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ECONOMIC COMMISSION  
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### **Summary of informal preparatory meetings for the UNECE Group of Experts on Renewable Energy**

- Geneva, Palais des Nations, 26 June 2014, 10:00-18:00
- Paris, REN21 offices, 11 July 2014, 13:00-18:00

The United Nations Economic Commission for Europe (UNECE) member States mandated the newly established Group of Experts on Renewable Energy (GERE) to carry out action-oriented, practical activities to significantly increase the uptake of renewable energy (RE), in line with the United Nations Secretary General's Sustainable Energy for All (SE4ALL) initiative. The region's 56 member countries of western, central and eastern Europe, central Asia, Israel, Turkey, and North America have significant economic, cultural, and energy diversity, and play a large role in the current and future global energy architecture.

Two informal preparatory meetings took place with selected experts from member States and key RE thought leaders, one on 26 June 2014 in Geneva and one on 11 July 2014 in Paris, respectively. Participants of the informal meetings discussed the state of development of RE with a particular focus on the challenges in the UNECE region, exchanged views on the role that the Group could play to increase the uptake of RE in order to refine the work plan of the GERE for clear value added and to launch specific activities in preparation for its first session on 18-19 November 2014. It was the second meeting held in Paris with representatives from the International Energy Agency (IEA), the International Renewable Energy Agency (IRENA), the Renewable Energy Policy Network for the 21<sup>st</sup> Century (REN21) and the United Nations Environment Programme (UNEP) that confirmed data gaps and needs in the UNECE region and allowed to define next steps for the publication of a potential joint Renewable Energy Status Report for the UNECE region in 2015.

#### Main outcomes from the discussions:

##### **Data**

- RE data in most concerned countries of the UNECE region are not readily available. A RE status report in the UNECE region is urgently needed to define the baseline for national policy and technology decision making. REN21, IEA and IRENA have a renowned on-going annual data collection process in place, culminating in an annual publication of a Global RE Status Report. UNECE's work could complement these efforts with a regional report in 2015 instead of launching a parallel process;
- IRENA could help with information about costs (e.g. land, legal, permitting, feasibility studies, other transaction costs);

##### **Energy access**

- Identifying communities in the UNECE region with no or limited access to energy services would allow to develop policy and technology approaches that could promote RE as a short and medium term solution for better energy services (off grid);

##### **Policy**

- Best practice examples are needed on how to "do RE right", in particular because the increased uptake of RE impacts existing business models and the assets of established energy providers;

## Barriers

- Financing remains a key barrier for increased uptake of RE. Working with investors and insurance companies on the notions of risk, working with the private sector on the creation of markets; and facilitating the understanding of RE technologies and policies is a key contribution that the GERE can make;
- Further analysis of the key barriers preventing the increase of RE in the UNECE region could complement ongoing efforts to develop best practice policies. IRENA and IEA are both actively tracking the implementation of RE policies and measures, and a database exists;

## Systems

- RE uptake should not be seen in isolation but rather as part of a future energy system. RE has an important role to play related to the modernization of infrastructure and more work is needed to identify how to optimise the integration of RE into existing or future systems, based on national circumstances and taking into account lessons learnt;
- Many countries face similar issues related to the integration of RE. Capacity building exercises and the exchange of knowledge could help, as could clustering of like countries with respect to RE resources and needs as well as doing analysis based on regional and sub-regional approaches if requested by countries;

## Key actions

- Key actions are listed in the following table. UNECE is working with experts and key partners on the implementation. Regarding proposed activities by November, GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit - GIZ GmbH) has started to work on a RE status report to be presented in November 2014 to the first meeting of the GERE;
- A project plan will be developed for the development of the Renewable Energy Status Report in the UNECE region for publication in 2015;
- A “UNECE RE Energy Award” will be further developed in order to reward low-cost, off-grid RE solutions that are robust and simple to handle.

## Suggested next steps:

<b>By November 2014</b>	<b>Beyond November 2014</b>
<p>State of RE Development in the UNECE region based on existing data/ analyses (IEA/REN21/IRENA/World Bank), done with GIZ support:</p> <ul style="list-style-type: none"> <li>• Capacity/energy potential</li> <li>• Policy measures, main frameworks, mechanisms and tools for investors/ for support systems/ for producers/ consumers/ for connecting remote areas</li> <li>• Barriers to implementation</li> <li>• Technology review</li> <li>• Costs/ prices</li> <li>• Non-electricity RE</li> <li>• Key stakeholders (multilateral and sample of bilateral donors)</li> <li>• Link to UN framework classification</li> </ul>	<p>Review of RE development at national level:</p> <ul style="list-style-type: none"> <li>• Review at national level through a strengthened cooperation with IEA/REN21/ IRENA within on-going REN21 data collection process</li> <li>• Analysis of the potential and competitiveness of RE technologies in the UNECE region</li> <li>• Identification of main obstacles, benefits/ drivers to attract investments in RE supply</li> <li>• Subsidies/ incentives/ market distortions/ mitigation social consequences</li> <li>• Cost of financing</li> <li>• Analysis of opportunities due to lowering of RE generating costs</li> <li>• Creation of RE markets/ subsidies and energy pricing</li> <li>• Ways to optimise energy systems</li> </ul>
<p>Questionnaire to be sent to UNECE member States:</p> <ul style="list-style-type: none"> <li>• Mapping of communities with no access to modern energy services</li> <li>• Survey on distributed generation as contribution to Global Tracking Framework report</li> </ul>	<ul style="list-style-type: none"> <li>• Survey to monitor RE progress</li> <li>• Identification of potential measures to improve data accuracy and reliability (with partners)</li> <li>• Cooperation with UNECE countries to receive data on distributed generation on a regular basis</li> </ul>
<p>Best Practices:</p> <ul style="list-style-type: none"> <li>• Taxonomy/ Guidelines on best practice policies and measures</li> </ul>	<ul style="list-style-type: none"> <li>• Identification and dissemination of best practices, capacity building exercises</li> <li>• Standard setting</li> </ul>
<p>Multi-stakeholder dialogues with key thought leaders:</p> <ul style="list-style-type: none"> <li>• World Bank, IEA, IRENA, REN21, others</li> </ul>	<ul style="list-style-type: none"> <li>• Regional Action Plans if requested</li> </ul>

## Summary of discussions

### **I. Data availability, access and reliability**

RE data for many of the region's 56 Member countries exist and is being collected by renowned international organisations like IEA, IRENA, and REN21. However, data for a large part of UNECE regions in central and eastern Europe, central Asia and the Caucasus is not readily available, up-to-date, accessible or reliable. This is an obstacle for strategic energy planning in many of these countries and represents real value added for future activities of the GERE. UNECE could assist to fill data gaps with the desired key characteristics (comprehensive, transparent, homogeneous and consistent (see slide below from REN21, presented during the workshop).

**What defines good data?**

- Quality / Reliability
- Accessibility
- Timeliness
- Comprehensiveness
- Transparency (necessity of referencing)
- Validity of data
- Methodology

**Ensuring these elements increases trust in the data produced**

[www.ren21.net](http://www.ren21.net)

Finding reliable and interpretable data on RE costs is another challenge. IRENA has done work on costs related to power generation and proposes levelized cost of electricity as a basis for comparison of systems cost. Due to rapidly falling technology costs as they have recently been observed in the solar PV market, data collection processes need to follow suit as good and up to date data becomes extremely relevant in national decision making. GERE has therefore an extremely important role to play related to the quality of data in all the aspects mentioned above. A first effort could be a gap analysis for the UNECE region. A survey of UNECE member States could complement ongoing activities of key actors and allow the analysis of national circumstances, framework conditions, policy instruments and constitute the basis for discussion for the first meeting of the GERE. Presenters suggested the grouping of countries according to RE potential in order to consider regional energy policies, grid development or regional energy markets as one approach to speed up RE uptake.

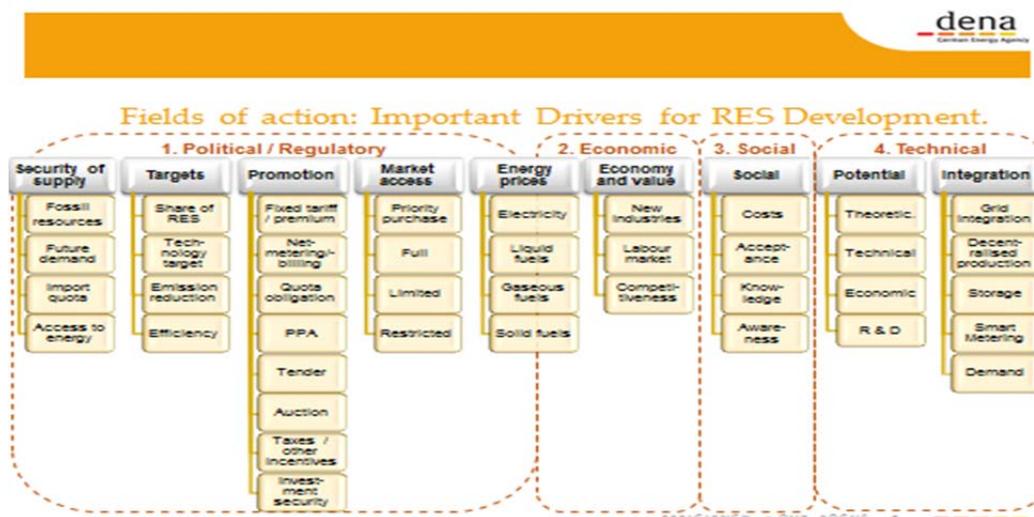
Member States have indicated their wish to the UNECE secretariat to cooperate closely with RE key players in order to avoid duplication of work and strengthen ongoing processes. In this context, UNECE seeks a long-term dialogue and partnerships with these actors, taking also advantage of the cooperation with other UNECE sub-programmes and divisions (e.g. Statistics, Forestry and Timber, Sustainable Housing, etc.), in order to assist in filling data gaps, complement existing databases and produce a more complete view of the status of RE in the UNECE region. Collaboration will also be explored in the context of the World Bank's Global Tracking Framework Report of the SE4ALL initiative, in which the increased uptake of RE plays a crucial role. UNECE may contribute to this second report with a survey on distributed generation in RE.

### **II. Energy Access in the UNECE Region**

The mandate of the GERE extends to shedding light on the role that RE can play in increasing energy access in the UNECE region, a region in which according to UNECE publications energy access does not seem to be an issue. It will therefore be important to examine the situation of remote communities, and consider definitions of energy access and energy services in this context. Solutions need to take into account local social, economic and environmental parameters related to improving energy supply and quality as well as affordability. Participants confirm that the meaning of energy access in the region in question is quite different from the one traditionally used for developing countries and is more orientated

towards continued access to *modern* energy services and to the *quality* of this access. The question posed during the meeting was if data for such remote communities can actually be identified through the work of the Group and if so in the given timeframe.

Country participants confirmed the need for a taxonomy of best practices for RE policies and measures by creating a genuine “menu” for policy makers encouraging the uptake of RE sources and by connecting remote areas to energy grids in line with the SE4ALL initiative. During the brainstorming, key fields of possible action were considered in the four categories of (i) Political/ Regulatory, (ii) Economic, (iii) Social and (iv) Technical (see slide below from the presentation by the German Energy Agency DENA).



Participants asked for a model that links energy access, affordability and subsidies or a tool that could help governments in determining energy pricing policies and approaches to the successful reduction of harmful energy subsidies. A mapping of energy subsidies in the UNECE region and a guidelines for successful subsidy reforms was also mentioned.

### III. Best practises policies in the UNECE region

RE policies mean well but do not work well enough. RE represents one way to reduce the carbon intensity of the energy sector, improve energy security, and encourage economic development. However, there is much more to be done. There is still no framework on how to “do RE right” from a policy, cost or systems perspective, and participants felt strongly that an exchange of best-practice exercises could accelerate an improved understanding of optimized systems backed by good RE policies and measures. UNECE can – together with other international organisations - serve as a platform for such best practice policy discussions leading to recommendations, guidelines, RE standards, as standards are a value added of the organization.

Participants were asked to identify key measures that would have the greatest impact on the increased uptake of RE. Topics mentioned for GERE consideration were the following:

- The importance of research and development and innovation, particularly concerning innovative bioenergy technologies and energy storage;
- Political will to promote policy agendas adapted to local situations;
- Closer collaboration with the private financial sector to increase RE finance, including a discussion about how to reduce the cost of finance for RE;
- Engagement with countries outside the UNECE region, notably Brazil, China and India;
- Examining closely the impact on RE on existing utility sector business models;
- Analysis of the medium and long-term development of RE costs and related impact on national decision making;
- An overview of energy pricing structures in the UNECE region and the relationship of these elements with the uptake of RE;
- More information about job creation through small scale RE installations; and

- Increased awareness of sustainable biomass/ first and second generation biofuels/ agricultural waste.

#### **IV. Integrated long-term approach: UNECE action within the SE4ALL**

For the GERE, an integrated approach is required that takes into consideration the overall objectives of the SE4ALL initiative and activities of other United Nations actors. Moreover, the need to consider RE as part of wider energy systems rather than in isolation was expressed. Only combined efforts linking for example RE to energy efficiency, through smart systems, sustainable cities, sustainable housing, etc. will have the urgently needed impact required to increase the share of RE faster than business as usual. Additional analysis of the role of RE in grid and off-grid infrastructure could further contribute to strengthening the impact of the GERE. It was further recommended to have a dedicated session on RE finance and investment, involving the private financial sector and project developers to provide targeted input into the next meeting of the GERE.

Participants suggested the following additional organisations for increased involvement in the GERE: the American Council on Renewable Energy (ACORE), the American Wind Energy Association (AWEA), École polytechnique fédérale de Lausanne (EPFL), Fraunhofer Institute, the Global Wind Energy Council (GWEC), Joint Research Centre (JRC), National Renewable Energy Laboratory (NREL), the Renewable Energy Industry Advisory Board of the IEA (RIAB) and the World Energy Council (WEC).

The participant lists for both meetings are attached in the Annex.

## **ANNEX**

### **List of participants**

#### **Governments (UNECE Bodies) - ECE Member States**

##### ***Azerbaijan***

Mr. Nazir Ramazanov  
Adviser to Chairman  
The State Agency on Alternative and Renewable  
Energy Sources of the Republic of Azerbaijan  
Baku

##### ***Bulgaria***

Ms. Maria Raytcheva  
Head of European and Regional Cooperation  
Directorate  
Ministry of Economy and Energy of the Republic of  
Bulgaria  
Sofia

##### ***Croatia***

Mr. Zeljko Juric  
National Coordinator of FEEI Project, Senior  
Researcher  
Department for Renewable Energy Sources and  
Energy Efficiency  
Energy Institute "Hrvoje Pozar"  
Zagreb

##### ***Germany***

Ms. Sarah Duhr  
Referent of Division "Cooperation with Central and  
Eastern European Countries and the Newly  
Independent States, MENA-Region"  
Federal Ministry for the Environment, Nature  
Conservation and Nuclear Safety  
Berlin

Mr. Thomas Fohgrub  
Second Secretary  
Permanent Mission of the Federal Republic of  
Germany  
Geneva  
Switzerland

Mr. Oliver Frank  
Head of Division Renewable Energies  
German Energy Agency (DENA)  
Berlin

##### ***Greece***

Ms. Rhea Tsitsani  
Counsellor of Economic and Commercial Affairs  
Permanent Mission of Greece  
Geneva  
Switzerland

##### ***Latvia***

Ms. Liene Grike  
Mission Member  
Permanent Mission of the Republic of Latvia  
Geneva  
Switzerland

##### ***Poland***

Ms. Agnieszka Hardej-Januszek  
First Secretary  
Permanent Mission of the Republic of Poland  
Geneva  
Switzerland

Mr. Marcin Scigan  
Expert  
Renewable Energy Department  
Ministry of Economy  
Warsaw

##### ***Russian Federation***

Ms. Anna Klyukhina  
Third Secretary  
Permanent Mission of the Russian Federation  
Geneva  
Switzerland

##### ***Spain***

Ms. Lucía Mora Ruiloba  
Regulatory Development  
Enagás, S.A.  
Madrid

## **European Union**

### ***European Union***

Mr. Servatius Van Thiel  
Minister Counsellor  
European Union  
Geneva  
Switzerland

## **Intergovernmental Organizations**

### ***Central european Initiative (CEI)***

Mr. Giorgio Rosso Cicogna  
Special Advisor to CEI SG

### ***International Energy Agency (IEA)***

Mr. Paolo Frankl  
Head Renewable Energy Division

### ***International Renewable Energy Agency (IRENA)***

Mr. Deger Saygin  
Programme Officer

Mr. Michael Taylor  
Energy Analyst

### ***United Nations Environment Programme (UNEP)***

Mr. Mark Radka  
Head, Energy Branch, Division of Technology,  
Industry and Economics

## **Non-Governmental Organizations - Others**

### ***Chatham House***

Ms. Kirsty Hamilton  
Head, Low Carbon Finance Group & Associate  
Fellow

### ***European Climate Foundation***

Mr. Julian Popov  
Senior Advisor

### ***Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH***

Mr. Marko Kosir  
Consultant

Mr. Tomaz Lajovic  
Consultant  
Ljubljana  
Slovenia

### ***HgCapital***

Mr. Tom Murley  
Director Renewable Energy

### ***Regions of Climate Action (R20)***

Mr. John Tidmarsh  
Chief Investment Officer

### ***Renewable Energy Policy Network for the 21st Century (REN 21)***

Ms. Rana Adib  
Research Coordinator

Ms. Christine Lins  
Executive Secretary

### ***Renewable Energy Solutions for the Mediterranean (RES4MED)***

Ms. Flavia Li Chiavi  
Energy Analyst

### ***The European Azerbaijan Society (TEAS)***

Ms. Marie-Laetitia Gourdin  
Head

## **UNECE Secretariat (Geneva, Switzerland)**

### ***UNECE/FAO Forestry and Timber Section***

Ms. Alicja Kacprzak  
Forestry Officer

Mr. Florian Steierer  
Economic Affairs Officer (Forest Products Markets)

### ***UNECE/Sustainable Energy Division***

Mr. Oleg Dzioubinski  
Economic Affairs Officer

Mr. Scott Foster  
Director

Ms. Charlotte Griffiths  
Senior Economic Affairs Officer

Ms. Stefanie Held  
Senior Economic Affairs Officer

Mr. Vahan Kotanjyan  
Regional Advisor for Sustainable Energy

Mr. Gianluca Sambucini  
Economic Affairs Officer