



23<sup>rd</sup> Session UNECE Committee on Sustainable Energy

# Energy for Sustainable Development

19-21 November 2014 - Geneva



## Sustainable Energy Subprogramme

### Quarterly Report

### 2<sup>nd</sup> Quarter 2014 (April-June 2014)

**This document is an informal document submitted to the Bureau of the Committee on Sustainable Energy to assist the Bureau in its oversight of activities under this sub-programme.**

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## **Committee on Sustainable Energy**

### 1. Activities

- (a) A statement was made into the plenary session of the First Annual SE4ALL Forum in New York 4-6 June 2014 about the Committee on Sustainable Energy and its mandate, stressing support to the initiative at every level, in particular through practical efforts on energy efficiency, renewables, coal, gas, electricity, resource classification, and energy security (Annex 1).
- (b) A contribution was made to the UN Summary report on Reliable and Stable Transit of Energy (Annex 2).
- (c) SED chaired the high-level panel on the application of the ESPOO Convention and the SEA Protocol to energy related issues on 5 June 2014.

### 2. Upcoming Events

- (a) 5<sup>th</sup> International Forum: Energy for Sustainable Development, Hammamet, Tunis, 4-6 November 2014 (UNECE in cooperation with other UN Regional Commissions). A draft concept note has been prepared and is attached as Annex 3.
- (b) The Sustainable Energy Week 1 (20-23 October 2014) is under preparation. It comprises a workshop on cleaner electricity production, the 10<sup>th</sup> session of the Group of Experts on Cleaner Electricity Production, a joint UNECE and Global Methane Initiative meeting, and the 9<sup>th</sup> Session of the Group of Experts on Coal Mine Methane.
- (c) The Sustainable Energy Week 2 (17-21 November 2014) is under preparation. It comprises the 1<sup>st</sup> Session of the Group of Experts on Energy Efficiency, the 1<sup>st</sup> Session of the Group of Experts on Renewable Energy and the 23<sup>rd</sup> Session of the CSE.

### 3. Main Challenges

- (a) Finalisation of the Renewables and Energy Efficiency Workplans.
- (b) Staffing and Recruitment.

### 4. Resources

50% P5, 1 G5.

## Group of Experts on Energy Efficiency

### 1. Activities

- (a) The secretariat organized an Inter-regional Workshop on Energy Efficiency Investment Projects Pipeline in cooperation with ESCAP in Bangkok, 23-24 April (under the UNDA project Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development). Workshop materials, including Information Report are available at: <http://www.unece.org/index.php?id=35165>
- (b) A project proposal “Promoting the implementation of the Regional Action Plan and Recommendations on development and implementation of energy efficiency policies in the CIS Countries” has been prepared and approved. It will disseminate the results of the recently completed project “Enhancing Synergies in CIS National Programmes on Energy Efficiency and Energy Saving for Greater Energy Security”. The project duration is June 2014 – May 2015, budget – USD 14,000.
- (c) The secretariat has prepared a draft Work Plan of the Group of Experts on Energy Efficiency and submitted it in early June for consideration by the Bureau of the CSE and by the nominated Bureau of the Group of Experts. The secretariat has received nominations from six countries for the members of the Bureau of the Group of Experts.
- (d) The secretariat continued efforts jointly with UNEP to resume disbursement of funds by the donors for the Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation (FEEI) project, so far without success. The project is expected to close soon if disbursements are not resumed.
- (e) The Memorandum of Understanding between UNECE and the Electric Power Council of CIS was signed at the 45<sup>th</sup> Meeting of the CIS Electric Power Council in Baku on 25 April 2014. Deputy Executive Secretary and Director of the Division participated in the event.
- (f) The first draft of the study “Analysis of National Case Studies on Policy Reforms to Promote Energy Efficiency Investments” was prepared by the consultant (under the UNDA project Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development).
- (g) The draft project proposal “Application of clean energy technologies for rural areas in Central Asian countries” was submitted to EXCOM for approval.
- (h) Staff members participated in the following events:
  - ADB 17th Meeting of the Energy Sector Coordinating Committee, Central Asian Regional Economic Cooperation, Bishkek, 2-3 April 2014.
  - ESCWA Seminar Enabling Policies for Financing Energy Efficiency Investments, Tunis, 14-15 April 2014.
  - ESCWA Regional Workshop on Developing a Regional Energy Efficiency Investment Pipeline, Hurgada, 19-20 June 2014.

### 2. Upcoming Events

- (a) 5<sup>th</sup> International Forum: Energy for Sustainable Development, Hammamet, Tunis, 4-6 November 2014 (UNECE in cooperation with other UN Regional Commissions, see Annex 3).
- (b) 1<sup>st</sup> session of the Group of Experts on Energy Efficiency, Geneva, 17-18 November 2014.

### 3. Main Challenges

- (a) Uncertainty regarding the Work Plan that has to be discussed and proposed by the nominated Bureau of the Group and by the Bureau of the Committee, and then approved by EXCOM. The secretariat is seeking engaged involvement of experts and government officials from across the UNECE region both for the Bureau and for the expert group itself.
- (b) The continuation of the FEEI project is questionable if donors do not resume funding. This would represent an unfortunate closure of what was previously a flagship activity.

### 4. Resources

As of June – 1 P5 (30%), 1 P4, 1 P4 (50%), 1 G5 (50%).

## **Group of Experts on Cleaner Electricity Production from Fossil Fuels**

### **1. Activities**

- (a) Prepared first draft of the provisional agenda for the 10<sup>th</sup> session of the Group of Experts in collaboration with the Chair. The draft is to be circulated to the Bureau.
- (b) Continued substantive and practical preparations for the 10<sup>th</sup> session and the related workshop (speakers, presentations, background documents, mailing lists).
- (c) Continued to work with prospective partners in co-organizing the October workshop on cleaner electricity production (IEA Clean Coal Centre, EURACOAL, University of Arizona, ECE Environment Division, UNEP, and UNFCCC).
- (d) Activity A of the work plan: Prepare a survey of carbon capture and storage (CCS): landscape, recent developments and stakeholders
  - Continued the work on the survey, with the secretariat's engagement and in-kind contribution from experts, with the support from interns.
- (e) Activity B of the work plan: Assist UNFCCC in assessing CCS technologies by preparing a communication to UNFCCC on the use of CCS in reducing greenhouse gas emissions
  - Continued the work on the recommendations to the UNFCCC on how carbon capture and storage in cleaner electricity production and through enhanced oil recovery could be used in reducing greenhouse gas emissions
  - Planned a visit, with the Chair and a Bureau member, to various carbon capture and storage (CCS) stakeholders (IEA Clean Coal Centre, World Energy Council, World Coal Association)
  - Continued to liaise with UNCCC to carry out this activity.
- (f) Activity C of the work plan: Assess the efficiency of the existing fleet of conventional power plants in the UNECE region
  - Continued work on a baseline analysis of the efficiency of fossil fuel-fired power plants in the ECE region, with the in-kind contribution from experts
  - Drafted the list of indicators on installed power, electricity production and coal parameters to be used as a basis for the analysis.
- (g) Activity D of the work plan: Define other activities through electronic exchanges among members of the Group of Experts.
  - Initiated conversation among members of the Group of Experts on emerging issues (the 20 October workshop will provide a venue to finalize outcomes of these discussions).
- (h) Updated website to reflect upcoming October events.
- (i) Continued to work on updating the mailing list for the Group.

### **2. Upcoming Events**

- (a) Meetings among key stakeholders in Washington DC (July 2) and London (July 22) to discuss draft recommendations on CCS from UNECE to UNFCCC.
- (b) 10<sup>th</sup> session of the Group of Experts (21 October 2014).
- (b) Pre-session workshop on practical aspects of CCS (activities A and B), improving conversion efficiencies (activity C), and emerging issues (activity D).

### **3. Main Challenges**

- (a) To encourage a broader participation of UNECE member States in the substantive activities of this Group of Experts.
- (b) To identify extrabudgetary resources needed to carry out the work plan and related capacity-building activities.

### **4. Resources**

50% of a P4 and 20% of a G6, plus in-kind contribution by the experts.

## **Group of Experts on Renewable Energy**

### **1. Activities**

- (a) Preparations for the first session of the Group on 18-19 November 2014. Draft work plan prepared with inputs by the CSE Bureau considered by GERE Bureau's candidates in April and submitted for consideration at the informal segment of EXCOM 4 June 2014. Clarifications proposed by EU member States on 3 June were incorporated in a draft revised by the secretariat and sent to missions in Geneva on 17 June. This draft was included in materials distributed for the June 27 Bureau meeting.
- (b) Germany is collaborating with GIZ to provide a consultant to carry out Activity A of the work plan. An initial proposal for a technical cooperation project for 2015 is under consideration by GIZ. Other co-financing and partnerships will be explored with bilateral and multilateral donors.
- (c) The secretariat negotiated and finalized the text of an MOU with IRENA in February 2014. Negotiations for the signature are on-going.
- (d) Secretariat moderated the UNCTAD Expert Meeting on Commodities and Development and presented CSE work areas with special focus on the mandate for the Group of Experts on RE, Geneva, 9 April 2014.
- (e) Secretariat participated in an interagency meeting organized by the CEI on Advanced Biofuels, Trieste, 6 May 2014 within the context of regulatory and policy dialogue as well as the sharing of best practices on various renewable energy sources, including biomass.

### **2. Upcoming Events**

- (a) An informal preparatory meeting on GERE will take place on 26 June 2014 in Geneva with Bureau candidates and selected experts from member States and key stakeholders, including international organizations. The objectives of the meeting are, inter alia, to tune the work plan, launch the preparatory activities and to consider the role and niche of the UNECE Group of Experts. The meeting will consider a draft work plan, in particular on the activities to be undertaken in the coming months and the outputs to be achieved by the first session of the Group in November. In particular, it is proposed to (i) conduct a review of relevant studies/analyses to establish a baseline of renewable energy in the ECE region; (ii) conduct a survey/questionnaire of ECE member States on the national situation, plans, framework conditions, instruments and tools that help to significantly increase the uptake of renewable energy in the region; (iii) map communities with no access to energy; (iv) disseminate best practices, also through an initial matrix, and facilitate exchanges of experiences.
- (b) 5<sup>th</sup> International Forum: Energy for Sustainable Development, Hammamet, Tunis, 4-6 November 2014 (UNECE in cooperation with other UN Regional Commissions), renewable energy session 6 November 2014
- (c) 1<sup>st</sup> session of the Group of Experts on Renewable Energy, Geneva, 18-19 November 2014.

### **3. Main Challenges**

- (a) The Secretariat is awaiting results from the brainstorming meeting on 26 June in order to tune the draft work plan towards a consensus building process as well as undertake initial activities and work for specific outputs by the first session in November.

### **4. Resources**

40% P4, 20% of a G5, 10% of a P5 Chief of Section (from 12 May).

## Group of Experts on Coal Mine Methane

### 1. Activities

- (a) Prepared, in consultation with the Chair, first draft of the provisional agenda for the ninth session of the Group of Experts. The draft is to be circulated to the Bureau.
- (b) Continued substantive and practical preparations for the ninth session of the Group of Experts meeting on 23 October (speakers, presentations, background documents, mailing lists).
- (c) Continued to work with the Administrative Support Group of Global Methane Initiative (GMI) on the joint UNECE and GMI Meeting on 22 October.
- (d) Activity A of the work plan: Electronic dissemination of Best Practice Guidance for Effective Methane Drainage and Recovery in Coal Mines
  - Identified and hired consultants to translate Best Practice Guidance on Effective Methane Drainage and Use in Coal Mines (BPG) into Spanish and Mongolian
  - With help from interns, finalized the first draft the BPG in Serbo-Croatian
  - Initiated the establishment of peer review boards that are to look into linguistic and technical quality of the Spanish and Serbo-Croatian translations.
- (e) Activity B of the work plan: Update and further development of the BPG
  - Established a task force to examine the content and structure of an updated Best Practice Guidance with a view to identifying themes that need to be addressed in a next edition.
- (f) Activity C of the work plan: Prepare proposals for case studies, where appropriate and financed by extra-budgetary resources, on the application of best practice guidance in specific coal mines in different regions of the world
  - Drafted project document for the extrabudgetary project: Application of Best Practices in Specific Coal Mines, funded by the Russian Federation, to comply with new requirements.
  - Initiated consultations between the Russian Ministry of Energy, the Russian Ministry of Foreign Affairs, the Chair, and other members of the Group of Experts to clarify deliverables of the project, in order to make sure it falls within the Group of Experts Terms of Reference.
  - Project is to be resubmitted to EXCOM for approval once these consultations are carried out.
- (g) Activity D of the work plan: Facilitate establishment of an International Centre of Excellence on Coal Mine Methane
  - Replied to Central Coal Mining Institute of Poland following its offer to host an International Centre of Excellence on Coal Mine Methane
  - Continued to liaise with relevant Polish actors in order to move forward with this initiative.
- (h) Activity E of the work plan: Continue to provide advice to UNFCCC (on the matters related to ACM0008) and to other international, national and regional market-based coal mine methane emission reduction mechanisms and coal mine methane related standards
  - Followed activities of the California Air Resources Board regarding its initiative to allow the use of reductions of methane emissions from coal mines as a way to comply with the State's clean energy law; developments will be presented to the Group of Experts ninth session.
- (h) Updated website to reflect upcoming October events.
- (i) Continued to work on updating the mailing list for the Group of Experts.

### 2. Upcoming Events

- (a) 9<sup>th</sup> session of the Group of Experts, 23 October 2014.
- (b) Joint UNECE-GMI meeting, 22 October 2014.

### 3. Main Challenges

- (a) The regular budget P-3 post that supports the CMM programme of work is still vacant. The work in this field is currently carried out through redistribution of tasks among existing staff members.

### 4. Resources

50% of a P3 and 20% of a G6, plus in-kind contribution by the experts. In the 2<sup>nd</sup> quarter of 2014 none of these resources were available and the work has been picked up by other staff in the Division.

## Expert Group on Resource Classification (EGRC)

### 1. Activities

- (a) UNECE Resource Classification Week, 28 April–2 May 2014, with over 170 experts.
- IAEA and UNECE Joint Consultancy Meeting, 28–29 April: resulted in the outline for development of guidelines for application of UNFC for uranium and thorium projects.
  - UNECE UNFC Workshop, 29 April.
  - EGRC Fifth Session, 30 April–2 May: meeting report approved on 2 May and posted to website.
  - Associated meetings: EGRC Bureau on 28 April and 1 May, Technical Advisory Group on 30 April; Communications Sub-Committee on 30 April and Renewables Task Force on 1 May.
- EGRC fifth session highlights, including delivery on work plan 2013–2014:
- EGRC Bureau elected: comprising a Chair, First Vice Chair, Chair Ex-officio & 17 Vice Chairs.
  - UNFC-2009 is operational: case studies on application of UNFC-2009 presented, including solid minerals, uranium and geothermal resources.
  - TAG established: Technical Advisory Group (TAG) is established. Its work will include mapping of other systems to UNFC-2009 and review of bridging documents.
  - Application of UNFC to renewable energy: agreed on draft specifications for application of UNFC to renewables and requested they be issued for public comment. Renewables Task Force to develop at least one set of draft renewable commodity-specific specifications for review at EGRC sixth session.
  - Application of UNFC to nuclear fuel resources: bridging document between NEA/IAEA Uranium Classification (Red Book) and UNFC finalized subject to incorporation of changes requested by EGRC. Bridging Document will be included as an appendix in Red Book and submitted to Energy Committee in November for approval.
  - Application of UNFC to injection projects: draft documentation presented that would allow the use of UNFC to classify injection projects, in particular for storage of carbon dioxide.
  - UNFC E axis - environmental and social issues: Bureau tasked to establish a subgroup to prepare guidance on accommodating environment and social considerations in UNFC. Guidance should revolve around high-level principles that are practical, useful and add value to UNFC.
  - Document approval procedure: EGRC recommended a five-step approval procedure.
- (b) A Memorandum of Understanding is under development between UNECE and the International Geothermal Association for development of specifications to apply UNFC to geothermal resources.
- (c) UNFC presented at more than 15 conferences worldwide by EGRC members during the period.
- (d) Generic Specifications for Application of UNFC to Renewables issued for public comment on 12 June, accompanied by UNECE press release.
- (d) UNFC presented in Opening Session of IAEA International Symposium on Uranium Raw Material for Nuclear Fuel Cycle: Exploration, Mining, Production, Supply and Demand, Economics and Environmental Issues, Vienna, 23–27 June. Event held in cooperation with UNECE.

### 2. Upcoming Events

- (a) Joint UNECE and IAEA Regional Workshop on “Application of UNFC-2009 for Uranium Projects”, Johannesburg, South Africa, 10-14 November 2014. 30 African countries expected to attend.

### 3. Main Challenges

- (a) UNFC is global; delivering on a global project is resource intensive.
- (b) Ability for secretariat to: service EGRC, its Bureau and six sub-groups; respond to requests for information and technical advice; organize workshops; update web pages; identify speakers for conferences globally. Need to secure extra-budgetary funding and in-kind contributions.

### 4. Resources

75% of 1 P5, 40% of a G3. EGRC and UNFC development dependent on significant voluntary contributions from EGRC members/stakeholders (time, travel and sponsorship of events).

## Group of Experts on Gas

### 1. Activities

- (a) Finalized the report from the 1<sup>st</sup> meeting of the Group of Experts.
- (b) Finalized the Group of Experts' work plan. Work plan of the Group of Experts was approved *ad referendum* by EXCOM at its May meeting.
  - Worked on Bureau consultations to establish the task forces needed to carry out the four activities defined by the Group of Experts' work plan. The meeting planned on 23 June was cancelled, and the secretariat is now working to organize a Bureau conference call around 30 June.
- (c) Activity A of work plan: Best Practice Guidance to Reduce Gas Leaks in the Gas Value Chain
  - Establishment of a Task Force to work on activity A under the direction of either the Chair or one of the Vice Chairs is still pending, due to delays in formal endorsement by member States of the nominations to the Bureau of the Group of Experts.
- (d) Activity B of work plan: Best Policy Practices on the Role of Natural Gas in Significantly Increasing the Uptake of Renewable Energy in the ECE Region and Helping Achieve the Objective of Access to Energy for All in the ECE Region.
  - Establishment of a Task Force to work on activity B under the direction of either the Chair or one of the Vice Chairs is still pending, due to delays in formal endorsement by member States of the nominations to the Bureau of the Group of Experts.
- (e) Activity C of work plan: Best Practice Policy Guidance for Liquefied Natural Gas (LNG)
  - Establishment of a Task Force to work on activity C under the direction of either the Chair or one of the Vice Chairs is still pending, due to delays in formal endorsement by member States of the nominations to the Bureau of the Group of Experts.
  - A meeting with the Group's Chair de la Flor and Bureau Vice Chair Karasevich was held to accelerate establishment of the Task Force and discuss the deliverables.
  - The secretariat established preliminary contacts with the Columbia University, as a representative of academia, regarding their possible participation in the Task Force on LNG, including through preparations of some joint studies.
- (f) Activity D of work plan: Removing Barriers to the Use of Natural Gas as a Transportation Fuel
  - Establishment of a Task Force to work on activity D under the direction of either the Chair or one of the Vice Chairs is still pending, due to delays in formal endorsement by member States of the nominations to the Bureau of the Group of Experts.
  - The secretariat has been in contact with the secretariat of the UNECE World Forum on Vehicles Regulations (WP.29) and its subgroup dealing with natural gas vehicles, with a view to explore the opportunities for synergic activities between the two intergovernmental bodies.
  - The secretariat has also been in discussion with NGVA Europe about their involvement in Activity D.

### 2. Upcoming Events

- (a) The next meeting of the Group of Experts on Gas is scheduled for January 2015.

### 3. Main Challenges

- (a) Assembly of the task forces to deliver on the work plan.
- (b) Coordination of the Group of Experts on Gas with the activities of the Gas Centre.

### 4. Resources

50% of a P4, equivalent of 20% of G3.



## Gas Centre

### 1. Activities

- (a) 10<sup>th</sup> Gas Centre Task Force on Supply, Infrastructure and Markets (SIM), hosted by GDF SUEZ, near Paris, 15-16 May 2014. Topic: New infrastructure, new technologies: the path towards sustainable development? The purpose of this meeting was to exchange ideas and to share experiences on “green” gas projects supporting sustainable development of the gas market and gas infrastructure. The agenda of the meeting was split into three parts: (i) development of bio-methane / bio-methane projects; (ii) development of power to gas projects (production of hydrogen / production of synthetic methane); and (iii) use of gas for transport (CNG for vehicles and LNG for heavy transport sector such as trucks or ships). Companies involved in such projects described the main features of their project, including economics, legal barriers, and social constraints.
- (b) Database Technical Committee, Geneva, 17-18 June 2014. This meeting was cancelled by the Chair of the Executive Board following the dismissal of the Gas Centre Programme Manager.
- (c) Secretariat participated in the European Business Council General Assembly meeting.
- (d) Meeting of the Bureau of the Executive Board of the Gas Centre, 25 June 2014. The topics will include temporary replacement of the Programme Manager until the end of the year and outlook for the Gas Centre beyond 2014.

### 2. Upcoming Events:

- (a) Preparations underway for THE 20th Anniversary of the Gas Centre and Industry Forum, St. Petersburg, Russian Federation, 7-9 October 2014. Proposed topics include the outlook for long term contracts in a globalizing market and the role of natural gas in the international and European energy mix.
- (b) Preparations underway for 11th Gas Centre Task Force on Supply, Infrastructure and Markets (SIM) in India, to be hosted by GAIL (new member of the Gas Centre), 25-28 November 2014. Proposed topics include the LNG business in Europe and in Asia, and links with transportation.
- (c) Preparations underway for 4th Task Force on Gas Markets and Regulation, Brussels, 16 December 2014.

### 3. Main Challenges

- (a) Replacing the previous Programme Manager, defining the purpose of the Gas Centre in light of the reform review, attracting new members, identifying speakers for events, reinforcing dialogue among gas companies, and initiating new links with stakeholders interested in the Gas Centre.

### 4. Resources

1 P3 (vacant) and 1 G4 and in-kind contributions from Gas Centre members (meetings hosted by companies). Until the P3 is replaced, the Director is acting as manager of the Gas Centre, a role that does not entail much until the meeting of 25 June has taken place.

## **Annex 1**

### **Statement made by SBF at the 1<sup>st</sup> Annual SE4ALL Forum in New York 4-6 June 2014**

“Thank you, Madame Chair, good afternoon Excellencies, ladies and gentlemen,

1. The sustainable energy division at the Economic Commission for Europe in Geneva services the Committee on Sustainable Energy, which strives to help our member states secure affordable and sustainable energy.
2. Our mandate is explicitly linked to the sustainable energy for all initiative and to reducing the carbon footprint of the energy sector. We work to support the initiative at a very practical, grassroots level. We develop normative instruments such as best practice guidance, standards, regulations and so forth. These activities will create the investment framework conditions needed to mobilize capital, technology, and skill at the required scale.
3. Our work is focused not only on energy efficiency and renewables, but also on coal, gas, electricity, resource classification, and energy security. If we get the rules of the game right, we can improve the technical, economic, and environmental/social efficiency of the entire energy system.
4. We are pleased to support the initiative and anticipate continued strong collaboration with all of our partners.

Thank you for your kind attention.”

## Annex 2

### **Contribution to the UN Summary report on Reliable and Stable Transit of Energy Issues related to the reliable and stable transit of energy Possible modalities for international cooperation**

#### Issues Relating to the Reliable and Stable Transit of Energy

UNECE's work on energy is designed to support the Secretary-General's initiative on Sustainable Energy for All. Our activities are aimed to facilitate efforts to secure affordable and sustainable energy supply for our member States.

- Energy supply is considered secure if supplies remain robust in the short- and long-run in the face of political or technical disruptions and resource depletion. Energy demand is considered secure if buyers respect contract terms and delivery paths remain unencumbered. Energy security collectively requires investment, diversification of primary fuels, technology and system flexibility. It also requires trust, stable relationships, long-term arrangements, and dialogue.
- Affordability means delivering least cost energy services to consumers to meet their basic needs with the means they have. Prices must indicate full costs including investment requirements to ensure the availability of affordable energy in both the short and long term.
- Sustainability has the three inter-related dimensions of economics, environment, and social equity. Investment and consumption decisions be made in a framework of sensible, long-sighted, and adaptive policies, sustainable resource use must meet current needs while preserving the environment and improving quality of life in the present and the future, and policies and programs should act over time for the welfare of all and thereby enjoy necessary and broad popular support.

Meeting the imperatives of sustainable development and a low carbon economy requires fundamental change that can occur only when rules are devised to enable the shift. The UN can and must facilitate development of the new directions at the international level. In sustainable energy UNECE plays a defining role in development of multilateral agreements, standards, and related norms and best practices. Finding, producing and delivering sustainable energy requires significant investment that will only occur when appropriate framework conditions are in place. The safe, reliable and efficient transit of energy is one prerequisite for investments to materialize.

The exploration, development, and production of primary energy supply, the upstream segments of energy, require significant investment of capital, technology, and management skills. Likewise, the transformation, transportation, and transmission of energy, the mid-stream segments of energy, require significant infrastructure commitments. The downstream segment of energy is the delivery of useable energy and energy services to final consumers, and it too requires investment. It is the final user of energy whose payment for energy services underpins the financing of needed investments in all of the segments of the energy system. Safe and reliable transit of energy cannot happen unless the global energy system and all its moving parts — upstream, midstream, and downstream — work together in an efficient and sustainable manner. Whereas energy consumers require security of supply to ensure the availability of affordable and sustainable energy services, energy investors require security of demand to ensure expected returns on their investments. If any element in the investment, delivery, and payment chain is interrupted, then the activities supported by the provision of energy services will be at risk. The reliable and stable transit of energy is an essential part of this equation.

The world is changing rapidly in terms of environmental considerations, technological progress, and globalization, and the pace of change is accelerating. What was meant by “energy security” in 1970 became something different in 1990. The concept is changing again in 2014 as the world works to decarbonise energy while ensuring energy access and improving energy intensities. The changes in what is meant by “energy security” will persist long after the current geopolitical disturbances have passed. Issues of market design,

structure and regulation, tariffs, subsidies, access, investments – in fact all of the policy considerations that relate to energy – enter into an energy security dialogue.

The specific issues that emerge regarding the reliable and stable transit of energy are not the same for all forms of energy. The general energy points that can be raised include the following:

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| <ol style="list-style-type: none"><li>1. Reliance of energy trade on fixed infrastructure<ul style="list-style-type: none"><li>- Up-front costs; large economies of scale</li><li>- Pathways controlled by incumbent companies</li><li>- Energy trade that is sensitive for energy security</li><li>- Capacity constraints</li></ul></li><li>2. Conditions to make international projects viable:<ul style="list-style-type: none"><li>- Economics based on supply/demand/prices</li><li>- Pricing philosophy, long-term contracts</li><li>- Reliable investment framework conditions</li><li>- Non-discrimination, facilitation of transit</li><li>- Non-interruption of energy flows, dispute resolution</li><li>- Conditions of access, tariffs, taxes</li><li>- Rights of way, approvals, licensing, standards</li></ul></li></ol> | <ol style="list-style-type: none"><li>3. Political support<ul style="list-style-type: none"><li>- Confidence, trust, and political support for large infrastructure projects</li><li>- Political, regulatory framework</li><li>- Credit guarantees, loans, projects of public interest</li><li>- Basic principles that reflect industry standards</li><li>- Reconciling interests of energy producing, consuming and transit countries</li><li>- Interface between different regulatory environments</li><li>- Parallel regional integration processes</li><li>- Geopolitical perspectives vs. common rules</li></ul></li></ol> |
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The issues of stable and reliable transit of energy specifically and energy security apply equally to all fuel types, all geographies, and all value chains. One of the key sessions at the last meeting of the UNECE Committee on Sustainable Energy addressed Reliable and Stable Transit of Energy Resources and Its Role in Ensuring Sustainable Development and International Cooperation. The discussion during the session focused on how the United Nations and other international organizations could play a more prominent role in defining and servicing energy transit regimes in the context of energy security. In today's complex energy environment, partnership can take many forms, but the common denominators never change: trust, based on dialogue and reliable performance; respect; and mutual benefit.

#### Modalities for International Cooperation

International cooperation must address the range of issues, engage across all forms of energy at all steps in the value chain (upstream/midstream/downstream), involve a close and enduring public/private engagement in terms of dialogue and the development of protocols and model agreements, and account for the interests of producer, consumer, and transit countries. There is a clear need for an on-going forum to discuss existing and possible future energy security issues, including the reliable and stable transit of energy. Issues that could be discussed at such a forum include the energy supply concerns that might emerge from the growth in demand for energy of all types in Asia, the emergence of gas exports from the Russian Federation to Asian markets, the long-term repercussions of the Arab spring, the near-term stability consequences of significant uptake of renewables, and so forth. The list of topics should not be too narrowly defined because the energy security landscape will evolve. All stakeholders in the global energy system should be engaged.

UNECE could serve as a platform for exploring issues surrounding energy security, including the reliable and stable transit of energy. Our proposal would be to renew the Energy Security Forum that was initiated at UNECE in 2003. Under such a Forum there could be informal working sessions on concerns to assess whether they are adequately covered in existing structures. The heart of the exercise would be to address the issue of what is required to secure affordable and sustainable energy supplies in the long term and how identified issues are treated in existing legal instruments/bodies. The experts would explore as well if identified deficiencies could be addressed within the existing instruments by modification/adaptation or if something else required. The informal working sessions would be conducted with experts nominated by member governments and other noted international experts on the topic. WTO, ECS, EU, IEA, OPEC and other relevant intergovernmental agencies would be invited, as would relevant energy industry groups and civil society. There could be discrete working session for each segment (upstream, mid-stream, downstream). At the conclusion of segment activities there could be a meeting of intergovernmental experts to integrate and agree recommendations to present to Member States.

## Annex 3

### Fifth International Forum on Energy for Sustainable Development

#### Draft Concept Note

*Hammamet, Tunisia, 4-6 November 2014*

The **Fifth International Forum on Energy for Sustainable Development** will be held in Hammamet, Tunisia, on 4-6 November 2014. The Forum is organized by the Government of Tunisia, the United Nations Economic Commission for Europe (UNECE), the Economic and Social Commission for Western Asia (ESCWA), the Economic and Social Commission for Asia and the Pacific (ESCAP), the Economic Commission for Latin America and the Caribbean (ECLAC), and the Economic Commission for Africa (ECA).

The Forum will emphasize attaining the three objectives of the Sustainable Energy for All (SE4All) Initiative of the UN Secretary-General through a regional agenda: 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 by 2030. The Forum will share experience from all regions of the world.

One of the key events will be a High-Level Dialogue on “International Cooperation towards Sustainable Energy for All” with participation of the Executive Secretaries of UN Regional Commissions (RCs) and ministers responsible for implementing sustainable energy policies. The High-Level Dialogue is expected to adopt a declaration that will reaffirm the roles of key stakeholders in promoting sustainable energy policies and call for joint efforts to achieve SE4All objectives.

The Forum will include a Global Workshop of the UN Development Account (UNDA) project “Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development”, implemented jointly by all five UN RCs. The Workshop will gather government officials and project developers from the regions along with major domestic and foreign investors to facilitate exchange of expertise, lessons learned and best practices and to promote greater investment flows into energy efficiency projects. The event will share experience with programmes for training on financial engineering and business planning as well as case studies on policy reforms to promote energy efficiency investments and discuss a project pipeline of each region.

A new UNDA project “Promoting Renewable Energy Investments for Climate Change Mitigation and Sustainable Development” will be launched by ESCWA and UNECE. The project is expected to improve capacity of government officials, national financial institutions, national energy experts and project developers to develop renewable energy investment projects in the private and public sectors. The project will also improve capacity for governments to adopt policies and measures to improve opportunities for banks and commercial companies to invest in renewable energy projects through the development of new financing mechanisms.

#### **Background**

The first three International Sustainable Energy Fora were organized by UNECE and ESCAP with participation of UNDP and other international organizations in Central Asia. The Fourth International Forum on Energy for Sustainable Development took place in Tbilisi, Georgia in 2013. Participants acknowledged the role of government in fostering sustainable energy development and the role of the business sector in implementing energy initiatives, including for development of infrastructure, enhancing cross-border energy trade, and increasing energy efficiency.

**Energy efficiency.** Improving energy efficiency (EE) is the famous low-hanging fruit that is supposed to be easy to do and contributes to energy security, a better environment, quality of life, and economic well-being for all. EE is the best way of getting more out of our existing resources, supporting economic growth,

and reducing the energy costs for all citizens. Despite the multiple benefits, improving energy efficiency remains elusive because of the way markets are designed and structured. Low energy tariff policies, subsidies, lack of information, and lack of investment capital for end-users are among the barriers to deployment of EE. Public investments in improving EE from source to use will be critically important. The Forum will look closely at how these challenges can be addressed.

**Renewable energy.** Investing in renewable energy (RE) is one way to reduce the carbon intensity of the energy sector. RE technologies are promoted for three principal reasons that are interlinked: a) to reduce the environmental consequences of fossil fuel use; b) to improve energy security; and c) to encourage economic development, innovation, and high-tech manufacturing. These reasons are particularly relevant for developing regions, where much of the population lives in isolated rural communities that lack energy services and suffer poor socio-economic conditions. RE can also contribute to energy security by diversifying the energy mix.

RE is not the only way to address climate change and air pollution. While RE penetration would be an important indicator of progress, sustainable energy policies could also explore the range of alternatives for reducing the carbon intensity of the energy sector and reducing the environmental and social impacts caused by energy and energy poverty. Looking at these broader aspects will be an important objective of the Forum.

**Access to modern energy services.** Ensuring equitable access to modern energy services for households and public services facilities, including access to adequate electricity supply and clean energy for cooking, health and hygiene is essential to fulfil basic human needs and enable sustainable development. However, access to modern energy services varies widely, and ensuring it requires adequate investments from primary energy supply to final end users. All stakeholders should have fair access to the different segments of the energy markets. A broad view of access includes three aspects: a) physical access, which is connection either to a grid-based service or to an off-grid solution; b) economic access, which is the ability to pay the cost of service; and c) quality of service – if systems are not properly maintained, then quality will deteriorate. Access to energy services can embrace energy services provided through non-grid-connected energy sources, including RE and other distributed energy technologies, as well as through energy services that become available due to energy resources “reallocated” through EE measures. The range of issues associated with the questions of access will be explored by the Forum.