

21ST ECONOMIC AND ENVIRONMENTAL FORUM

“Increasing stability and security: Improving the environmental footprint of energy-related activities in the OSCE region”

2013 COMPILATION OF CONSOLIDATED SUMMARIES

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PLEASE NOTE:

All documents and speakers’ presentations of the respective Forum Meeting are available on the OSCE Economic and Environmental Forum website:

Concluding Meeting: www.osce.org/eea/21st_eef_2013

Consolidated Summary (EEF.GAL/17/13/Rev.1), www.osce.org/eea/107678

Second Preparatory Meeting: www.osce.org/event/21st_eef_prep2

Consolidated Summary (EEF.GAL/ 10/13), [/www.osce.org/eea/101771](http://www.osce.org/eea/101771)

First Preparatory Meeting: www.osce.org/event/21st_eef_prep1

Consolidated Summary (EEF.GAL/08/13), www.osce.org/eea/100121

**21ST OSCE Economic and Environmental Forum
CONCLUDING MEETING**

Prague, 11-13 September 2013

EXECUTIVE SUMMARY

Introduction

The Concluding Meeting of the 21st Economic and Environmental Forum took place on 11–13 September 2013 in Prague. It built upon the outcomes of the two preparatory meetings in Vienna, on 4-5 February 2013 (EEF.GAL/8/13) and Kyiv, on 16-17 April 2013 (EEF.GAL/10/13).

The agenda of the Concluding Meeting of the EEF focused on the following issues:

- Review of the implementation of the OSCE commitments in the field of energy;
- Strengthening policy and regulatory frameworks and fostering international co-operation to prevent adverse environmental impacts of energy activities;
- Strengthening policy and regulatory frameworks and fostering international co-operation to promote renewable energy and energy efficiency;
- Increasing security and stability through reinforcing environmental good governance in planning, financing and implementing energy-related activities;
- Co-operation between the public and the private sector and international organizations to improve the environmental footprint of energy-related activities;
- Co-operation and partnerships on new and emerging environment-friendly technologies in the energy field.

A Special Event discussed approaches to promoting transparency and good governance in the energy sector.

A Side Event, organised by the OSCE Action against Terrorism Unit presented the *“Good Practices Guide on Non-Nuclear Critical Energy Infrastructure Protection from Terrorist Attacks Focusing on Threats Emanating from Cyberspace.”*

Another Side Event and an exhibition organised by the Austrian Regional Development Agency in Vorarlberg presented the European initiative *“Common European Sustainable Building Assessment (CESBA)”*. The initiative aims at applying energy efficiency and utilisation of renewable energy sources in public building projects.

The Concluding Plenary Session discussed the role of the OSCE in promoting the environmental footprint of energy-related activities and addressed possible follow-up to the 21th Economic and Environmental Forum.

The Prague Forum Meeting was attended by more than 300 participants with various backgrounds, representatives from OSCE participating States, OSCE institutions and field operations, OSCE Partners for Co-operation, representatives of international and regional organizations, of civil society organizations, the business and academic community.

Main conclusions and recommendations

During the 21st OSCE Economic and Environmental Forum, a report on the implementation of the OSCE commitments by participating States in the field of energy, with a focus on diversifying the energy-mix, was presented by the UNECE. The report analyses the current situation in the OSCE region in light of the linkages between energy, environment and security. It proposes a series of recommendations to better and further implement the aforementioned commitments. During the presentation of this report, OSCE participating States were urged to reduce the environmental footprint of energy-related activities, which would contribute to enhancing energy security and reducing environmental and economic challenges. In particular, participating States were encouraged to mitigate the environmental impact of primary energy production in the development, production and transportation of natural resources, and to improve the environmental footprint of energy transformation to electricity and heat.

It was suggested that the OSCE could **raise awareness** among populations on the importance of reducing the impact of energy-related activities on the environment. This measure would help generate support of the civil society towards decisions taken by governments in this field. It was also suggested that the OSCE could promote **technological development**, including smart grids, and continue, among others, the **co-operation with relevant international partners, such as the UNECE and the Energy Charter**. This co-operation would ensure the efficient development and dissemination of comprehensive solutions to environmental challenges and to the security of energy supply. In this regard, it was noted that the UNECE contributes to this dialogue from a technical, economic, and sustainable development perspective, while the OSCE provides a **platform for exchanges of ideas in its region and can have an important role as a facilitator, as it does in its Economic and Environmental Forum meetings**.

During the Forum, it was acknowledged that in the coming years the **promotion of renewable energy** would substantially contribute to the mitigation of energy-related activities' impact on the environment. It was noted that renewables, increasingly, have an essential role to play in international relations becoming a valuable tool to ensure security. In this regard, taking into account that **sustainable energy and energy efficiency initiatives** are crucial for the OSCE participating States, it was suggested that the Organization should serve as a **platform for exchange of best practices** on how to use alternative energy resources and **transfer relevant technologies** across the OSCE region. **Technological innovations**, including new technologies of shale gas extraction, were considered to be one of the solutions to modify current patterns and promote the sustainable use of environmental resources. It was pointed out that technological innovation often links academic research and the private sector. However, such co-operation needs to be mediated by a recognized third party. According to some participants, the **OSCE** could play such a role.

It was also suggested that the **OSCE could promote the collection of data on all life-cycle phases of energy production** and evaluate the environmental costs associated. It was highlighted that by reducing the use of scarce resources in the generation of energy, participating States could contribute to the reduction of energy consumption, waste and emissions. Along these lines, it was suggested that participating States could promote energy efficiency **through selecting sustainable building materials** that could be found locally. In this case, the environmental breakthrough is achieved through the type of input selected. In order to reach this goal,

participants acknowledged that support from governments was required to develop an appropriate legal framework for increased innovation in the building sector.

During the discussions it was emphasized that **systematic environmental monitoring** has contributed to the strengthening of stability and security and reduction of the environmental damage from energy-related activities. The results of the monitoring can be used as indicators of sustainable development, green growth and green economy principles. Therefore it can contribute to the reduction of greenhouse gas emissions and the strengthening of technological standards, as well as the development of green policies and energy efficiency. Some participants proposed that the Organization could promote the **systematic environmental monitoring** of energy-related activities in the OSCE area.

The co-operation **between international organizations, the private sector and civil society** was highly recommended by participants throughout the meeting. It was noted that the OSCE Economic and Environmental Forum provides an opportunity to call on international organizations for new initiatives to jointly promote renewable energy. Furthermore, particular focus was placed on the role played by **international financing institutions** in providing incentives for environmentally friendly initiatives and for large public investments.

The key role played by **private capital and investments** in promoting the development of renewable energy and technological innovation was often emphasized. Special attention was devoted to the promotion of **public-private partnerships**. According to some participants, such co-operation could focus on the establishment of guidelines for bankable proposals, the development data regarding renewables' potential and the conduct of impact assessment of renewables deployment on socio-economic variables.

Participants underlined that a key factor to attract investors is the promotion of **transparency and accountability** at all levels. The need to systematically include a **good governance** perspective in all energy contracts, as well as in the reporting on transactions and investments in the private and public sectors was encouraged.

The role played of the **Extractive Industries Transparency Initiative (EITI)** was praised by many participants. EITI was defined as a valuable instrument in building trust, internationally and domestically, and in changing the public's perception on transparency. The Initiative was perceived as an important factor in the promotion of adequate investment climate, transparency of payments, civil society involvement and accountability of governments within the energy sector. Discussants agreed on the importance of political will in driving a process towards transparency. One of the recommendations made to the OSCE was that the Organization could further contribute to assisting and encouraging participating States in joining the EITI and in applying its principles. The organization of relevant trainings and seminars and the sharing of best practices by the OSCE in this field were highly recommended.

The engagement of the **civil society in the decision making, the organization of public hearings, as well as the access of media to relevant information** was also highlighted during the meeting. In this regard, the role played by the **Aarhus Centres** was praised and its co-operation with the media, actively encouraged. The co-operation between the government, civil society and the media was considered by participants as an excellent way to promote the OSCE cross-

dimensionality. Thus, it was suggested that the OSCE could further promote the **strengthening of public participation at national and regional level, as well as the expansion of the Aarhus Centres' network.**

The establishment of adequate **legal frameworks** was considered as indispensable to ensure an economically viable environment for energy efficiency initiatives and for new market players. In this regard, it was proposed that the OSCE could develop **capacity building** programmes for national and regional experts on sustainable energy. It was also suggested to prepare a Handbook on renewable energy, which could serve as a tool for conducting seminars and workshops and for assisting participating States in reducing the environmental impact of their energy activities. Some participants also proposed the organization of **legislative assessment missions** to interested participating States in order to better assist them in adapting and updating their legislation on sustainable and renewable energy.

Aware of the importance of ensuring energy supply and of the negative impact that any disruption of the energy infrastructure could have on the health, safety, security and economic well-being of individuals and countries, participants suggested that particular attention should be paid to the vulnerability of **critical energy infrastructure**. In this regard, stronger co-operation and collaboration among participating States and relevant stakeholders was identified by participants as the best way to reduce the risk of natural and man-made disasters. Perspectives and opportunities resulting from the integration of risk management aspects in the administration of renewable and traditional energy resources were discussed. It was underlined that energy infrastructure keeps the global economy moving and therefore is an ideal target for possible terrorist attacks. The OSCE guide *Good Practices on Non-Nuclear Critical Energy Infrastructure protection from Terrorist Attacks Focusing on Threats Emanating from Cyberspace* was presented as a cross-dimensional tool that could serve participating States and field presences to raise awareness, identify key policy issues and challenges, and collect good practices to be later replicated in other participating States. In view of the aforementioned Organization's expertise in his field, **the OSCE was considered to be an excellent platform for sharing experiences, best practices and lessons learnt on the protection of non-nuclear critical energy infrastructures.**

REPORTS OF THE RAPPOREURS

Review of the implementation of OSCE commitments in the field of energy

Moderator: Dr. Halil Yurdakul Yigitgüden, Co-ordinator of OSCE Economic and Environmental Activities

Rapporteur: Mr. Cyril Leroy, Senior Programme Officer, Energy Security, Office of the Co-ordinator of OSCE Economic and Environmental Activities

Speaker: Mr. Scott Foster, Director, Sustainable Energy Division, UNECE

Mr. Scott Foster started his presentation by stating that the topic of this Forum “Increasing stability and security: Improving the environmental footprint of energy-related activities in the OSCE region” combines many challenging and important environmental and energy policy issues.

He indicated that the challenge of climate change is enormous and the time to act is now and action must be on a scale that addresses the challenge. Thus, OSCE participating States must reduce the environmental footprint of their energy activities, which at the same time can address energy security, environmental and economic challenges. To achieve this, there is need to:

- address market failures that hinder cost-effective improvement of energy and carbon intensities
- invest in end-use energy efficiency (subject of the report presented at the 19th EEF)
- improve the efficiency of existing coal-fired power stations
- progressively switch to natural gas away from coal
- develop the technologies of renewable energy further so they can contribute to cost-effective attainment of environmental goals
- put in place smart grids, smart cities, everything that allow renewables to play a bigger role
- pursue and develop projects that cost-effectively capture and store carbon (CCS technology)
- make sure the nuclear sector meets its safety obligations and can be cost competitive, if countries wish to maintain the nuclear option

The speaker underlined that each technology has a role to play and that there is no single solution.

Because opportunities exist throughout the energy value chains to reduce the environmental impacts on air, water, soil, and a range of other aspects, the speaker emphasized that realizing these opportunities will not only help to protect the environment, but can also improve overall system efficiency, enhance acceptance of energy solutions by the public, improve security and stability, and even improve energy economics in some cases.

Mr. Foster highlighted that improving the environmental footprint of energy-related activities in our region involves efforts to:

Reduce the environmental impact of primary energy production, in the development, production and transportation of natural gas, oil, coal, biomass, and uranium. These efforts may include:

- reducing GHG emissions from coal mines
- reducing leaks in the gas transportation and distribution networks and gas production
- land reclamation and improved water management

Improve the environmental footprint of energy transformation to electricity and heat. Such improvements may come from:

- emissions control at power plants
- improving the technology used for the transformation
- switching out coal with natural gas in the power sector
- implementing combined heat and power plants, distributed generation, deployment of cost-effective renewable energy, smart grids, energy efficiency, smart cities, and other new technology as it develops.

The speaker also stressed that normative instruments like best practices, along with performance benchmarking, or well-designed regulatory schemes could enhance performance. And investing in appropriate best technology, enabling finance and applying modern management skills are all necessary efforts if we are to reduce the environmental footprint of energy activities and thereby enhance both stability and security.

Mr. Foster stated that “we do not know what the future might bring when it comes to new technologies” and that “it is incumbent on governments to ensure that innovators are encouraged to innovate and empowered to bring their alternative approaches to the market”.

He noted that energy security is a priority for the majority of the OSCE participating States and the UNECE can collaborate with the OSCE and other relevant international organizations such as the Energy Charter Secretariat to help our respective participating States procure a secure energy supply. The UNECE contributes to that dialogue from a technical/economic/sustainable development perspective, while the OSCE provides a platform for exchanges of ideas in its region and can have an important role as a facilitator, as it does in its Energy and Environmental Forum meetings.

The UNECE representative explained that the economic challenge is to secure affordable and sustainable energy services for energy consumers. However, because the world is changing so rapidly, governments cannot afford to bet on specific technologies and it is the role of investors to put their capital at risk. Governments should focus on providing a long-term, stable framework for all energy chains from the source to final use to ensure proper investment and consumption decisions.

The speaker added that prices are an effective tool for bringing about sustained change, and market prices that reflect supply and demand considerations including environmental costs are that much more effective. He stated that “governments have a role in designing, monitoring, and regulating markets so that they work properly.”

In his concluding statement, Mr. Foster stressed that the key challenges we face include:

- a lack of awareness of the need to reduce emissions, notably regarding climate change and the need for a global response
- the on-going economic downturn

But the speaker also reminded of the existing opportunities, such as:

- growing awareness in some countries of the urgency to address environmental challenges, notably local issues such as urban pollution
- technological developments
- economies of scale and lower costs
- improved primary energy mix

Finally, Mr. Foster listed main conclusions of the study. These are the next steps the OSCE countries should consider in order to reduce the environmental footprint of their energy-related activities:

- First, increase awareness, which enables populations to support their governments' actions;
- Second, facilitate deployment of the new technology that is needed. Deployment means ensuring adapted technology is available along with needed finance and management capacity;
- Third, development and dissemination of comprehensive solutions through engaged dialogue at the OSCE, UNECE and other international partners;
- Fourth but not last, engage strongly with all stakeholders, particularly the private sector, to ensure that changes take place at the scale needed to meet the challenge.

The following questions and remarks from the plenary were posed.

A representative of the US inquired about Mr. Foster's assessment of the future role of renewable energy in the transport sector and the comparison between employment in the renewable energy sector and the employment in the conventional energy sector.

A representative of Azerbaijan shared the experience of her country in diversifying the energy mix, including the government's plans to significantly increase the share of renewable energy resources as envisioned in the recently adopted "National Strategy for the Development of Alternative and Renewable Energy Sources in 2012-2020"

Session I: Strengthening policy and regulatory frameworks and fostering international co-operation to prevent adverse environmental impacts of energy activities

Moderator: Ambassador Ol'ga Algayerová, Chair of the Economic and Environmental Committee, Permanent Representative of Slovakia to the OSCE

Rapporteur: Mr. Martin Koncal, Counsellor, Permanent Mission of Slovakia to the OSCE

Speakers:

Ms. Ermina Salkicevic-Dizdarevic, *Deputy Minister, Ministry of Foreign Trade and Economic Relations, Bosnia and Herzegovina (BiH)*

Mr. Mahmasharif Khakdodov, *Head of the Ecological Commission of the Parliament, Tajikistan*

Ms. Maria Germenchuk, *Vice-Director of Scientific Centre "Ecology", Republic of Belarus*

Mr. Thomas Wuchte, *Head, Action against Terrorism Unit, Transnational Threats Department*

Ms. Ermina Salkicevic-Dizdarevic presented key facts related to the energy sector in Bosnia and Herzegovina (BiH). She indicated that BiH has a significant potential in the field of renewables and illustrated this statement indicating that, for instance, only 40% of the hydropower potential of the country is currently used.

Concerning traditional energy sources, *Ms. Salkicevic-Dizdarevic* indicated that BiH has significant reserves of coal. She also added that her country highly depends on natural gas and oil imports. In this regard, she stressed that in order to further develop its potential in the field of renewables BiH needs private capital and investment.

Ms. Salkicevic-Dizdarevic also informed that BiH is a full member of the Energy Community and aims at joining the EU. In order to facilitate its future integration in the Union, the country is currently adopting EU legislation in various fields, e.g. the Directive 2009/28/EC on renewable energy.

Talking about the future, *Ms. Salkicevic-Dizdarevic* indicated that more attention should be devoted to Public-Private Partnerships (PPPs) and listed some PPP activities and projects financed by international organizations in her country. She finalized her intervention by suggesting that the OSCE plays an important role at national and regional level in strengthening public participation and in promoting the expansion of the network of Aarhus Centres.

Mr. Mahmasharif Khakdodov stressed that the environmental footprint of energy-related activities can have an important impact on the social and economic areas. He also pointed out that whereas oil and gas reserves decline, the power consumption is expected to double within the next years. In this regard, he stated that existing data suggest that by 2030 a quarter of the world population might not have access to electricity. He indicated that more efforts should therefore be made to satisfy people's needs. One possibility would be the further promotion and development of hydropower. He emphasized that in Central Asia there is a significant potential in this field, and mentioned Tajikistan as the country having the highest hydropower capacity in the region, with 527 billion kWh.

Furthermore, he declared that energy security is nowadays a top priority for the government of Tajikistan. Thus, different programmes have been carried out, aiming at the improvement of the

legal basis, the promotion of energy efficiency, as well as the development of hydropower. Concerning this last point, Mr. Mahmasharif Khakdodov explained that the strategy of Tajikistan in the hydropower field is to have a regional approach, including the creation of a Water and Energy Consortium, taking advantage of the international expertise and attracting investors. This would assure stability and energy security in the region, including in Afghanistan, and contribute to solving social problems by contributing to job creation.

Ms. Maria Germenchuk presented the latest developments made by Belarus in the field of energy security, including in the energy and environmental monitoring. The speaker emphasized that environmental monitoring contributes to stability, security and reduction of the environmental damage generated by energy-related activities. She stressed that Belarus has a national system of environmental monitoring, analysis, and evaluation that involves a network of experts. Among the goals and objectives of the system, Ms. Germenchuk mentioned the reduction of greenhouse gas emissions, the development of policies for the introduction of “green” tools and the strengthening of technological standards of pollutant emissions and energy efficiency.

Ms. Germenchuk explained that the National Environmental Monitoring System (NEMS) of Belarus is based on a system of collection, processing, analysis and evaluation of data obtained through a science-based network of more than 4000 observation points. She mentioned that this monitoring system should be further developed, both in terms of compliance with the new economic trends, and in terms of the update of new technologies of observation, collection, processing, storage and presentation of information. The results of the NEMS have generated a data base for sustainable environmental management and for the assessment of environmental damage, including emergency situations of natural and man-made disasters in the OSCE region.

Mr. Thomas Wuchte informed that the OSCE Action against Terrorism Unit offers a wide range of counter-terrorism assistance to participating States. Concerning the energy field, he stated that smooth and secure running of energy infrastructure is a prerequisite for safe and environment-friendly energy activities. Any disruption of the infrastructure would have a serious impact on health, safety, security and economic well-being of individuals and countries. Unfortunately, that makes it an ideal target for terrorists.

Referring to the Ministerial Council Decision on Protecting Critical Energy Infrastructure from Terrorist Attacks (MC.DEC/6/07), Mr. Wuchte highlighted that protecting critical infrastructure from terrorist attacks is an issue particularly salient for the OSCE. He presented the OSCE’s efforts in this field, and paid particular attention to the project called “Good Practices Guide on Non-Nuclear Critical Energy Infrastructure Protection from Terrorist Attacks Focusing on Threats Emanating from Cyberspace”. Mr. Wuchte explained that the goal of this publication is to raise awareness, to identify key policy issues and challenges, and to collect selected good practices that could be replicated in other participating States. The guide also aims at serving as a reference document containing key information for government policy makers, state authorities in charge of critical energy infrastructure protection, owners and operators of non-nuclear energy infrastructure. Mr. Wuchte concluded his intervention by stating that particular attention should be paid to the level of vulnerability of energy infrastructures, and reiterated that co-operation and collaboration among participating States and relevant stakeholders is the best way to protect ourselves from different future threats.

The Moderator emphasized that great work has been done in the First Dimension after the MC.DEC./6/07 was adopted. Concerning the “Good Practices Guide on Non-Nuclear Critical Energy Infrastructure Protection from Terrorist Attacks Focusing on Threats Emanating from Cyberspace”, she stated that it is an excellent tool for OSCE participating States and field operations. In her view, this topic should be also seen from a wider perspective and approached systematically; especially regarding the protection of non-nuclear critical energy infrastructure from natural and man-made disasters. She concluded by stating that the OSCE with its expertise can contribute to the reduction of impacts of natural and man-made disasters.

The representative of Uzbekistan shared the experience of his country on the construction of large dams. He stressed that it is important to reduce losses in the energy sector and to learn from other participating States’ best practices.

Mr. Sergey Solyanik, Crude Accountability, mentioned the conclusions of the recent Caspian Sea Conference, where no information regarding disasters and its effect on environment was provided. He mentioned that the Caspian States and the OSCE should pay special attention to the environmental risk related to energy activities in the field of oil and gas that could have a dramatic impact on the Caspian Sea.

In his concluding statement, *Mr. Wuchte* reiterated that while the Guide covers terrorist attacks, there are other threats, such as natural disasters, that could be further explored. He concluded by encouraging the exchange of best practices among participating States.

Ms. Germenchuk stressed that the OSCE should consider further co-operation with the EU on monitoring and assessing stability in its region through the promotion of renewables and the green economy.

Mr. Khakdodov stressed that co-operation must be bilateral and multilateral in order to ensure energy security

Finally, *Ms. Ermina Salkicevic-Dizdarevic* emphasized that the impact on critical energy infrastructure from natural and man-made disasters is evident in all countries and should therefore be seriously taken into consideration by all participating States. She reiterated that OSCE field missions and Aarhus Centres are a great source of information and could contribute to these efforts.

The following conclusions and recommendations could be drawn from the discussion:

- Energy security, renewables and green economy are key factors in the efforts to mitigate the environmental footprint of energy-related activities. As the OSCE includes producing, transporting and consuming participating States, it is essential to unite efforts to deal with energy and environmental challenges.
- The “Good Practices Guide on Non-Nuclear Critical Energy Infrastructure Protection from Terrorist Attacks Focusing on Threats Emanating from Cyberspace” has a cross-dimensional nature but does not address disasters impacts. It is important that field presences share lessons learnt and best practices on both areas.

- More attention should be paid to the protection of non-nuclear critical energy infrastructure from natural and man-made disasters, which can damage the energy distribution systems and affect citizens. Natural disasters have affected all participating States and are therefore of common concern. In this regard, the OSCE could serve as an excellent platform for sharing experiences, best practices, creating networks and providing training of experts.
- OSCE participating States should join EU efforts in monitoring and assessing the stability in the region in light of renewable and green economy principles. Monitoring results could be used as indicators of sustainable development, green growth and green economy.
- All mechanisms aiming at providing energy security must benefit from co-operation on bi- and multilateral level.

Session II: Strengthening policy and regulatory frameworks and fostering international co-operation to promote renewable energy and energy efficiency

Moderator: Mr. Stevian Defilla, Director, Energy Charter Secretariat

Rapporteur: Mr. Ruslan Ovezdurdyev, Programme Assistant, OSCE Centre in Ashgabat

Speakers:

Mr. Tolib Sultanov, Director of the Uzbekistan Branch of the Regional Environmental Centre for Central Asia.

Prof. Yury Shcherbanin, Head of the Department of Oil-Gas Trading and logistics, Russian State University of Oil and Gas.

Mr. Tahir Jafarov, Chief Power Engineer of the State Agency on Alternative and Renewable Energy Sources of the Republic of Azerbaijan.

Ms. Laura E. Williamson, Communication and Outreach Manager, REN21, Secretariat

Mr. Dejan Trifunovic, Assistant Minister, Development and Environmental Protection, Ministry of Energy, Serbia

Mr. Sultanov started his intervention by presenting the Regional Environment Center for Central Asia set up within the Central Asia Regional Economic Cooperation (CAREC) Program. Among others, the Center's mission is to support multi-sector cooperation on environmental issues at national and regional level.

Mr. Sultanov stressed the necessity of developing renewable energy in Uzbekistan and informed that laws on renewable energy of Uzbekistan were expected to be enacted by the Parliament by the end of 2013. Moreover, he stressed the necessity to support, stimulate and create favourable conditions for the development of renewables in his country. He pointed at the possibility to discuss with the OSCE plans for a legislative assessment mission to Uzbekistan. The moderator, *Mr. Defilla*, indicated that the mandate of the Energy Charter Secretariat includes the possibility of carrying out such kind of mission for any country wishing to do so.

Mr. Shcherbanin reported on a decision of the Russian Federation from May 2013 on renewable energy promotion. He informed about the Russian Federation's intention to raise the production of renewable energy by 2.5%. In this regard, he drew attention to the cost implications of

renewable energy development and declared that State subsidies are therefore necessary. He also underlined that issues related to energy storage and the integration of energy into existing grids should still be solved. Finally, he proposed the elaboration of a handbook on renewable energy similar to the OSCE-UNECE Handbook of Best Practices at Border Crossings.

Mr. Jafarov started his presentation by reporting on the existing status of the energy sector in Azerbaijan. In this regard, he pointed out that energy production has recently grown by 40% in the country. He proposed the elaboration of *terms of reference* for a proposal to unify the energy systems of the neighbouring countries, where Azerbaijan would serve as European energy corridor. The proposal would also include the transfer of the energy produced in Turkmenistan to European markets.

Ms. Williamson started by presenting REN21, an organization which aims at promoting renewable energy and that includes NGOs, industry associations, governments and international organizations. She touched upon the renewable energy generation, as well as its global distribution and consumption. A key point in her presentation was the fact that the renewable energy industry creates jobs all around the world and contributes to the reduction of CO₂ emissions.

Mr. Trifunovich reported on energy consumption patterns, changes in domestic production and the situation of energy imports and exports in Serbia. He also touched upon the renewable energy potential of Serbia in biomass, hydropower, wind-energy, solar, and geothermal, and on the latest developments related to Serbia's National Renewable Energy Action Plan. *Mr. Trifunovich* elaborated on the incentives for privileged power producers. Such incentive package includes the right to acquire the temporary status of a PPP for investors in solar and wind power plants; agreements with the public power supplier for the purchase of power during 12 years; privileged prices; annual corrections in accordance with the inflation rates; and after the privileged period, the obligation of the public supplier to purchase all produced power in accordance with the current market conditions.

The following representatives contributed to the discussion.

Ms. Tamar Tsurtsunia, Department of International Relations, Ministry of Energy and Natural Resources of Georgia, reported on Georgia's latest developments in the area of renewable energy production, distribution and legislative framework. The representative informed on Georgia's expectations to become one of the main renewable energy exporters in the region.

Mr. Toktassyn Buzubayev, CIS-Vice Executive Secretary, CIS, touched upon the problem of rational use of resources and the improvement and introduction of legislative platforms for nature protection. He reported that CIS countries account for only 5% of total global renewable energy production, and that this share is expected to be increased in the future. However, the modernization of economies and the improvement and harmonization of environmental laws would be needed in order to accomplish this goal. He emphasized the CIS was ready to participate in a dialogue dealing with this issues.

Session III: Increasing security and stability through reinforcing environmental good governance in planning, financing and implementing energy related activities

Moderator: Ms. Marta Szigeti Bonifert, Executive Director, Regional Environmental Center for Central and Eastern Europe

Rapporteur: Mr. Özgür Gökmen, Counsellor, Permanent Mission of Turkey to the OSCE

Speakers:

Mr. Michael Thurman, Crisis Prevention and Recovery Practice Leader, UNDP Bratislava

Ms. Ainur Sospanova, Director, Green Technologies and Investment Attraction Department, Ministry of Environmental Protection, Republic of Kazakhstan

Mr. Krzysztof Michal Księżopolski, Assistant Professor at the Institute of International Relations of Warsaw University, Poland

Ms. Mariska de Wild-Scholten, Senior Scientist, SmartGreenScans, The Netherlands

During his intervention, *Mr. Michael Thurman* approached energy issues from the point of view of crisis prevention. In this regard, he explained the perspectives and opportunities resulting from the integration of risk management aspects in the administration of renewable and traditional energy resources. He explained the main factors triggering the energy crisis in Central Asia region between the years 2002-2007, which led to the development of the Central Asian Regional Risk Assessment (CARRA) initiative. Referring to this initiative he elaborated on specific programmes designed for different regions such as Central Asia, Commonwealth of Independent States and Central Europe. He underlined, that the water and energy nexus depends on trans-boundary coordination, dam safety, water-users association and climate issues, and mentioned the projects on various areas such as energy efficiency and conservation as disaster prevention, renewable energy as preparedness and sustainable urban and transport systems. Finally, he underlined the importance of the UN initiative “Sustainable Energy for All” (SE4ALL).

Ms. Ainur Sospanova stressed that the Astana-Expo 2017 concept is based on the transition of Kazakhstan to green economy. She pointed out the targets set for the year 2030 on the energy mix of Kazakhstan and explained that the transition foreseen will have positive impacts on the country’s economy, rather than bringing extra burden. She also provided information about the “Green Bridge Partnership Programme” initiated by Kazakhstan.

Mr. Krzysztof Michal Księżopolski discussed the impact of energy sources on economic security. He explained the concept of “Security Economization Process” and underlined its evolution and impact on the functioning of markets. In this regard, he briefed participants on the impact of renewable sources on the economic development and the international relations. Underlining the significant results of Kyoto Protocol on renewable energy and climate change, he highlighted the overall positive impacts of green economy. Finally Professor Księżopolski indicated that renewable energy will play an increased role in the international relations, and therefore could be used as a tool to ensure security. Finally he recommended re-doubling the efforts for the liberalization of energy markets and increasing the mutual exchange of information on energy resources.

Ms. Mariska de Wild-Scholten presented her study on photovoltaic. She gave information about the “Life Cycle Assessment”, which starts from the mining and refining processes, followed by the manufacturing, the installation, the use and the final recycling. She also listed the carbon footprints of electricity use by different countries. *Ms. Mariska de Wild-Scholten* recommended reducing the use of scarce materials as a way to limit energy consumption, waste and emission. Her recommendation to the OSCE was to collect data on all life cycle phases of energy production and evaluate the environmental costs associated with energy production which are not included in the cost paid by the consumers.

Four interventions by participating States and one by a representative of a non-governmental organization were delivered.

Mr. Sergey Solyanik, Crude Accountability, underlined the importance of the involvement of civil society in the decision making and in the implementation processes of energy policies of Central Asian countries which are parties to the Aarhus Convention.

In response to *Mr. Solyanik*, *Ms. Ainur Sospavova* provided information about different meetings that had taken place in her country at bilateral as well as regional level, where discussions focused on the strategy to be adopted in the energy sector.

A representative of the delegation of Tajikistan emphasized that before initiating a dam project in their country, the government tried to reach out to the public at large. To this end, prior to the finalization of an environmental impact assessment of this project, the government organised public hearings and held seminars with the participation of the local population.

A representative of the delegation of Belarus stated that economic sustainability and energy security should be in the future part of our daily lives.

A representative of the delegation of Azerbaijan provided information about national environmentally friendly policies, guidelines and mechanisms applied in the country. Pointing out the importance of compliance with the international regulations and agreements, the delegate alleged that not all participating States are complying with the responsibilities resulting by the Espoo Convention membership and expressed concern about nuclear activities posing a threat to the environment of the OSCE region. The delegate also stated his country’s ambition to see the Caucasus region free from nuclear power.

A representative of the delegation of Armenia indicated that his country closely co-operates with the International Atomic Energy Agency and other relevant organizations and countries on nuclear safety. The delegate further informed that the results of such co-operation will be published shortly and disagreed with allegations of non-compliance with the Espoo Convention.

The Moderator summarized the presentations and underlined the importance of adopting the right policies on renewable energy resources, which will lead to increasing security and prosperity.

Session IV: Co-operation between the public and the private sector and international organizations to improve the environment footprint of energy-related activities

Moderator: Mr. Jan Dusik, Acting Director, Regional Office for Europe, UNEP

Rapporteur: Mathilde Nguyen Panigel, OSCE Office in Baku, Azerbaijan

Speakers:

Ms. Roberta Ianna - Italian Program for the Evaluation of the Environmental Footprint

Mr. Dolf Gielen – International Renewable Energy Cooperation (IRENA)

Mr. Ian Parry - Getting Energy Prices Right: From Principle to Practice

Mr. Hubert Rhomberg – Improve the environmental footprint of buildings

Ms. Roberta Ianna explained that in 2009 the Italian Ministry for the Environment set up a working group called “Task Force for the environmental footprint-PEF” to improve partnerships with the private sector and to enhance carbon footprint analysis of consumers goods during their life cycle. The partnership took the form of a voluntary agreement between the government and private companies, which can be accompanied by special grants for small and medium-sized enterprises. To date, more than 200 companies have joined the programme, triggering long-term reduction of carbon emissions.

One of the main drivers for private companies to join the task force is the understanding that the analysis of the environmental footprint can lead to direct economic savings in material and facilitate the choice of energy resources.

Mr. Dolf Gielen introduced IRENA, an agency focusing on the six renewable energies resources (Biomass, Geothermal, Hydro, Ocean, Solar and Wind) that had been created in 2011 to accelerate the deployment of renewable energy. IRENA co-operates with regional and international organizations. Out of the 57 OSCE participating States, 41 are currently members of the organization. IRENA acts as a hub for a renewable energy roadmap, which has the aspirational objective of doubling the global renewable energy share by 2030. In order to raise awareness about the cost-effectiveness of renewable energies, IRENA Renewable Energy Costing Alliance will offer a forum for discussions among multi stakeholders and finance innovative renewable energy projects in developing countries.

IRENA foresees four possible themes for co-operation with the private sector:

- Guidelines for bankable proposals;
- Renewable potentials data;
- Impact assessment of renewable energy deployment on socio-economic variables; and
- The opening by Abu Dhabi Fund for Development of call for tenders in January 2014.

Mr. Ian Parry stressed that green energy taxes are being calculated by the International Monetary Fund in order to stimulate environmental behaviour change through taxes. The taxes would charge fuel supply proportionally to emissions factors. The additional taxes would accelerate the shifting to cleaner and comparatively cheaper power generation fuels by consumers.

To illustrate the damages caused by CO2 emissions, Mr. Parry explained that they cause premature deaths, congestion costs, pedestrian injuries, and local pollution, noise and property damages. According to the speaker, kilometre-based charges system would be an ideal policy. However in the interim the costs could be reflected into the motor fuel taxes. Mr. Parry concluded by informing that the International Monetary Fund will publish in January 2014 a report presenting possible efficient taxes for coal, natural gas, gasoline and diesel for 187 countries.

Mr. Hubert Rhomberg introduced the private Austrian construction company “Rhomberg”, which is exploring possibilities of innovating beyond energy efficiency through building material. According to the speaker, knowing that over 50% of the population is currently urbanised and the trend will grow, the way construction companies are currently building is neither innovative, nor sustainable. Building materials can be extremely environmentally costly as they are not unlimited. In several countries, wood is the best natural renewable material that can stand-up to 100m high. The production of wood prefabricated systems can be replicated locally, thus giving the possibility to replicate zero-emission (passive) buildings. In this case, the environmental breakthrough is achieved through the type of input selected. The speaker informed that a demonstration building had been constructed in 7 days and is open to public as an exhibition building in Austria. Support from governments is required to develop the right public policy guidelines providing the appropriate framework for increased innovation in the building sector. He also drew the attention to the exhibition on the European initiative *Common European Sustainable Building Assessment* (CESBA), organized on the margin of the Forum Meeting and showing the several steps for energy efficiency and utilisation for renewable energy sources in public buildings projects.

The following remarks from the floor were made.

A representative of the Armenian delegation noted that the main resources of construction materials in Armenia usually are stones, and that they could not apply the wooden model presented by Mr. Rhomberg. The limitation is set by the availability of local resources, although technical innovation can develop local energy-efficient inputs. In his response the speaker explained that stones also provide such a sustainable solution if they are available locally.

A representative of the Ministry of Environment of Italia remarked that the government is interested in exploring sustainability in the construction sector and with this aim it is working with companies to establish how they can develop environmentally sensitive materials.

The following recommendations can be drawn from Session IV:

- Technological innovation is one of the solutions to cope with scarce resources and to modify the current paradigm into a sustainable use of environment resources. Engaging international financial institutions in providing incentives for environmentally conscious solutions can be instrumental, in particular for large public investments.
- A partnership taking the form of a coalition between international organisations, the private sector and civil society could enable the publication of transparent and accountable reports. In parallel, the OSCE could support governments in developing the appropriate legal framework to enforce good governance practices as legal obligations.
- Sustainable energy and energy efficiency initiatives are crucial for OSCE participating States -including for oil and gas driven-economies - to ensure an energy supply

transition towards more sustainable sources. Policies and guidelines are indispensable to ensure an economically viable environment for energy efficiency initiatives and the emergence of new market players that would contribute to the diversification of the economy. The OSCE could develop specific programmes to build the capacity of experts on sustainable energies.

- Best practices in reducing the environmental footprint of energy-related activities should be widely disseminated with the support of the OSCE. Pertinent information is necessary to assist consumers to choose domestic energy supply or experts to design school curricula covering courses on energy efficiency.

Session V: Co-operation and partnerships on new and emerging environment-friendly technologies in the energy field

Moderator: Ambassador Mykola Melenevskyi, Ambassador-at-large on environmental issues, Ministry of Foreign Affairs of Ukraine, 2013 Ukrainian OSCE Chairmanship

Rapporteur: Mr. Leonid Kalashnyk, Environmental Programme Officer, Office of the Co-ordinator of OSCE Economic and Environmental Activities

Speakers:

Mr. Didier Houssin, Director, Sustainable Energy Policy and Technology, International Energy Agency

Dr. Aviezer Tucker, Assistant Director, The Energy Institute, University of Texas, United States of America

Prof. Leonid M. Grigoriev, Chief Adviser to the Head of Analytical Centre of the Government of the Russian Federation

Mr. Giorgio Rosso Cicogna, Special Adviser, Central European Initiative

Mr. Michael Gonchar, President of the Center for Global Studies “Strategy XXI”, Ukraine

The Moderator, Ambassador Melenevskyi, briefly introduced the five selected topics of this session: clean production of energy, new sources of energy, smart grids and sustainable transport, energy storage solutions and shale gas.

Mr. Houssin outlined the role of the IEA on energy policy issues, noting the nexus of energy and environment being one of the key objectives within the IEA’s mandate. Both energy demand and carbon dioxide emissions are likely to double by 2050. Strategic application of clean energy (CE) can enhance sustainable economic development and reduce environmental impact. According to the IEA’s Tracking Clean Energy Progress Report, the current progress is not fast enough. At the same time considerable energy efficiency potential remains untapped. Energy efficiency is a key tool for achieving a sustainable energy future. The positive news is that costs of renewable energy fell more rapidly than expected. Other elements of the IEA international cooperation network mentioned by the speaker were: international low-carbon energy platform by IEA (dissemination, analysis and policy recommendations); energy technology perspective programme; IEA’s Technologies Roadmaps (on each energy technology) to help accelerate the deployment of major technologies to reach climate objectives. Such strategies are developed on

each energy technology. In conclusion, Mr. Houssin noted the IEA was pleased to contribute to the OSCE's efforts on energy.

Mr. Tucker presented an analysis of different countries' policies on shale gas extraction from a multidisciplinary perspective. European policies show a whole range of reactions from enthusiasm to banning shale gas development. The US reaction to shale is quite positive: gas is overtaking coal as energy resource in the US with gas prices plummeting, fertilizers prices decreasing and the level of emissions going down.

According to the speaker, the arguments used in Europe to undermine shale gas' popularity - often related to legal, scientific, technological and political science aspects - are not consistent. According to Mr. Tucker the real explanation is the lack of trust of people in their governments (e.g. fear of thirst, hunger, disease). In the 1990s there were a series of crises (AIDS-contaminated blood, mad cow disease) including in the democratic governments - that had shaken this trust. The way to build trust is through engaging civil society, accountability, transparency and good governance. For example, public debate in the US is about how strict regulations should be. This should also be debated in Europe.

Mr. Grigoriev provided an analysis of energy and commodity markets from a sustainability perspective, calling for a clear differentiation between descriptive vs. normative approaches in energy discussions. He pointed out that against the background of energy price volatility, the attitude to energy and environment is currently much more pragmatic than before. Emissions (CO₂) are going up. The use of up to 70% of coal in the Asian economy gives very little chance to reduce emissions globally by reducing emissions in Europe. There is also a trend of resurgence of coal consumption all over the world. At the same time, energy consumption is growing at a slower rate. Mr. Grigoriev called for urgent action against the increasing threat of climate change. Renewables consumption is not without its challenges: need for reserve capacities and smart grids. Recent developments on renewable energy in Russia were outlined by the speaker, including some pilot projects regarding the extension of renewables' strategies in Russia.

Mr. Grigoriev concluded that at the moment economics governs the energy sector in a substantial way. Europe is increasing its coal consumption. Gas-to-goal switching also takes place. It takes good governance, public support, high-income level to create similar success stories on renewable energy like in Sweden and Germany.

Mr. Cicogna outlined the latest developments on advanced biofuels (e.g. crop residues, sorted municipal solid waste, algae). Mr. Cicogna declared that the ethical dilemma of the past – food vs. biofuels is now behind us. However, there is a great need for political and public awareness building on new advanced biofuels. Advanced biofuels are the best equation combining: energy requirements, environmental protection, rural development and food security.

Mr. Cicogna continued by saying that CEI Member Countries have large agriculture and forestry sectors. The Bloomberg Report on Advanced Biofuels (can be downloaded from the CEI web-site) builds on a very conservative approach examining only agricultural waste as feedstock, only existing conversion technology and no change in current land-use patterns. Potential benefits of advanced biofuels in the CEI region according to this most conservative scenario: job creation up to 36,000 permanent jobs mostly in rural areas; innovation and economic growth total

investment 40 billion EUR and total revenue of about 260 billion EUR in 2012-2050 and energy security enhancement.

According to the speaker, the OSCE Economic and Environmental Forum provides an opportunity to call on international organizations for a new initiative to jointly promote advanced biofuels with their respective constituencies, working on comparative efficiency and cost effectiveness vs. other renewable sources.

Mr. Gonchar made a presentation about unconventional gas (which includes shale gas, methane hydrates, etc.). He noted the potential of gas to reduce CO₂ emissions compared to the use of coal as an energy source. He also outlined potential risks to the environment and emphasized that these risks are however not greater than those existing during the extraction of conventional natural gas. Mr. Gonchar pointed out that technologies available today can minimize these risks and noted the importance of establishing a dialogue with the public and to conduct risk assessments. The speaker also stated that carbon capture and storage technologies still need improvement. He later proceeded to detail the potential existing with world deposits of gas hydrates trapped on the deep ocean floor. Mr. Gonchar informed that some fracking technologies which do not require water have been developed. He added that by January 2015 all new natural gas wells are required to include green completions, also known as reduced emissions completions.

According to Mr. Gonchar, the OSCE can be used as a platform for exchange of experience on how to tap these unconventional energy resources. It is also necessary to initiate discussions at different levels and to accomplish geologic exploration in Europe to evaluate commercially extractable unconventional gas reserves. There is a need for transfer of advanced technologies across the OSCE region. Other areas of possible action are the elaboration of adequate regulatory mechanisms and public awareness raising.

Statements from the delegations:

The representative from the Russian Federation declared that shale gas production is helpful for energy security. Concerning the environmental implications of its extraction, he noted that technologies are getting better. According to the delegate, there is a need to conduct environmental impact assessments in the US to be able to transfer the technologies to other countries. He also stated that more transparency is needed. He concluded by noting that there may be a tendency to use less expensive technologies that may have greater environmental consequences.

The Moderator summarized the discussion and briefly referred to Ukraine's latest efforts on clean and renewable energy including projects between Ukraine and UNIDO in the fields of energy efficiency and renewable energy.

The following recommendations can be drawn from the session:

- The OSCE Economic and Environmental Forum can be instrumental in mobilizing support for advanced biofuels as an efficient and cost-effective source of renewable energy.

- The OSCE can be used as a platform for the exchange of experience and transfer of advanced technologies in the field of exploration and extraction of unconventional energy resources, including shale gas.
- The OSCE can provide assistance in the development of appropriate regulatory frameworks and in raising public awareness on unconventional energy resources.

Special event: Promoting Transparency and Good Governance in the Energy Sector – Panel Discussion

Moderator: Ambassador Mykola Melenevskiy, Ambassador-at-large on environmental issues, Ministry of Foreign Affairs of Ukraine, 2013 Ukrainian OSCE Chairmanship

Rapporteur: Ms. Iryna Iarema, Senior Project Assistant, OSCE Project Co-ordinator in Ukraine

Speakers:

Mr. Igor Ryzhkov, Senior Specialist of the Ministry of Energy and Coal Industry, Ukraine

Ms. Marinke van Riet, International Director, Publish What You Pay

Ms. Husniyya Mammadova, Deputy Head of Department of Economic Cooperation and Development, Ministry of Foreign Affairs, Azerbaijan

Mr. Shkelqim Hysaj, Director, EITI Albania

Ms. Sanela Habes, Journalist for BH Radio 1, Bosnia and Herzegovina

Mr. Ryzhkov presented to the audience the situation with energy storages in Ukraine, which are still insufficient to ensure energy security. The speaker informed about Ukraine's intention to access the EITI (Extractive Industries Transparency Initiative) that, among other things, promotes public financial management and accountability in the extractive industries. *Mr. Ryzhkov* added that the Ministry of Energy and Coal Industry of Ukraine has been identified as the national coordinator for the implementation of EITI commitments.

The speaker also mentioned the *Open Government Partnership*, of which Ukraine is a party and which foresees the implementation of EITI commitments by the country. Keeping in mind the procedure of accession to the EITI, Ukraine is applying for the status of candidate-country, which implies preparation and submission of a report on implementation of commitments within 18 months after status confirmation. According to the speaker, under the auspices of Ukraine's Ministry of Energy and Coal Industry, there is the intention to create a Center for Resource Effectiveness and Cleaner Production, which could be responsible for compiling the data and publishing the respective report. The speaker requested OSCE assistance in creating such a Center.

Ms. van Riet dwelled upon the history of *Publish What You Pay*, which had been launched as a specific campaign calling for extractive companies to publish what they have paid to governments, and for governments to publish what they have received. The coalition currently consists of around 700 civil society organizations. In 2012, the organization adopted a new strategic framework (Vision 20/20) for transparent and accountable management of natural resources all along the so-called extractive industry "value chain". The speaker focused on key achievements of the organization, which include an expanded scope of the transparency and accountability principle in extractive industries.

Ms. van Riet concluded with two main recommendations:

First, to the EU member States and to countries wishing to join the EU: to transpose EU Transparency and Accountability Directives into national legislation as soon as possible; and to foster their dialogue with civil society. Within the OSCE this could be done by combining work done in the Second and Third Dimensions, which would guarantee civil society involvement.

Ms. Mammadova shared Azerbaijan's experiences in implementing the EITI. Having joined the EITI in 2003, Azerbaijan has submitted already 17 reports. The speaker focused on the main benefits resulted of joining the EITI, including an improved climate for investors, transparency of payment, civil society involvement and accountability of the government. In 2009, Azerbaijan was praised for its achievements in implementing the EITI. In this regard, Ms. Mammadova indicated that implementing the EITI was instrumental in building trust internationally and domestically, and in changing the public's perception of transparency. The speaker stressed the importance of keeping the voluntary basis principle of EITI, which contributes to its attractiveness for countries. Finally, Ms. Mammadova provided two recommendations: to promote experience sharing between countries; and to develop practical guidelines based on the recommendations from the EITI Global Conference in Sydney 2013.

Mr. Hysaj shared Albania's experience in implementing the EITI. In this regard, Mr. Husaj considered that such implementation contributes to the EU integration process and supports sustainable development. In his view, the implementation of EITI commitments does not only benefit today's government and civil society, but also the future of the country. According to the speaker, the Albanian government decided to follow EITI rules because all of them serve to increase living standards. He emphasized that working with local communities and civil society is crucial when implementing EITI principles. Reports on an annual basis provide a possibility for comparability between years. Mr. Hysaj expressed gratitude to those who helped Albania in joining the EITI and stressed the importance of co-operating within the Initiative.

Ms. Habes referred to the media competition launched in April by the OSCE Mission in Bosnia and Herzegovina and the research she made on plastic bags usage. While talking about transparency, the speaker recalled that media is an important player to keep in mind. However, she noted certain reluctance by public officials in her country to provide information on environmental effects of some energy-related projects, such as waste incinerators or small hydropower plants, which violates procedures of accountability. Ms. Habes underlined the importance of communication between civil society, the government and the media for the common benefit and suggested that the media should collaborate with the Aarhus Centres to promote transparency in the environmental and energy sectors.

Questions and discussion:

The Moderator asked panellists what should be the priority in promoting transparency in the energy sector and what actions Governments could take to respond to possible challenges.

Mr. Ryzhkov replied that in the case of Ukraine, the country could learn from the experience of other OSCE participating States in implementing EITI principles. In his view, the first action is to put in place a mechanism - a sort of agency, and to demonstrate political will through a public information campaign.

Ms. Mammadova agreed with *Mr. Ryzhkov* on the importance of political will in driving a process towards transparency. This includes readiness of the companies to co-operate and disclose their information. *Ms. Mammadova* added that civil society plays a key role, but in Azerbaijan it should further mature in order to act as a partner of the government.

Ms. van Riet stated that a political commitment to transparency and change is the first priority. In this regard, she added that the respect for human rights is vital, and civil society should be engaged into debates.

Ms. Habes considered that true political transparency is a key factor and stated that politicians should be more aware of environmental issues. *Mr. Hysaj* suggested that the EITI should be supported by publishing at least one report per year.

The U.S. Delegate to the OSCE asked for examples on how EITI works in practice and how EITI can become a tool for governments to attract investments. The delegate also asked if one can see new interest or improved dialogue with foreign investors after EITI accession.

Ms. Mammadova answered that EITI is a model for different industries (health, pharmaceutical, etc.). Disclosure of information requires a lot of sources and such disclosure should be encouraged. Investments depend on the specific sector and the multi-stakeholder process.

An Ukrainian NGO representative asked about the real contribution that EITI's membership makes in fighting corruption in the extractive industries.

Mr. Hysaj declared that companies want to work in a safe environment and, in this regard, thanks to EITI, communities know what the companies have paid to the government. Civil society plays a role in making this process public. *Mr. Hysaj* pointed out that the implementation of the EITI does not mean that corruption will be stopped but it will help to fight corruption.

Ms. Mammadova added that the idea of joining the EITI was not seen by Azerbaijan as a tool to just foster a culture of transparency or to fight corruption. She explained that it was a way to also promote accountability in the energy and public sector and therefore attract investors.

Ms. van Riet clarified that EITI is a multi-stakeholder initiative, whereas Publish What You Pay is a civil society movement. In her view, one of the main weaknesses of EITI is that the adherence by governments depends on their political will. In this regard, she considered that such involvement should be mandatory. New frontiers to tackle include corruption, license and contract transparency, etc. As an example, *Ms. van Riet* mentioned that in Nigeria a Fiscal Unit was established in the Ministry of Finance to scrutinize the reports of companies, and that this activity has proved to be useful for governments.

The representative from the Czech Republic to the OSCE enquired about the role of the OSCE in promoting good governance in the energy sector and requested panellists to provide some recommendations to be taken into consideration during the Ministerial Council.

Ms. Mammadova replied that the OSCE could support participating States in implementing the EITI principles and encourage companies to join the Initiative and mainstream EITI in their operations.

Mr. Hysaj added that the OSCE's role is to continue to provide support in organizing training seminars on EITI principles, and to share best practices to ensure security in the region.

Concluding Plenary Session: The role of the OSCE in promoting the environmental footprint of energy-related activities: follow-up to the 21th Economic and Environmental Forum

Moderator: **Dr. Halil Yurdakul Yigitgüden**, Co-ordinator of OSCE Economic and Environmental Activities

Rapporteur: **Mr. Christian Melis**, Water and Energy Policy Adviser, OSCE Office in Tajikistan

Dr. Halil Yurdakul Yigitgüden opened the Concluding Plenary Session thanking the Ukrainian Chairmanship for the relevant proposed theme, which encouraged a fruitful discussion among delegates from participating States, representatives from key partner organizations, civil society and the private sector. He also thanked all the participants who contributed with presentations and interventions during the three day meeting, as well as during the preparatory meetings in Vienna and Kyiv.

He stated that the increasing energy demand in the world - and the related energy production, transportation and consumption - needs to be considered in relation with the environmental implications of energy-related activities. In this perspective, the OSCE should act as a platform for improving dialogue and co-operation in the sectors of energy and environment. In particular, energy efficiency, renewable energy, technology transfer and improvement of legislative frameworks should be among the main topics discussed among all the concerned stakeholders. According to the Co-ordinator of OSCE Economic and Environmental Activities, as to reducing the impact of energy-related activities, the Forum clearly indicated the importance of appropriate international, regional and national legal instruments, as well as the role of civil society in the decision-making process on environmental and energy-related issues. He also expressed that the activities implemented in co-operation with the Aarhus Centres network and the OSCE field operations represent a positive example in this context. The Environment and Security Initiative (ENVSEC) was also showcased as a strong platform to improve trans-boundary environmental co-operation in the OSCE region. Dr. Yigitgüden stressed that good governance and transparency are essential to reduce the risk of corruption in the field of energy. Furthermore, he underlined the importance of mainstreaming sustainable development considerations into energy policies and energy co-operation. He concluded by suggesting to transfer the Forum's conclusions and recommendations into political engagements.

A representative of Lithuania, on behalf of the European Union (EU) thanked the Ukrainian Chairmanship, the Office of the Co-ordinator of OSCE Economic and Environmental Activities and the authorities of the Czech Republic for the constructive discussions, and recalled the importance of the 21st OSCE Economic and Environmental Forum in view of the Ministerial

Council in Kyiv. The delegate said that trans-boundary energy co-operation requires proper legal instruments at regional and international level, and reminded that the indications included in the Dublin Declaration on good governance should be applied also in the field of energy. She stressed the role of civil society and the need to strengthen transparency and stakeholder participation in the decision making process, and pointed to the Aarhus Convention as an appropriate instrument to increase co-operation and public involvement. It was also noted that the OSCE has the competency to lead the process of confidence-building on energy issues. The representative of the EU also emphasized the usefulness of the side event organised by the OSCE Action against Terrorism Unit on Non-Nuclear Critical Energy Infrastructure Protection (NNCEIP) from Terrorist Attacks Focusing on Threats Emanating from Cyberspace. In conclusion, she hoped that the engagement in the forum process will be reflected in the Kyiv Ministerial Council.

A representative of the United States of America expressed satisfaction with the good organization of the event and the progress achieved during the discussions on the development of renewable energy sources and energy efficiency. He specifically mentioned the event on the Good Practices Guide on Non-Nuclear Critical Energy Infrastructure Protection from Terrorist Attacks, Focusing on Threats Emanating from Cyberspace. The delegate expressed the wish that participating States will take action to protect their infrastructure also from natural risks. He also underlined the value of the Special Event on Transparency in the Energy Sector, and encouraged the OSCE to continue to promote transparency and good governance in consideration of their benefit in promoting investments. As to the panel on New and Emerging Technologies in the Energy Field, the delegate emphasized that governments, civil society and the private sector have to be involved in a comprehensive discussion about the potential use of new energy sources, and pointed out the important role of the OSCE in this context. Finally, he invited participating States to integrate the outcomes of the Forum into ministerial action in Kyiv.

Ambassador Igor Prokopchuk recalled the beginning of the discussion on the environmental impact of energy-related activities on 4th February in Vienna, and the opportunity offered to reflect on energy security in the OSCE region. During the Preparatory Conference in April it was said that the environmental challenges should turn into opportunities for co-operation, and he is still convinced that the OSCE can facilitate this process. Encouraging putting the Forum's recommendations into meaningful actions, he emphasized three main considerations that came up at the Concluding Meeting. First, the role of the OSCE as effective platform for co-operation on different aspects of energy was recognized, as well as the interaction among Field Operations and Executive Structures in facing transboundary environmental threats. Second, the importance of transparency and good governance in energy activities and the necessary contribution of academia, civil society and business community were acknowledged. In this context, he suggested that it is in our interest that the OSCE extends its wide expertise in promoting public participation in matters related to environmental security to the field of energy. Third, co-operation on new emerging technologies was indicated as a crucial step to promote energy security. Particularly, clean energy production, smart grids, sustainable transport, energy storage solutions and other know-hows can help in reducing pollution and mitigating climate change, and in combination with transparent policy contribute to affordability, sustainability and reliability of energy. In conclusion, he stated that the Ukrainian OSCE Chairmanship will continue its efforts on the topic of promoting the environmental footprint of energy-related activities in the OSCE region. Joining previous speaker in thanking the Co-ordinator of OSCE Economic and Environmental Activities, his staff, the OSCE Field Operations, the speakers, the participants and all the organisers of the Forum, he closed the 21st OSCE Economic and Environmental Forum.

21ST OSCE ECONOMIC AND ENVIRONMENTAL FORUM

“Increasing stability and security: Improving the environmental footprint of energy-related activities in the OSCE region”

CONCLUDING MEETING

Prague, 11 – 13 September 2013

Venue: Czernin Palace, Loretánské nám. 5, 118 00 Prague

ANNOTATED AGENDA

Wednesday, 11 September 2013

10.00 – 13.00 **Opening Plenary Session** (*open to the press*)

Moderator: Ambassador Ihor Prokopchuk, Chairperson of the OSCE Permanent Council, Permanent Representative of Ukraine to the OSCE

Welcoming remarks

- **H.E Jan Kohout**, Minister of Foreign Affairs, Czech Republic
- **H.E. Leonid Kozhara**, OSCE Chairperson-in-Office, Minister for Foreign Affairs of Ukraine
- **H.E. Lamberto Zannier**, Secretary General of the OSCE

Keynote addresses:

- **H.E. Sven Alkalaj**, Executive Secretary, UNECE
- **Mr. Fabrizio Barbaso**, Deputy Director General, European Commission/DG Energy

Statements by Delegations / Discussion

13.00 – 14.30 Lunch break

14.30 – 16.30 **Review of the implementation of the OSCE commitments in the field of energy**

- Presentation of the UNECE Review Report, with a focus on diversifying the energy mix
- Forward looking discussion on the Review Report’s main findings and recommendations

Moderator: Dr. Halil Yurdakul Yigitgüden, Co-ordinator of OSCE Economic and Environmental Activities

Rapporteur: Mr. Cyril Leroy, Senior Programme Officer, Energy Security, Office of the Co-ordinator of OSCE Economic and Environmental Activities

Speakers:

- **Mr. Scott Foster**, Director, Sustainable Energy Division, UNECE
- **Mr. Branko Milicevic**, Programme Officer, Sustainable Energy Division, UNECE

16.30 – 17.00 Coffee/Tea break

17.00 – 18.00 **Special Event: Promoting Transparency and Good Governance in the Energy Sector** – Panel Discussion

Moderator: Ambassador Mykola Melenevskyi, Ambassador-at-large on environmental issues, Ministry of Foreign Affairs of Ukraine, 2013 Ukrainian OSCE Chairmanship

Rapporteur: Ms. Iryna Iarema, Senior Project Assistant, OSCE Project Co-ordinator in Ukraine

Suggested speakers/countries:

- **Mr. Igor Ryzhkov**, Senior Specialist of the Ministry of Energy and Coal Industry of Ukraine
- **Ms. Marinke van Riet**, International Director, Publish What You Pay
- **Ms. Husniyya Mammadova**, Deputy Head of Department of Economic Cooperation and Development, Ministry of Foreign Affairs, Azerbaijan
- **Mr. Shkelqim Hysaj**, Director, EITI Albania
- **Ms. Sanela Habes**, journalist BH Radio 1, Bosnia and Herzegovina

18.30 **Reception hosted by the Ukrainian 2013 OSCE Chairmanship**, Wintergarden of the Czernin Palace, 2nd floor.

Thursday, 12 September 2013

09.30 – 11.00 **Session I: Strengthening policy and regulatory frameworks and fostering international co-operation to prevent adverse environmental impacts of energy activities**

Selected topics:

- Polluter pays principle
- International legislation
- Environmental enforcement

Moderator: Ambassador Ol'ga Algayerová, Chair of the Economic and Environmental Committee, Permanent Representative of Slovakia to the OSCE
Rapporteur: Mr. Martin Koncal, Counsellor, Permanent Mission of Slovakia to the OSCE

Speakers:

- **Ms. Ermina Salkicevic-Dizdarevic**, Deputy Minister, Ministry of Foreign Trade and Economic Relations, Bosnia and Herzegovina
- **Mr. Mahmasharif Khakdodov**, Head of the Ecological Commission of the Parliament, Tajikistan
- **Ms. Maria Germenchuk**, Vice-Director of Scientific Centre "Ecology", Republic of Belarus
- **Mr. Thomas Wuchte**, Head, Action against Terrorism Unit, Transnational Threats Department, OSCE Secretariat

11.00 – 11.30 Coffee/Tea break

11.30 – 13.00 **Session II: Strengthening policy and regulatory frameworks and fostering international co-operation to promote renewable energy and energy efficiency**

Selected topics:

- Energy tariffs
- Fiscal incentives
- Lessons learned

Moderator: Mr. Steivan Defilla, Director, Energy Charter Secretariat
Rapporteur: Mr. Ruslan Ovezdurdyev, Programme Assistant, OSCE Centre in Ashgabat

Speakers:

- **Mr. Tolib Sultanov**, Director of the Uzbekistan Branch of the Regional Environmental Centre for Central Asia
- **Prof. Yury A. Shcherbanin**, Head of Department of Oil-Gas Trading and Logistics, Russian State University of Oil and Gas
- **Mr. Dejan Trifunovic**, Assistant Minister, Development and Environmental Protection, Ministry of Energy, Serbia
- **Mr. Tahir Jafarov**, Chief Power Engineer of the State Agency on Alternative and Renewable Energy Sources of the Republic of Azerbaijan
- **Ms. Laura E. Williamson**, Communication and Outreach Manager, REN21 Secretariat

13.00 – 14.30 Lunch break

13.00 – 14.30 **Side Event organised by the OSCE Action against Terrorism Unit: Presentation of the Good Practices Guide on Non-Nuclear Critical Energy Infrastructure Protection (Nnceip) from Terrorist Attacks Focusing on Threats Emanating from Cyberspace**

(A light lunch will be offered)

Moderator: **Mr. Thomas Wuchte**, Head, Action against Terrorism Unit, Transnational Threats Department, OSCE Secretariat

Speaker: **Ms. Sharri Clark**, Foreign Affairs Officer, Bureau of Counterterrorism, U.S. Department of State

14.30 – 16.00 **Session III: Increasing security and stability through reinforcing environmental good governance in planning, financing and implementing energy-related activities**

Selected topics:

- Environmental due diligence
- Life cycle analysis of energy projects

Moderator: Ms. Marta Szigeti Bonifert, Executive Director, Regional Environmental Centre for Central and Eastern Europe

Rapporteur: Mr. Özgür Gökmen, Counsellor, Turkish Delegation to the OSCE

Speakers:

- **Ms. Ainur Sospanova**, Director, Green Technologies and Investment Attraction Department, Ministry of Environmental Protection, Republic of Kazakhstan
- **Mr. Michael Thurman**, Crisis Prevention and Recovery Practice Leader, UNDP Bratislava
- **Mr. Krzysztof Michal Księżopolski**, Assistant Professor at the Institute of International Relations of Warsaw University
- **Ms. Mariska de Wild-Scholten**, Senior scientist, SmartGreenScans, The Netherlands

16.00 – 16.30 Coffee/Tea break

16.30 – 18.00 **Session IV: Co-operation between the public and the private sector and international organizations to improve the environmental footprint of energy-related activities**

Selected topics:

- Strengthening public - private co-operation
- Engaging financial institutions and providing incentives for the business sector
- Role of financial institutions in providing technical assistance

11:30 – 13.00

Concluding Plenary Session – The role of the OSCE in promoting the environmental footprint of energy-related activities: follow-up to the 21th Economic and Environmental Forum

Moderator: Dr. Halil Yurdakul Yigitgüden, Co-ordinator of OSCE Economic and Environmental Activities

Rapporteur: Mr. Christian Melis, Water and Energy Policy Adviser, OSCE Office in Tajikistan

Ambassador Ihor Prokopchuk, Chairperson of the OSCE Permanent Council, Permanent Representative of Ukraine to the OSCE

- General discussion
- Closing statements

**21ST OSCE Economic and Environmental Forum
SECOND PREPARATORY MEETING**

Kyiv, 16-17 April 2013

EXECUTIVE SUMMARY

Introduction

The Second Preparatory Meeting of the 21st OSCE Economic and Environmental Forum (EEF) on “Increasing stability and security: Improving the environmental footprint of energy-related activities in the OSCE region” took place in Kyiv on 16-17 April 2013. Five thematic areas were addressed during the two-day meeting:

- Strengthening co-operation among OSCE participating States on promotion of new and renewable sources of energy
- Green Growth and sustainable energy and their contribution to security
- Improving governance and regulatory frameworks for private investments to promote the transition to sustainable energy
- Innovation and technology transfer in the field of sustainable energy
- Promoting security and stability through partnerships for sustainable energy

More than 230 participants, including official representatives of the OSCE participating States, field operations and institutions, as well as experts from international, regional and non-governmental organizations, the business community and academia attended this second meeting of the Economic and Environmental Forum process and actively engaged in fruitful discussions. Participants proposed concrete recommendations related to the environmental benefits of promoting renewable and sustainable energy by the OSCE participating States and Executive Structures.

Main conclusions and recommendations

During the two-day meeting, participants discussed how **new and renewable energy sources**, the **green economy**, adequate **technological innovation and transfer**, as well as **partnerships** among key parties can contribute to energy security and to the mitigation of climate change in the OSCE area. The necessity to work towards **sustainability** and **efficiency** in the energy field, together with the need to translate the **political will** in **transparent regulatory frameworks** was also highlighted throughout the event. The discussions generated a number of suggestions and recommendations.

Participants commended the role played by the OSCE as a **platform for sharing experience and best practices**. In this regard, it was suggested that the Organization could continue to play this role by serving as a coordinating and communication body of data related to the energy sector. The fields identified for this activity were: renewable energy sources, latest technologies’ transfer and their implementation, efficient legal and regulatory frameworks and incentives for the use of sustainable energy. Moreover, the OSCE field operations were identified as key actors in contributing to the exchange of best practices and the organisation of regional and local meetings, trainings and seminars.

Many participants considered that sharing best practices among OSCE participating States would be of paramount importance to generate relevant **capacity building** among energy experts and members of the academia at national, regional, and global levels. In particular, it was suggested that the OSCE could organise regional activities in Central Asia in order to better prepare local specialists for the management of renewable energy and new technologies.

The **transboundary character of energy** and its environmental footprint was highlighted during the meeting by a number of participants. Some OSCE participating States took the floor to acknowledge that energy security was considered by their governments a strategic goal in their foreign policy. Therefore, it was generally recognized that energy security and sustainability can only be reached through close **co-operation with neighbouring countries** and **stable regional partnerships**. In this regard, the regional nature of the OSCE was identified as a comparative advantage of the Organization, allowing it to support regional renewable energy initiatives through seminars, trainings and workshops. The aforementioned activities were not only considered excellent means to generate capacity building, but were also identified as potential confidence-building measures.

Together with the regional co-operation, the collaboration with **relevant international organizations** was encouraged by the OSCE participating States and key stakeholders. In this regard, there was a shared view that while other international organizations might have a rather technical profile, the OSCE's political nature allows the Organization to widely promote international standards at a high political level, as well as through the OSCE field operations. In particular, it was suggested that the OSCE could continue and strengthen its co-operation *inter alia* with UNECE, UNEP, the Energy Charter Treaty, the International Energy Agency, the International Atomic Energy Agency and the Vienna Energy Club.

Concerning the work undertaken by the OSCE with key partner organizations in the framework of the **ENVSEC Initiative**, participants praised the work done by the parties and considered it a good example of regional co-operation that should be continued and strengthened. In this regard, participants suggested that the reinforcement of this partnership would contribute to the reduction of conflicts, enhancement of sustainability and promotion of transition to green economy in the OSCE area.

The triangulation among the **private, public sectors** and **academia** was also identified as a key element in promoting the efficient design and implementation of projects related to sustainable energy. It was suggested that the OSCE could establish and support networks among academics, the business sector and government experts to further the use of renewable energy. The participation of civil society and financial institutions in this co-operation as well as in other OSCE events was also recommended.

Indeed, many representatives from NGOs and participating States called for a further involvement of **civil society** in the promotion of sustainable and renewable energy in the OSCE area. A wider public awareness of the advantages of promoting green energy was highlighted as a key element to improve the environmental footprint of energy consumption. Some participants suggested that the OSCE could promote the creation of an international platform of NGOs, aiming at improving their co-operation with relevant stakeholders, as well as at supporting the elaboration of policy recommendations.

It was also proposed that the OSCE could further support public information by organising awareness raising projects on renewable energy and efficient energy management systems. In this context, the important role of OSCE field operations in facilitating the exchange of information among relevant parties, including representatives of the civil society, was once more highlighted by participants. In addition, some speakers took the opportunity to emphasize the necessity of including a gender balanced perspective in the elaboration and implementation of projects and policies related to energy sustainability.

Finally, participants underlined the need to uphold good governance standards and transparency while promoting and designing legal instruments related to the energy sector. In this regard, a reference was made to the OSCE's Good Governance Declaration adopted at Dublin Ministerial in 2012, including the reference to EITI in the document.

Possible future activities regarding Energy and Environmental issues for consideration

On the basis of recommendations made during the Preparatory Meeting, the OSCE participating States and Executive Structures could give consideration to the following issues:

- The OSCE could serve as a platform for exchange of best practices and experience on sustainable energy an energy efficiency, and promote the development of adequate legal and regulatory frameworks among participating States;
- The OSCE could take advantage of its regional nature to organise activities aiming at enhancing capacity building related to renewable energy, new technologies and technology transfer among participating States;
- The OSCE could further support international standards related to sustainable energy and climate change mitigation at high political level and through its field operations;
- The OSCE could support the establishment and development of relevant networks involving representatives of the academia, the business sector and civil society to better promote sustainable energy and contribute to energy security by reducing the adverse environmental impact of energy-related activities;
- The OSCE could promote the participation of financial institutions in activities and discussions related to the promotion of sustainable energy and mitigation of the energy environmental footprint;
- The OSCE could promote the creation of an international platform of NGOs, aiming at improving their co-operation with relevant stakeholders, as well as at supporting the elaboration of policy recommendations;
- The OSCE could further support public information by organising awareness raising projects on renewable energy and efficient energy management systems;
- The OSCE could further support the promotion of good governance and transparency in the energy sector in order to improve its environmental footprint, including by supporting the EITI.

REPORTS OF THE RAPPOORTEURS

Session I: Strengthening co-operation among OSCE participating States in the area of new and renewable sources of energy

Moderator: Ambassador Ol'ga Algayerová, Chair of the Economic and Environmental Committee, Permanent Representative of Slovakia to the OSCE

Rapporteur: Mr. Jens Rasmussen, Senior Project Officer, OSCE Project Co-ordinator in Uzbekistan

Speakers:

Mr. Hugo Lucas, Director, Knowledge, Policy and Finance Centre, International Renewable Energy Agency (IRENA)

Dr. Oleksiy Onipko, President of the Ukrainian Academy of Sciences

Ms. Nadia Shevchenko, Expert, NGO Green Dossier, Ukraine

Mr. Hugo Lucas stated that the world is in an energy transition from fossil fuel to renewable energy, and in the future solar and wind energy will play a crucial role. Mr. Lucas highlighted that even nowadays, countries with a high share of wind and solar energy can get energy for free in certain periods of the year. In this regard, he stated that in 2011, 44% of investments in new energy production were made in renewable energy. Mr. Lucas pointed out that in the future, the decrease of use of fossil fuels will not necessarily depend on their availability, but on the understanding that the use of renewable technologies is more important. He illustrated this idea by recalling that “the Stone Age finished, but not because of lack of stones and, likewise, the era of fossil fuels will also come to an end”. He added that this understanding has led major oil producing countries in the Middle East to massively invest in the development of renewable energy technologies in order to become self-sufficient in renewable energy, and a global hub of technologies’ export. Mr. Lucas closed his presentation by underlining that there is a lot of experience accumulated in some OSCE participating States on how policy support and incentives provide necessary framework conditions for the promotion of renewable energy.

Dr. Oleksiy Onipko underlined that renewable energy technologies and industry should work under the principles of sustainable development. In this regard, he suggested that the OSCE could work as a platform to discuss combined solutions of renewable sources of energy including solar, wind and hydro, as well as a better connected electricity grid and storage facilities for renewable energy. Dr. Onipko also presented the advantages of small scale wind turbines with a capacity below 100 kW to be installed in households or small industries. In his opinion, this technology would be very beneficial for people living in remote areas. Dr. Onipko informed that China and the USA are very advanced in small scale wind turbines technology and suggested that the OSCE could be a platform to strengthen the European expertise in this field. Finally, Dr. Onipko added that the OSCE could be instrumental in establishing and promoting international and regional networks of experts from the academia, the business community and the civil society, aiming at the development of sustainable and renewable energy.

Ms. Nadia Shevchenko explained that Ukraine has a vast potential for solar energy. The speaker informed that Ukraine has established legal incentives to promote renewable energy, such as green tariffs, import incentives, tax incentives, grid connection and mandatory electricity purchase. Ms. Shevchenko pointed out that by involving civil society and by promoting a principle of “local production for local use”, the share of renewable energy could increase substantially, improving the environmental footprint of energy consumption. Such involvement is currently promoted in developing countries, and European countries could also benefit from it. In this regard, Ms. Shevchenko suggested that the OSCE could be instrumental in sharing experiences on such initiatives among participating States.

Ms. Shevchenko also presented the “European Solar Days” that took place in Ukraine in 2011-2012. This initiative aimed at involving civil society in the promotion of solar energy. The “European Solar Days” were supported by many institutions, including the OSCE Project Co-ordinator in Ukraine and the EU Delegation in Kyiv.

A representative from Moldova informed about the status of renewable energy in the country. The participant explained that so far the share of renewables in Moldova is very low and the development of renewable sources of energy is still at an early stage. The participant stressed that while hydro energy and biomass have the largest share in the country, solar, wind and sources of reduced thermal potential are inadequately explored. Moreover, it was pointed out that a legal and regulatory framework for renewable energy sources has been established, including an “Energy Strategy till 2030”, a law on renewable energy and a “National Energy Efficiency Program 2011-2020”. It was also underlined that a “National Renewable Energy Action Plan” is currently being drafted. Finally the representative called for donors and investor’s assistance in implementing the national programmes and projects related to renewable sources of energy in Moldova.

A representative from Uzbekistan stressed that in March 2013 three decrees have focused on the promotion of renewable energy and energy efficiency in the country. He also informed that a solar institute has been recently established with the support of the Asian Development Bank and that a solar plant is currently under planning. Finally he informed that a Central Asian Regional Centre for Renewable Energy was established in 2012 in Tashkent with regional branches in all five Central Asian countries. In this regard, he stated that the support of the OSCE to this Centre would be highly appreciated.

A representative from Armenia stated that renewable energy could bring security of supply and reduce the dependency on imports. The participant explained that in Armenia small hydropower plants are developing, while there is little potential for wind. He noted that in many countries there is poor information on the advantages of renewable energy and suggested that the OSCE could be instrumental in supporting relevant information sharing.

A representative from the Russian Federation questioned the sustainability of the production and installation of big scale wind mills, as it often demands lots of steel and concrete, as well as the transportation of material over long distances.

A representative from Bosnia and Herzegovina stated that renewable energy development needs to be based on principles of sustainability. The expertise and the legal frameworks should be

coherently established nationally and regionally. In this regard, the participant suggested that the OSCE could support the exchange of experiences and knowledge among transition countries and developed countries.

Referring to the intervention by the representative from the Russian Federation, *Mr. Lucas* informed that a number of life cycle studies have shown that the renewable energy plants are far more sustainable and environmental friendly than fossil fuel technologies. He suggested that the OSCE could serve as a coordinating and communication body for well documented information on the benefits of renewable energy technologies.

The *Moderator* concluded the session by highlighting the following main points:

1. The OSCE should be a platform for exchange of best practices on wind and solar energy promotion in terms of development of efficient legal and regulatory frameworks, and in terms of technology transfer from developed countries to countries in transition. The scope of activities should cover both large scale and small scale technologies and should be based on solid scientific analysis;
2. The OSCE should establish and support networks among academics (centres of excellence), business sector and civil society organizations to further the development of renewable energy, so that the participating States get the best out of wind and solar energy;
3. The OSCE should support regional renewable energy initiatives within its area - seminars, workshops, institutions and platforms for development and promotion of renewable energy and energy efficiency;
4. The OSCE should support public information campaigns on renewable energy and efficient energy management systems.

Session I – (Continuation): Strengthening co-operation among OSCE participating States on promotion of new and renewable sources of energy

Moderator: Ambassador Stanislav Raščan, Director General of the Economic Diplomacy Directorate, Ministry of Foreign Affairs, Slovenia

Rapporteur: Ms. Jane Earl, Second Secretary, United Kingdom Delegation to the OSCE

Speakers:

Dr. Heinz Kopetz, President, World Bioenergy Association, Sweden

Mr. Peter Canciani, Project Officer, Central European Initiative

Mr. Gudni A. Johannesson, Director General, Orkustofnun, National Energy Authority of Iceland

The Moderator introduced the topics of Biomass, Biofuels and Geothermal for discussion during the session:

Dr. Heinz Kopetz explained the need for more sustainable bio-energy to mitigate climate change. In his presentation on the role of biomass in the future energy system, he explained that in order to attain the goal of limiting global warming to 2°C, renewable energy will need to form 50% of all our energy production by 2035. Bio-energy will have to play a key role in reaching this target. He

went on to state that, in his opinion, the potential of sustainable biomass is huge, especially in Eastern Europe. There have been significant improvements in the efficiency of production of biomass fuels, with short rotation forestry producing up to five times more timber than traditional methods. However, there is a need to harness the potential of world agriculture without harming the security of food supply.

He also stressed the importance of improving the efficiency of the use of biomass in the heating and electricity sectors. Using the example of Sweden, Dr. Kopetz explained that carbon taxes can be a powerful tool in speeding up the transformation from fossil fuels to bio-energy and other renewables. He stressed that carbon taxes were achieving better results than emission trading systems and should be considered by more states.

Dr. Kopetz concluded by saying that strong reliable government policies were key for creating rapid development of renewable energies including bio-energy and that Government grants were required to fund change. He stressed the need to learn from our mistakes and underlined that some of the biggest gains would come from improvements in efficiency, both in the production of bio-mass fuels, and in their consumption.

Mr. Peter Canciani explained that the Central European Initiative (CEI) was established in 1989 as a forum for promoting regional co-operation in Central and Eastern Europe. Mr. Canciani indicated that the topic of sustainable energy plays a major part in the Centre's activities, in particular the promotion of advanced bio-fuels, which do not compete with food or feed production. The CEI was committed to strengthening the capacity of member countries to develop and implement strategies to support bio-mass value chains and bankable projects. He explained that the Initiative provides advanced training on the subject, including workshops and seminars aimed at improving the knowledge and skills of those involved. Mr. Canciani added that CEI also promotes access to available financial instruments.

The speaker stated that the CEI believes that countries could gain economic benefit from the bio-economy through rural development; modernising farming techniques and improving land management. He added that this could also provide energy security through innovative use of sustainable energy technology.

Mr. Canciani highlighted the CEI's "Report on Advanced Bio-fuels in CEI Countries" which was commissioned by Bloomberg in 2012. He went on to say that he believed that approximately 36,000 jobs could be created over the next 20 years in the advanced bio-fuel industry; in agriculture, logistics, construction and academia and research.

Finally, he stressed that a regional approach is needed to provide action that would lead to change.

Mr. Gudni A. Johannesson gave a presentation based on Iceland's experience of geo-thermal energy production. Mr. Johannesson explained that Iceland's geological characteristics provided an excellent opportunity to exploit a sustainable source of power through the conversion of heat produced in the earth's crust into hot water for heating and energy production. It did not, he said, make sense to use a high quality energy source, such as electricity, to produce a low quality one, such as hot water.

The speaker underlined that the energy and economic crisis had driven further development in Iceland and had accelerated the process, by providing a clear economic incentive to reduce dependency on imported fossil fuels. He went on to say that further improvement and development was needed in the built environment to improve energy efficiency and therefore reduce CO2 emissions e.g. through the use of better insulation materials. He also added that more development was needed to introduce more and better alternative sources of fuel for transport. In this regard, he pointed out that currently in Iceland there were more cars than driving licences, there was therefore scope for reducing emissions from vehicles through innovation.

Mr. Johannesson summed up by saying he thought geo-thermal could play a larger role in sustainable energy production in future. He emphasised the importance of using the best technology available; using local sources and the quality management of energy use as the key factors in reducing emissions.

A representative of Uzbekistan informed that his country was developing co-operation on a local level and was working on implementing best practices in the area of sustainable energy production.

A representative of Tajikistan said that Tajikistan was developing geo-thermal, bio-mass use, as well as exploiting solar and hydro power; drawing attention to their capacity of 300 solar days a year. In this regard, the representative said there was potential for more projects of this nature.

A representative of Slovenia drew attention to the online presentation on sustainable energy in Slovenia circulated among participants.

A representative of Turkey said that a document setting out Turkey's experience in the sector was distributed among participants during the meeting.

A representative of the Russian Federation asked a question about emissions from biofuels. Dr. Kopetz answered by explaining that sustainable biomass is carbon neutral, as the carbon it contains has been recently removed from the atmosphere and that this is then returned to the atmosphere, whereas fossil fuels return additional ancient carbon from storage in the earth's crust, contributing to global warming.

Session II (Panel Debate): Green Growth and sustainable energy and their contribution to security

Moderator: Ambassador Mykola Melenevskiy, Ambassador-at-large on environmental issues, Ministry of Foreign Affairs of Ukraine, 2013 Ukrainian OSCE Chairmanship

Rapporteur: Ms. Pavlina Rehor, Policy Officer for the Economic and Environmental Dimension, Delegation of the European Union to the International Organisations in Vienna

Speakers:

Ms. Maïke Christiansen, Climate Neutrality and Energy Efficiency Officer, United Nations Economic Commission for Europe (UNECE)

Ms. Rie Tsutsumi, Programme Officer, Regional Office for Europe, United Nations Environment Programme (UNEP)

Mr. Marcus Hicken, Deputy Head of Division for Energy and Raw Material Foreign Policy, Federal Foreign Office, Germany

Ms. Lucija Rakocevic, Expert on renewable energy and energy efficiency, Montenegro

Ms. Maïke Christiansen focused on energy efficiency and UNECE role in this area. She highlighted the link between energy efficiency approach and sustainable development. Ms. Christiansen explained that energy efficiency contributes to economic competitiveness, reducing poverty and mitigates climate change by lowering emission levels. She added that energy efficiency is also fundamental to energy security and increasing it should be in interest of all OSCE participating States. In this regard, Ms. Christiansen underlined that energy efficiency leads to lowering domestic consumption and lesser need for energy imports and thus to reducing energy dependency. In this context, it is necessary to look at the entire energy chain - production, transport and consumption. UNECE contributes to disseminating information on best practices on how energy efficiency can be increased. Ms. Christiansen further focused on energy consumption with emphasis on the housing sector.

Ms. Rie Tsutsumi focused her presentation on the link between green economy and sustainable development. Ms. Tsutsumi described UNEP's work and introduced "UNEP Green Economy report" illustrating the impact of increased investments in renewable energy to global economic development. She highlighted that UNEP is also providing service to countries on macroeconomic scenario analysis including impact to environment, economy and employment concerning power generation capacity from renewables. She further introduced UNEP's contribution to the transition towards green economy in the energy sector by tackling both renewable energy and energy efficiency solutions. Ms. Tsutsumi mentioned two initiatives: UNEP's Global Efficient Lighting Partnership Programme "en.lighten" and, in the area of renewable energy, UNEP's Global Solar Water Heating.

Ms. Tsutsumi concluded by concentrating on the future role of the OSCE. In this regard, she underlined that addressing the challenges related to the nexus between energy, water, economy and security requires regional cooperation and inter-agency coordination. Joint efforts between OSCE and other partners of the Environment and Security (ENVSEC) Initiative are needed in many countries of the OSCE region. She suggested that through the ENVSEC Initiative and other relevant partnerships, the OSCE can contribute to energy security and stability in the region through: 1) helping countries to diversify and move away from resource-dependent livelihood; and 2) supporting countries in strengthening synergies and policy coherence between water, food and agriculture sectors in the transboundary context. These efforts would be of paramount to reduce conflicts, enhance sustainability and promote transition to green economy.

Mr. Marcus Hicken presented the German energy policy called "Energiewende", i.e. the transformation of the German energy system with the goal to have a reliable, competitive and sustainable energy supply. Mr. Hicken explained that in October 2010 the German government passed this energy concept to cover the future energy supply from renewable energy by up to 35 % of electricity production by 2020, rising up to 80 % by 2050. Germany further aims to reduce 40 % greenhouse gas emissions by 2020 and to phase out nuclear energy by 2022. Mr. Hicken concentrated then on the current state of play in Germany. He pointed out that almost 25% of

electricity production stems from renewables, but acknowledged that there are still challenges, such as aligning the grid network to the needs of fluctuating renewables; cost pressures, especially on the consumer side, as well as increase in coal use for electricity production. Finally, Mr. Hicken elaborated on the international dimension and the security implications. In this regard, the speaker explained that Germany is highly dependent on energy imports of fossil fuels, 95 % of oil and 85 % of natural gas have to be imported. Therefore, energy security has become a strategic foreign policy goal and the diversification of sources of energy, of suppliers and of supply routes plays a key role. He underlined that close co-operation and co-ordination with EU partners and neighbours is essential. He concluded by saying that Energiewende was a great opportunity to prove that a highly industrialised country like Germany can successfully manage to move to low carbon economy.

Ms. Lucija Rakocevic presented the current situation and challenges from the perspective of the Western Balkans region with special emphasis on Montenegro. She focused, on the status of the economy, existing markets, energy systems and transition to EU policy. Ms. Rakocevic explained that countries in the Western Balkans have a relatively unreliable energy infrastructure and have become dependent on energy imports. Energy development has been pushed in order to achieve energy security and economic growth. With this aim, the countries of the region have focused on local resources and thus turned mainly to hydro and coal. These countries follow EU policy and have started promoting sustainable economic development based on local resources, including sustainable energy development. The speaker pointed out that the countries are contracting parties to the Energy Community Treaty and have to harmonise their legislation and energy policy with the EU energy policy. Finally, the speaker underlined that: a clearer and consistent overall direction for economic growth and energy development, clear and transparent policy, better informed public and more realistic economic equation for energy projects is missing in their green growth concept.

A representative of Ireland asked the panel how the OSCE can contribute to the green growth.

A representative of the Russian Federation enquired about the paradoxical relation between increasing energy efficiency and overall rise in energy consumption.

A representative of Switzerland enquired about the role of energy efficiency in housing and asked about the possible awareness raising activities of UNECE.

A representative of Ireland on behalf of the European Union introduced EU's efforts in the area of tackling non-technological barriers to the efficient use of energy and to the use of new and renewable energy sources, as well as in support of new "green" technologies.

A representative of Azerbaijan introduced the Green economy concept of Azerbaijan and touched upon incidents in the area of nuclear energy sources. He concluded by expressing his hope that all aspects of energy security will be discussed in the EEF Forum process.

A representative of Covenant of Mayors drew the attention to the growing energy prices and their impact on the cities as major energy consumers and the municipal budgets. He further stressed the necessity of energy savings by mentioning the building sector and the issue of reinvesting savings in further measures.

In response to the questions posed in the discussions round:

Mr. Hicken saw the OSCE's role in exchange of views and best practices as a possible confidence building measure. He also pointed out that energy efficiency is the most underestimated solution and the least popular one – more popular is to open big energy projects.

Ms. Rakocevic saw the role of the OSCE in sharing best but also worst experiences. Being aware of possible failures can lead to avoiding similar mistakes.

According to *Ms. Christiansen*, the UNECE and the OSCE share the same geographic regions and have a long standing co-operation, e.g. on Aarhus Convention, and in the area of transport. UNECE is a technical organization, setting standards; the OSCE as a political organization can promote these standards at a high political level and can help UNECE together with the OSCE field missions to implement these standards. She further reacted to the comment on energy efficiency in the housing sector. She mentioned some difficulties such as high individual ownership and the need of coordinated approach to energy performance of buildings. Finally she informed that UNECE is advising governments on entire building approach and has developed an action plan on energy efficiency.

Ms. Tsutsumi highlighted again the need for cross-border co-operation and further encouraged the good example of the OSCE and UNEP co-operation in the framework of the ENVSEC Initiative.

Session III: Improving governance and regulatory frameworks for private investments to promote the transition to sustainable energy

Moderator: Mr. Andrew Rasbash, Head of Operations, Minister-Counsellor, Delegation of the European Union to Ukraine

Rapporteur: Mr. Yaroslav Yurtsaba, National Project Manager, OSCE Project Co-ordinator in Ukraine

Speakers:

Mr. Ian Parry, Tax Policy, Technical Assistance Advisor, Climate Change and Environment, Fiscal Affairs Department, International Monetary Fund

Mr. Andrei Marcu, Senior Advisor and Head of the Carbon Market Forum, Centre for European Policy Studies, Belgium

Ms. Darya Revina, Vice-chairman on green economy, Head of GREENERGY Initiative, International Chamber of Commerce, Ukraine

Mr. Ian Parry focused his intervention on fiscal instruments such as environmental taxes or ETS (emissions trading systems) in the context of green growth. According to the speaker, such instruments are effective as they strike the right balance between emissions and mitigation opportunities (e.g. a carbon tax promotes fuel switching in power generation and reduces demand for electricity, transportation fuels, and heating fuels). Mr. Parry stressed that fiscal instruments are more effective than regulatory policies and noted that some OECD countries have raised about 6% of revenue thanks to environmental taxes.

Mr. Parry mentioned that when designing fiscal instruments, it is necessary to target sources of emissions, rather than the consumption. He continued by underlining that charges should reflect environmental damages from carbon and local pollution. For example, motor fuel taxes should reflect congestion, accident, road damage, etc.

The speaker also stated that holding down energy prices is an inefficient way to help low-income households. In this regard, he pointed out that a solution could be to compensate energy price increases through targeted measures, such as scaling back pre-existing energy taxes, adjusting broader tax system and subsidizing clean technology alternatives.

Finally, Mr. Parry highlighted that international organizations can contribute to the progress of energy price reform by providing practical guidance on 'getting the prices right'. With this aim, institutions should measure environmental damages (the IMF is currently working on this) and monitor effective taxes/subsidies on fuels/energy.

Mr. Andrei Marcu focused on governance and regulatory frameworks to promote sustainable energy. Mr. Marcu pointed out that de-carbonization and right regulatory policies are key elements to reach energy sustainability. For this purpose, a green economy roadmap including economic, social and environmental innovation is needed. Mr. Marcu called for the necessity of policies aiming at changing the energy matrix, the mobilization of enough resources to achieve the low carbon economy, as well as the allocation of private capital in the right assets. Focusing on trade emissions, the speaker pointed out that in order to establish a carbon market it is necessary to gather the necessary political will, technical level, institutional development and legal framework of the parties.

Finally, Mr. Marcu summarized the lessons learned from experiences with carbon markets. In this regard, he underlined that carbon markets can function well, however they are not easy to implement because of the lack of support from the private sector, the clash with different stakeholders' agendas, the political instability in some regions and the absence of international agreement. He stressed that it is necessary to further work on carbon reduction and co-ordinate these efforts with the right policies on renewable energy and energy efficiency.

Ms. Darya Revina presented the "Greenergy Initiative", a platform for public-private partnership which unites and represents the interests of companies committed to green business/investments/technology/energy/projects. Ms. Revina explained that Greenergy supports Ukraine in reaching national sustainable energy objectives, such as the "Updated Energy Strategy of Ukraine until 2030", the "Renewable Energy Action Plan" and the "State Programme on Energy Efficiency and Renewable Energy 2010-2015". Ms. Revina continued by describing how Ukraine strives to attract investors through green tariffs pre-approvals, improved access to the grid, preparing achievable local requirements and adapting the balancing and bilateral contracts market.

The speaker then focused on the "Ukrainian Commission on Green Economy and Ecological Investments Initiative of the Ukrainian International Chamber of Commerce" which is currently being elaborated by Greenergy with the Ukrainian authorities and in co-operation with international organizations. This initiative aims at implementing the aforementioned Strategy, as well as State incentives for energy production out of waste. The Initiative also aims at the promotion of qualification for green tariffs prior to construction, simplified permitting

procedures, increased investment competitiveness of the biomass sector, as well as at the definition of taxes and other privileges.

Ms. Revina then singled out some practical recommendations for the energy sector practitioners based on Ukraine's experience:

1. Promote exchange of best practices in the introduction of incentives for the use of sustainable energy;
2. Uphold high governance standards on energy efficiency policies in the energy sector;
3. Learning from experiences of other countries in the introduction of energy efficiency policy tools;
4. Use of economic incentives to attract private capital;
5. Using ETS and other policy tools should be consistent.

Presentations were followed by an intervention by the *representative of Ukraine's Ministry of Energy and Coal Industry* who provided with an outline of Ukraine's policies related to environmental aspects of coal mines.

A representative of the Russian Federation expressed some concerns on the inadequate use of tax instruments and tools promoted by the green economy concept, as it might undermine some local industries.

A representative of Kyrgyzstan described the energy mix in his country, as well as the experience of Kyrgyzstan with small scale hydropower plants and green tariffs. Concerning the latter, the participant noted that even though Kyrgyzstan has promoted green tariffs, it has also learnt that they have to be accompanied by some regulations and transparent rules. Currently Kyrgyzstan, together with UNDP, is elaborating such regulations. Referring to Ms. Revina's presentation, the representative from Kyrgyzstan acknowledged that the exchange of best practices is necessary and mentioned Georgia as a participating State with a relevant experience in hydropower.

Recommendations for the OSCE:

- Promote exchange of best practices in the introduction of incentives for the use of sustainable energy;
- Uphold high governance standards and promote legal instruments that promote low carbon economy;
- Learn from experiences of the OSCE participating States in the introduction of energy efficiency policies.

Session IV: Innovation and technology transfer in the field of sustainable energy

Moderator: Prof. Gerald Braun, The IRES Network, California, the United States of America

Rapporteur: Mr. Farkhod Abdurakhmonov, Water Management and Energy Security Programme Analyst, OSCE Office in Tajikistan

Speakers:

Mr. Luis Frauca, Business Manager for Integrated Solutions, EPTISA, Spain

Mr. Nurgeldy Seygeldyev, Head of Research Department, Solar Institute "GUN", Turkmenistan

Dr. Vladimir Kouzmitch, Managing Partner of the Energy Engineering & Consulting Company ENECA, Belarus

Mr. Guido Beltrani, Director, Swiss Cooperation Office (SCO) Ukraine, Switzerland

Professor Gerald Braun reviewed some of the pertinent facts concerning the Energy Innovation and Technology Transfer: Speed and Scale. He explained tactics and metrics of the Energy Infrastructure transformation and its possible scenario for the next 20 years. Moreover, he explained in his presentation the 21st century electricity grid, as well as some clean energy innovation technologies. Professor Braun advocated that a number of practical steps must be taken:

- The pivot of our energy future is the city or community that integrates its information, energy, water and waste infrastructure for sustainable economic purposes;
- Need for specialists and generalists to more quickly, completely and confidently understand one another; need for purpose driven human networks and educational transformation.

A representative of the Russian Federation indicated that increasing and volatile energy prices place additional burdens on many less developed countries. He added that it will be important to ensure that developing country governments have funds in the future so that their populations can maintain the current levels of energy consumption.

Mr. Luis Frauca presented “Business solutions in the field of innovative energy technologies”. Mr. Frauca indicated that the company closed the financial year 2011 with a gross income of 150 million euros and more than 2,100 staff members, with over 900 professionals involved in international projects. He then outlined the history of the company till current achievements and awards. In order to illustrate EPTISA’s implementation of concrete projects, Mr. Frauca presented the “Zaragoza - Eco City” project, a practical example of energy efficiency and best practices in energy consumption.

Mr. Vladimir Kouzmitch focused on “The role of international organizations in promoting technology transfer and innovations in the field of renewable energy in the Republic of Belarus”. The speaker explained in detail the local energy consumption, including renewable energy, and presented a scenario development till 2015. Mr. Kouzmitch also outlined the “National Programme of the International Technical Co-operation for 2012-2016”. While widely describing joint projects with the main donor partners, Mr. Kouzmitch suggested that the OSCE could also take an active role in Belarusian market of renewable and innovative energy projects.

Professor Nurgeldy Seygeldyev focused his intervention on the “impact of renewable energy sources in context of Global Climate Change”. Professor Seygeldyev stressed that Turkmenistan pays great attention to the development of alternative and innovative energy sources and listed energy saving, energy efficiency and rational use of natural resources, such as oil and gas, among key energy priorities in the country. Describing the scientific and technological inventions realized

by his Institute, the speaker outlined the latest developments related to alternative energy resources and in particular, the solar technology installations. The photo bioreactors for the cultivation of microalgae were another case-study of his presentation. Professor Seygelyev also explained in detail the potential of the micro-algae and noted their role in disposing the waste carbon dioxide into the atmosphere.

Mr. Guido Beltrani underlined in his presentation the “role of the Swiss technical assistance to Ukraine in promoting innovations towards a sustainable energy management”. Following the historical background of Swiss-Ukrainian co-operation, Mr. Beltrani presented the main domains of intervention during 2011-2014. Touching upon the issue on energy efficiency, Mr. Beltrani described several projects implemented by SCO. He mainly focused on technical, institutional, organisational and financial aspects of projects in *Vinnitsa (16,08 million Swiss Francs-CHF)*, the *Residential Energy Efficiency project (3 million CHF)* and the *Cleaner Production Center Project (3,4 million CHF)*.

Finally, Mr. Beltrani outlined the challenges that the SCO encountered during implementation of these projects, such as:

- Legal barriers in existing legislation which does not provide a favourable ground for new financial mechanisms in view of promoting energy efficiency in the residential sector;
- Lack of experience in energy efficiency finance of commercial banks;
- Lack of awareness raising on new, efficient technologies and related benefits;
- Lack of readiness to make necessary initial investments;
- Low energy tariffs hamper sustainability of investments.

A representative of Kazakhstan informed about the “State strategy on renewable energy until 2050”, where the main target is to reach 50% of electricity generation from renewable sources. He then stated that there is a need to find a proper balance between environment protection and economy development.

The delegation of Albania supported the identification of the proper balance between alternative and conventional energy flow.

A representative of Azerbaijan noted that innovations in the energy sector are a relatively new matter for the OSCE and stated that there is still much to learn about. He added that the positions of all participating States on this topical matter should be equally considered. He also noted that all the above mentioned sources of energy are as valid as nuclear energy, and the latter should be duly taken into consideration. He suggested that when a participating States decides to build a nuclear reactor, all environmental impacts should be taken into consideration, and all necessary risk assessment must be conducted.

A representative of Armenia outlined the history of nuclear reactor construction in his country and noted that all relevant information, including environmental and risk assessments, can be obtained from an official site on Internet.

In his concluding remarks, Professor Braun expressed hope that the discussions undertaken during the Session would contribute to better investments attraction in the field of technological innovation. In this regard it was suggested that a set of indicators could be developed and

employed in future reviews and deliberations. It was also discussed that specific case studies of energy projects could provide useful information for the next meeting. Finally, assistance from national, regional, and multilateral agencies was requested in supporting the evidential base required for sound decision-making.

Recommendations for the OSCE:

- Participants supported the idea of developing capacity building trainings for energy experts and academic staff;
- The International Sakharov Environmental University is ready to host graduate, post-graduate and academic exchange programmes on Renewable/Alternative Energy and Research. In this regard, the support of the international organizations to this University would be welcome;
- Projects on energy efficiency are only possible when the public and the private sectors are involved. Moreover, the engagement of research centres is also very important;
- Awareness raising projects on energy saving and energy efficiency were supported by the majority of participants.

Session V: Promoting security and stability through partnerships for sustainable energy

Moderator: **Ambassador Vytautas Nauduzas**, Economic and Security Policy Department, Ministry of Foreign Affairs, Lithuania

Rapporteur: **Mr. Maurice Dunand**, Political-military Officer, OSCE Mission to Moldova

Speakers:

Ms. Cornelia Schenk, MSc Scientific Expert, Austrian Energy Agency, Austria

Dr. Anke Stock, Coordinator Gender & Rights, Women in Europe for a Common Future, Germany

Mr. Timur Idrisov, Head of the NGO "Little Earth", Tajikistan

Mr. Hamid Mehinovic, Director of the NGO ENERGIS, Bosnia and Herzegovina

The Moderator opened the session underlining the importance of sustainability, which can be obtained only if energy supply meets the society needs in each and every way. He identified four essential pillars to reach this objective: dialogue, declarations, decisions and demarches.

Ms. Cornelia Schenk provided a broad and thorough overview of the role played by Austria in the field of energy partnerships, and detailed the tasks of the Austrian Energy Agency. Ms. Schenk explained that Austria developed energy partnerships, especially with Eastern Europe countries, in order to bring environmentally and socially friendly, as well as cost effective, energy supply solutions. The framework is based on political agreements, but the main co-operation partners are national energy agencies. The Austrian Energy Agency is acting on behalf of the Austrian Ministry of Agriculture, Environment, Forestry and Water Management. Austria's energy agency is an independent think-tank which focuses on international activities. With its partners, the Agency promotes capacity building and know-how transfer, and also helps coordinate dialogue and exchange of experience processes. Referring to regional co-operation, Ms. Schenk pointed out that stability is a key factor to guarantee sustainable energy and stressed that political

changes sometimes jeopardize projects and co-operation. Finally, Ms. Schenk noted that capacity building measures should be better coordinated and structured at regional level.

Dr. Anke Stock started her presentation by reminding the prominent role of women in the development of the economy and the society. Dr. Stock underlined that gender aspects should be taken into consideration at every stage of a project, and that the specific knowledge of women should be taken into account. Dr. Stock acknowledged that GDP growth is needed for sustainability, but claimed that it is not enough to bring happiness to population. Ms. Stock outlined that gender equality contributes to GDP growth, but beyond that, it also contributes to a better life (education, etc.). In this regard, Dr. Stock referred to the Rio Declaration on Environment and Development, which highlights that women's participation is essential to achieve sustainable development. Dr. Stock pointed out that "*Women in Europe for a Common Future (WECF)*" is also working in transition and developing countries on women's equal access to resources and sustainable energy solutions. Dr. Stock explained that WECF addresses economic empowerment of women is addressed through two strategies: Women's livelihood Strategy and Women's Income Generation Strategy. Political empowerment of women is also addressed via two strategies: Women's participation and Gender Advocacy. She suggested to improve the understanding and to raise awareness on the role of gender values in sustainable development; to empower women economically and politically; to use the specific knowledge of women about sustainable resource management; and to work with local NGOs and rely on local expertise.

Mr. Timur Idrisov presented the challenges that Tajikistan is facing in the field of energy. First, Mr. Idrisov stated that Tajikistan's energy strategy is driven by a number of factors which makes it very difficult to implement. Indeed, geographical (mountainous area), demographical (high growth rate) and political (poor governance) issues are heavy constraints for such implementation and are, in a way, responsible of the fact that about 60% of the GDP is spent on energy. Mr. Idrisov explained that most of the energy supply (96%) is provided by hydropower plants and pointed out that gas and oil reserves are very limited. Concerning coal reserves, Mr. Idrisov indicated that they are estimated to be more than 3 billion tons. Mr. Idrisov noted that 74% of the population is rural and at least 1 million people have poor access to energy supply. Equipment and infrastructure are old and out of date. Moreover, the speaker explained that the average energy demand in buildings is 3 to 6 times higher than in the EU, and an international survey showed that buildings are using about 2/5 of the energy resources of the country. In addition the losses of energy are high and the efficiency is poor. Therefore, there is an enormous need for energy savings. But, although a law on energy savings was adopted in 2002, it has not been yet implemented. In this regard, Mr. Idrisov pointed out that legal frameworks and political will are not sufficient to allow development of efficient energy savings. There ought to be an access to market and services in the field of energy savings. Without this access to a market it is almost impossible for companies to initiate proper actions. Mr. Idrisov stressed that there are several issues to be addressed, such as increasing incentives for investments, fostering exchanges of know-how, developing cooperation on cross-borders and regional projects and improving of democracy-based participation. Finally, Mr. Idrisov underlined that increasing energy efficiency should involve a combination of promotion, incentives, monitoring and law enforcement tools.

Mr. Hamid Mehinovic presented the role played by NGOs in promoting energy efficiency in Bosnia and Herzegovina. Mr. Mehinovic explained first the challenges that his NGO, Center for

Education and Raising Awareness of Energy Efficiency (Energis), aims to address. The mission of the Center is to facilitate the transition to an energy efficient future in Bosnia and Herzegovina through education, advocacy and tangible community projects. Three main projects are currently being implemented. The first project is called Capacity Building for Renewable Energy Resources and Energy Efficiency in Southeast Europe. The project is built on a common understanding of the needs for modernizing communal energy systems. The focus is put on small and medium sized municipalities as they are neglected in international know-how transfer and investments. Nevertheless, a regional approach is useful as existing problems and solutions in municipalities are similar. The main expected outputs are the development of communal energy concepts and strategies and the definition of a road map, as well as the facilitation of access to financing sources and investments. The technical assistance is tailored to the needs and capacity building is fostered. The speaker explained that the second project was dedicated to help a metal processing company in energy saving, and especially to reduce heating costs of office spaces. The results achieved serve as an example of best practice in the region, as a monthly expenditure of EUR 5000 was saved, compared to the total investment of EUR 9000 for the project. The third project aims at providing technical assistance to a bank for strategy and product development. The bank is specialized in energy efficiency lending and, due to its retail loans in the area of construction and home improvement it has a good basis for the development of strategy and products. Mr. Mehinovic indicated that OSCE has a role to play in providing exchange of information, thanks to its wide field presence.

A representative from Uzbekistan stressed that the civil society has also a role to play in the area of energy efficiency and informed that his country has been contributing to the involvement of the civil society in three main ways:

1. Raising awareness, through projects, eco-forums, competitions, etc.
2. Drafting a legal framework, with the contribution of parliament members, NGOs, etc.
3. Developing practical project activities, like solar energy supply in rural areas, demonstration plants, and educational programmes. In this regard, the representative thanked the OSCE for its support in these activities.

Finally, the representative suggested that the OSCE could consider developing a long-term programme on environmental friendly energy sources in remote regions of Uzbekistan.

A representative of the OSCE Centre in Astana informed that the Centre assists the government of Kazakhstan in introducing new economic opportunities for sustainable development and in increasing its competitiveness in the global economic market. For instance, the Centre is supporting the Green Bridge Initiative. Moreover, the participant welcomed the initiative of Kazakhstan to shift towards green growth.

A representative of Switzerland stated that his country is heavily dependent on import of fossil and nuclear fuels. The participant stated that because sustainability can only be reached through close cooperation with international organizations and neighboring countries, Switzerland has developed many partnerships with European countries.

A representative from Belarus stressed the necessity to establish public-private partnerships in the field of sustainable energy. Moreover, the participant declared that Belarus could provide training to specialists on technology transfers.

A representative of the Ukrainian Institute of International Politics recommended creating an international platform of NGOs, which could improve co-operation among partners and work on policy recommendations.

A representative of Kyrgyzstan mentioned the importance of the promotion by the OSCE of a handbook on best practices in the area of energy efficiency.

A representative of Tajikistan informed that his country is working on developing the use of coal, and incentives are dedicated to this purpose. The representative recalled the importance of importing new technologies and equipment, and the necessity to review and improve the national legislation.

Recommendations for the OSCE:

- Strengthen the involvement of civil society raising awareness on energy efficiency;
- Facilitate sharing of experiences between countries and to promote regional co-operation;
- Invite more financial institutions to this kind of fora, as they are a key factors in energy sustainability;
- Emphasize how gender equality can contribute to economic growth and sustainability and to support financially and with a legal framework the participation of women in the field of sustainable energy.

Concluding Session: The OSCE's Role in the Follow-up to the Forum

Moderator: **Dr. Halil Yurdakul Yigitgüden**, Co-ordinator of OSCE Economic and Environmental Activities

Rapporteur: **Mr. Richard Wheeler**, Senior Programme Officer for Energy Security, Office of the Co-ordinator of OSCE Economic and Environmental Activities

Dr. Halil Yurdakul Yigitgüden said that discussions over the past two days have been very fruitful, and that much has been learned about possible platforms for dialogue and co-operation with the involvement of business, academia, NGOs and governments. He continued by saying that sustainable energy development needs proper political framework conditions. These conditions include market-based energy prices as a driver for energy efficiency and renewable energy development; as well as more directed energy price subsidies, which are currently a burden to state budgets and are used very inefficiently. Dr. Yigitgüden mentioned three possible instruments which could be used: stick, carrot and tambourine. The stick is in the form of mandatory legislation to move ahead on sustainable energy solutions, since voluntary legislation has been shown as not contributing to our sustainable development. The carrots are incentives, of which we have heard much during the past two days; as an example, the OSCE Partner for Co-operation countries, such as Tunisia, have introduced incentives for energy efficiency, which helps to wean the population away from expensive fossil fuel subsidies, funds which could

otherwise be used for other development purposes. The tambourine can be awareness raising programs for energy efficiency and renewable energy.

A representative of the European Union (EU) thanked the Chairmanship in Office (CiO) and the Office of the Co-ordinator of OSCE Economic and Environmental Activities (OCEEA) for their excellent organisation of the event, as well as the contributions from presenters and participants. The representative mentioned that the OSCE is a forum for political dialogue, and that this Meeting fulfilled this purpose. She also mentioned that the Forum allowed to see where the OSCE co-operates with stakeholders in the areas of energy efficiency and sustainable energy, and thanked participants for the specific ideas raised over the course of the meeting, saying that they should be discussed in detail leading-up to the Ministerial Council in December. The representative of the EU stated that energy is an issue which is cross border by nature, and that the OSCE is well placed as a security organization to utilize energy as a confidence-building measure. She stated that co-operation with international organizations allows the OSCE to work in a complementary manner with other stakeholders in the energy field. She added that the OSCE can raise awareness for work done with other specialized organizations. In this regard, the delegate noted that the ENVSEC Initiative was mentioned as a positive example of such co-operation by a number of organizations. The usefulness of public private partnerships and the need for investments in sustainable energy was also underlined. The representative also emphasized the value of the activities undertaken by the OSCE field operations and the importance of promoting capacity building activities. Finally, she mentioned that her delegation would support proposals leading to improved transparency and good governance in the field of energy; in this regard she mentioned the Dublin Good Governance Declaration, as well as the reference to EITI in the Declaration.

A representative of the United States of America joined previous speaker in thanking the CiO and the OCEEA for their excellent organisation of the event, as well as the contributions from presenters and participants. He recalled that his Head of Delegation mentioned that there are a number of opportunities to discuss better management of energy resources, as well as improving the impact of energy upon the environment, and added that Maastricht has given the OSCE the basis to deal with the environment and energy security. The delegate stated that panelists described a number of innovative and exciting approaches to solving some of the many challenges that confront us in these areas. These have included everything from reducing the heavy energy use of residential buildings, increasing the use of solar and wind power in Central Asia, developing new approaches to incentivize more efficient use of fossil fuels in cars and power plants, to finding new and more ways to involve civil society in decisions about energy and environmental policy at a national and also local level. In this regard, the representative indicated that the United States look forward to the leadership of the Ukrainian Chairmanship in identifying where the OSCE can be most relevant and effective going forward in dealing with issue.

A representative of Azerbaijan noted the inter-linkage of sustainability and green growth, and stated agreement with the main conclusions and recommendations of the Meeting. He mentioned the role of the OSCE as a platform for dialogue in dealing with these issues, and stated that the OSCE should in particular work with the UNECE, the Energy Charter Treaty, the Paris-based International Energy Agency and the International Atomic Energy Agency on nuclear issues, as well as continue its co-operation with the Vienna Energy Club. The representative stated that the OSCE should deal with nuclear energy issues. He also took the opportunity to express

appreciation for the input provided by other participating States on the energy debate, and hoped that the Swiss chair will also include energy security into its plans for the 2014 Chairmanship. The representative stated that the environmental aspects should also be addressed, and he expressed satisfaction that the OSCE has been successful in raising profile of the ENVSEC Initiative. He added that transparency and access to information are also important issues.

A representative of Belarus thanked the OSCE Chairmanship and the OCEEA for their efforts, and stated that the discussions over the past two days demonstrated how the OSCE could play a role in the areas of energy efficiency and environmentally clean energy. He wished success to the Ukrainian CiO, so that a basis for Ministerial agreements could be reached. Finally, the representative mentioned that the OSCE can play a key role in areas such as energy efficiency and renewable energy, as well as in the preparation of specialists to manage new technologies.

A representative of Kazakhstan stated that much time was spent discussing the need to use renewable energy; he stated that the proceedings could have been used more effectively by exploring the issues of renewable energy, energy efficiency and sustainability at a deeper and more technical level. He therefore suggested inviting technical experts from other ministries to future Forum meetings. The representative also mentioned that green forms of energy are often more expensive than traditional forms of energy, and therefore deeper economic issues and social policy should also be taken into account. He stated that he would like the 21st Forum to discuss fundamental economic and technical problems, while providing less “propaganda” in favour of renewable energy sources. He concluded by saying that the Forum should be oriented as a consultative body on the technical issues, and claimed that there is a noted shortage of specialized information in these areas, and that the OSCE could help to close this gap.

A representative of the Ukrainian CiO mentioned that the question of using traditional or renewable energy is a serious issue. He mentioned that it is necessary to raise the proportion of renewable sources in the electricity balance to at least 10 %, or even to 30-40 %, before it would make sense to transition the debate from awareness-raising to a discussion about the social policy impacts of renewable energy use. In this regard, many OSCE participating States such as his own require access to best practices from countries which have already attained a high level of renewable energy use, and hearing some of these best practices over the past two days has been quite valuable.

Ambassador Igor Prokopchuk, Chairperson of the OSCE Permanent Council, Permanent Representative of Ukraine to the OSCE, 2013 Ukrainian OSCE Chairmanship expressed satisfaction with the proceedings and with the productive approach of participating States and stakeholders. In this regard, he noted that over past two days there has been a strengthening in co-operation on the issues of energy savings, use of renewables, public private partnerships, and the reinforcing role of civil society. Ambassador Prokopchuk thanked the participants for their practical input, for their concrete recommendations, as well as for sharing best practices. He stated that these recommendations will be used going forward to the Ministerial Council in December. Although time will be needed to digest the proceedings of the past two days, Ambassador Prokopchuk pledged that the CiO will take into account participants’ views while putting together the agenda for the Prague Forum meeting. He took advantage to mention that discussions within the Economic and Environmental Committee framework provide good

examples of what the OSCE can do. Ambassador Prokopchuck recalled that during this Meeting, representatives of other international organizations recognized and welcomed OSCE activity in this field. He added that international cooperation and political should be further strengthened, and expressed the view that the OSCE can give strong political impetus and signal in this area. That said, he stated the need for a clearer mandate on energy and environment for the OSCE. He also pointed out that energy transport, production and consumption provide key challenges. The speaker concluded by saying that the OSCE – as a multilateral political organization – can be used effectively as platform for dialogue, and that as a result of this Meeting, the Organization is now better equipped to answer what role the OSCE can play in relation to other organizations.

Vienna, 11 April 2013

21ST OSCE ECONOMIC AND ENVIRONMENTAL FORUM**“Increasing stability and security: Improving the environmental footprint of energy-related activities in the OSCE region”****SECOND PREPARATORY MEETING****16-17 April 2013, Kyiv**Venue: Diplomatic Academy of Ukraine
01001, Kyiv, St. Velyka Zhytomyrska, 2**AGENDA****Tuesday, 16 April****09.30 – 11.00****Opening Session: Increasing stability and security in the OSCE area through sustainable energy solutions** (*Open to the Press*)**Moderator: Ambassador Ihor Prokopchuk**, Chairperson of the OSCE Permanent Council, Permanent Representative of Ukraine to the OSCE, 2013 Ukrainian OSCE ChairmanshipOpening Address by **H.E. Leonid Kozhara**, Chairperson-in-Office of the OSCE, Minister for Foreign Affairs of UkraineOpening Remarks by **Dr. Halil Yurdakul Yigitgüden**, Co-ordinator of OSCE Economic and Environmental Activities**Keynote Speeches:**

- **Mr. Michael C. Camuñez**, Assistant Secretary of Commerce for Market Access and Compliance, U.S. Department of Commerce, International Trade Administration
- **Ambassador Vadim Lukov**, Ambassador-at-Large and Sous-Sherpa in G8, Coordinator for G20, Russian Federation

Statements by Delegations / Discussion

11.00 – 11.30

Coffee/Tea break

11.30 – 13.00**Session I: Strengthening co-operation among OSCE participating States in the area of new and renewable sources of energy**

Selected topics:

- Status of new and renewable energy production in the OSCE area
- Wind energy
- Solar energy

Moderator: Ambassador Ol'ga Algayerová, Chair of the Economic and Environmental Committee, Permanent Representative of Slovakia to the OSCE

Rapporteur: Mr. Jens Rasmussen, Senior Project Officer, OSCE Project Co-ordinator in Uzbekistan

Speakers:

- **Mr. Hugo Lucas**, Director, Knowledge, Policy and Finance Centre, International Renewable Energy Agency (IRENA)
- **Dr. Oleksiy Onipko**, President of the Ukrainian Academy of Sciences
- **Ms. Nadia Shevchenko**, Expert, NGO Green Dossier, Ukraine
- **Discussion**

13.00 – 14.30 Lunch break

14.30 – 16.00 **Session I - Continuation: Strengthening co-operation among OSCE participating States on promotion of new and renewable sources of energy**

Selected topics:

- Biomass and biofuels
- Geothermal

Moderator: Ambassador Stanislav Raščan, Director General of the Economic Diplomacy Directorate, Ministry of Foreign Affairs, Slovenia

Rapporteur: Ms. Jane Earl, Second Secretary, United Kingdom Delegation to the OSCE

Speakers:

- **Dr. Heinz Kopetz**, President, World Bioenergy Association, Sweden
- **Mr. Peter Canciani**, Project Officer, Central European Initiative
- **Mr. Gudni A. Johannesson**, Director General, Orkustofnun, National Energy Authority of Iceland

Discussion

16.00 – 16.30 Coffee/Tea break

16.30 – 18.00

Session II (Panel Debate): Green Growth and sustainable energy and their contribution to security

Selected topics:

- Green Growth in the context of energy security and sustainable development
- Energy efficiency and energy savings
- Best practices promoting Green Growth

Moderator: Ambassador Mykola Melenevskiy, Ambassador-at-large on environmental issues, Ministry of Foreign Affairs of Ukraine, 2013 Ukrainian OSCE Chairmanship

Rapporteur: Ms. Pavlina Rehor, Policy Officer for the Economic and Environmental Dimension, Delegation of the European Union to the International Organisations in Vienna

Speakers:

- **Ms. Maike Christiansen**, Climate Neutrality and Energy Efficiency Officer, United Nations Economic Commission for Europe (UNECE)
- **Ms. Rie Tsutsumi**, Programme Officer, Regional Office for Europe, United Nations Environment Programme (UNEP)
- **Mr. Marcus Hicken**, Deputy Head of Division for Energy and Raw Material Foreign Policy, Federal Foreign Office, Germany
- **Ms. Lucija Rakocevic**, Expert on renewable energy and energy efficiency, Montenegro

Discussion

18.30

Reception hosted by the Ukrainian 2013 OSCE Chairmanship

Wednesday, 17 April

09.30 – 11.00

Session III: Improving governance and regulatory frameworks for private investments to promote the transition to sustainable energy

Selected topics:

- Adopting economic incentives
- Carbon markets, carbon capture and storage
- Pollution abatement

Moderator: Mr. Andrew Rasbash, Head of Operations, Minister-Counsellor, Delegation of the European Union to Ukraine

Rapporteur: Mr. Yaroslav Yurtsaba, National Project Manager, OSCE Project Co-ordinator in Ukraine

Speakers:

- **Mr. Ian Parry**, Tax Policy, Technical Assistance Advisor, Climate Change and Environment, Fiscal Affairs Department, International Monetary Fund
- **Mr. Andrei Marcu**, Senior Advisor and Head of the Carbon Market Forum, Centre for European Policy Studies, Belgium
- **Ms. Darya Revina**, Vice-chairman on green economy, Head of GREENERGY Initiative, International Chamber of Commerce, Ukraine

Discussion

11.00 – 11.30 Coffee/Tea break

11.30 – 13.00 Session IV: Innovation and technology transfer in the field of sustainable energy

Selected topics:

- Emerging smart technologies and innovations
- Existing clean technology transfer initiatives and mechanisms
- Role of international financial institutions and other international organizations in promoting technology transfer and innovations

Moderator: Prof. Gerald Braun, The IRES Network, California, United States of America

Rapporteur: Mr. Farkhod Abdurakhmonov, Water Management and Energy Security Programme Analyst, OSCE Office in Tajikistan

Speakers:

- **Mr. Luis Frauca**, Business Manager for Integrated Solutions, EPTISA, Spain
- **Mr. Seygeldyev Nurgeldy**, Head of Research Department, Solar Institute "GUN", Turkmenistan
- **Dr. Vladimir Kouzmitch**, Managing Partner of the Energy Engineering & Consulting Company ENECA, Belarus
- **Mr. Guido Beltrani**, Director, Swiss Cooperation Office Ukraine, Swiss Confederation

Discussion

13.00 – 14.30 Lunch break

14.30 – 16.00 Session V: Promoting security and stability through partnerships for sustainable energy

Selected topics:

- The role of International Organizations in fostering partnerships with key stakeholders
- Strengthening public-private partnership at local and national levels
- Reinforcing the role of the civil society in promoting sustainable energy

Moderator: Ambassador Vytautas Nauduzas, Economic and Security Policy Department, Ministry of Foreign Affairs, Lithuania

Rapporteur: Mr. Maurice Dunand, Politico-military Officer, OSCE Mission to Moldova

Speakers:

- **Ms. Cornelia Schenk**, MSc Scientific Expert, Austrian Energy Agency, Austria
- **Dr. Anke Stock**, Coordinator Gender & Rights, Women in Europe for a Common Future, Germany
- **Mr. Timur Idrisov**, Head of the NGO "Little Earth", Tajikistan
- **Mr. Hamid Mehinovic**, Director of the NGO ENERGIS, Bosnia and Herzegovina

Discussion

16.00 – 16.30 Coffee/Tea break

16.30 – 18.00 Concluding Session: The OSCE's Role in Follow-up to the Forum

Moderator: Dr. Halil Yurdakul Yigitgüden, Co-ordinator of OSCE Economic and Environmental Activities

Rapporteur: Mr. Richard Wheeler, Senior Programme Officer, Office of the Co-ordinator of OSCE Economic and Environmental Activities

Concluding Debate

- Identifying priority areas for future engagement
- Ways and means to tackle existing gaps and strengthen co-operation

Closing Statement: Ambassador Ihor Prokopchuk, Chairperson of the OSCE Permanent Council, Permanent Representative of Ukraine to the OSCE, 2013 Ukrainian OSCE Chairmanship

**21ST OSCE Economic and Environmental Forum
FIRST PREPARATORY MEETING**

Vienna, 4-5 February 2013

EXECUTIVE SUMMARY

Introduction

The First Preparatory Meeting of the 21st OSCE Economic and Environmental Forum (EEF) on “Increasing stability and security: Improving the environmental footprint of energy-related activities in the OSCE region” took place in Vienna from 4-5 February 2013. Six thematic areas were addressed during the two-day meeting:

- The linkages between energy and environment and their impact on security and co-operation
- Environmental challenges and opportunities of energy consumption
- Environmental challenges and opportunities of energy production and transportation
- Promoting sustainable management of energy resources
- Co-operation between public and private sectors and international organizations
- Communicating environmental challenges and risks and promoting public participation in decision making

More than 250 participants, including official representatives of OSCE participating States, field operations and Institutions, as well as experts from international, regional and non-governmental organizations, the business community and academia attended the EEF and engaged in the discussions. Participants proposed concrete recommendations related to the impact of energy-related activities on the environment to be further considered by OSCE participating States and the Executive Structures.

Main conclusions and recommendations

Throughout the Vienna Forum, participants analysed the impacts on the environment of various energy sources, both traditional and new. *Inter alia*, the challenge to improve the environmental footprint of production, transportation and consumption of fossil fuels (oil, gas and coal) was often emphasized. Many highlighted the opportunities offered by **renewable sources of energy** and the need to promote **energy efficiency** and **green economy**. In that regard, a number of suggestions were put forward by speakers and participants.

During the EEF meeting it was acknowledged that the OSCE has proven to be an excellent platform for sharing experiences, different views and best practices in many areas. In this regard, it was suggested that its expertise as **dialogue facilitator** could be extended to the field of environmental footprint of energy-related activities in the OSCE region. It was suggested that the OSCE could serve as a **platform for exchange of best practices** and information (clearing-house) on renewable energy, new technologies and appropriate legislative frameworks. Moreover, it was proposed to create a mechanism to collect data and information on new technologies in order to enhance co-operation among participating States in case of natural disasters, oil spills or terrorist attacks against critical energy infrastructure.

The political nature of the OSCE was identified as a comparative advantage of the Organization. The need to foster trans-boundary environmental co-operation through **political dialogue** was discussed as a way to promote, *inter alia*, conflict prevention. Climate diplomacy, for example, could ensure the exchange of relevant information to support accurate decision-making processes, develop early warning mechanisms and undertake precise vulnerability assessments. In order to take advantage of its political character, the OSCE was encouraged to support the involvement of participating States with regard to international and regional **legal instruments**, conventions and protocols, to actively co-operate with the private sector and to facilitate the implementation by participating States of existing mechanisms aiming at preventing the negative impact of energy-related activities on the environment.

Participants agreed that the OSCE could further encourage and strengthen **regional co-operation** among participating States in the area under discussion. It was suggested that the OSCE could support the organisation of regional workshops and seminars aiming at **exchanging best practices**, as well as **capacity building activities promoting co-operation at expert level**. In particular, the organisation of a workshop on best practices among Central Asian republics on the subject was suggested by representatives from the region.

During discussions on the necessity of a timely and efficient **co-operation among relevant stakeholders** in decision-making processes on energy-related activities on the environment, the importance of engaging **governments**, relevant **international organizations**, **development agencies**, **the private sector**, **the civil society** and the **financial institutions** was highlighted.

Many experts representing governments and NGOs praised OSCE's efforts in promoting the **engagement of the civil society** in decision-making processes through the Aarhus Centres. Several OSCE field operations provided concrete examples of the work conducted by the Aarhus Centres in co-operation with the OSCE in promoting **public participation**. These reports were well received by the OSCE delegations and such activities were cited as examples of the role the OSCE should continue to play in the area of energy and environment. Moreover, some speakers encouraged the OSCE to support the establishment of new Centres in the OSCE region.

While discussing the co-operation with **international organizations**, participants commended the work done by the OSCE and its key partners within the framework of the **ENVSEC Initiative**. New areas for co-operation - such as the enhancement of critical infrastructure protection and resilience and scientific co-operation on energy, environment and security - were proposed.

The necessity to promote **transparency, accountability and good governance** in the field of energy was also emphasized. The 2012 OSCE Dublin Declaration on Strengthening Good Governance was pointed out as a strong expression of the commitment of the OSCE to promote **good governance** in all areas of its work, including in the protection of the environment. Participants welcomed OSCE's engagement in supporting initiatives aiming at improving good governance in the extraction of natural resources, and more precisely they commended OSCE's co-operation with the Extractive Industries Transparency Initiative (EITI). In this regard, participants encouraged the OSCE to propose ways to further engage the Organization in the area of good governance and suggested to further discuss EITI principles in future meetings of the Economic and Environmental Forum, as well as during the upcoming Economic and Environmental Dimension Implementation Meeting.

Possible future activities on Energy and Environmental issues for consideration

On the basis of recommendations made during the Preparatory Meeting, OSCE participating States and Executive Structures may wish to give consideration to the following issues:

- The OSCE should continue playing a role as platform for exchange of best practices and information among participating States and relevant stakeholders;
- The OSCE could increase its engagement in promoting multi-stakeholder co-operation and public participation in decision-making processes related to environmental and energy-related issues. In this regard the OSCE should further support the work done by Aarhus Centres and inquire the possibility of opening new centres;
- The OSCE could further promote good governance in the field of energy-related activities in order to improve their environmental footprint, including by supporting EITI and by promoting transparency and accountability at different levels;
- The OSCE could organise capacity building activities aimed at responding to the needs of participating States;
- The OSCE could further encourage the participation of civil society, academia and industry representatives at meetings, such as the Economic and Environmental Committee to present and discuss energy-related issues;
- The OSCE could further assist participating States in accessing and implementing international and multilateral conventions related to the impact of energy related activities on the environment.

REPORTS OF THE RAPPORTEURS

Session I: Environmental challenges and opportunities of energy consumption

Moderator: Ambassador Ol'ga Alayerová, Chairperson of the Economic and Environmental Committee, Permanent Representative of Slovakia to the OSCE

Rapporteur: Ms. Dana Bogdan, Project Assistant, Office of the Co-ordinator of OSCE Economic and Environmental Activities

Speakers:

Mr. David Stanners, Head of International Co-operation, European Environment Agency (EEA)

Mr. Dennis Tänzler, Head of Climate & Energy Policies, Adelphi Research, Germany

Ms. Gabriela Prata Dias, Senior Expert for energy efficiency and related environmental questions, Energy Charter Secretariat

Session I provided an overview of the global effects of fossil fuels, their impacts on climate change, and the policy measures developed within the area of energy efficiency.

Mr. David Stanners provided a broad overview of the links between environment and energy and briefly presented the work of the EEA. He referred to the outcomes of the 2010 EEA Flagship Report, which highlights important environmental policy developments, as well as the persistence of major environmental challenges. The speaker emphasized the need to understand the links between environmental challenges, other global mega-trends, and sectorial developments.

According to Mr. Stanners EU/EEA countries recorded progress in improving resource efficiency while ecological resilience decreased.. He mentioned that within the context of a green economy, efficient targets would be the ones that consider the links between resource efficiency, ecosystem resilience, and human well-being. He further explained that the most intensive energy consumption segments are transformation losses, accounting for around 20-23%, and transport, which produces 90% of EU's Green House Gas (GHG) emissions. While improvements can be noticed in the area of energy intensity and efficiency and in the industry sector, the transport sector is at the opposite pole and registers no improvement. The speaker identified possible areas of energy savings, such as the design of new buildings and improvement of buildings standards that have a potential of 30% in energy savings. However, Mr. Stanners pointed out that the situation in Europe differs considerably from one country to the other, requiring a localized policy system.

Addressing the cost of pollution across different industrial facilities, Mr. Stanners underlined that 50% of the damage costs are produced by a relatively small number of facilities that have a large damaging effect on the EU economy. Talking about the EU initiative to develop a low carbon economy, the speaker also mentioned the target of decreasing the GHG emissions in the EU by 80-95% and the scenarios that could make these reductions possible. He welcomed the major drive to use energy efficiently and mentioned the new directive on energy performance in buildings and energy efficiency technology markets.

In his concluding remarks, Mr. Stanners referred to the EU target to increase the percentage of energy consumption produced by renewable energy sources to 20% by 2020. In this regard, he proposed a recipe for using the renewable energies to their fullest potential: interconnected renewable energy sources, performing storage capacities, and smart grid systems. Mr. Stanners encouraged the audience to address instabilities using both legislative and fiscal instruments, to analyse the correct price signals and focus on implementing those scenarios that could generate increased jobs, reduction of GHG, and decreased energy production and consumption.

Mr. Dennis Tänzler presented the challenges and prospects related to climate change, energy and security. He posed some key questions: How is climate change related to peace and security? How will future energy consumption affect climate change? How can climate and energy policies support security, stability and also wealth?

According to Mr. Tänzler, climate change can be regarded as a conflict driver, and can affect in different ways the stability and security of the world's regions. In that regard, conflicts could be determined by: the competition over resources; the territorial integrity of states affected by the rise of the sea level, in particular for small island states; by maritime issues that remained unresolved; or by the changing distribution of resources and the destabilisation of states. Fragile or unstable states are primarily affected by climate change, and some regions of the world already experience the exacerbation of existing tensions or conflicts due to climate change.

Regarding the energy of the future, fuels used and climate change, Mr. Tänzler recommended a closer look into the IEA's World Energy Outlook (2012). The IEA noticed that the world is failing to put the energy on a more sustainable path. For example, carbon dioxide emissions increased in absolute terms; the share of global water used for energy increased from 15% to 35%; and only 1/3 of the economic energy potential is used to increase energy efficiency by 2035. Acknowledging the fact that by implementing enormous gas, oil and shale gas extraction projects the probability to have a 5 or even 6 degree temperature increase is relatively high and a more comprehensive climate diplomacy approach needed. Mr. Tänzler made reference to the debate of the UN Security Council under the German Presidency in July 2011 when "*the Security Council expressed concern that possible effects of climate change may, in the long run, aggravate certain existing threats to international peace and security*". Furthermore, Mr. Tänzler referred to the 2009 report by the Secretary General on the UN Resolution on climate change and security, which mentioned the relationship between climate change and security, underlining the importance of understanding climate change not only as a threat multiplier, but also looking into the climate policies that have contributed into threats minimisation.

In his final remarks, the speaker presented four areas for climate diplomacy:

- adaptation to climate change, as mitigation and adaption represent the two pillars of climate change policies;
- fostering of trans-boundary environmental co-operation, as this area illustrates what co-operation can achieve to increase conflict prevention through dialogue;

- early warning systems and vulnerability assessments, with the main challenge of integrating geographical and political information and of ensuring that these data are the basis for decision making;
- promotion of sustainable energy policies and green economy, which provides numerous opportunities for building partnerships to design and implement policy measures that develop low carbon strategies.

Ms. Gabriela Prata Dias presented the Energy Charter Treaty and her organization's perspective on the link to energy security. She highlighted that the Energy Charter Treaty aims, *inter alia*, at protecting investments in the energy field, and that the broader Protocol on Energy Efficiency and Environmental Related Aspects (PEEREA), embedded in the Energy Charter Treaty, "*defines policy principles for the promotion of energy efficiency as a considerable source of energy and for consequently reducing adverse environmental impacts of energy system*". The main objectives of the PEEREA protocol refer to promotion of efficiency policies, creation of conditions for development of energy efficiency through efficient energy markets and fostering international co-operation. The PEEREA protocol requires its signatories to develop, implement and update energy efficiency programmes, in all sectors of the energy market, be it demand and supply, cogeneration, institutional and legal infrastructure, private initiatives and co-operation, or any kind of impacts associated to the energy sector.

Ms. Prata Dias also presented a couple of recent examples of countries' good performances and/or recommendations that have already started to be implemented. *Inter alia*, Mongolia, is working on the development of secondary legislation and regulations, to be ensured prior to the adoption of the Energy Conservation Law. Among the recommendations: Georgia should create an energy efficiency unit. Belarus should ensure sufficient resources to the Department of Energy Efficiency. Azerbaijan should consider the introduction of market oriented principles in the energy sector, etc. In addition to these recommendations, the speaker identified energy statistics as extremely important, as well as the availability of financing and incentives (improvement of procedures for donor support approval and strengthen co-operation with commercial banks). Ms. Prata Dias emphasised the need for states to compare existing monitoring systems against international practices for the purpose of improvement.

Concluding, Ms. Prata Dias reiterated that the working group PEEREA is a strong platform for stimulating dialogue on energy efficiency, on providing support to the process of energy efficiency implementation in countries with different levels of development, and on energy profiles that aim at promoting an integrated approach by bringing together national policy makers and local decision makers.

During the discussion, **a representative from Kazakhstan** presented the national mid- and long-term plans aiming at transforming the national economy into a green economy by 2035 and, furthermore, to promote the best practices at regional and international level. The speaker invited the OSCE participating States and the OSCE Secretariat to take an active part in the Green Bridge Partnership Initiative, rooted in the Rio +20 Conference. Moreover, the participating States were invited to provide input and share their views in the preparatory process for the "Energy of the Future" Exhibition, to take place in 2017, in Astana. The representative added that in efforts to transform the country's economy into a green one, Kazakhstan is currently amending

legislation, in particular on renewable energy sources, and undertakes specific projects on energy efficiency and energy savings.

A representative of Ukraine thanked the European Commission for the assistance provided in dealing with energy efficiency and renewable energy sources and emphasized the need for a legal basis to explore further ways of savings. In this regard, the representative indicated that in Ukraine, work on the National Action Plan for developing renewable energy sources has started under an UNIDO project. The objective of the National Action Plan is to reach 1 billion KW from renewables by 2013.

Ms. Olga Andrianova, Open University, Austria, asked whether it is a healthy approach to reduce the lifetime of cars to almost half as compared to some decades ago, considering the perspective of increased use of energy. **Ms. Prata Dias** referred to Mr. Stanners' presentation to indicate that the transport sector is the biggest consumer of energy in Western Europe. In this regard she signalled that policies have an important role to play in imposing constraints on fuel consumption and energy inefficiency.

A representative of Armenia underlined the need to elaborate a sound Energy Security Strategy, mentioning that different regions experience different impacts related to energy issues. Armenia registers positive development regarding hydropower electricity production, in particular from small hydro-power plants. He also indicated that the public environmental movement has become very strong in Armenia, being able to make a difference in the decision-making process. According to the speaker, solar power, geothermal and biofuels are other sources of renewable energy that could be used efficiently within the country.

Ms. Nurzat Abdyrasulova, Director, Energy and Environmental Expert at Civic Foundation UNISON, Kyrgyzstan, referred to the situation in the country, mentioning energy efficiency as an important topic that needs improvement. She indicated that work is currently being done together with key partners on these issues. Ms. Abdyrasulova encouraged the OSCE to support governments in implementing laws and regulations and also in advocating increasing public participation in decision-making processes.

Conclusions and recommendations for the OSCE:

- The need for an increased and more comprehensive climate diplomacy approach was identified (with EU and UN climate policy levels as reference);
- During the session, the need to bring different experiences in these areas together and to share them at regional level was commonly identified and emphasized by the speakers and participants;
- Within the context of policy design, the importance of monitoring, accounting and modelling the so called knowledge infrastructure was stressed. Furthermore, its relatively low costs compared to other infrastructures were emphasized. For that, tools, models and visions are needed in order to break through the monopoly type of thinking about the ways of consuming and producing energy;

- An integrated and systemic way of thinking should be adopted with regard to the green economy, where various environmental challenges are addressed simultaneously;
- The OSCE should complement the role of other international organizations working in the field. The Organization should act as a platform for discussion and co-operation for its participating States.

Session II: Environmental challenges and opportunities of energy production and transportation

Moderator: Ambassador Thomas Greminger, Permanent Representative of Switzerland to the OSCE

Rapporteur: Ms. Nino Makashkhia, Associate Environmental Affairs Officer, Office of the Co-ordinator of OSCE Economic and Environmental Activities

Speakers:

Mr. Werner Floegl, Vice-President, International Commission on Large Dams (ICOLD)

Mr. Bosko Kenjic, Head of Water Resources Department, Ministry of Foreign Trade and Economic Relations, Bosnia and Herzegovina

Mr. Peter Taylor, Manager, Oil Spill Preparedness Regional Initiative (OSPRI)

Ms. Shynar Izteleuova, Director of the Atyrau Aarhus Centre, Kazakhstan

The focus of Session II was on hydropower and environment, environmental risks related to fossil fuel transportation, best practices in oil spill prevention and preparedness, and public participation in decision making.

Ambassador Thomas Greminger, underlined the importance of joint efforts to reduce the environmental footprint of energy-related activities. In this regard, he noted that the promotion of renewable resources of energy, the exchange of best practices related to resource extraction, environmental impact assessments, and the promotion of transparency in the resource sector are among the most effective ways to reduce the adverse impact of energy-related activities on the environment and to promote co-operation.

Mr. Bosko Kenjic focused on the experience and challenges faced by his country in bridging hydropower development and environment. He noted that most of the hydro projects in Bosnia and Herzegovina (BiH) have trans-boundary environmental impacts due to the geographic location of the country. The speaker indicated that only 40% of the country's hydro potential is currently utilized. Therefore, there are opportunities to further develop this sector.

Mr. Kenjic also mentioned BiH's challenge in achieving the national target for renewable resources by 2020. The construction of 46 new hydropower stations is planned in order to achieve a 40% share of renewables in energy generation. Mechanisms such as environmental and water permits and public participation in decision making are important tools used by BiH to ensure environmental protection. Some of the ongoing projects of hydropower plants are controversial in terms of possible environmental impacts. The main challenge the government is currently facing is to ensure that decisions are based on sustainable development principles. In

this regard he underlined the necessity of transparent decision-making processes to prevent a deterioration of the existing ecological status. Mr. Kenjic referred to the situation of the Drina River to illustrate the complexity of decision-making processes in Bosnia and Herzegovina in terms of engaging all stakeholders and taking all possible issues into account. .

Mr. Kenjic suggested that the OSCE continues its assistance in implementing environmental legislation and proposed that the Organization extends its assistance in preparing and implementing river basin plans. Finally, Mr. Kenjic highlighted the important role of the OSCE in promoting public participation in environmental decision-making through Aarhus Centres and encouraged the OSCE to continue to support Aarhus Centres and establish new centres in the region.

Mr. Peter Taylor made a presentation on environmental risks of fossil fuel transportation and presented examples of best practices related to oil spill prevention and preparedness. Mr. Taylor underlined the importance of collaborative efforts between the oil industry and national governments in putting in place procedures and plans for prevention of and response to oil spills.

The speaker noted the huge efforts made over last decades to reduce oil spill accidents from shipping. As a result, the number of oil spills has decreased in comparison with the period 1970s-1990s. The implementation of treaties and the willingness to comply with conventions have been the main drivers towards this progress. Mr. Taylor also emphasized that the accidents in Australia and in the Mexican Gulf have in a way led to an awakening of the oil extraction and production industry. The accidents proved that the levels and standards of preparedness and prevention were not adapted to the new trends of moving deeper into offshore waters and to harsher environment.

Mr. Taylor positively assessed the OSCE's involvement in oil spill prevention and preparedness in the Black and Caspian Seas, and the activities which were initiated during the 2008 OSCE Finnish Chairmanship. He emphasized the need to step up the efforts in ensuring the participation of the OSCE countries in regional conventions and emergency protocols, as well as the implementation by participating States of the existing mechanisms. There is also a need to further support co-operative efforts of industry and governments to implement these conventions. Mr. Taylor underlined that the OSCE is well positioned to support this process.

Ms. Shynar Izteleulova thanked the OSCE, the Environment and Security (ENVSEC) Initiative and the government of Kazakhstan for supporting the Zhaik-Caspian/Atyrau Centre and its activities. She explained that the Atyrau Aarhus Centre is located in the largest industrial, so called, "petrol center" of Kazakhstan, where all major oil companies concentrate their activities. Given the intense development of the economy in this area, there is increasing public concern about the environmental situation. The Centre, which was set up in 2009, tries to address this concern through promoting the Aarhus Convention and improving awareness of rights under the Convention.

The speaker informed participants about the wide range of activities performed by the Centre, including the involvement of the public in decision-making processes using various mechanisms and methods such as roundtable discussions, public enquiries, public hearings, etc. Public hearings and discussions organized by the Centre on the construction of the Northern-Caspian

Ecological Oil Spills Response Base in the Ural Delta was one of example mentioned by the speaker. The Centre also provides advisory services to enable the public to monitor the situation and to be involved in discussions of national and regional plans on the prevention of and response to oil spills.

Ms. Izteleulova emphasized the special role the Centre plays in linking the public, government and companies and in facilitating dialogue between all stakeholders. The Centre managed to establish good working relations with some companies that provide the Centre with environmental impact assessment reports and their environmental action plans. To achieve better participation in decision making it is important to work with the civil society, the state institutions and oil companies. The Zhaik-Caspian/Atyrau Aarhus Centre is also involved in the Extractive Industry Transparency Initiative (EITI).

Finally, the speaker underlined the need to further expand the Aarhus Center's work. The existing support of the government in this regard is crucial. Nevertheless, assistance from international organizations is still needed. She also indicated that more efforts are required to strengthen public outreach and raise awareness and facilitate a dialogue between civil society and oil companies. In that regard, exchanging best practices on public monitoring based on the experience in the EU and the United States would be important to further strengthen the civil society and Aarhus Centres in Kazakhstan.

Following the presentations a discussion started and several participants posed questions to the panel, many on issues related to the use of hydropower.

Ms. Nurzat Abdyrasulova, Director, Energy and Environmental Expert at Civic Foundation UNISON, Kyrgyzstan, underlined the importance of the Aarhus Convention in promoting public participation. In her view, it was vital to work with political parties and the government on this issue. According to the speaker, the OSCE has an important role to play.

The delegation of Kyrgyzstan underlined the importance of hydropower in the energy sector of the country. Kyrgyzstan has a huge potential in hydropower development and therefore, it attaches great importance to renewable resources development and to improving energy efficiency. Respective legislation has been adopted during the last years. In order to secure energy production and reduce its environmental footprint, it is essential to adopt new technologies and increase investments. The representative suggested that the OSCE can assist countries in furthering international co-operation in that regard.

Key suggestions for possible OSCE action:

- The OSCE should further support neutral platforms that promote dialogue, multi-stakeholder co-operation and public participation in decision-making on environment and energy issues. In this regard, the unique role of the Aarhus Centres was underlined and it was suggested to further enhance this mechanism;
- The OSCE can be regarded as a political door opener and facilitator of dialogue on energy and environmental-related issues, and should therefore continue promoting co-operation in these areas;

- The OSCE should further assist participating States in accessing and implementing international and multilateral conventions addressing oil pollution preparedness, response and co-operation.

Session II - Continuation: Environmental challenges and opportunities of energy production and transportation

Moderator: Ambassador Eoin O'Leary, Permanent Representative of Ireland to the OSCE

Rapporteur: Ms. Gohar Ghazinyan, National Officer, Environmental Dimension, OSCE Office in Yerevan

The Moderator introduced the topics for discussion during the session:

- Production of electricity and environment;
- Environmental concerns of electricity distribution and opportunities for co-operation on electricity markets;
- Efforts to protect critical energy infrastructure.

Speakers:

Mr. Janez Kopač, Director, Energy Community

Dr. Majid Khodjaev, Executive Director, CA Regional Center for Renewable Energy, Uzbekistan

Mr. Julijus Grubliauskas, Energy Security Officer, North Atlantic Treaty Organization (NATO)

Ms. Nurzat Abdyrasulova, Director, Energy and Environmental Expert at Civic Foundation UNISON, Kyrgyzstan

Mr. Janez Kopač, presented the Energy Community, its mandate, tasks and activities. The Energy Community aims at assisting its members in transposing the EU legislation related to energy and to foster proper investments in the energy sector. It works for the implementation of the following directives related to environment: Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment, Directive 1999/32/EC relating to a reduction in the sulphur content of certain liquid fuels, Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants and Art. 4(2) of the Directive 79/409/EEC on the conservation of wild birds. In addition, Mr. Kopač focused on the Large Combustion Plant Directive 2001/80/EC to be implemented by 31 December 2017. Regarding this last directive, Mr. Kopač highlighted that power and heat generation facilities located in the Energy Community region are, generally speaking, in a bad condition because of maintenance delays and lack of investments over the last two decades. Moreover, Mr. Kopač qualified the incoming 5 years as a short timeframe to implement the directive taking into account the current financial environment. In this regard, the main objectives of the Energy Community are to support governments, decision-makers, private and public owned energy companies, and private and public investors in their efforts to increase the capacity of the Contracting Parties to meet their commitments under the Energy Community Treaty (ECT) by the deadline foreseen (end 2017). A study is currently under preparation in order to provide solutions to this issue. The study will aim at providing an accurate assessment of the investments needed to meet the requirements of the LCP Directive, of different scenarios for individual plants in order to achieve compliance with the emission limit values of the Directive. It will also include

an analysis of the potential and the costs involved for achieving compliance with the emission limit values of Annex V of Directive 2010/75/EU on industrial emissions.

Dr. Majid Khodjaev started with an overview on the potential energy resources of the different Central Asian republics and indicated that greenhouse gas emissions are very high in the region. He emphasized that countries in the region have national programs aiming at modernizing and developing the industrial sector, which require an increase of energy production and consumption. Mr. Khodjaev indicated that there is a great potential to decrease greenhouse gas emissions in the region, mainly by turning to the use of renewable energy and energy saving technologies. In this regard, the speaker explained the work of the CA Regional Centre for Renewable Energy in promoting regional co-operation on clean and renewable energy in Central Asia through the development and implementation of coherent policies and programs. *Inter alia*, it supports the implementation of a Regional Action Plan for environmental protection and promotes the engagement of civil society in the decision-making process related to renewable energy sources.

Mr. Khodjaev finalized his intervention by suggesting that the OSCE could further support the development of the Regional Centre for Central Asia on renewable energy. He proposed that the OSCE could collaborate with the Centre in organising a workshop in Uzbekistan on regional co-operation in the field of sustainable energy.

Mr. Julijus Grubliauskas presented NATO's approaches to energy and environment and security. He pointed out that energy and environmental risks are part of the emerging security issues that NATO allies and partners currently face. NATO, as a defence and security organization, seeks to meet these challenges by adapting its agenda and capabilities to the new security environment. NATO's Strategic Concept emphasises the importance of energy and environmental security.

Energy, environment and security are interlinked in NATO's agenda and reflected in three main areas of NATO's work. The first area is *operational environment*, which focuses on energy efficiency in the military and NATO's troop's environmental footprint. The second area of NATO's environmental security activity is *risk and consequence management*. In this area NATO civil emergency planners focus their work on ways to enhance critical infrastructure protection and resilience. Mr. Grubliauskas suggested that this is an area where the co-operation between NATO and the OSCE could be enhanced. The third area is *scientific co-operation in energy, environment and security*. The Speaker indicated that this is an area where NATO and OSCE could also collaborate and underlined that there is great potential for closer co-operation between both organizations in the framework of the ENVSEC Initiative.

Ms. Nurzat Abdyrasulova presented the civil society perspective on environmental challenges and opportunities of energy production and transportation in Kyrgyzstan. The speaker explained that the Civic Foundation UNISON is an independent organization, working on the national and international arena since 2002 and focusing on climate change, good governance, sustainable energy, sustainable tourism, ecology and sanitation. Ms. Abdyrasulova continued by explaining that in spite of Kyrgyzstan clean energy potential (90% of the national electricity production is generated by hydropower plants), the country still depends on the imports of coal, gas and fuel.

Ms. Abdyrasulova underlined that the generation, transmission and distribution of energy is mainly managed by the government and that 99% of the public is connected to the grid, which explains the great interest of the population in the energy sector as well as its degree of politicization. The speaker listed the main problems existing in the energy sector in Kyrgyzstan, which are related to revenues, tariffs, costs, corporate policy, governance, procurement of export and import of energy, etc. She also mentioned that Kyrgyzstan suffers of a low quality of energy distribution.

To address these challenges, the Provisional Government initiated in 2010 the Fuel Energy Sector Transparency Initiative of Kyrgyzstan – FESTI, which involves representatives from the government and the civil society. This has positively changed the situation in Kyrgyzstan. There has been an improvement in information disclosure, transparency has been enhanced, media-coverage better balanced, quality policy debates have taken place with relevant stakeholders and awareness on consumer level has been raised. To address the problems related to distribution identified by FESTI, civil society established a Community Energy Advocates Network in 2011. In one year, more than 1000 complaints on electricity supply were considered by FESTI; more than 1500 consultations were organised and 100 trainings conducted. FESTI is currently applying the Electricity Distribution Interface Toolkit (EDIT), divided in two phases: reviewing and analysing the governance of electricity distribution, and organizing of social surveys at grass-roots level to collect suggestions and recommendations on how to further improve the electricity sector governance.

The UNISON already applied EDIT in two regions and plans to extend it to the rest of the country. The Initiative has proven that there is room for civil participation in the energy sector.

Ms. Abdyrasulova suggested the unification of market standards and technical documentation in the Central Asian region, prioritizing the development of energy efficiency, the development of public-private partnership on distribution level, and the introduction of renewable energy in remote areas. The speaker finalized her intervention by encouraging OSCE to support FESTI, as well as the activities presented during her intervention.

During the discussion a representative of the Russian Federation asked how the Energy Community monitors the implementation of the EU legislation by its members. Mr. Kopač clarified that it is done through technical assessments and judiciary mechanisms. The second question of the representative of the Russian Federation was on the comparative advantages of coal and mining in Central Asia in comparison to the development of renewable energy sources. Mr. Khodjaev replied that the cost of coal extraction increases every year, while the mines start to be exhausted. Therefore, he considered the development of renewable sources of energies as a pertinent option and underlined that it should be accompanied by enhanced protection of the environment.

The representative of an NGO from Kyrgyzstan commented that it is important to concentrate efforts towards the development of renewable energy in Central Asian countries. He pointed out that in the case of his country, solar power has an enormous potential. In this regard, he suggested that the OSCE could encourage the exchange of technical experience among the Central Asian countries and promote the exchange of best practices. He also recommended

Central Asian states to co-operate in order to find support mechanisms, such as fiscal incentives, to promote renewable energy sources..

A representative from Kazakhstan commented on the obstacles her country faces in promoting renewable energy sources and stated that with a proper development, they can be in the future as lucrative as the traditional sources of energy.

Mr. Miodrag Dakić, Energy and Climate Change Program Co-ordinator, Centre for Environment, Banja Luka, Bosnia and Herzegovina, took the floor to underline that the Regional Energy Strategy of the Energy Community was implemented without having taken into account the requests from 40 environmental NGOs from the region of South East Europe to postpone it, as they considered that it not in compliance with the Aarhus Convention.

Ms. Nurzat Abdyrasulova underlined the importance of transparency and accountability while developing renewable energy in the OSCE area. She highlighted the importance of empowering the civil society, of taking into account its expertise and analytical skills in the process, as well as the necessity to ensure their participation in the development of the renewable energy sector.

Mr. Julijus Grubliauskas reiterated that it is fundamental to use and improve the current frameworks such as the ENVSEC Initiative, enhance the exchange of best practices among international organizations such as NATO and OSCE, and engage the private sector and NGOs to better face the environmental challenges related to energy production and transportation.

The Moderator, Ambassador O'Leary, concluded that there is a need to invest in efficient and environmentally sustainable infrastructures, as well as to promote transnational co-operation.

Session III: Promoting sustainable management of energy resources

Moderator: Mr. Matthew Murray, Deputy Assistant Secretary of Commerce for Europe and Eurasia, International Trade Administration Department, United States of America

Rapporteur: Mr. Richard Wheeler, Senior Programme Officer, Office of the Co-ordinator of OSCE Economic and Environmental Activities

Speakers:

Mr. Jonas Moberg, Head, Extractive Industries Transparency Initiative Secretariat (EITI)

Professor Thomas Johansson, Co-Chair of the Global Energy Assessment, International Institute for Applied Systems Analysis (IIASA) and Professor at the International Institute for Industrial Environmental Economics, Lund University, Sweden

Mr. Stepan Kudria, Deputy Director, Institute of Renewable Energy, National Academy of Sciences, Ukraine

Mr. Gan-Ochir Ser-Od, Senior Specialist of Department of Coordination of Policy Implementation, Ministry of Mining, Mongolia

Mr. Matthew Murray, opened the session by saying that the sustainable management of energy resources is one of the main challenges today, and that the OSCE is the perfect venue to discuss this issue. In this regard, he suggested a multi-dimensional and multi-stakeholder approach.

Furthermore, he stated that the Dublin Declaration on Good Governance is an excellent starting point for getting government, business and civil society working together.

Mr. Jonas Moberg stated that Ukraine was at an advanced stage of implementing the EITI, and that he was grateful for the political will of the Ukrainian government to implement it. He mentioned that EITI is important as an international transparency standard, currently implemented by 37 countries, with many more progressing towards its application.

The speaker mentioned that the EITI builds trust between governments, companies and communities, and that all extraction companies are required to report their payments to the government if the country in which they work adopts EITI, thus ensuring a level-playing field amongst all companies. Mr. Moberg also mentioned that the recovery rates of natural resource extraction tends to be improved in countries using good governance practices, since the investors tend to have a longer term perspective, using techniques which will yield a longer-term income rather than short-term profits. He also cited improved environmental practices, such as less gas flaring, and less energy used to extract natural resources.

Professor Thomas Johansson summarized the challenges and solutions related to the environmental footprint of energy. He mentioned that a global growth in population and rapid economic growth has pushed the planetary boundaries beyond what is considered as the safe operating space in the areas of biodiversity, climate change and the nitrogen cycle. It is important to keep the increase in global temperature within only two degrees by cutting carbon emissions from the energy sector; otherwise our world will become a very different place from what it is today.

Mr. Johansson continued by mentioning that the IASA *Global Energy Assessment* sees that there are opportunities. Specifically, energy end use efficiency and renewable energy sources are the solutions with most potential. For example, energy-efficient “passive buildings” can decrease energy use by 90 per cent in a sector of the economy that takes 30 per cent of global energy use. As regards renewable sources of energy, the costs are decreasing while new investments are increasing. Most investments have been in wind investments and solar photovoltaic. Mr. Johansson concluded that energy efficiency is the most effective option for immediate action, that renewable sources of energy are abundant and widely available, and that the smarter use of fossil fuels through the gasification of coal and use of biomass are also important.

Mr. Stepan Kudria shared information regarding the progress of renewable energy usage in his country. He mentioned that Ukraine first started working with renewable energy 30 years ago. Ukraine has a very high level of energy intensity, and although it has improved markedly over the past decade, it still trails most other industrialized countries in this regard.

Ukraine is a member of the Energy Community, and thus has agreed to implement the Directive on the promotion of energy from renewable sources. By 2020, Ukraine has pledged to produce 11 % of energy from renewable sources. Installed capacity of renewable energy power plants steadily increases. Mr. Kudria concluded that Ukraine has strong renewable potential. In order to stimulate this process, a platform for exchange of best practice on technology, educational programmes and legislative frameworks should be undertaken.

Mr. Gan-Ochir Ser-Od emphasized that the mining industry is very important to the Mongolian economy. Therefore, for Mongolia, the environmental footprint and economic issues are inextricably linked. Mr. Ser-Od mentioned that 300 current mining operations cover 14 % of the country's territory, mostly in the southern provinces. Soil pollution is a problem: 19,870 hectares of land were degraded as a result of mining activities, which negatively impacts animal husbandry, a traditional way of life in Mongolia. As regards water, gold exploration has resulted in the pollution of 28 rivers in eight Mongolian provinces. The main challenges in preventing environmental degradation are: a lack of social responsibility by mining companies; a lack of capacity to monitor mining activities; and the need to strengthen co-operation between the government and civil society. Mr. Ser-Od also highlighted preventative measures in three areas: establishing a legal framework to avoid negative impacts; introducing modern technologies and internationally recognized best practices; and learning from international experience in the mining sector. Mr. Ser-Od concluded that it is crucial for the government, industry, academia, and civil society to work together in the area of environmental governance.

The Moderator asked the panellists to give insights on what OSCE could do to leverage multi-stakeholder approaches towards these problems.

Mr. Moberg stated that EITI provides a platform within government bureaucracies for those who are trying to push reforms generally. Since OSCE participating States' delegations are part of Foreign Ministries, strong signals of support for the EITI approach can be sent. Those civil servants supporting EITI implementation need to see that other parts of their government are supportive. Thus, the OSCE, through its participating States, can help to give political support for little reform efforts such as EITI.

Mr. Johansson said that within the energy sphere the OSCE can be a great platform for "knowledge infrastructure", or sharing know-how. IIASA is well-positioned to propose help in increasing knowledge infrastructure, given that it has developed a system-based approach. Mr. Johansson concluded by saying that the concept of knowledge infrastructure is valuable, and progresses from knowing what one's challenges are not only for own country, but within broader region and the world.

Mr. Kudria suggested the compilation of a global atlas of renewable energy potential which would be created on the basis of a single standard of data used. He also emphasized the capacity-building potential in the OSCE's activities which could be related to educational co-operation.

After these presentations, the floor was opened for discussion.

A representative from Azerbaijan thanked the moderator and speakers for their comprehensive presentations on policy instruments for preventing negative legacies, especially of mining activities. However, the speaker considered that other energy activities should be discussed, specifically nuclear energy. He mentioned that the use of aging nuclear plants must be discussed when talking about the energy footprint, and specifically raised the issue of the Metsamor power plant in Armenia. He continued with specific safety issues, including the construction of a new reactor, and also made reference to the Espoo Convention.

A representative from Armenia stated his opinion that the safety threats related to Metsamor are overstated. He said that frequent safety visits take place, and that Armenia duly submitted an impact report to the Espoo Secretariat.

A representative from Austria indicated that Austria claims to be a leader in the use of sustainable and renewable energy, and stated a position to not classify nuclear as a source of sustainable and renewable energy. She stated support for using the highest possible safety standards, including the use of stress tests, and hoped to hear more about planned stress tests. Replying, the representative from Armenia informed that the Metsamor power plant does undergo stress tests.

Session IV: Co-operation between public and private sectors and international organizations

Moderator: Ambassador Mykola Melenevskyi, Ambassador-at-large on environmental issues, Ministry of Foreign Affairs of Ukraine, 2013 Ukrainian OSCE Chairmanship

Rapporteur: Mr. Elton Qendro, Project Assistant, Governance in Economic and Environmental Issues Department, OSCE Presence in Albania

Speakers:

Mr. Alistair Clark, Managing Director, Environment and Sustainability, European Bank for Reconstruction and Development (EBRD)

Mr. Markus van der Burg, Managing Director, Conning Asset Management Limited, United Kingdom

Mr. Martin Krause, Regional Practice Leader for Environment, Climate & Energy, Regional Centre for Europe and CIS, United Nations Development Programme (UNDP)

Mr. Alistair Clark stated that EBRD has financed over 50 water and sanitation projects in the last decade and that this amounts to a total investment portfolio of €870 million. In this regard, he explained that these investments benefit 30 million people, almost 10% of the population of the EBRD region. Mr. Clark added that EBRD investment policy is based on three main aspects: *impact, assurance* and *engagement*. In the field of sustainability impact, EBRD works on energy and climate change, greenhouse gas assessment 2012, water and waste management, safer roads, occupational health & safety and promotion of better access for women. He indicated energy efficiency was one of the key themes for EBRD as it operates in some of the most energy-inefficient countries.

Mr. Clark presented the work done by EBRD with the Northern Dimension Environmental Partnership (NDEP) to assist the Gulf of Finland in reducing phosphorous load and achieve more than half of Russia's phosphorous reduction commitment under BSAP 2007. In addition, he presented several projects where EBRD was involved and where economic aspects and the protection of the environment were taken into consideration. Mr. Clark informed that, in order to promote sustainability, EBRD has different mechanisms, such as an environmental and social policy, performance standards, disclosure of information prior to the board, monitoring of commitments, a public complaints mechanism, problem-solving and compliance review as well as, evaluations and audits.

Mr. Markus Van Der Burg started by explaining the concept of “bankable” projects. In this regard, he described bankable as the combination of good governance, rule of law, transparency and accountability. He explained that projects should be bankable in order to be financed. He continued by saying that there is an enormous amount of money from the private sector that could be invested in a new kind of projects, such as those related to sustainability. He pointed out that due to the financial crisis investors are struggling to find adequate return of the money invested in traditional sectors. This can be also translated in an opportunity to invest in sectors that were not considered in the past. Mr. Van Der Burg said that sustainable investments are not a new area for investment and drew the attention of participants to the fact that large amounts of money have been already invested in wind and solar, but very little in projects related to energy efficiency.

Mr. Van der Burg considered that whilst government policy reforms are put in place, investing in untested markets involves significant risks. To overcome these risks, public-private initiatives are needed as an interim solution; but always with the long-term focus of making projects self-sustaining i.e. bankable to the private sector.

The speaker explained that a forum is needed to discuss and address all issues forming part of commercial solutions which, in many cases, market participants cannot solve alone *e.g.* the bundling of small projects and the financing of complex projects related to energy efficiency, such as district heating, municipal lending, etc. In this regard, he informed that Conning was working on a structure to use a Financing Co-ordination Agreement (FCA) to address market failures, lower friction costs and avoiding the conflicts of interest lenders have. FCA would then improve the skill sets required to produce information memoranda to market standards for bankable projects and allow more projects to be financed by the private sector, also in conjunction with the public sector. According to him, this FCA should be under the auspices of a supranational entity in order to avoid any conflict of interest.

Mr. Martin Krause indicated that UNDP implements many projects focused on energy efficiency and renewable energy aiming at creating a market transformation approach, meaning a proper business environment for the private sector. He explained that a market transformation needs 3 elements:

- the right policy and regulatory environment;
- capacity building and skills;
- and leverage in financial aspects.

Mr. Krause emphasized that energy-sustainable solutions do have a human face and are not solely the prerogative of highly specialized experts. Consequently, co-operation is needed beyond energy experts and planners, and should involve specialists from health and education sectors, because they are those that cope with the impact of energy related activities on people. Mr. Krause concluded that, in order to create sustainable energy solutions, five partners should co-operate: governments, development agencies, the private sector, civil society and financial institutions.

Discussion

Dr. Maria Germenchuk, Belarusian Research Centre Ecology, informed that her government has been applying green technologies and co-operating with other actors such as the EU in order to develop more effective technologies. She suggested to further develop a scientific and technical co-operation and added that more conferences such as the Economic and Environmental Forum would be needed. Ms. Germenchuk said that within the OSCE area it was important to generate consensus among governments, civil society and the private sector. She suggested the organisation of technical co-operation activities in the form of conferences at national and regional level.

Ms. Olga Andrianova, Open University of Austria, asked Mr. Krause to comment on the private sector engagement in Aarhus Centres' activities. She asked whether there was a potential in the co-operation between multinationals and Aarhus Centres, namely through partnerships related to supply-chain improvement and technology transfer. In that regard, she also suggested that the OSCE could elaborate a framework for the engagement of the private sector with the Aarhus Centres' activities. Mr. Krause replied that the role of multinationals was very important for the improvement of sustainable energy. However, he added that small companies should also have the chance to compete for and participate in this public-private co-operation. In this regard, the governments should ensure an adequate framework and the necessary rules to create an environment of fair competition.

Mr. Alexander Bakalov, Executive Manager, Permanent International Secretariat, Organization of the Black Sea Economic Co-operation (BSEC), suggested that the OSCE could become a hub of information and welcomed the multi-stakeholder presence at the Forum. He added that the OSCE could also raise awareness of civil society. Mr. Bakalov suggested that, in order to improve the environmental footprint of energy-related activities in the Black Sea region, international organizations could: raise awareness among Member States, including the governmental sector, the business community, academic community and the general public; develop international/intra-regional co-operation; promote concrete projects, capable of having multiplying effects in the economies of the BSEC Member States.

A representative of Azerbaijan asked about EBRD's plans on nuclear energy. Mr. Clark replied that EBRD would not invest in nuclear power but in nuclear safety.

A representative of Armenia took the floor and asked Mr. Van Der Burg about his views on the perspectives of investment in solar energy, taking into account that the technology of solar panels is not developing as fast as other technologies. Mr. Van Der Burg explained that each project has its particularities and therefore would be developed at a different pace.

A representative of the NGO Green Planet, Ukraine, suggested that the OSCE could work with likeminded partners to gather the necessary support from organizations having relevant expertise and capacities. Moreover, the representative declared that his organization firmly supports the initiatives that emerged at the Rio+20 Summit concerning the need to set up a world environmental organization on the basis of UNEP and to draft an Environmental Constitution for the Earth as a common concept for global environmental protection.

Session V: Communicating environmental challenges and risks and promoting public participation in decision making

Moderator: Ambassador Robert Kvile, Permanent Representative of Norway to the OSCE

Rapporteur: Mr. Nurbek Tashbekov, Assistant, Office of the Co-ordinator of OSCE Economic and Environmental Activities

Speakers:

Ms. Aykhon Sharipova, Deputy Chairperson, Environmental Protection Committee, Tajikistan

Ms. Marta Szigeti Bonifert, Chair of ENVSEC Initiative and Executive Director of the Regional Environmental Centre for Central and Eastern Europe (REC)

Ms. Katherine Richardson, Professor, Biological Oceanography and Leader, Sustainability Science Centre, University of Copenhagen, Denmark

Mr. Dmitry Prudtskikh, Manager, Aarhus Centre in Khujand, Tajikistan

Ambassador Kvile introduced the main topics of the session. He asked participants to analyse how individuals can use the OSCE and other organizations to anchor the work on environmental issues in the society, ensuring democratic debate.

Ms. Marta Szigeti Bonifert started her presentation with an overview of the Environment and Security (ENVSEC) Initiative. ENVSEC assessments have been conducted for Eastern Europe, South Eastern Europe, the South Caucasus and Central Asia. She explained that ENVSEC's work focuses on issues such as trans-boundary natural resources, hazardous substances and practices, population pressure and climate change, information and participation.

She also listed a number of examples of ENVSEC's work on capacity building, such as the multi-media environmental education curriculum kit – Green Pack, or the Sustainable Development Academy. Among the ENVSEC Chair's priorities for 2013, Ms. Bonifert mentioned: strengthening the security dimension of ENVSEC, with particular emphasis to the risk nexus between climate, water, energy and food; consolidating and widening the scope of ENVSEC step by step to include countries neighbouring the ENVSEC regions, as well as by sharing its experience more effectively with other regions; creating a more sustainable and effective ENVSEC Initiative; sharing lessons learned and enhancing the visibility of the ENVSEC Initiative.

Ms. Katherine Richardson stressed that achieving sustainable development requires a change in perception. Societal development has, until now, been based on the assumption that the natural resources and services upon which societal development under the current model relies are essentially unlimited. However, science now tells us that this is not the case. Future societal development is dependent upon matching the human demand for resources with the global supply. A greater understanding of the current societal reaction to anthropogenic climate change and other manifestations of human perturbation of the Earth can be reached by examining the perception of the human-earth relationship in an historical perspective. Perhaps an increased focus on the underlying need for changing our perception of the human-earth relationship would motivate more action on, for example, climate change, rather than trying to communicate our scientific understanding of climate change.

Ms. Aykhon Sharipova indicated that Tajikistan acknowledges the importance of the Millennium Development Goals and considers them an important tool for poverty reduction. In this context she emphasized the relevance of mitigating risks resulting from climate change through the usage of clean and affordable energy. She added that energy supply for the population of the whole country was an important factor for economic development in Tajikistan, for poverty reduction and for the increase of the living standard. Sharipova referred to the sources of hydropower in Tajikistan, indicating that the country also supports the construction and usage of small hydropower stations (for energy supply and promotion of small businesses in the remote mountainous territories) considered as clean energy. She added that Tajikistan also uses other renewable energy sources like solar, wind and biomass. However, she pointed out that due to temporary lack of electricity and electricity interruptions, natural gas and coal were also used as sources of energy.

Because of critical shortage of bio-fuel and difficulties in its delivery to mountainous regions of Tajikistan, the population living far from electrical transmission lines may use wood as energy source. This deeply harms the forests and may cause floods, landslides and other natural disasters, interferes with the ecology of mountainous areas and leads to the destruction of flora and fauna. In efforts to develop the clean energy sector and to minimize the use of natural resources like wood, the government of Tajikistan together with civil society developed and adopted a number of respective state programs and legal documents and co-operates with international organizations in this respect. Due to the network of the established and OSCE supported Aarhus Centres, which operate in all remote areas of Tajikistan, it became possible to raise awareness and familiarize the population with short-term and mid-term programs of the Government and increase their capacity in preserving ecosystems. Ms. Sharipova expressed her view that the co-operation with the OSCE, including through the Aarhus Centres, will contribute to the preservation of natural resources and, consequently, to poverty reduction and an increase of welfare.

Mr. Dmitry Prudtskikh, Manager, Aarhus Centre in Khujand, Tajikistan, focused his presentation on promoting public participation on radioactive security in Tajikistan. He provided an overview of the work conducted by the Aarhus Centres and OSCE in promoting public participation campaigns in this field. The work of the Aarhus Centre in Khujand was based on three main areas: strategic environmental planning, focusing on radioactive security; public campaigns on nuclear safety in Taboshar city; and support for the environmental working group of the Community Council under the Head of Sughd region.

Mr. Prudtskikh added that it is important that the population identify the environmental problems they face. He stated that local population can influence environmental decision making issues, improve planning and therefore support the identification of environmental “hot spots” at local level, as well as play a role in the development of public environmental monitoring tools. He also voiced the necessity of counting on the governmental approval and funding for the implementation of local environmental strategies. In that regard, he pointed out to the necessity of having a short, mid- and long term vision of local environmental planning and implementation. Finally, he recommended continuing using mechanisms of the Aarhus Convention at local level

After the presentations the Moderator opened the floor for discussion, questions and comments.

Mr. Tytarchuk, Institute for International Research at the Ukrainian Academy of Sciences, asked Ms. Richardson about her opinion regarding a relatively new type of social science called “Environmental psychology”, which combines social science and natural resources to address issues concerning environmental changes. Then, he proposed some recommendations for the OSCE role on promoting of public participation and communication:

- Incorporating this issue into the Helsinki+40 process under the good governance agenda with practical emphasis on energy related activities;
- Broadening the scope of the so-called Track II initiatives with a view to organising some kind of OSCE Economic and Environmental Security Days prior to the Economic and Environmental Implementation Meeting;
- Establishing interaction with the Open Government Partnership Networking Mechanism, in line with the Dublin OSCE Declaration;
- Inviting civil society, academia and industry representatives to meetings of the Economic and Environmental Committee to present and discuss energy-related issues;
- Combining cross-dimensional efforts with other civil society initiatives and events under the OSCE auspices such as the Civil Solidarity Platform, NGO activities parallel to MC meetings, etc.

Ms. Richardson answered that it was essential for social science to work together with natural science to get good results. Social problems should be resolved by social scientists. She noted that in addition to economic sustainability, sustainability has components linked to environment and social aspect.

Mr. Miodrag Dakić, Energy and Climate Change Program Co-ordinator, Centre for Environment, Banja Luka, Bosnia and Herzegovina, commented on three examples of the implementation of Environmental Impact Assessments (EIA), as well as on the application of the Regional Energy Strategy (RES) for the Energy Community in Bosnia and Herzegovina, which he considers unsuccessful. He stressed that during the consultations and adoption processes of the assessments and the Strategy, the provisions of the Aarhus Convention were not respected and civil society did not have a chance to address their concerns. He expressed his hope that the revision of the Strategy will be organised in a different way. Referring to hydropower projects in BiH, Mr. Dakić signaled that in some cases there was a lack of communication among local and neighboring governments, civil society and the entities responsible of the organisation of the EIA. Concluding, Mr. Dakić regretted that almost all EIA projects got environmental permits regardless of the fact that consultations were not properly conducted.

A representative of the OSCE Centre in Bishkek shared the experience of implementing projects by the Centre on introduction and inclusion of green economy study modules into the curricula at university and high school levels.

A representative of Austria thanked Ms. Bonifert for the update on the ENVSEC initiative and noted that the Initiative is a success story where interagency co-ordination on the ground really works and where all institutions and organizations work together to create comparative advantage. The representative ensured the continued support of Austria to this Initiative. Regarding Ms. Richardson presentation, the representative expressed her view that a positive communication, that conveys the advantages of investing in raising awareness on environmental

challenges, can lead to positive results, including the generation of green jobs through the development of environmental technologies. The representative also asked Mr. Prudtskikh if Tajikistan had any experience on trans-boundary processes concerning nuclear issues.

Ms. Richardson replied to the representative of Austria that, because we are part of the environment, by helping us we help the environment and vice-versa.

Mr. Prudtskikh replied to the representative of Austria that there were regional scientific projects in Central Asia with IAEA and NATO, on the Syrdarya River Basin, on identifying heavy metals and radioactive elements in the water.

Ms. Bonifert promised to convey the comments from the representative from BiH to the OSCE colleagues working in South East Europe. She underlined that one important element of the Aarhus Centres is that they help accelerate interaction on the ground.

Ms. Richardson concluded that public participation is absolutely essential before designing a project that could impact the population. She wondered how much participation would be needed in order to be able to make a decision on global environmental issues.

Ms. Sharipova expressed the wish to continue the co-operation with international organizations and requested OSCE's support for three new Aarhus Centres.

Mr. Prudtskikh recommended the OSCE to develop new platforms of co-ordination between Central Asian countries on the use of natural resources and renewable energy sources.

The Moderator gave an example of potential conflict between energy and environment in Norway, concerning opening new areas for gas and oil exploration offshore. Based on that example he stressed that it was important that all relevant stakeholders discuss and have the possibility to express their views before taking a decision on an issue that could affect the population and the environment. He mentioned that there was a very strong link between the discussion during this Session and the Dublin Declaration on Good Governance, because good governance is about the relationship between the government and the population and about various stakeholders having access to key information and different perspectives.

Concluding Session: The OSCE's Role in Follow-up to the Forum

Moderator: Ambassador Ihor Prokopchuk, Chairman of the Permanent Council, Permanent Representative of Ukraine to the OSCE, 2013 Ukrainian OSCE Chairmanship

Rapporteur: Mr. Raul Dausa, Environmental Programme Officer, Office of the Co-ordinator of OSCE Economic and Environmental Activities

The Delegation of Ireland, on behalf of the EU, welcomed the focus on good governance issues, and indicated that it is crucial to enhance transparency in policy-making. In this regard, the representative welcomed the OSCE engagement in support of the implementation of the Aarhus Convention, as well as of other multi-stakeholder initiatives aiming at improving good governance in the extraction of natural resources, such as the EITI. In that regard, the EU indicated that it would welcome proposals for further engagement by the OSCE in the area of

good governance and transparency. In addition, the EU attached particular importance to the topic of Environment and Security and underlined that the OSCE as a security organization has a role to play in that regard. Therefore, it would welcome further deliberations in this context.

The delegation of Belarus welcomed the discussion undertaken during the First Preparatory Meeting of the 2013 OSCE Forum process, in particular on topics such as sustainable and renewable energy, energy efficiency, safeguard of critical energy infrastructures and good governance linked to developing co-operation and strengthening security. The delegate indicated that the OSCE can become an important forum for co-operation among the different players involved in the development of renewable energy and access to new technologies. In that regard, the delegate added that Belarus was interested in seeing the dialogue in this area pursued within the OSCE.

The delegation of the Russian Federation welcomed the discussions undertaken during the two-day meeting but suggested to balance the speakers' presentations to avoid too much focus given to one particular sub-region in the OSCE area. In this regard, the delegate encouraged the EU, Canada and the United States to share their best practices in promoting energy efficiency in order to learn from potential challenges they faced in implementing sustainable energy initiatives.

The delegation of the United States of America expressed the relevance of the OSCE as a neutral platform for establishing an energy dialogue without politicizing the discussion and commended the OSCE work with regard to the Aarhus Centres. The United States delegation supported the creation of a mechanism to collect data and exchange new technologies to enhance co-operation in case of natural disasters, oil spills and terrorist attacks against critical energy infrastructure. Furthermore, the delegate indicated that the good governance principles set forth by the EITI should be included in the Economic and Environmental Forum discussions and also in the Economic and Environmental Dimension Implementation Meeting.

The Delegation of Azerbaijan praised the importance of co-operation and exchange of best practices on sustainable energy and good governance in the field of extractive industries. After summarizing the main points of the background paper and subsequent discussions, the Azerbaijani delegation noted that nuclear energy is an important topic to discuss in the Economic and Environmental Forum process and expressed its willingness to discuss this topic in future Forum meetings.

The Delegation of Spain stressed the importance of a stronger involvement of international finance institutions and the private sector in the Forum process.

The Delegation of Serbia explained its national initiative on energy savings and energy infrastructure, as well as plans to promote a green economy. The delegate also expressed the view that the Forum meeting was not only about renewing commitments, but also about taking responsibility for action for a better world.

The Delegation of Kyrgyzstan welcomed the outcome of the meeting as well as the support provided by international financial institutions to promoting sustainable energy projects in Kyrgyzstan.

The Moderator, Ambassador Prokopchuk, concluded the session and summarized the main issues linking environment and energy issues which, if not tackled properly and timely, can become an issue of serious global concern. The Ukrainian Chairmanship expressed the view that the OSCE offers a relevant platform for sharing experiences, different views and best practices, which can advance partnerships among regions and countries. The general objective of the Forum process is to clearly define the role the OSCE can play, as a platform for co-operation, in the fields of energy and environment. The outcome of the EEF meetings must be beneficial to all participating States. The Moderator invited all delegations to the Second Preparatory Meeting of the 21st OSCE Economic and Environmental Forum, which will take place on 16-17 April in Kyiv.

Vienna, 30 January 2013

21ST OSCE ECONOMIC AND ENVIRONMENTAL FORUM

“Increasing stability and security: Improving the environmental footprint of energy-related activities in the OSCE region”

FIRST PREPARATORY MEETING

4-5 February 2013, Vienna

Venue: OSCE Congress Centre, Hofburg, Heldenplatz, 1010 Vienna,
NeuerSaal, 2nd Floor

AGENDA

Monday, 4 February

09.30 – 11.00 **Opening Session: The linkages between energy and environment and their impact on security and co-operation** (*Open to the Press*)

Opening Statements:

- **Ambassador Ihor Prokopchuk**, Chairman of the Permanent Council, Permanent Representative of Ukraine to the OSCE, 2013 Ukrainian OSCE Chairmanship
- **Ambassador Lamberto Zannier**, OSCE Secretary General
- **Mr. Halil Yurdakul Yigitgüden**, Co-ordinator of OSCE Economic and Environmental Activities

Keynote Speeches:

- **Mr. Taizo Nishikawa**, Deputy to the Director General, United Nations Industrial Development Organization (UNIDO)
- **Mr. Sebastian Winkler**, Director for Europe, Global Footprint Network

Statements by Delegations / Discussion

11.00 – 11.30 *Coffee/Tea break (Press Conference)*

11.30 – 13.00

Session I: Environmental challenges and opportunities of energy consumption

Selected topics:

- Local effects of fossil fuel consumption: air pollution and existing measures to reduce its harmful effects on population
- Global effects of fossil fuels: climate change as a threat to security and as an opportunity for international co-operation
- Energy efficiency: policy measures to promote energy savings

Moderator: Ambassador Ol'ga Alayerová, Chair of the Economic and Environmental Committee, Permanent Representative of Slovakia to the OSCE

Rapporteur: Ms. Dana Bogdan, Project Assistant, Office of the Co-ordinator of OSCE Economic and Environmental Activities

Speakers:

- **Mr. David Stanners**, Head of International Co-operation, European Environment Agency (EEA)
- **Mr. Dennis Tänzler**, Head of Climate & Energy Policies, Adelphi Research, Germany
- **Ms. Gabriela Prata Dias**, Senior Expert for energy efficiency and related environmental questions, Energy Charter Secretariat

Discussion

13.00 – 14.30

Lunch break

14.30 – 16.00

Session II: Environmental challenges and opportunities of energy production and transportation

Selected topics:

- Fossil fuel extraction and environment
- Hydropower and environment
- Environmental risks of fossil fuel transportation, including best practices on oil spill prevention and preparedness

Moderator: Ambassador Thomas Greminger, Permanent Representative of Switzerland to the OSCE

Rapporteur: Ms. Nino Makashkhia, Associate Environmental Affairs Officer, Office of the Co-ordinator of OSCE Economic and Environmental Activities

Speakers:

- **Mr. Werner Floegl**, Vice-President, International Commission on Large Dams (ICOLD)

- **Mr. Bosko Kenjic**, Head of Water Resources Department, Ministry of Foreign Trade and Economic Relations, Bosnia and Herzegovina
- **Mr. Peter Taylor**, Manager, Oil Spill Preparedness Regional Initiative (OSPRI)
- **Ms. Shynar Izteleuova**, Director of the Atyrau Aarhus Centre, Kazakhstan

Discussion

16.00 – 16.30 Coffee/Tea break

16.30 – 18.00 Session II - Continuation: Environmental challenges and opportunities of energy production and transportation

Selected topics:

- Production of electricity and environment
- Environmental concerns of electricity distribution and opportunities for co-operation on electricity markets
- Efforts to protect critical energy infrastructure

Moderator: Ambassador Eoin O'Leary, Permanent Representative of Ireland to the OSCE
Rapporteur: Ms. Gohar Ghazinyan, National Officer, Environmental Dimension, OSCE Office in Yerevan

Speakers:

- **Mr. Janez Kopač**, Director, Energy Community
- **Dr. Majid Khodjaev**, Executive Director, CA Regional Center for Renewable Energy, Uzbekistan
- **Mr. Julijus Grubliauskas**, Energy Security Officer, North Atlantic Treaty Organization (NATO)
- **Ms. Nurzat Abdyrasulova**, Director, Energy and Environmental Expert at Civic Foundation UNISON, Kyrgyzstan

Discussion

18.30 Reception hosted by Mr. Halil Yurdakul Yigitgüden, Co-ordinator of OSCE Economic and Environmental Activities (Hofburg - Winter Garden)

Tuesday, 5 February

09.30 – 11.00 Session III: Promoting sustainable management of energy resources

Selected topics:

- Policy instruments for promoting sustainable energy
- Good governance in the resource extraction sector
- Preventing negative legacies of energy-related activities, including mining operations

Moderator: Mr. Matthew Murray, Deputy Assistant Secretary of Commerce for Europe and Eurasia, International Trade Administration Department, United States of America

Rapporteur: Mr. Richard Wheeler, Senior Programme Officer, Office of the Co-ordinator of OSCE Economic and Environmental Activities

Speakers:

- **Mr. Jonas Moberg**, Head, Extractive Industries Transparency Initiative Secretariat (EITI)
- **Professor Thomas Johansson**, Co-Chair of the Global Energy Assessment, International Institute for Applied Systems Analysis (IIASA) and Professor at the International Institute for Industrial Environmental Economics, Lund University, Sweden
- **Mr. Stepan Kudria**, Deputy Director, Institute of Renewable Energy, National Academy of Sciences, Ukraine
- **Mr. Gan-Ochir Ser-Od**, Senior Specialist of Department of Coordination of Policy Implementation, Ministry of Mining, Mongolia

Discussion

11.00 – 11.30 Coffee/Tea break

11.30 – 13.00 Session IV: Co-operation between public and private sectors and international organizations

Selected topics:

- Strengthening public-private co-operation on the way to the Green Economy
- Engaging private and international financial institutions and providing incentives for the business sector
- The role of international organizations in providing technical assistance

Moderator: Ambassador Mykola Melenevskiy, Ambassador-at-large on environmental issues, Ministry of Foreign Affairs of Ukraine, 2013 Ukrainian OSCE Chairmanship

Rapporteur: Mr. Elton Qendro, Project Assistant, Governance in Economic and Environmental Issues Department, OSCE Presence in Albania

Speakers:

- **Mr. Alistair Clark**, Managing Director, Environment and Sustainability, European Bank for Reconstruction and Development (EBRD)
- **Mr. Markus van der Burg**, Managing Director, Conning Asset Management Limited, United Kingdom
- **Mr. Martin Krause**, Regional Practice Leader for Environment, Climate & Energy, Regional Centre for Europe and CIS, United Nations Development Programme (UNDP)

Discussion

13.00 – 14.30 Lunch break

14.30 – 16.00 Session V: Communicating environmental challenges and risks and promoting public participation in decision making

Selected topics:

- Improving the narrative to enhance dialogue between science, political decision makers, the industry and the civil society
- Best practices in public outreach on environmental risks, including at local level
- Awareness raising, education and capacity building

Moderator: Ambassador Robert Kvile, Permanent Representative of Norway to the OSCE

Rapporteur: Mr. Nurbek Tashbekov, Assistant, Office of the Co-ordinator of OSCE Economic and Environmental Activities

Speakers:

- **Ms. Aykhon Sharipova**, Deputy Chairperson, Environmental Protection Committee, Tajikistan
- **Ms. Marta Szigeti Bonifert**, Chair of ENVSEC Initiative and Executive Director of the Regional Environmental Centre for Central and Eastern Europe (REC)
- **Ms. Katherine Richardson**, Professor, Biological Oceanography and Leader, Sustainability Science Centre, University of Copenhagen, Denmark
- **Mr. Dmitry Prudtskikh**, Manager, Aarhus Centre in Khujand, Tajikistan
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Discussion

16.00 – 16.30 Coffee/Tea break

16.30 – 18.00 Concluding Session: The OSCE's Role in Follow-up to the Forum

Concluding Debate

- Identifying priority areas for future engagement
- Ways and means to tackle existing gaps and strengthen co-operation

Moderator: Ambassador Ihor Prokopchuk, Chairman of the Permanent Council, Permanent Representative of Ukraine to the OSCE, 2013 Ukrainian OSCE Chairmanship

Rapporteur: Mr. Raul Daussa, Environmental Programme Officer, Office of the Co-ordinator of OSCE Economic and Environmental Activities

ANNEXES



922nd Plenary Meeting

PC Journal No. 922, Agenda item 4

DECISION No. 1047
THEME, AGENDA AND MODALITIES FOR THE
TWENTY-FIRST ECONOMIC AND ENVIRONMENTAL FORUM

The Permanent Council,

Pursuant to Chapter VII, paragraphs 21 to 32, of the Helsinki Document 1992; Chapter IX, paragraph 20, of the Budapest Document 1994; Ministerial Council Decision No. 10/04 of 7 December 2004; Ministerial Council Decision No. 4/06 of 26 July 2006; Permanent Council Decision No. 743 of 19 October 2006; Permanent Council Decision No. 958 of 11 November 2010; and Permanent Council Decision No. 1011 of 7 December 2011,

Relying on the OSCE Strategy Document for the Economic and Environmental Dimension (MC(11).JOUR/2) and Ministerial Council decisions related to the environment, energy and water management,

Building on the outcomes of past Economic and Environmental Forums, as well as on the results of relevant OSCE activities, including follow-up activities,

Decides that:

1. The theme of the Twenty-First Economic and Environmental Forum will be: "Increasing stability and security: Improving the environmental footprint of energy-related activities in the OSCE region";
2. The Twenty-First Economic and Environmental Forum will consist of three meetings, including two preparatory meetings, one of which will take place outside of Vienna. The concluding meeting will be held from 11 to 13 September 2013 in Prague. These arrangements shall not set a precedent for future meetings of the Economic and Environmental Forums. The Office of the Coordinator of OSCE Economic and Environmental Activities, under the guidance of the OSCE Chairmanship for 2013, will organise the above-mentioned meetings;
3. The agenda of the Forum will focus on the following topics:
 - Addressing environmental challenges and risks stemming from energy-related activities and their security implications, including through sustainable management of energy resources;
 - Improving the environmental footprint of energy production, transportation and consumption in the OSCE area including through strengthening the co-operation between the participating States on promotion of green economy, new and renewable sources of energy and energy efficiency, as well as good governance and transparency in energy field and public-private partnerships;
4. The agendas of the Forum meetings, including timetables and themes of the working sessions, will be proposed and determined by the OSCE Chairmanship for 2013, after being agreed upon by the participating States in the Economic and Environmental Committee;

5. Moreover, having a view to its tasks, the Economic and Environmental Forum will review the implementation of OSCE commitments in the economic and environmental dimension. The review, to be integrated into the agenda of the Forum, will address OSCE commitments relevant to the theme of the Twenty-First Economic and Environmental Forum;

6. The discussions of the Forum should benefit from cross-dimensional input provided by other OSCE bodies and relevant meetings, organised by the Office of the Co-ordinator of OSCE Economic and Environmental Activities, under the guidance of the OSCE Chairmanship for 2013, and deliberations in various international organizations;

7. Moreover, having a view to its tasks, the Economic and Environmental Forum will discuss current and future activities for the economic and environmental dimension, in particular the work in implementation of the OSCE Strategy Document for the Economic and Environmental Dimension;

8. The participating States are encouraged to be represented at a high level, by senior officials responsible for shaping international economic and environmental policy in the OSCE area. The participation in their delegations of representatives from the business and scientific communities and of other relevant actors of civil society would be welcome;

9. As in previous years, the format of the Economic and Environmental Forum should provide for the active involvement of relevant international organizations and encourage open discussions;

10. The following international organizations, international organs, regional groupings and conferences of States are invited to participate in the Twenty-First Economic and Environmental Forum: Asian Development Bank; Barents Euro-Arctic Council; Organization of the Black Sea Economic Co-operation; Central European Initiative; Collective Security Treaty Organization; Commonwealth of Independent States; Conference on Interaction and Confidence-Building Measures in Asia; Council of Europe; Council of the Baltic Sea States; Economic Cooperation Organization; Energy Charter Treaty; Energy Community; Eurasian Economic Commission; Eurasian Economic Community; European Bank for Reconstruction and Development; European Environment Agency; European Investment Bank; Secretariat of the Extractive Industries Transparency Initiative; Food and Agriculture Organization of the United Nations (FAO); European Investment Bank; Intergovernmental Commission TRACECA (Transport Corridor Europe-Caucasus-Asia); Gas Exporting Countries Forum(GECF); International Atomic Energy Agency; International Energy Agency; International Energy Forum; International Fund for Agricultural Development (IFAD); International Institute for Applied Systems Analysis (IIASA); International Renewable Energy Agency(IRENA); International Fund for Saving the Aral Sea; International Labour Organization; International Maritime Organisation; International Monetary Fund; International Partnership for Energy Efficiency Cooperation (IPEEC); International Rail Transport Committee; International Road Transport Union; International Road Federation; International Union of Railways; International Transport Forum; North Atlantic Treaty Organization; Organization of the Petroleum Exporting Countries (OPEC); OPEC Fund for International Development(OFID); Organisation for Economic Co-operation and Development (OECD); Organization for Democracy and Economic Development – GUAM; Organization of Islamic Cooperation; Regional Cooperation Council; Renewable Energy and Energy Efficiency Partnership(REEEP); Russian-German Energy Agency (RUDEA); Secretariat of the United Nations Convention to Combat Desertification (UNCCD); Southeast European Cooperative Initiative; Secretariat of the United Nations Framework Convention on Climate Change; Shanghai Cooperation Organisation; United Nations Conference on Trade and Development; United

Nations Development Programme; United Nations Economic Commission for Europe; United Nations Economic and Social Commission for Asia and the Pacific; United Nations Commission on Sustainable Development; United Nations Environment Programme; United Nations Human Settlements Programme (UN HABITAT); United Nations Industrial Development Organization; UN Women; United Nations Special Programme for the Economies of Central Asia; World Bank Group; World Health Organization (WHO); World Meteorological Organization (WMO); World Trade Organization (WTO) and other relevant organizations;

11. The OSCE Partners for Co-operation are invited to participate in the Twenty-First Economic and Environmental Forum;

12. Upon request by a delegation of an OSCE participating State, regional groupings or expert academics and business representatives may also be invited, as appropriate, to participate in the Twenty-First Economic and Environmental Forum;

13. Subject to the provisions contained in Chapter IV, paragraphs 15 and 16, of the Helsinki Document 1992, the representatives of non-governmental organizations with relevant experience in the area under discussion are also invited to participate in the Twenty-First Economic and Environmental Forum;

14. In line with the practices established over past years with regard to meetings of the Economic and Environmental Forum and their preparatory process, the Chairperson of the Twenty-First Economic and Environmental Forum will present summary conclusions and policy recommendations drawn from the discussions. The Economic and Environmental Committee will further include the conclusions of the Chairperson and the reports of the rapporteurs in its discussions so that the Permanent Council can take the decisions required for appropriate policy translation and follow-up activities.

Office of the Co-ordinator of OSCE
Economic and Environmental Activities

Vienna, 31 January 2013

21st OSCE Economic and Environmental Forum
“Increasing stability and security: Improving the environmental footprint of
energy-related activities in the OSCE region”

BACKGROUND PAPER ON THE THEME OF THE FORUM

In accordance with PC.DEC/1047 the theme of the 21st Economic and Environmental Forum (EEF) is “Increasing stability and security: Improving the environmental footprint of energy-related activities in the OSCE region”.

This paper was prepared with the goal of presenting to participating States some of the main issues related to this year’s Forum process and recall the relevant OSCE documents and meetings.

The aim of the 2013 EEF process is to focus on the environmental impact of issues related to energy production, transportation and consumption in a way which is relevant to all participating States (pS). Indeed, environmental degradation as a consequence of energy-related activities can have an impact on security. Energy activities may cause an environmental situation that negatively impacts health, soil and water quality, loss of biodiversity and in the long run can become an impediment for sustainable growth and development as well as a source of conflict.

In adopting the PC.DEC/1047 participating States agreed that the EEF should focus on:

- Addressing environmental challenges and risks stemming from energy-related activities and their security implications, including through sustainable management of energy resources; and on:
- Improving the environmental footprint of energy production, transportation and consumption in the OSCE area including through strengthening the co-operation between the participating States on promotion of green economy, new and renewable sources of energy and energy efficiency, as well as good governance and transparency in the energy field and public-private partnerships.

As such, discussions which will be held throughout the year will be based on the relevant OSCE documents adopted by the pS, including MC.DEC/12/06 on *Energy Security Dialogue in the OSCE*; the 2007 *Madrid Declaration on Environment and Security* (MC.DOC/4/07), MC.DEC/6/07 *Protecting Critical Energy Infrastructure from*

Terrorist Attack; MC.DEC/6/09 on *Strengthening Dialogue and Co-operation on Energy Security*, the 2010 *Astana Summit Commemorative Declaration*, and the 2012 *Dublin Ministerial Declaration on Strengthening Good Governance and Combating Corruption, Money-Laundering and the Financing of Terrorism* (MC.DOC/2/12).

Moreover the 21st EEF represents the logical continuation of an on-going dialogue on energy issues in the OSCE framework also based on the recommendations of previous EEF meetings and the follow-up activities implemented by the Office of the Co-ordinator of OSCE Economic and Environmental Activities (OCEEA) and the OSCE field operations. The 1998 Economic Forum (under the Polish Chairmanship) and the 2011 EEF (under the Lithuanian Chairmanship) focused on energy while some energy-related topics were also discussed in other years, such as the issue of oil spills prevention during the 2008 Finnish Chairmanship. In recent years, the OSCE has conducted and co-organised meetings and conferences on “Strengthening Energy Security in the OSCE Area” (July 2009, Bratislava), “Strengthening Regional Co-operation in Central Asia for Promoting Stable and Reliable Energy within Eurasia” (May 2010, Ashgabat), “Assessing the OSCE’s Future Contribution to International Energy Security Co-operation” (September 2010, Vilnius), and the Chairmanship Conference “Integrating Global Energy Markets – Providing Energy Security” (November 2011, Ashgabat).

OSCE attention to this topic fits into the broader context: In December 2010, recognizing the importance and urgency of energy challenges, the United Nations General Assembly declared 2012 the International Year of Sustainable Energy for All. The UN Secretary-General has launched the Sustainable Energy for All Initiative (SE4ALL), which seeks to identify and mobilize action by all stakeholders in support of energy access, energy efficiency and increasing the share of renewable energy.

1. Environment and energy links

Significant progress has been made in the OSCE region to protect its natural resources and the environment, resulting in improved urban air quality, greater use of renewable energy, improved water and land management, increased protected areas and phasing out of ozone depleting substances. However, in many countries, environmental issues still do not have the priority they deserve in view of their potential consequences for human health, well-being and future economic growth.

Reducing the environmental impact of energy-related activities is one of the challenges faced by OSCE participating States. The production, transportation and consumption of energy can negatively impact the environment in several ways: for example, the extraction and transportation of fossil fuels (oil, gas and coal) can cause air, land and water pollution, and their consumption can cause health problems and contribute to climate change.

Additionally, natural disasters can affect the security and well-being of the population in the OSCE region: earthquakes, extreme weather events like floods, storms, sea surges, heat waves and droughts can pose a threat to energy infrastructure with consequences on energy demand and supply.

Improving the environmental footprint of energy-related activities offers an avenue for co-operation among the OSCE participating States. The promotion of renewable energy sources (sharing technology, legislative frameworks and regulatory examples), co-operation on best practices on resource extraction, environmental impact assessment and transparency in the resource sector are among the most effective ways to reduce the adverse environmental impact of energy. The OSCE includes net energy producers and exporters as well as transit countries and is therefore well-placed to act as a platform for dialogue on energy-related issues.

2. Environmental risks and challenges of energy-related activities

Air pollution through the release of substances such as dust, smoke and harmful gases caused i.a. by the combustion of fossil fuels, can pose a serious health hazard. It is a risk factor for multiple health conditions. The biggest effect of air pollution on the environment is the formation of “acid rain”, which can affect forests, soils, and water bodies, as well as buildings and infrastructure.

According to the Intergovernmental Panel on Climate Change (IPCC), the environmental and social costs of **climate change** such as sea-level rise, water scarcity, reduced food supplies, and damaged ecosystems are increasing. Balancing energy security and climate change might prove to be one of the greatest challenges of the 21st century: achieve an adequate, reliable, and affordable energy supply, while at the same time reducing harmful emissions into the atmosphere. Most of the world’s energy still comes from burning fossil fuels such as coal, oil, and natural gas, which are major sources of greenhouse gases and continued dependence on these fuels will jeopardize our climate. Low-carbon replacements for these fuels are urgently needed, while ensuring that actions to reduce emissions will not destabilize the current energy system. The challenge the world must figure out is how to achieve energy security while at the same time protect the Earth’s climate.

Oil spills can have devastating impact on the ecosystems seriously disrupting ecological services provided by them. As experience shows, they may also have an impact on economic development. There are several international legal frameworks which are supporting countries to combat this risk. Many of the OSCE participating States are Parties to the International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC 1990). It provides a framework for international co-operation and mutual assistance in preparing for and responding to the major oil pollution incidents in maritime environment. Since 2007 the OSCE has been supporting a number of activities aiming at enhancing international oil spill preparedness and response through the promotion, ratification and implementation of key UN conventions.

State legislatures and natural resource managers have traditionally addressed **water and energy** as two separate issues. However, water and energy are deeply connected and sustainable management of either resource requires consideration of the other. Detailed understanding of the interdependencies of water and energy systems and of new technologies to reduce water use and loss, advancing water and energy system forecasting, scientific innovation, and the implementation of management systems are necessary. The involvement of state lawmakers and constituents in this process is critical

given their responsibility in formulating policy, convening stakeholders, facilitating negotiations, and ratifying agreements.

The safety of dams and other water control facilities, particularly regarding trans-boundary rivers, is a matter of concern. Ageing dams and their inadequate maintenance can result in increased risks to life, human health, property and the environment. Effective national regulatory frameworks for dam safety and sub-regional collaboration on dam safety are therefore crucial.

The considerable damage brought on by hurricanes in recent years illustrates the **threat posed to energy infrastructures by natural disasters**. Earthquakes, tsunamis and volcanic activities, which are regularly encountered by a number of OSCE participating States, could potentially affect energy networks. The disruption to energy infrastructure as a result of natural disasters has negative effects on essential areas vital to human well-being. Earthquakes have the potential to knock out local electricity supplies and hamper rescue efforts. Power grid components are especially vulnerable since most of the critical equipment is exposed in surface level facilities which can hardly be shielded against severe natural occurrences.

In recent years, the number of frequent catastrophic **floods** has increased and their economic, social and environmental impacts have worsened, also leading to increased casualties. The expansion of climate variability and expected climatic changes may exacerbate this trend. Floods very often have trans-boundary dimensions, so that risk management can only succeed through a cooperative and coordinated approach.

Mining operations have a large potential to seriously impact the environment and there is a corresponding need for appropriate forms of control. Abandoned unreclaimed mining areas tend to be used as dumping ground for waste – including toxic waste, which exacerbates the problem. Impacts on the environment stemming from mining may also have trans-boundary effects and potentially cause tensions and even security problems in the affected regions.

Environmental impact assessment is a tool to address the concerns and contribute to reducing the negative environmental effects of new activities. The 1991 UN Convention on Environmental Impact Assessment in a Trans-boundary Context, the so-called Espoo Convention, sets out the obligations of Parties to assess the environmental impact of certain activities at an early stage of planning. It also lays down the general obligation of States to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries, including energy-related activities.

3. Opportunities for environmental co-operation on energy-related activities

For the past decades the use of **alternative energy sources**, particularly **renewable energy**, has increased. Against the background of high and unstable prices for fossil fuels and increased environmental considerations, countries have put in place energy diversification strategies with a view to increase energy independence and security. National programmes for renewable energy development have been adopted in more than 60 countries of the

world. Renewable energy has become a base for regional and/or local energy supply, also through public-private partnerships.

While traditional types of renewable energy sources, such as hydropower, wood and wood waste biomass, still dominate, a remarkable growth in the use of non-traditional renewable energy sources can be observed: solar and geothermal energy, energy of wind and waste, and

tidal and wave energy are becoming increasingly relevant and important. This development has opened opportunities for engaging private and international financial institutions, provided incentives for the business sector and led to price decreases for renewable energy technologies.

Energy efficiency and energy savings as way of managing and restraining the growth in energy consumption offer powerful and cost-effective tools for achieving a sustainable energy future. According to the International Energy Agency, improvements in energy efficiency can reduce the need for investment in energy infrastructure, cut energy bills, improve health, increase competitiveness and improve consumer welfare. Environmental benefits can also be achieved by the reduction of greenhouse gases emissions and local air pollution. Energy security – the uninterrupted availability of energy sources at an affordable price – can also profit from improved energy efficiency by decreasing the reliance on imported fossil fuels.

The OSCE pS have repeatedly supported the exchange of best practices and capacity building on energy efficiency and renewable energy, an engagement that is continuing. The Rio+20 Outcome document “The Future We Want” reaffirmed support for increased use of renewable energy sources and other low-emission technologies, and the sustainable use of traditional energy resources and recognized that improving energy efficiency, increasing the share of renewable energy, cleaner and energy-efficient technologies are important for sustainable development, including in addressing climate change

Good governance is key for developing appropriate natural resource management policies. There are a number of international initiatives in this field. The 2006 G-8 St. Petersburg Principles on Global Energy Security include a strong emphasis on the importance of transparency and predictability. The Extractive Industries Transparency Initiative (EITI) is another example which aims to strengthen governance by improving transparency and accountability in the extractives sector and which supports improved governance in resource-rich countries through the verification and full publication of company payments and government revenues from oil, gas and mining.

In support of the United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention), the OSCE, since 2002, has supported the establishment of Aarhus Centres and Public Environmental Information Centres. As of January 2013, there are 41 OSCE-supported Aarhus Centres in 12 countries (Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Montenegro, Serbia, Tajikistan and Turkmenistan). **Aarhus Centres** provide a space where the public and governments can come together to discuss and take action on their

shared responsibility for all issues concerning environmental governance including challenges stemming from energy-related activities.

4. Some suggested goals of discussions during the Forum process:

- Promote co-operation and exchange of best practices on national legislation and policies to prevent environmental risks from energy-related activities;
- Enhance co-operation and exchange of best practices to promote renewable energy, energy efficiency and energy savings, fiscal incentives and technology transfer;
- Promote and support environmental governance, public participation in decision making, the Aarhus Convention and Aarhus Centres;
- Strengthen public-private co-operation on the way to a “Green Economy”, contribute to engaging private and international financial institutions and providing incentives for the business sector;
- Support existing multilateral and UN processes for increased co-operation on issues such as: air pollution, climate change, oil spills, water and energy issues, dam safety, natural and man-made disaster prevention and risk reduction, legacies of energy-related activities as well as sustainable energy;
- Promote good governance in the energy sector and sustainable management of energy resources;
- Promote technology transfer initiatives and mechanisms within and between countries, promote co-operation on research and development for new technologies.



EEF.GAL/13/13
6 September 2013
ENGLISH only

CHAIRMANSHIP FOOD-FOR-THOUGHT PAPER

Towards Energy Sustainability – Advancing the OSCE Energy Dialogue in the context of the OSCE Economic and Environmental Forum

“Increasing stability and security: Improving the environmental footprint of energy-related activities in the OSCE region”

Purpose

The present paper aims at stimulation discussions and eliciting reactions, comments and suggestions from Delegations and the participants in the Concluding Meeting of the 21st OSCE Economic and Environmental Forum (Prague, 11-13 September 2013) dedicated to the theme of “*Increasing stability and security: Improving the environmental footprint of energy-related activities in the OSCE region*”*. It should contribute to orienting the Forum’s deliberations towards concrete and viable recommendations for the OSCE, and support the consensus building process. The discussions at the Forum may result in an expression of both renewed political will and commitment by the participating States to address the environmental impact of energy-related activities, and produce ideas regarding concrete follow-up activities.

Building on the elements included in this Food for Thought paper, the OSCE participating States may consider taking further steps that provide guidelines for the future engagement of the Organization in addressing the links between energy and the environment and advancing energy sustainability.

The OSCE and its Partners for Co-operation may consider strengthening their dialogue, co-operation and engagement with regard to the topic of the 21st Economic and Environmental Forum

The OCEEA and the OSCE Field Operations may find inspiration for developing and implementing follow-up activities.

Energy issues have always been on the OSCE’s agenda. The **1975 Helsinki Final Act** refers to expanding mutually beneficial co-operation on “*new technologies of production, transport and distribution of energy aimed at improving the use of existing fuels and sources of hydroenergy, as well as research in the field of new energy sources, including nuclear, solar*

*This paper is based on the main conclusions and recommendations stemming from this year’s EEF process, namely the preparatory meetings in Vienna (4-5 February 2013) and Kyiv (16-17 April 2013). The Consolidated Summaries (EEF.GAL/8/13 and EEF.GAL/10/13) of the respective preparatory meetings provide the complete picture of what has been discussed and proposed there.

and geothermal energy”, as well as with regard to “research on new technologies and equipment designed in particular to reduce energy consumption and to minimize or eliminate waste”.

Later on, the **2003 Maastricht Strategy Document for the Economic and Environmental Dimension** recognizes that *“a high level of energy security requires a predictable, reliable, economically acceptable, commercially sound and environmentally friendly energy supply, which can be achieved by means of long-term contracts in appropriate cases”* and encourages *“energy dialogue and efforts to diversify energy supply, ensure the safety of energy routes, and make more efficient use of energy resources”* and expresses support for the *“further development and use of new and renewable sources of energy”*.

Three Ministerial Council Decisions refer specifically to energy related commitments, namely the Brussels MC.DEC/12/06 on “Energy Security Dialogue in the OSCE”, Madrid MC.DEC/06/07 on “Protecting Critical Energy Infrastructure from Terrorist Attack” and Athens MC.DEC/6/09 on “Strengthening Dialogue and Co-operation on Energy Security in the OSCE Area”.

The 2010 Astana Commemorative Declaration – Towards a Security Community states that *“Our energy security dialogue, including on agreed principles of our co-operation, must be enhanced”*.

Following the tasking in the Athens MC.DEC/6/09, the OSCE Secretary General, in October 2010, presented a “Report Concerning the Complementary Role of the OSCE in the Field of Energy Security”(RC.GAL/21/10). The report identifies a number of areas for possible OSCE engagement, including good governance and transparency, threats to critical energy infrastructure, confidence building and early warning, sustainable energy solutions, and the linkages between energy security and climate change.

The 2007 “Madrid Declaration on Environment and Security” (MC.DOC/4/07) refers to the potential impact on security of environmental challenges. It also recognizes that climate change is a long-term challenge and acknowledges that the OSCE, as a regional security organization under Chapter VIII of the UN Charter, has a complementary role to play within its mandate in addressing this challenge in its specific region.

In recent years energy and environmental issues have been discussed in a number of high level conferences as well as expert meetings organized by the OSCE. The Greek Chairmanship of the OSCE held the Conference “Security Implications of Climate Change in the OSCE Region” in October 2009, where links between climate change, energy and environment were addressed. Energy and environmental issues also featured on the agenda of the 2010 Review Conference and of the 2011 and 2012 Economic and Environmental Dimension Implementation Meetings.

At the Economic and Environmental Committee meeting of March 2013, OSCE delegations and experts, including from the private sector, shared their views on the Non-nuclear Critical Energy Infrastructures Protection, a topic complementary to the theme of the 21st Economic and Environmental Forum.

Specific energy related aspects – namely sustainable energy – have been discussed in the context of the 19th Economic and Environmental Forum in 2011. In order to ensure continuity, links could also be sought with the priorities announced by the incoming Swiss and Serbian Chairmanships and the theme of the 22nd Economic and Environmental Forum “Responding to environmental challenges with a view to promoting cooperation and security in the OSCE area (PC.DEC/1088).

The international context

In recent years, energy related issues and their impact on the environment have emerged to the forefront of international debate. At national level, they are often considered issues of primary importance. International organizations and civil society actors have started to pay increased attention to these questions. It is generally acknowledged that energy and environmental issues can become a source of tension or conflict, but also present ample opportunities for co-operation. The OSCE may play a useful role in fostering such cooperation in a complimentary manner.

When discussing and addressing energy and environmental issues, the OSCE should coordinate, engage and closely co-operate with other international organizations active in this field. It should, *inter alia*, continue and enhance co-operation with partner organizations in the Environment and Security (ENVSEC) Initiative, the Vienna Energy Club, as well as with other stakeholders such as the UN (i.e. United Nations Sustainable Energy for All initiative), European Union, G8, G20, International Energy Agency, International Renewable Energy Agency (IRENA), Energy Charter Treaty, and Extractive Industries Transparency Initiative (EITI). Throughout the Forum meetings, the collaboration with relevant international organizations has been strongly encouraged. The OSCE should seek to play a meaningful role and effectively utilize its comparative advantages.

Possible key conclusions of the 21st Economic and Environmental Forum:

- There is a link between energy-related activities and their impact on the environment at local, regional and international level.
- The mismanagement of natural resources, including energy resources, contributes to environmental degradation and can cause climate change, curtail economic growth and threaten stability and security;
- With increasing energy demand, the impact of energy production, transportation and consumption on the environment is likely to increase. The development of renewable sources of energy and the need for cleaner traditional energy sources offer opportunities to counter this trend.
- Renewable energy sources contribute to reducing air pollution and greenhouse gas emissions. They also offer opportunities for local energy production, thus contributing to expanding energy access to remote areas, as well as to jobs creation and economic growth.
- Affordable, reliable and sustainable energy is a precondition for sustainable economic growth and development.

- The environmental footprint of energy-related activities may be of transboundary nature;
- Addressing energy and environmental challenges requires participation of all relevant stakeholders, including civil society, business, financial institutions, international organizations and academia.

Furthermore, when defining the OSCE's role in the energy field it should be taken into consideration that:

- All OSCE participating States - energy producing, consuming and transit countries - have a common interest in promoting global energy sustainability.
- The OSCE participating States share a common interest in stable, transparent, predictable energy markets.
- The OSCE participating States have a common interest in reducing the negative impacts of energy related activities on the environment.
- Energy sustainability depends on co-operation on renewable energy sources, energy efficiency, technological innovation and transfer of know-how, as well as partnerships among key stakeholders.

Recommendations for future actions

Based on the discussions at the 21st EEF, the participating States could consider identifying a set of areas directing the future engagement of the Organization in addressing the link between energy, the environment and security, and advancing energy sustainability.

Thus the OSCE can

- Continue to serve as a **platform for a broad dialogue, co-operation**, exchange of information and sharing of best practices, *inter alia*, on renewable energy, energy efficiency, new technologies, technology transfer, green growth, and appropriate legislative frameworks, involving its participating States, the Partners for Co-operation, as well as all relevant stakeholders;
- Contribute to **fostering international co-operation**, *inter alia*, through supporting relevant international and regional **legal instruments**, conventions and protocols related to the impact of energy related activities on the environment, and facilitate the **implementation of existing agreements** by participating States;
- Promote sustainable management of energy resources and foster **trans-boundary environmental co-operation** to strengthen security and stability;
- Address **cross-dimensional aspects** related to energy and the environment, such as, *inter alia*, the protection of non-nuclear **critical energy infrastructure** including with respect to natural and man-made disasters or disruptions;
- Support the development and implementation of **national strategies, policy and regulatory frameworks** to prevent the adverse environmental impact of energy-related activities, to increase energy diversification and the use of renewable energy resources, as well as energy efficiency as a key factor of sustainability;
- Promote **modernization and technological innovation** in the energy sector, in particular with a view to enhancing environmental sustainability and reducing/minimizing the environmental impact/footprint of energy related activities;

- Continue to promote high standards of **transparency, accountability and good governance** in the field of energy-related activities in order to improve their environmental footprint, including by advocating and reinforcing good environmental governance in planning, financing and the implementation of energy-related activities and by supporting EITI principles;
- Promote **multi-stakeholder co-operation** among governments, international, regional and non-governmental organizations, civil society, the business community, academia, development agencies and the financial institutions with the goal to improve the environmental footprint of energy-related activities, including through the promotion of public-private partnerships and technological innovation;
- **Promote empowering civil society organizations** to actively participate in the elaboration of policy recommendations as well as the design, implementation and evaluation of projects related to sustainable energy and the environmental impact of energy-related activities;
- Continue to support the **involvement of civil society** in decision-making processes regarding environmental and energy-related issues, including through the OSCE supported Aarhus Centers network, the creation of a regional platform of NGOs, or multi-stakeholder networks (involving academia, the business sector and civil society);
- Support **awareness-raising and education** on the link between environment and energy-related activities and security at all levels of society;
- Organize **training and capacity-building** activities at different levels to enable exchange of knowledge, best practices and lessons learned.
- Advocate and support the **mainstreaming of a gender perspective** in the elaboration and implementation of projects and policies related to energy sustainability, thus ensuring equal opportunities, equal access to resources and benefits and equal participation in decision making at all levels for men and women;
- Consider the OSCE's possible role in supporting the post-2015 development agenda related to sustainable energy.

These ideas as well as recommendations and outcomes of the Concluding Meeting of the 21st OSCE Economic and Environmental Forum could be further explored at **High-level International Conference on "Energy Security and Sustainability – the OSCE Perspective"** initiated jointly by the Ukrainian Chairmanship and Government of Turkmenistan. This high-level event to be held on 17-18 October 2013 in Ashgabat and will complement the debate within this year OSCE Economic and Environmental Forum process.

OPENING and CLOSING REMARKS

**CONCLUDING MEETING
OF THE 21ST OSCE ECONOMIC AND ENVIRONMENTAL FORUM**

Welcoming Remarks

by H.E. Jan Kohout

Minister of Foreign Affairs of the Czech Republic

Mr. Chairman,
Excellencies, Ladies and Gentlemen, distinguished Guests,

It is a great pleasure to welcome all of you in Prague on the occasion of the twenty-first OSCE Economic and Environmental Forum. Let me most sincerely welcome Minister Leonid Kozhara, Secretary General Lamberto Zannier, the representatives of the 57 participating States of the OSCE, members of the OSCE Secretariat, as well as the representatives of Partners for Co-operation and of international organizations and other participants in this meeting.

At the outset, allow me to express our appreciation for the efforts of the Ukrainian Chairmanship to achieve progress and tangible results in OSCE agenda for the upcoming Ministerial Council meeting in Kiev. We truly hope that we can together overcome an impasse of last two years and will be able to adopt decisions in all three dimensions. We think that more needs to be done to enhance trust and confidence among OSCE participating States, more needs to be done to fully implement our own commitments and more needs to be done to address the most pressing issues, among others protracted conflicts.

Considering the preparations of the Ministerial Decision in the economic and environmental dimension (EED), the Czech Republic would value the adoption of decision empowering the role of civil society and promoting transparency and good governance. In our opinion the decision should build on previous EED work with some value added. In this regard, we see merit in the Chairmanship's aim to increase security and stability through reinforcing environmental good governance.

As to the EED in general, the Czech Republic promotes a clearer link to security in all programmatic activities of the OSCE in the economic and environmental sphere as well as the role of the economic and environmental dimension as Confidence-Building Measure.

Today we are here to discuss the aspects of possible improvements of environmental footprint in energy-related activities in the OSCE region. This topic is an important one and I wish us all that this year's Forum will be conducive to produce very concrete outcomes, such as conclusions and recommendations helping in participating States' efforts to deal with such complex issues.

Mr. Chairman,

In conclusion, let me express my thanks to the Ukrainian Chairmanship and also wish every success to the Swiss incoming Chair. I would like to wish you a pleasant and productive stay in wonderful city of Prague.

Opening Statement

by H.E. Leonid Kozhara

OSCE Chairperson-in-Office, Minister for Foreign Affairs of Ukraine

Excellencies,
Ladies and Gentlemen,

It is an honour for me to open the Concluding Meeting of the 21st OSCE Economic and Environmental Forum.

I would like to convey my sincere gratitude to the Government of the Czech Republic and in particular to H.E. Minister Jan Kohout for their warm hospitality.

My most cordial thanks go to the Office of the Co-ordinator of OSCE Economic and Environmental Activities and the OSCE Office in Prague for their efforts in organizing this Forum as well as for their contribution to our common endeavour – improving environmental footprint of energy-related activities in the OSCE area.

I warmly welcome all distinguished representatives of the OSCE participating States and Partners for Co-operation, high-level officials from ministries and agencies for energy and environment, representatives of international, regional and non-governmental organizations, as well as experts from business sector and academia.

Ladies and Gentlemen,

The world is clearly in a transition from fossil fuel to renewable energy. And Ukraine itself has experienced tangible advantages of developing renewable energy in the latest years. Establishing various legal incentives provided an explosive growth in the output of the green energy in my country.

On the other hand, there is a lot of experience accumulated in the OSCE participating States on how policy support and incentives provide necessary framework conditions for the promotion of renewable energy.

I am extremely glad that the wide participation to the Forum clearly demonstrates that the topic of the 21st OSCE EEF, chosen by the Chairmanship, resonated with the member states.

Discussions held during the First and the Second Preparatory Meetings in Vienna and Kyiv provided us with a number of innovative and exciting approaches to solving some of the many challenges that confront us in these areas.

As a result, the Organization is now better equipped to answer the pressing questions about the role the OSCE can play in further translating the political will of the participating States and other stakeholders in transparent regulatory frameworks.

I am confident that this EEF meeting would bring together the best recommendations from the Preparatory meetings on various issues, including enhancing of the OSCE role as a platform for exchange of best practices and experience on sustainable energy and energy

efficiency; strengthening capacity building related to renewable energy, new technologies and technology transfer; promotion of good governance and transparency in the energy sector.

Excellencies,
Ladies and Gentlemen,

There is also a clear need for an enhanced contribution of the OSCE to mainstreaming the environmental and energy-related activities within the broader security context.

The discussions of the Informal Working Group of the Helsinki+40 Process devoted to economic and environmental dimension have shown that there is a strong interest to continue fostering strategic approach to the EEF.

Energy security is linked with sustainability which implies energy sustainable production, transport and consumption. We should, therefore, look at feasible ways to diversify sources, routes and technologies of energy production and distribution, as well as to enhance protection of critical energy infrastructures.

These issues, and many others, will be further debated at the High-level International Conference on “Energy Security and Sustainability – the OSCE Perspective,” co-hosted by the Ukrainian OSCE Chairmanship and the Government of Turkmenistan on 17-18 October 2013 in Ashgabat.

This high-level Conference will bring together policymakers from the OSCE participating States, decision-makers from the energy and foreign policy field, as well as heads of relevant international organizations.

Ukrainian Chairmanship believes this High-level meeting will facilitate enhancement of the OSCE dialogue on energy security and co-operation, which should become an integral part of the OSCE concept of comprehensive security as highlighted in Astana Commemorative Declaration of 2010.

Excellences,
Ladies and Gentlemen,

Throughout the Forum process this year, the Ukrainian Chairmanship has been actively promoting consensus on the Organization’s future engagement in the Economic and Environmental Dimension.

In an era of pressing global economic challenges we need a truly 21st century approach to the Second Dimension – an approach that is centred on pragmatic initiatives to create and support sustainable economic growth as a crucial element of comprehensive peace and security.

I am confident that this Concluding Meeting will provide important inputs for the Kyiv Ministerial Council later this year, as a strong political will is much needed to foster the OSCE mandate on environment and energy.

Ukraine expects that this meeting will strengthen political dialogue within the OSCE, give political incentive to economic and environmental issues and contribute to the elaboration of follow-up activities to address these challenges.

I wish all of us a great success in our common endeavour.

Welcoming Remarks

by Ambassador Lamberto Zannier

OSCE Secretary General

Minister Kohout,
Minister Kozhara,
Excellencies,
Ladies and Gentlemen,

I would like to join our host and the Ukrainian Chairmanship in welcoming you all to the Concluding Meeting of this year's OSCE Economic and Environmental Forum. I am very pleased to see so many high-level representatives of the OSCE participating States, Partners for Co-operation, and various international, regional and non-governmental organizations, as well as experts from academia and the private sector.

In the last years, energy security has been high on the OSCE agenda.

In 2010 at the OSCE Astana Summit, Heads of States and Government identified energy security as one of the areas where dialogue among participating States must be enhanced. A number of Ministerial Council decisions, Economic and Environmental Fora, and conferences have addressed this topic.

Since the beginning of 2013, within the framework of the Economic and Environmental Forum, we have focused our deliberations on the impact of energy production and consumption on the environment from a stability and security perspective.

Promoting sustainable development through the green economy has been one of the key concepts highlighted during the preparatory process of the Forum. Indeed, the current economic and environmental challenges the OSCE region and the world as a whole are facing oblige States to increase energy efficiency and look for solutions, based on renewable and environmentally sound technologies.

In this regard, when looking at the sustainable energy aspects of the post-2015 development agenda, we should be conscious and bearing in mind the strengths the OSCE has as the largest regional security organization in the world.

It is in the interest of our Organization to focus its action on those areas where it can bring added value and offer its expertise.

Let me mention three areas, where I believe, the OSCE has proven its strength and which could represent the path of our future action:

- We are a platform for discussion where experts and representatives from national and international organizations can continue to exchange views and share best practices. This particular area offers an opportunity to even more broadly involve private sector, civil society and academia and support regional and sub-regional dialogue on specific energy and environmental issues;

- Because of our comprehensive security mandate, we address the link between energy and environment from a cross-dimensional perspective, which is instrumental in strengthening stability and promoting sustainable energy cooperation and thus contributing to building trust and confidence among participating States;
- The promotion, throughout the whole OSCE region, of transparency, accountability and good governance, also in the field of environmental and energy-related activities should continue to have priority in our agenda.

These are some of the areas where we are involved and where participating States can strengthen their co-operation further. They have a great potential, and it is in meetings like today that we should constantly bear them in mind in order to effectively orientate and focus our endeavours in the economic and environmental dimension.

Energy and environmental issues pose ever growing challenge we all have to face and all relevant stakeholders, including the civil society, have a meaningful role to play in responding to it. It is through the multi-stakeholder and complementary co-operation among governments, international, regional and non-governmental organizations, the business community, academia, development agencies and financial institutions that the goal of reducing the environmental footprint of energy-related activities can eventually be achieved.

I do hope that the deliberations held throughout this year will offer useful food-for-thought to all of us in view of the forthcoming Ministerial Council. Also in light of the recent discussion on developing a strategic approach to the OSCE economic and environmental dimension within the framework of the Helsinki +40 process, promoting energy and environmental dialogue and cooperation should be among core areas where the OSCE and OCEEA in particular could enhance their activities. The confidence building potential of the cooperation in this field should be further explored and deepened. We need to better understand the energy and environmental challenges we are currently facing in the OSCE area and worldwide and how the OSCE can further contribute to addressing them in more efficient manner.

Finally, let me mention that we very much appreciate the co-operation and partnerships we have with a number of international organizations in the energy and environment field. They allow us to synergise our efforts and reinforce our action based on respective mandates and capabilities. Today's Review Session, where our colleagues from the UNECE will present a report, is a good example of such co-operation. Let me welcome all partner organizations which, in the next days, will contribute to our discussions here in Prague.

I look forward to productive discussions and debates that will take place during the next days.

Closing Statement

by Ambassador Ihor Prokopchuk

**Chairperson of the OSCE Permanent Council
Permanent Representative of Ukraine to the OSCE
2013 Ukrainian OSCE Chairmanship**

Distinguished Participants,
Ladies and Gentlemen,

On the 4th of February in Vienna we embarked on a thorough discussion of the environmental impact of energy-related activities within the 2013 Economic and Environmental Forum process. We have since had the opportunity to reflect on what can be done to address the often adverse effects of energy-related activities on the environment and thus to strengthen security and stability in the OSCE region.

I am very pleased to note that our discussions during the preparatory process of the Forum have culminated in dynamic and fruitful debates here in Prague. Reiterating what I said at the Preparatory Conference in April, we need to turn the environmental challenges stemming from energy-related activities into opportunities for closer co-operation. The Chairmanship is of the opinion that the OSCE can give a strong political impetus to facilitate such co-operation.

The Co-ordinator of OSCE Economic and Environmental Activities has already mentioned some of the key recommendations from the Concluding Meeting. I encourage all of us to carefully consider how these recommendations could be promptly translated into meaningful actions.

Let me, however, briefly highlight some of the most important discussions we have had in the past three days. First, many speakers have expressed their strong conviction that the OSCE can be an effective platform for dialogue and co-operation on promoting environmentally sustainable energy management. I am of the same opinion and firmly believe that the expertise and knowledge within the OSCE's Executive Structures, including its Field Operations, are a key asset for fostering transboundary co-operation.

Second, as our panel discussion on Wednesday underlined, the importance of enhancing transparency and good governance in the energy field - including through such multi-stakeholder partnerships as the Extractive Industries Transparency Initiative (EITI) - is hard to overstate. Planning, financing and implementation of energy-related activities have been identified as areas deserving particular attention. In Dublin last year, the participating States reaffirmed their commitment to strengthening good governance and transparency. In this regard the involvement of civil society, academia and the business community are vital in supporting the development of more transparent and accountable national energy authorities and more responsible and environmentally conscious energy industries. It should be noted in this context that the OSCE has extensive expertise in promoting transparency and public participation in matters related to the

environment and security and has already embarked on extending this expertise to the field of energy.

Third, let me recall a stimulating discussion we had this morning looking at how we can cooperate on new and emerging technologies to promote energy sustainability. A broad spectrum of diverse perspectives and insights brought in by our speakers from government, academia, intergovernmental fora and multi-stakeholder partnerships made this discussion truly valuable and rewarding. Clean production of energy, the deployment of new sources of energy, smart grids, sustainable transport, and energy storage solutions all have an important role to play in our efforts to reduce air pollution, to prevent other adverse environmental impacts of energy-related activities and to respond to the growing challenge of climate change. These new and emerging technologies, in synergy with sound, effective and transparent policies at all levels, can also contribute to making energy more affordable, reliable and sustainable.

Ladies and Gentlemen,

I would like to warmly thank Dr. Halil Yurdakul Yigitgüden, Co-ordinator of OSCE Economic and Environmental Activities, and his competent staff for their valuable contribution to the success of the 2013 Forum Process. The Economic and Environmental Forum continues to provide an effective platform for discussion capable of gathering both recognized experts and high-level policy-makers from across the OSCE region. Let me also extend my gratitude to the OSCE Field Operations for their support and reiterate my appreciation to the experts that have shared their knowledge with us.

Dear participants,

Thank you for your attention and active involvement in this Forum. The Chairmanship will work to strengthen our efforts in the field of energy-related activities and their impact on our environment.

I hereby close the 21st OSCE Economic and Environmental Forum.

SECOND PREPARATORY MEETING OF THE 21st ECONOMIC AND ENVIRONMENTAL FORUM

Opening Statement

by H.E. Leonid Kozhara

**Chairperson-in-Office of the OSCE
Minister for Foreign Affairs of Ukraine**

Excellencies,
Ladies and Gentlemen,

I am very pleased to welcome you this morning to the 2nd Preparatory Meeting of the 21st Economic and Environmental Forum, here in the Diplomatic Academy in Kyiv.

During the next two days participants of the meeting will be generating substantive food-for-thought on how to enhance security and stability by improving the environmental footprint of energy-related activities in the OSCE area.

This is not an easy task, of course.

Nevertheless, I am convinced that excellent speakers as well as the selection of relevant issues will contribute to the success of our event.

The Ukrainian Chairmanship has carefully selected topics for 2013 Economic and Environmental Forum cycle.

We have chosen the environmental footprint of energy-related activities, renewable sources of energy, energy savings and energy efficiency as main lines for our discussions.

We hope these themes would unite the participating States in an open discussion on challenges and opportunities faced by the OSCE in the Economic and Environmental Dimension.

Indeed, we are convinced that energy efficiency can slow down the global energy demand increase, reduce our household and business energy bills and decrease energy related greenhouse pollution.

The Second Preparatory Meeting is designed to look for ways to promote such efficiency and sustainability.

The debates will place strong emphasis on strengthening co-operation in the fields of new and renewable sources of energy, recent innovations and technology transfer, as well as in the development of green growth and green economy.

Possible ways to better orientate our co-operation with relevant stakeholders will also be analyzed. Key representatives of civil society, the private sector and major international partners are our privileged participants to this debate.

Ladies and Gentlemen,

Energy is a subject with many different aspects.

The world's population will continue to grow in the next decades. The energy demand is likely to increase. Recent studies have pointed out that today, worldwide, 64% of electricity supply comes from fossil fuels, 16% from nuclear power and 19% from hydro energy, with very little from other renewable sources. This energy mix has implications for climate change and de-carbonization efforts. The need to mitigate the environmental footprint of energy related activities provides us with many challenges and tasks.

Still, discussing the challenges is only part of our Organization's energy dialogue during this year's Forum cycle.

The good news is that solutions to these challenges hold the potential for green job creation, innovation in our economies, and green growth. Sustainable economic growth, as well as the provision of security in both the supply and demand of energy, is an integral part of the OSCE's mandate of comprehensive security. We should find ways to consolidate our efforts in this area.

In order to foster an economic environment where innovation and green growth is possible, it is necessary to provide for a stable investment climate.

Public private partnerships are also important. Neither the corporate sector nor the governmental sector alone is able to provide innovative solutions to today's energy challenges. I do hope that we will hear about best practices in this field today and tomorrow.

Ladies and Gentlemen,

The First Preparatory Meeting in Vienna witnessed a fruitful discussion about the challenges of the environmental footprint of energy-related activities in the OSCE area.

I would consider our proceedings in Kiev today and tomorrow to be a success if we would hear about specific and realistic recommendations that could be later translated into relevant OSCE decisions.

I would therefore like to encourage all of you to actively participate in the discussions and to contribute to pave the way to the Concluding Forum Meeting in Prague.

I thank you.

Opening Remarks

Mr. Halil Yurdakul Yigitgüden

Co-ordinator of OSCE Economic and Environmental Activities

Your Excellency, Minister Kozhara,
Ladies and Gentlemen,

Allow me to start my welcoming statement by expressing my gratitude for the warm hospitality of Ukrainian Chairmanship, who provided this beautiful, historic and inspiring venue – the Diplomatic Academy – for our meeting and facilitated excellent conditions for our deliberations. I also highly appreciate the commitment of the Ukrainian Chairmanship towards further consolidating the OSCE's economic and environmental dimension as well as the co-operation my Office has established with the Chairmanship's team in Vienna.

Distinguished participants,

Today, we start the Second Preparatory Meeting of the 21st Economic and Environmental Forum, dedicated to improving the environmental footprint of energy-related activities in the OSCE region.

During this meeting, we should identify ways and means to further strengthen the co-operation among OSCE participating States, as well as with other relevant stakeholders, in the area of new, renewable and cleaner sources of energy, as well as on promoting Green Growth, innovation and technology transfer in these fields. I do hope our discussions will help us strengthen the OSCE's political commitments and engagement in promoting of sustainable energy solutions.

From the very outset, I want to emphasize that our Forum's deliberations should not be confined to exchanging views among Government representatives alone. If we want to be successful and make progress in developing and implementing sustainable energy solutions, we should seek and encourage an active and stronger involvement of civil society and the private sector. The issues on our agenda concern all of us and every citizen, man or woman, should have the right to contribute and have a say and be empowered to do so. That is why the OSCE promotes and supports a participatory approach and a broad-based decision-making process regarding energy and environment issues, which includes all relevant stakeholders. This is a key component of good governance.

Ladies and Gentlemen,

We are all aware of the global effects of energy production and use, particularly of fossil fuels. Their adverse effects on climate change and environment -including air pollution, greenhouse gas emissions and negative impacts on ecosystems, water, animals, plants and people -are among the humankind's biggest challenges, with potentially critical security and stability implications. In the context of projected increase in energy demand over the next decades, addressing these challenges becomes a matter of urgency. These facts should determine each participating State,

each government, industry and individual to take effective measures in order to reduce such environmental threats and to support sustainable socio-economic development. Developing renewable and cleaner energy technologies are essential contributors to sustainable energy and, generally, to energy security.

Moving towards energy sustainability will require changes not only in the way energy is supplied, but in the way it is used. Reducing the amount of energy required to deliver various goods or services is essential. Along renewable energy, energy savings and energy efficiency are the main pillars of sustainable energy policy, because the cleanest and most economic form of energy is the one which does not have to be used.

Innovative solutions are required, both on the supply side, as well as on the demand side. On the supply side, we've heard much about the nonconventional or shale revolution currently underway in North America. But beyond these headlines much good work is being done in other areas, such as the production of methane – a form of natural gas – from the types of coal beds which are, for example, abundant in our host country, Ukraine.

Not less important is focusing on 'green growth', aiming at the same time at economic growth and environmental protection. Together with innovation, going green can be a long-term driver for economic growth, by, for example, investing in renewable energy and improved efficiency in the use of energy and materials. An active co-operation with the energy industry is crucial in this regard.

In the next sessions we will hear about recent progress and positive developments from across the OSCE region related to a variety of new energy sources such as solar, wind or biomass. We will look at aspects related to policies and incentives as well as to innovation and technology. Our focus should be on how to overcome current inefficiencies and untapped the huge potential of new, renewable and clean energy resources, which could indeed bring concrete dividends to many participating States.

Dear participants,

The OSCE can provide a platform for dialogue and for the exchange of best practices and information on renewable energy, new technologies and appropriate legislative, institutional and policy frameworks. This is what our Forum process is about. Our overall goal should be to identify the areas where the OSCE can bring added value and define its possible contribution to enhance co-operation in the field of energy, environment and security.

As well, making use of its political character, the OSCE can provide support to its participating States with regard to relevant international and regional legal instruments, conventions and protocols, and facilitate the implementation by participating States of existing mechanisms aiming at preventing negative impact of energy-related activities on the environment.

The contribution of the OSCE Field Operations is very important in reaching our goals. They are working closely with their host countries and provide assistance in areas such as sustainable energy, sound management of natural resources, water management, soil degradation and waste. As well, they contribute by raising environmental awareness and promoting public participation in environmental decision-making.

The OSCE Office in Tajikistan, together with the Tajik-Norwegian Small Hydro Power Initiative,

supported the development of private investment in small hydro-power in the country, including through the preparation of a comprehensive action plan. It also sponsored, in 2012, the 3rd Regional Exhibition on Energy Saving Technologies and Recycling, which, *inter alia*, demonstrated energy saving prototypes made by approximately 50 participants – including schoolchildren – from Tajikistan and Kyrgyzstan.

The OSCE Project Co-ordinator in Uzbekistan supported the drafting of a national strategy and action plan on renewable energy development and facilitated visits by Uzbek delegations to Germany and Spain to study best practices in the field of renewable energy.

The OSCE Office in Baku has also been actively engaged in promoting best practices for the legal and regulatory framework for renewable energy sources and facilitated the exchange ideas between representatives of State institutions, NGOs, local energy companies, academies, research centres, international agencies, etc. It has also contributed to the dialogue on water policy in Azerbaijan, and facilitated consultations on a new bilateral water agreement between Azerbaijan and Georgia.

The OSCE Centre in Ashgabat initiated and organized a series of training workshop on Energy Diplomacy.

These are just few examples but many more could be provided from the work carried out by the OSCE Missions to Bosnia and Herzegovina, Montenegro, and Serbia, Presence in Albania, Centres in Bishkek and Astana, or our Offices in Yerevan etc, as well as by the OSCE Project Co-ordinator in our host country, Ukraine.

I would like to thank my colleagues in the field presences for their tireless efforts and strongly encourage them to actively participate and contribute to our Forum's discussions.

Ladies and Gentlemen,

This meeting provides a unique opportunity for us all to exchange knowledge and experience.

Let us use this Forum fully to identify areas for further improvement and to strengthen our co-operation in promoting environmentally sustainable energy management for the benefit of sustainable socio-economic development, stability and security.

By complementing each other and by working together, we will be more effective and more successful in addressing evolving common challenges.

I would therefore like to encourage all of you to actively participate in the discussions and to suggest topics for further elaboration at the Concluding Forum Meeting in Prague and beyond.

Thank you for your attention.

Closing Statement

by Ambassador Ihor Prokopchuk

**Chairperson of the OSCE Permanent Council
Permanent Representative of Ukraine to the OSCE
2013 Ukrainian OSCE Chairmanship**

Distinguished Participants,
Ladies and Gentlemen,

We are now about to conclude the Second Preparatory Meeting of the 21st OSCE Economic and Environmental Forum on “Increasing stability and security: Improving the environmental footprint of energy-related activities in the OSCE region”.

On behalf of the Chairmanship I would like express our satisfaction with the meeting’s proceedings, the interesting discussions we have had, the constructive approaches of delegations and other stakeholders, and in general with the results we have achieved. I would like to thank the Moderators, Speakers and Panelists for their excellent performance and for sharing their expertise.

Among the thematic areas explored over the last two days, there were strengthening co-operation on new and renewable sources of energy, the linkages between sustainable energy and Green Growth, energy efficiency and energy savings, good governance in the energy field, promoting innovation in the field of sustainable energy, as well as strengthening public-private partnerships and reinforcing the role of the civil society in promoting sustainable energy. Our ultimate goal has been to determine how the OSCE, by promoting dialogue, co-operation and partnerships in the field of sustainable energy, could contribute to advancing security and stability in our region. This meeting in Kyiv complements the First Preparatory Meeting we held in Vienna in February. The outcome of these two Forum events, their conclusions and recommendations, will be paving the way to the Concluding Forum meeting in Prague in September. Obviously we would need more time to analyze in more details all the ideas expressed and all the suggestions formulated in the course of preparatory process. Based on that work and on the input we further expect from delegations, the Chairmanship and the Office of the Co-ordinator of the OSCE Economic and Environmental Activities will design the agenda for the Prague Forum.

At this point, let me briefly highlight some of the issues that, in Chairmanship’s view, stand out as key conclusions of our deliberations over the last two days.

My first point is that the OSCE can play a useful complementary role in facilitating a multi-stakeholder dialogue on energy issues and in particular on the links between energy and the environment. Not only this year’s Forum process but also the Forum under the Lithuanian Chairmanship in 2011, a number of other thematic OSCE conferences or meetings dedicated to energy related issues, as well as the discussions we have had in the framework of the Economic and Environmental Committee, are good examples of what the OSCE can do. I am pleased to note that representatives of other organizations, inter alia, IRENA, UNECE, UNEP etc. welcomed the OSCE engagement in this field. Of course, we should pay due attention to avoiding overlaps.

From this perspective, I do believe it would be useful to provide our Organization with a clear mandate on energy and environment. Moreover, the OSCE's engagement in discussing and addressing energy issues is quite timely. Energy production, transportation and consumption pose some of the key challenges the mankind has to deal with at the beginning of this century. Energy issues are fundamentally important for the economy and at the same time it have clear implications for our environment. All these have ultimately an impact on security and stability.

In a context of limited natural resources, of limited fossil fuel reserves and of increased energy demand, new, innovative and sustainable solutions have to be identified. Competition for resources can turn into conflict. This challenge should be turned into an opportunity. We believe that in this field, as in many others, a co-operative approach should be pursued and countries should join efforts and build up synergies. The OSCE can give a strong impetus and political signal in that regard.

Public opinion is more and more aware of the impact of energy production, transportation and consumption on the environment and more and more vocal in demanding sustainable solutions. Let me also underline the key importance of good governance in the energy field.

The issues at stake are quite complex. Technical and technological aspects have to be considered, policy choices have to be made and explained, countries have to diversify their "energy mix", cross-sectoral as well as bilateral, regional and international co-operation needs to be strengthened, the public sector, the private sector, the research community, the civil society, all have to work together. There is a need for a well-managed transition to more sustainable energy solutions. And for all these to happen, political will is required. And here is where the OSCE could play a role, as a multilateral political organization. The OSCE can be a platform for sharing experiences and best practices, for facilitating co-operation at various levels.

Ladies and Gentlemen,

This meeting in Kyiv has been instrumental in shedding more light on the multiple and complex links between energy, environment, economy, and security. Its conclusions should be helpful in setting priorities right and in identifying existing gaps that should be tackled. We are now better prepared to answer, in September, in Prague, to the question "What role could the OSCE play in follow-up to this year's Forum and what means and instruments we can or should employ?"

The Chairmanship is confident that by the Concluding Meeting in Prague and thereafter, ahead of the Ministerial Council, with the help of all participating States, we will achieve positive results.

Ladies and Gentlemen,

Let me conclude with a very warm Thank You to Dr. Halil Yurdakul Yigitgüden, Co-ordinator of OSCE Economic and Environmental Activities, and his able staff, for their outstanding contribution to the success of this event. Let me also commend the work done by the OSCE Field Operations. The Office of the Co-ordinator will compile the Consolidated Summary of this Forum meeting. It will be discussed in one of the next Economic and Environmental Committee meetings in Vienna.

Dear participants, thank you for attention and for your contribution to this Forum. I am looking forward to seeing you soon in our next meetings.

FIRST PREPARATORY MEETING OF THE 21ST ECONOMIC AND ENVIRONMENTAL FORUM

Opening Remarks

by Ambassador Ihor Prokopchuk

**Chairperson of the OSCE Permanent Council
Permanent Representative of Ukraine to the OSCE
2013 Ukrainian OSCE Chairmanship**

Excellencies,
Ladies and Gentlemen,

On behalf of the Ukrainian Chairmanship it is my great pleasure to welcome you all to the First Preparatory Meeting of the 21st OSCE Economic and Environmental Forum.

At the outset, I would also like to warmly welcome the new OSCE Co-ordinator of OSCE Economic and Environmental Activities, Mr. Halil Yurdakul Yigitgüden, who joined the OSCE team last week, and to wish him every success in performing his responsible duties. I am sure that under his guidance, and with the support of his professional colleagues, the OCEEA will contribute to the Chairmanship's goal to increase the effectiveness of the OSCE Economic and Environmental Dimension.

In its Priorities for Action, the Ukrainian Chairmanship has stressed that it considers the OSCE as a unique platform for conducting an open dialogue among equal partners. In our view this means working in the spirit of Helsinki to maintain a balanced approach across all three OSCE dimensions, to pursue the principles and goals of this Organization and to promote trust, confidence and co-operation among the participating States. In that regard, most relevant issues relating to Economic and Environmental Dimension may be reflected in the "Helsinki+40" process and I am confident that with the support of the Chair of the Economic and Environmental Committee, Ambassador Ol'ga Algayerova, and the engagement of all OSCE participating States we will be able to further strengthen co-operation in the second dimension, thus advancing the work towards a security community.

Another aspect that we have stressed in our Priorities for Action is "co-operation". Indeed, the Chairmanship strongly believes that promoting co-operation on economic and environmental matters contributes to greater stability, security and prosperity. On the other hand, neglecting economic and environmental challenges and problems may increase tensions inside and between States and regions. This applies as well to issues related to energy, and that is why we will emphasise the aspect of co-operation in the whole Forum process.

Excellencies,
Ladies and Gentlemen,

As the OSCE Chairperson-in-Office, Minister for Foreign Affairs of Ukraine, H.E. Mr. Leonid Kozhara stated in his address to the OSCE Permanent Council last January: *“It would hardly be possible to promote a comprehensive and lasting security in the OSCE region without properly addressing the existing challenges in the economic and environmental sphere, including energy security”*. This approach guided us when we proposed the theme for this year's Forum.

The topics “energy” and “environment” and their security implications are not new to the Organization. The theme *“Increasing stability and security: Improving the environmental footprint of energy related activities in the OSCE region”* draws on the work already undertaken by the Belgian, Spanish, Greek and Lithuanian Chairmanships, as well as on the 2010 Astana Summit Commemorative Declaration.

We are all aware that security issues in the context of energy and environment are pressing and need to be addressed. Given the OSCE’s relevant position as a platform for dialogue, I believe that the Organization should contribute to the energy security dialogue, not only among its participating States, but also among leading experts, the private sector, the civil society, and international organizations specialized in energy-related issues. The expertise of the OCEEA and of the OSCE field operations are important tools at the disposal of all participating States to improve the environmental footprint of energy-related activities in the OSCE region.

Throughout this year we will have ample opportunities to discuss energy and environmental challenges to security, as well as to promote energy efficiency and renewable energy co-operation in the OSCE area.

In this respect, I would like to draw attention of the participants of the meeting to the OCEEA “Background paper on the theme of the Forum distributed last week, which identifies reduction of the environmental impact of energy-related activities as one of our common challenges.

By prioritizing the energy efficiency as well as broader use of alternative and renewable sources of energy we intend to contribute to further development of energy dialogue within the OSCE as well as to generate political will for enhancing co-operation in the field of energy security without politicizing this issue.

The Ukrainian Chairmanship proposes to focus the discussions during the Forum process on a number of specific issues such as:

- Addressing environmental risks from energy-related activities;
- Promoting renewable energy, energy efficiency and energy savings;
- Promoting and supporting good governance and public participation in decision making in the environmental sector;
- Supporting co-operation between public and private sectors;
- Promoting technology transfer and co-operation on research and development for new technologies.

Our aim is to develop ideas further and come up with recommendations for a clearer and strengthened role for the OSCE. We will strive to facilitate a comprehensive and meaningful dialogue on these issues. By the end of this year, we do hope all participating States would be in

the position to agree on a reinforced mandate for the OSCE and its executive structures in the field of energy and environment.

I am confident that the discussions that will be initiated today will promote co-operation and help achieve this goal. We should be able through this collective process to reach consensus on practical and balanced recommendations.

I encourage you to participate actively in the discussions and wish you all an interesting and stimulating Forum here in Vienna. The Chairmanship looks forward to discussions in the days ahead.

Thank you for your attention.

Opening Remarks

Ambassador Lamberto Zannier

OSCE Secretary General

Excellencies,
Ladies and Gentlemen,

I warmly welcome all of you to Vienna for this First Preparatory Meeting of the 21st OSCE Economic and Environmental Forum. I am pleased to see so many representatives of the OSCE participating States, Partners for Co-operation, and various international, regional and non-governmental organizations, as well as experts from academia and the private sector.

Allow me also to warmly welcome our new Co-ordinator of OSCE Economic and Environmental Activities, Mr. Yurdakul Yigitgüden. In particular, with his long standing experience in the energy sector he can offer a strong contribution to our joint efforts

The event which is beginning today is the first building block of the 2013 Economic and Environmental Forum. The relevance and importance that energy has for the development and security in the OSCE region have been lastly recognised in the OSCE context at the 2010 Astana Summit where Heads of States and Governments agreed that energy security dialogue in the OSCE, including on agreed principles of our co-operation, must be enhanced. This year's Forum is the continuation of an on-going dialogue on energy issues in the OSCE framework, culminated over the years with the adoption of a number of MC decisions.

In particular, this year's Forum will mainly focus on the impact that energy production, transportation and consumption have on the environment, as well as on the opportunities that an improved environmental footprint of energy will bring to OSCE participating States.

Excellencies,
Ladies and Gentlemen,

Reducing the environmental impact of energy related activities is one of the challenges faced by the OSCE participating States.

One cannot neglect that the energy is one of the main drivers of economic development. It contributes greatly to the improvement of life's quality of billions of people all around the world. But at the same time energy production, transportation and consumption - which have obvious economic and political implications - can also have severe implications for the environment with long lasting consequences. Climate change is for sure one of the main challenges we are currently facing, but we should not forget that energy-related activities can also negatively impact on ecosystems, on human health, on soil and sea. We have all witnessed the devastating impact of accidents that took place during last years in the oil extraction industry, in the energy production and transportation.

On the other hand, recent years also marked a significant progress in improving the environmental impact of energy-related activities. The current economic and environmental challenges oblige States to look for solutions, based on renewable, efficient and environmentally sound technologies. Technological development is contributing significantly in curbing CO₂ emissions, increasing energy efficiency and reducing pollution from the extractive industry. Water, wind, solar, geothermal, biofuel are offering alternative options with much lesser impact on the environment and opportunities for local energy production.

But addressing the link between energy, environment and security means going beyond the energy and environmental sectors. It means tackling economic development, trade, social issues, climate change, political and security concerns. It also means mainstreaming energy and environment into all relevant policies such as research, development, and foreign affairs.

I believe that the environmental footprint of energy-related activities offers an ample avenue for co-operation among the OSCE participating States. The promotion of renewable energy sources, co-operation on best practices on resource extraction, environmental impact assessment and transparency in the resource sector are among the most effective ways to reduce the adverse environmental impact of energy.

Excellencies,
Ladies and Gentlemen,

As the OSCE includes participating States of the whole energy chain, our Organization is well placed to facilitate the exchange of best practices related to sustainable energy.

Through the efforts of the Office of the Co-ordinator of OSCE Economic and Environmental Activities and our field operations, the OSCE has contributed to promote sustainable energy solutions. Specific areas in which the OSCE has responded to participating States requests have included oil spill preparedness, sharing of best practices in the use of renewable sources of energy, capacity building for policy makers and other national stakeholders, and raising public awareness and public participation on issues at the interface of energy and environment.

In carrying out its work in this area, the OSCE has worked in partnership with other international and regional organizations, focussing on its comparative advantages. In that regard, we have deepened our co-operation with other international bodies, in particular in the framework of the "Vienna Energy Club".

The OSCE has also a fruitful co-operation with the UNECE, with which we have a Memorandum of Understanding, as well as with the Energy Charter Secretariat, NATO and the Secretariat of the Extractive Industries Transparency Initiative (EITI). I would also like to underline the Environment and Security (ENVSEC) Initiative through which we have been cooperating with a number of important partners to address environment and security challenges in the OSCE region. Within its last ten years, ENVSEC has dealt with several issues related to energy, environment and security.

I believe that throughout this year's Forum process, particular attention will be paid to identifying opportunities to increase the effectiveness of such international co-operation. But I am also confident that the recommendations and outcomes of this year's Forum will strengthen the

mandate of the OSCE to support relevant multilateral environmental agreements to the benefit of all participating States.

In conclusion, I wish to express my gratitude to all the guest speakers and participants for joining us here in Vienna and for agreeing to take an active part in our deliberations. I look forward to our discussions over the next two days, and especially to practical suggestions that may enhance the OSCE's role in this important area.

Opening Remarks

Mr. Halil Yurdakul Yigitgüden

Co-ordinator of OSCE Economic and Environmental Activities

Excellencies,
Distinguished participants,

It is an honour to address this opening session of the First Preparatory Meeting of the 21st OSCE Economic and Environmental Forum, especially given that this Meeting is my first official event as the Co-ordinator of OSCE Economic and Environmental Activities. I look forward to working with the Ukrainian Chairmanship and the delegations on the Forum as well as on all other second dimension issues this year. I am pleased to welcome so many government officials and experts from OSCE participating States and Partners for Co-operation, representatives of international and regional organizations, the civil society, the business community and academia. By bringing together for this meeting leading experts, the OSCE is fulfilling its mandate as a platform for dialogue and exchange of ideas with regard to energy issues. We are continually deepening our relations with partner organizations, and as you can see, many of them are represented here in Vienna this week.

I take this broad participation as a sign of acknowledgement of what the OSCE has to offer in the economic and environmental dimension, in particular in the field of energy and its footprint upon the environment.

In our discussion during the next two days, we shall identify examples of successful co-operation and share best practices on topics such as effective policies for sustainable energy and energy efficiency, Climate change concerns, a drastic increase in the use of energy over the last decades and the environmental impact of the use of conventional energy sources. These are among the most challenging and pressing issues that need to be addressed at global, regional, national and local level. Environmental good governance and transparency in the energy sector, as well as the protection of critical energy infrastructure, are an important part of the Forum agenda.

This year's Forum is the logical continuation of an on-going dialogue on energy issues in the OSCE framework. Sustainable Energy was discussed during the Forum of the Lithuanian Chairmanship in 2011. In recent years, we have conducted and co-organized meetings and conferences on "Strengthening Energy Security in the OSCE Area" (in July 2009 in Bratislava), "Strengthening Regional Co-operation in Central Asia for Promoting Stable and Reliable Energy within Eurasia" (in May 2010 in Ashgabat), "Assessing the OSCE's Future Contribution to International Energy Security Co-operation" (in September 2010 in Vilnius), and the Chairmanship Conference "Integrating Global Energy Markets – Providing Energy Security" (in November 2011 in Ashgabat).

Based on the existing experience accumulated by my Office and the Field operations, we will continue to provide support to dialogue and co-operation initiatives between various stakeholders at national, bilateral and regional level, notably on renewable energy, energy efficiency and technology transfer. We could raise awareness on the environmental footprint of energy-related activities and its impact, particularly at local level, including gender aspects, and

support innovative solutions. We could also encourage the inclusion of good governance and anti-corruption aspects in policies promoting sustainable energy and environmental management. In this regard, OSCE-supported Aarhus Centers are well positioned to promote the shared responsibility between governments and the public for all issues concerning environmental governance including challenges stemming from energy-related activities. The Environment and Security Initiative (ENVSEC) where the OSCE cooperates with other International Organizations – United Nations Environment Programme (UNEP), United Nations Development Programme (UNDP), United Nations Economic Commission for Europe (UNECE), Regional Environmental Center (REC) and North Atlantic Treaty Organization (NATO) as associate partner also offers a unique mechanism to create synergies to jointly address environmental challenges related to the energy sector.

Excellencies,

Sustainable energy, co-operation on energy issues as well as on environment and security are key priorities of the second dimension and thus part of the OSCE's concept of comprehensive security. The increasing importance of sound environmental governance and the very dynamics of the energy sector require a continuous and transparent dialogue. I trust that the discussions that will take place over the coming days will strengthen our dialogue and co-operation in these areas.

Thank you for your attention.

Closing Remarks

by Ambassador Ihor Prokopchuk

**Chairperson of the OSCE Permanent Council
Permanent Representative of Ukraine to the OSCE
2013 Ukrainian OSCE Chairmanship**

Your Excellencies,
Ladies and Gentlemen,

We are now concluding the First Preparatory Meeting of the 21st OSCE Economic and Environmental Forum. I would like to express, on behalf of the Ukrainian 2013 OSCE Chairmanship, our satisfaction for the dynamic and constructive discussions we have had over the last two days and for the results we have achieved.

Let me in particular thank our speakers, who brought a lot expertise and of relevant ideas to our attention. Allow me to use this opportunity and thank Mr. Yigitgüden and the staff of his Office for the excellent co-operation with our Chairmanship in preparing this event.

In our view, this Forum meeting has proved, once again, the necessity and importance of addressing the environmental footprint of energy-related activities in the OSCE region. The impact of energy-related activities on the environment has its own dynamic. Negative consequences may accumulate and become more serious year by year; they may have local as well as trans-boundary implications; if not properly and timely tackled, such issues can become a serious global concern.

In that regard, the 57 OSCE participating States have a shared responsibility. I am pleased to note the willingness, expressed by many of you during the debates, to deepen our co-operation on a number of challenging energy issues. I also want to stress that we are not alone in this effort and that, as we have heard over the last days, many international, governmental and non-governmental, public and private organizations share these concerns and can work together with the OSCE.

Regional and international organizations pay much attention to these energy issues which means that we should enhance our co-operation and coordination with them as well as to strengthen public-private co-operation.

No less important is dialogue between and with the scientists and researchers, and the civil society. The OSCE should be seen as a platform for sharing experiences, different views and best practices. On the global level, OSCE can advance partnerships among different regions and countries. I believe that the OSCE can bring added value and contribute to enhancing co-operation in the field of energy and the environment.

Ladies and Gentlemen,

The issues at stake are very complex. During this two-day meeting we have received some answers to some of the questions that have been raised; for some questions we have received only partial answers and there are many questions which require further attention. We should therefore continue our discussions; we should advance our dialogue and co-operation and streamline our efforts directing them towards achieving concrete results.

Economic activity, development and growth require energy and the world's energy needs increase every day. But, energy production and consumption, particularly of fossil fuels, have a number of environmental impacts including air pollution, greenhouse gas emissions and adverse impacts on ecosystems. With the increase of energy demand, if policies do not change, the energy-related CO₂ emissions will also multiply and may reach unsustainable levels. Such environmental threats may even undermine security and stability in the OSCE region. For example, climate change may cause shortages of food and water and increased risk of flooding. In order to have sustainable development we need to implement all possible measures and instruments taking into consideration a comprehensive cost-benefit analysis. We should make long-term choices and efficiently manage the needed energy sources. Our cooperative actions should help to reduce environmental risks at regional and global level, and at the same time underpin the economic growth of our countries.

We should place these issues high on our agenda to promote energy savings and energy efficiency, and develop alternative and renewable sources of energy which have much less environmental footprint. This may also play a key role in reaching the goals of security of supply and reduction in greenhouse gas and air pollution emissions. Moreover, renewable energy technologies are expected to bring a number of social and economic benefits, including regional and local development opportunities.

Energy efficiency and renewable are the answer to some key challenges of our time: energy poverty, inequality, sustainable economic growth and environmental degradation.

We acknowledged the multiple benefits provided by renewable energy. Together with energy efficiency it provides energy access especially for the poor; creates economic and job opportunities; improves the environmental footprint and moderates climate change; and enhance energy security and sustainable development.

Ladies and Gentlemen,

Our general objective for the Forum process is to clearly define the role the OSCE can play, as a platform for co-operation, in the fields of energy and environment. The outcome of our meetings must be beneficial to all participating States.

In doing so we should build upon our existing experiences. We should dully take into account the conclusions of our past deliberations on similar topics - international and regional conferences and meetings of the Economic and Environmental Committee, as well as the outcomes of activities carried out by the Office of the Co-ordinator of OSCE Economic and Environmental Activities or by the Economic and Environmental Officers in this Field Operations.

I do believe that if we, together, take such a pro-active approach, we will be able to reach, at the Concluding Meeting of this year's Forum process, a common understanding on how to best advance our dialogue and co-operation on energy issues and in particular on their environmental footprint in the OSCE region. By joining our efforts and sharing our expertise it would be able to reach better results than by working alone.

As in past years, the Office of the Co-ordinator of Economic and Environmental Activities will compile a Consolidated Summary which will be made available to all of you during the next weeks. It should serve as a background for further discussions in the framework of the Economic and Environmental Committee in Vienna. I am looking forward to that.

Our next benchmark is the Second Preparatory Meeting of the 21st OSCE Economic and Environmental Forum, which will take place on 16-17 April in Kyiv. Soon, a draft agenda will be shared with the OSCE Delegations.

Before closing this meeting, I would like to thank all those who contributed to its success, the Moderators, Speakers and Rapporteurs, the conference service staff and the interpreters.

I also want to thank all of you, dear participants, for your active contribution, and to wish you a safe trip back home.

I am looking forward to seeing you soon in Kyiv. Thank you for your attention.

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