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## **Fourth International Forum: Energy for Sustainable Development**

Tbilisi, Georgia  
17-19 September 2013

### **SUMMARY**

The Fourth International Forum: Energy for Sustainable Development took place in Tbilisi, Georgia on 17-19 September 2013. The Forum was organized jointly by the Government of Georgia, the United Nations Economic Commission for Europe (UNECE), the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), and the United Nations Development Programme (UNDP). Over 210 delegates from 28 countries attended the Forum. This Forum was a follow-up to the International Energy Efficiency Forums held in 2010 in Astana, Kazakhstan and in 2011 in Dushanbe, Tajikistan and Third International Forum: Energy for Sustainable Development held in 2012 at the Issyk Kul Lake in Kyrgyzstan.

#### **Day 1**

##### ***Opening Session***

The Forum was opened by Mr. Kakhaber Kaladze, Vice Prime Minister, Minister of Energy of Georgia. He pointed out that Georgia needs to develop an energy security strategy as well as a draft law on energy efficiency and renewable energy. Georgia has applied for the full membership in the Energy Community, which means that in the next few years the country's legislation and regulatory framework will be closer to the European Union's energy legislation. Mr. Dimitri Kumsishvili, First Deputy Minister of Economy and Sustainable Development of Georgia stressed that energy efficiency policy is critical for the country and exchange of experience among countries would help develop appropriate policies. Mr. Andrey Vasilyev, Deputy Executive Secretary of UNECE noted that this is the fourth Forum and it has built on the success of the previous years. UNECE is pleased to deepen and expand collaboration with the host Government, its partners – ESCAP and UNDP, and all participants. The Forum highlighted the importance of the sustainable energy agenda for the European and Asian regions and globally, especially in the context of the upcoming International Decade of Sustainable Energy for All (2014-2024) declared by the UN General Assembly.

Welcoming speeches were also delivered by Mr. Nikolay Pomoshchnikov, Head, Subregional Office for North and Central Asia, ESCAP and Ms. Inita Paulovica, Acting Resident Representative, UNDP Georgia.

### ***Session 1: High-Level Round Table***

#### ***Achieving sustainable energy development through policy reforms and international cooperation***

The Forum included the High-Level Round Table on **Achieving sustainable energy development through policy reforms and international cooperation** with participation of high-level officials of the government bodies responsible for energy and sustainable development from Armenia (Ms. Ruzan Alaverdyan, Deputy Minister of Urban Development), Belarus (Mr. Siarhei Siamashka, Vice Chairman of the State Committee on Standardization), Georgia (Mr. Dimitri Kumsishvili, First Deputy Minister of Economy and Sustainable Development), Kazakhstan (Mr. Alexander Braginskiy, Consultant to the President of Kazakhstan), Kyrgyzstan (Mr. Raimbek Mamurov, Deputy Minister of Energy and Industry), Tajikistan (Mr. Haydar Kholov, Deputy Minister of Energy and Industry) as well as from UNECE and ESCAP. Mr. Hongpeng Liu, Chief of the Energy Security and Water Resource Section, ESCAP presented the outcomes of the First Asian and Pacific Energy Forum (APEF) held in Vladivostok, Russian Federation, in May 2013, including the Plan of Action on Regional Cooperation for Enhanced Energy Security and the Sustainable Use of Energy in Asia and the Pacific, 2014-2018. Mr. Andrey Vasilyev emphasized that UNECE with its sister UN agencies that have strong energy programmes can collaborate with all relevant international organizations and respective member States in providing a secure energy supply. UNECE contributes to that collaboration and dialogue from a technical, economic and sustainable development perspective.

Participants of the High-Level Round Table emphasized the value of this Forum in the context of the UN Secretary General's Sustainable Energy for All Initiative and stressed the importance of cooperation among countries and international organizations to move towards countries' commitments to sustainable energy.

### ***Session 2: Energy efficiency in the housing sector***

The plenary session was chaired by Mr. Mikheil Janelidze, Deputy Minister of Economy and Sustainable Development of Georgia. Five panelists highlighted the roles and activities of international organizations. Ms. Gulnara Roll, Head of the UNECE Housing and Land Management Unit emphasized the role of the UNECE Housing and Land Management Committee as a unique intergovernmental forum that integrates housing and land management policies with energy efficiency measures. It was generally agreed that energy efficiency is a major challenge for the region and that better coordination of international aid and assistance is needed to support countries of the region.

Implementation of energy efficiency measures in the housing sector is very complex, with many stakeholders involved and many activities needing coordination. The role of local governments was particularly emphasized, by Ms. Khatuna Sichinava, Key Expert, Covenant of Mayors Regional Office in connection with the decentralization process. Local authorities in Eastern Europe, the Caucasus and Central Asia need to be supported in their efforts to reduce their dependence on fossil fuels, to improve the security of energy supply, and to become more involved in mitigating the effects of climate change.

The UNECE Case Book on Good Practices for Energy-efficient Housing in the UNECE Region was presented at the session by the principal author – Mr. Sergey Sivaev, Director of the Municipal Economy Department, The Institute for Urban Economics, Russian Federation. He emphasized the differences that exist between the various UNECE sub-regions. Some examples include:

- The Western European countries (member States that joined the European Union (EU) before 2004) have in place policies, strategies, legislation and programmes at the national level.
- Countries that joined the EU in 2004 and 2007 are completing their policy and regulatory framework and developing national programmes.
- Countries with economies in transition are still lagging behind with policy reforms, legislation and financial instruments to address energy efficiency in the housing sector in a comprehensive manner; and implementation is limited to pilot projects.

Access to information about energy consumption, saving potential and financial support mechanisms is important for changing the mentality of homeowners and raising their awareness of the benefits of energy efficiency.

### ***Session 3: Investments in energy efficiency and cleaner energy projects in the context of climate change mitigation and sustainable development***

This plenary session discussed financing options for energy efficiency projects and cleaner energy technologies. The keynote addresses were given by representatives of the Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA) Group, International Energy Agency, and UN Foundation. They presented existing experience in various countries and shared their vision on desirable policy reforms and incentive mechanisms to promote energy efficiency market formation. The panellists from financial institutions and international organizations discussed the role of governments and private sector in market formation for cleaner energy development. It was emphasized that since financing might be available, but not always accessible and affordable, the development of efficient delivery mechanisms (e.g., credit lines, ESCOs, utility programmes, labelling schemes) is often more important than technology.

Panelists at the session represented international financial institutions (The World Bank, International Finance Corporation, and Eurasian Development Bank), UN system organizations (UNEP and ESCAP), intergovernmental organizations (European Union and Eurasian Economic Commission) and private companies. They agreed that cooperation between public and private institutions becomes essential to address the interim legislative gaps and to address all the complexity surrounding green economy projects as by definition relatively new industries need time for the legislative framework to be created to allow bankable projects to be financed as business as usual.

## **Day 2**

### ***Workshop 1: Policies and Legislation to Promote Energy Efficiency and Clean Energy Technologies in the Caucasus region***

The workshop was organized by the Government of Georgia with the objective to share the experiences of the countries in the Caucasus region in development of relevant policies and legislation and to learn more about such experiences in the countries outside of the Caucasus region.

The workshop was opened by the Deputy Minister of Energy of Georgia Mr. Ilia Eloshvili who told the participants about the current status and plans of Georgia in promoting efficient use of energy and renewable energy sources. Experts from Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine delivered presentations about development of relevant policies and legislation in their countries as well as challenges and good practices associated with this process.

A representative of ESCAP informed participants of the current status of the online *Database of policies and regulations on sustainable use of energy and renewable energy sources in countries of North and Central Asia* ([www.asiapacificenergy.org](http://www.asiapacificenergy.org)) and plans for its further expansion and development. To demonstrate the information available from the database, a brief comparative analysis of the current status of policy and legislation on energy efficiency in countries of North and Central Asia (Azerbaijan, Kazakhstan, Kyrgyzstan, Russian Federation, Tajikistan and Uzbekistan) was presented. Countries not currently included in the database were invited to join with the view to strengthen the role of the database as a tool for exchange of knowledge and experience of the countries in developing relevant national policies and legislation.

### ***Workshop 2: A Road Map to Energy-Efficient Residential Sector***

The workshop was organized by the UNECE Housing and Land Management Unit to discuss challenges, experiences and good practices of Governments in the UNECE region in promoting energy efficient housing. The workshop was opened by Mr. Mikheil Janelidze, Deputy Minister of Economy and Sustainable Development of Georgia who informed participants of the main challenges for the government in enhancing energy efficiency and of activities that are undertaken in cooperation with other Ministries. Almost 30 experts participated in the panel discussions and 16 reports were presented and discussed. The discussions were organised in four thematic panels:

- Legislative and regulatory framework for energy-efficient housing
- Financing for energy-efficient housing
- Housing management to promote energy-efficient housing
- Technical and awareness-raising measures.

There is a high sensibility on energy efficiency issues in the region and this is a priority supported at the political level. However, it was noted that the legal environment regarding energy efficiency enhancement in Eastern Europe, the Caucasus and Central Asia is only at the initial stages. Complex substantive issues remain to be addressed, such as, for example, the destruction of the district heating systems in Georgia. Because of this the country still lacks a well-conceived national policy on the systems of heat supply to buildings. This slows down the introduction of energy efficiency standards.

Financing for energy efficiency of the housing sector is perceived as one of the major challenges in the region, and this topic has only recently been added to the agenda. It can be addressed through joint efforts of the three parties: owners of premises in multi-family buildings, banking sector, and the state.

There is a need for stronger public awareness and education, clear policy on tariffs, legislative changes and stronger governmental support to enhance energy efficiency in the housing sector. The whole building-cycle process needs serious reform, including developing or updating building standards, improving the processes of issuing building permits and of monitoring the implementation of the regulations, and providing training and certification for the professionals involved. The benefits of retrofitting the existing housing stock should be seen not just at the household level, but also as a way to enhance employment.

### ***Workshop 3: Case Studies on Policy Reforms to Promote Financing Energy Efficiency Investments and Advanced Energy Efficiency Technologies***

This workshop was organized jointly by the UNECE Sustainable Energy Division and ESCAP and was a cooperative effort of several projects of the UNECE Energy Efficiency 21 (EE21) Programme: Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation (FEEI) and Global Energy Efficiency 21 (GEE21). There are two GEE21 subprojects that contributed to this workshop: i) Analysis of Advanced Technologies in Energy Efficiency and Renewable Energy in the Framework of Global Energy Efficiency 21 Project and Preparations of Recommendations on its Application with Special Emphasis on Central Asian Region and ii) Promoting Energy Efficiency Investments for Climate Change Mitigation, which is implemented jointly by all UN Regional Commissions and with particularly close cooperation between UNECE and ESCAP.

A UNECE representative introduced the projects of the EE21 Programme and outlined the work done by the UNECE in facilitating improved investment environment for energy efficiency projects in countries of South-Eastern Europe, Eastern Europe, the Caucasus and Central Asia and in promoting advanced energy efficiency technologies in Central Asia.

The keynote presentation was delivered by a representative of “Mezhregionsoyuzenergo”, a company from the Russian Federation. The speaker presented the study on enhancing synergies in Commonwealth of Independent States (CIS) national programmes on energy efficiency and energy saving for greater energy security. The analysis of the national energy efficiency programmes and policies was outlined and examples of best practices were given. Possible tools for integration and cooperation between CIS countries in the area of energy efficiency and energy saving policy have been presented.

Three Panel Discussions on *Case studies on energy efficiency financing* were focused on best practices and solutions in the three sub-regions: 1) countries of South-Eastern Europe; 2) countries of Central, Northern, and South-Eastern Asia; and 3) countries of the Caucasus and Eastern Europe. Representatives of Montenegro, Croatia, Thailand, China, Tajikistan, Armenia, Georgia and Belarus made presentations on policy reforms in their countries that resulted in financing and implementation of energy efficiency projects.

The panellists from countries of the region presented their views and responded to questions for discussion. They discussed in particular the main players in the area of energy efficiency policy in the countries and their activities; the issue of new and additional legislation and

policies vs. enforcement of the existing ones; the respective roles of international donor aid and national policy reforms; and the recent major changes and proposals for next steps.

Presented case studies demonstrated both similarities and differences in the approaches to promoting EE financing in countries of the various sub-regions; in the existing obstacles; in the roles of donors and investors; and in the effectiveness of policies, government institutions and incentive mechanisms. Countries of South-Eastern Europe aim to harmonize their legislations with the European Union (EU) and have access to EU funds for energy efficiency projects. In countries of Central and South-Eastern Asia and the Caucasus markets for energy efficiency projects are underdeveloped. It was pointed out that creation of favourable market conditions through appropriate legislation and its enforcement is a critical element to enhance energy efficiency.

Panel Discussion 4 focused on the advanced energy efficiency and renewable energy technologies for Central Asian countries. The experts from Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan shared their problems and success stories. Regional Studies were presented, which will help countries to identify appropriate advanced energy efficiency and renewable energy technologies for particular country and opportunities for regional cooperation to promote application of these technologies.

#### ***Workshop 4: Sustainable Energy Challenges and Opportunities in Transition Countries***

This workshop was organized by UNDP. At the Session 1: Case Studies on UNDP Projects Related to Removing Barriers for Energy-Efficiency, Mr. John O'Brien of UNDP gave a regional overview of the UNDP/GEF energy efficiency portfolio in the Europe and CIS region. He explained that in the climate change mitigation focal area the bulk of UNDP projects are aimed at removing barriers to energy efficiency, mainly because this region is a region with very high levels of energy intensity and there are significant opportunities for saving energy and reducing greenhouse gas emissions. Specific interventions are targeted at various issues such as energy efficiency standards and labelling, energy-efficient lighting, energy efficiency in public buildings, energy efficiency in private residential buildings, and support for the development of energy service companies. A variety of institutional, legislative, informational, and financing barriers prevent greater levels of investment in energy efficiency. UNDP projects are aimed at overcoming these barriers and providing scalable, replicable and sustainable solutions.

Project managers presented some of the activities and results from various UNDP/GEF energy efficiency projects in the Russian Federation, Ukraine, Belarus, Croatia, Armenia, and Uzbekistan focusing on the barriers that have been faced and lessons learned. A common theme which came through from the presentations was the need to have constant energy management and data collection systems in place to enable appropriate decision-making to support energy efficiency. Several presentations stressed the importance of energy efficiency demonstration projects as valuable tools to help further develop and catalyse the market. The significance of the financial barrier which prevents many low-income households from investing in energy-efficient technologies was also mentioned.

At the Session 2: UNDP and Sustainable Energy for All and Recent UNDP Publications, Mr. Martin Krause of UNDP presented the landscape concerning the UN Secretary General's Sustainable Energy for All (SE4All) initiative. He reiterated that more than 1.2 billion people lack access to electricity, at least 2.8 billion are without clean cooking facilities, and many more have access to energy but of poor quality and reliability – a typical problem particularly for this region. If the world continues on its current path, global temperatures could rise by more than 4 degrees Celsius by the end of the century with unsustainable use of energy being the largest contributor. He explained the three goals of the SE4All initiative, which are ensuring universal access to modern energy services, doubling the global rate of improvement in energy efficiency, and doubling the share of renewable energy in the global energy mix. Mr. Krause presented the IEA/UNDP publication *Modernising Building Codes to Secure our Global Energy Future* released in August 2013, which highlights the important role that building codes have to play in promoting investments in energy efficiency. Mr. John O'Brien of UNDP presented the UNDP publication *De-risking Renewable Energy Investment* released in April 2013 which highlighted the importance of both policy and financial de-risking instruments to help facilitate greater investment in energy efficiency. The presentations were followed by a question and answer session.

### *Day 3*

On the third day of the Forum the participants visited Wood Service Ltd, a Georgian company that provides innovative and energy efficient technologies in the construction sector.

### *Joint Statement of the Forum*

The participants adopted the **Joint Statement of the Fourth International Forum: Energy for Sustainable Development**, in which they called the Forum an important platform for discussing energy and sustainable development in the European and Asian regions and a substantive input into enhanced regional energy cooperation. They stressed that one of the major aims of sustainable development in the energy sector in the countries of the European and Asian regions is securing sustainable balance between supply and demand of energy. The increase of renewable energy sources' role in the energy mix is important and energy efficiency improvement is critical for curbing energy consumption growth levels in the region. The Joint Statement called upon UNECE, ESCAP and UNDP to continue holding such Fora on a regular basis and recommended to convene the next Forum in 2014.

### *Forum Website*

Materials from the Forum, including Agenda, Joint Statement, presentations, and media coverage are posted on the UNECE website (<http://www.unece.org/index.php?id=32843>).