Important examples are stable climate and biodiversity. If the climate is destabilized by increased greenhouse gas emissions, the basis for our civilization in the long run may be threatened, almost irrespective of our material wealth. Coming to grips with the challenge of climate change is therefore a fundamental prerequisite for sustainable development.
- 52. Similarly, the biological diversity is a fundamental condition for the maintenance of many ecosystem services that benefit all. Human survival is dependent upon biodiversity, through our reliance on natural resources for food, materials and fuel and on the services provided by ecosystems (e.g. pollution absorption and biodegradation, pollination, etc). Quantifying biodiversity is a difficult issue because biodiversity can be seen as encompassing the entire and irreducible complexity of life. As such, no single objective measure is possible but only measures relative to some particular purpose, for example measuring the state of species, the state of habitats/ecosystems, or, on a more anthropocentric basis, the resources and services taken up by mankind.

3. Defining and measuring human and social capital

53. There are difficulties in defining and measuring the stocks of human and social resources. It is a general belief that improvement in the human and social resources through better education, preserving the traditional values and norms, maintaining social networks, enhancing the ability of a society to work together and having a stable political, legal and cultural framework will help make development in the long term more sustainable. Some progress has been made on measuring human capital in the recent years, while work on

social capital is still in its very early stage of development. How to define and measure these two types of capital is a main focus of the work of the Task Force created by the CES.

4. The international aspect

54. The Brundtland definition of sustainable development rightly includes one often neglected aspect of the sustainable development, that is, the international aspect. It states that "developments in one country should not be at the expense of the quality of life of the citizens of other countries". It is essential that this aspect is further examined and the relevant and also comparable measures of the impact between countries are being developed.

C. The need for high quality environment statistics

55. Sustainable development and environment are the two sides of the same coin. How to evaluate the interactions between the humans and the environment and what are the implications for humanity in the long-term? The basic issues of human survival, development and welfare are at the core of this question.

1. Climate change related statistics

- 56. The statistical community is increasingly recognizing the need to develop better statistics on climate change. There is no complete information at this moment on the extent to which the National Statistical Offices (NSOs) are involved in climate change related statistics. ECE has taken the lead to conduct a survey among the ECE member countries and beyond to assess the degree to which NSOs are involved in producing emission inventories and other climate change related statistics. For this purpose the secretariat, in consultation with experts from Statistics Norway, Statistics Finland, Eurostat and the European Environment Agency developed a questionnaire to study the state of the art in the member countries. The objective of the initiative is to identify issues of common concern for the countries that should be addressed at international level and find ways to strengthen the capability of countries to produce high quality statistics for climate change analysis.
- 57. The survey will be carried out in 2011 in close collaboration with Eurostat and in coordination with the United Nations Statistics Division in New York. The United Nations Committee of Experts on Environmental-Economic Accounting expressed support to the work and has asked ECE to report on the outcome of the survey. The Committee of Experts and the Statistics Division also asked the ECE secretariat to extend the survey to some countries outside the ECE region in order to ensure a more global coverage.

2. Environmental indicators

- 58. The demand for high quality environmental indicators has stressed the need for ECE to improve data production and promote comparability of environmental statistics in the countries of Eastern Europe, Caucasus and Central Asia. In this context, the ECE has initiated a forum where environmental experts and statisticians from these countries may come together and discuss how to produce environmental indicators in key areas such as clean air, energy, drinking water, waste, forest biodiversity, sustainable transport, etc. The work revealed numerous methodological discrepancies, data gaps and lack of clear guidance when it comes to the production of concrete environmental indicators.
- 59. The work is carried out by the Task Force on Environmental Indicators established by the two ECE Sectoral Committees, the Committee on Environmental Policy and the Conference of European Statisticians. The United Nations Statistics Division is actively involved in the work of the Task Force by providing financial support and expert

knowledge. During its three meetings, held in 2009–2010, the Task Force reviewed more than half of the 36 indicators from the Guidelines for the Application of Environmental Indicators in Eastern Europe, Caucasus and Central Asia (Indicator Guidelines) that were endorsed at the Ministerial Conference "Environment for Europe" in 2007. The Task Force also considered indicators that are important but are currently not included in the Guidelines, namely the indicator of environmental expenditures, agri-environmental indicators and energy and environment indicators. In November 2010, the Committee on Environmental Policy and the Bureau of the Conference of European Statisticians extended the mandate of the Task Force for two more years. The work will continue in 2011 to review the rest of the indicators.

3. Energy statistics

60. As part of the work on environmental indicators and in the context of climate change and sustainable development, ECE has realized the importance of issues related to energy statistics. Focus is given to strengthening energy statistics in Eastern Europe, Caucasus and Central Asian countries, and in particular on measuring renewable energy consumption.

D. Conclusion

- 61. Sustainable development over the last decades has gained importance on the political agenda and most likely will grow in importance in the future. Sustainable development is a global issue, but the responsibility for achieving it rests mainly with countries. It is the responsibility of international organizations to help countries in their efforts, facilitate international cooperation and address the growing concern "about the accelerating deterioration of the human environment and natural resources and the consequences of that deterioration for economic and social development."
- 62. The measurement of sustainable development is crucial to formulate adequate and evidence-based political initiatives. At the same time, the measurement raises a number of conceptual and practical issues that are difficult to resolve. ECE in close cooperation with Eurostat and OECD has launched a pioneering work on developing a conceptual framework to measure sustainable development. The work will continue in 2011. A final report of the Task Force is expected to be presented to the plenary session of the CES in June 2012.

¹ United Nations General Assembly resolution 42/187.

Annex

Time frame and questions for discussions for the Seventh "Environment for Europe" Ministerial Conference

Astana, 21–23 September 2011

Tuesday, 21 September

Wednesday, 22 September

Thursday, 23 September

Registration (9 a.m. -2p.m.)

Greening-the-conference-related events for the Heads of Delegation organized by the host country, such as planting trees, riding bikes, etc. (11.00 a.m. – noon.)

3. Sustainable management of water and water-related ecosystems (one-hour plenary followed by two-

(one-hour plenary followed by two-hour round-table discussions, organized in three parallel sessions, 10 a.m. – 1 p.m.)

Questions for discussion:

- (a) Which policies proved to be effective to value and protect water-related ecosystems, including the payment for ecosystem services? What are the main obstacles and gaps?
- (b) What policies proved to be effective in addressing human health issues related to water quality and quantity? What are the main obstacles and gaps?
- (c) What are the priorities/challenges in adapting management of water and waterrelated ecosystems to extreme weather events and to climate change?
- (d) What are the experiences and lessons learned from the cooperation in transboundary basins to improve water quality, manage water quantity and protect ecosystems?

5. Greening the economy: mainstreaming the environment into economic development

(one-hour plenary followed by two-hour round-table discussions, organized in three parallel sessions, 10 a.m. – 1 p.m.)

Questions for discussion:

- (a) What policy mixes have the potential to secure the achievement of a green, inclusive, and competitive economy, through an integrated approach, including sectors such as transport, housing, energy, agriculture and education?
- (b) How can resource efficiency improve sustainability and competitiveness in local, regional and global markets?
- (c) How can research, innovation and investment help the transition towards a green economy?
- (d) How could the "Environment for Europe" process contribute to outcomes on green economy in the context of UNCSD 2012 (Rio+20)?

Lunch break / side events: noon-2 p.m.

Lunch break / side events: 1–3 p.m.

Lunch break / side events: 1-3 p.m.

Tuesday, 21 September

Wednesday, 22 September

Thursday, 23 September

1. Opening of the Conference (plenary, 2–4 p.m.)

- Opening ceremony
- Adoption of the agenda

2. The EfE process: 20 years of pan-European cooperation

(plenary, 4-6 p.m.)

- History of the EfE process (20th anniversary)
- Astana Green Bridge Initiative
- Presentation of EEAoA
- Presentation of the Second Assessment of Transboundary Waters
- Statements by Ministers and high-level representatives of private sector and civil society, with an emphasis on the findings of EEAoA

Official events / side events: 6–9 p.m.

<u>U4. Sustainable management of</u> <u>water and greening the economy</u> (one-hour plenary followed by two-

hour round-table discussions, organized in three parallel sessions, 3–6 p.m.)

Questions for discussion:

- (a) What policy mixes and practical tools, such as IWRM, pricing, standards, and water users associations, can be most effective to improve water efficiency by different water users, especially in agriculture, households and industrial operations?
- (b) How can we encourage investments to take into account the impacts on water quantity and water quality, energy and resource efficiency, and vulnerable populations?

Official event – establishment of Environmental Information System (SEIS) / side events: 6–9 p.m.

6. Reporting on the outcomes of the discussions under the thematic sessions

(plenary, 3-4.30 p.m.)

7. Adoption of Conference outcomes

(plenary, 4.30–5.30 p.m.)

8. Closing of the Conference

(plenary, 5.30–6 p.m.)

Official events / side events: 6-9 p.m.