

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

# Renewable Energy A Crucial Role in the Future Energy Mix



**UNECE**

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

# **RENEWABLE ENERGY – A CRUCIAL ROLE IN THE FUTURE ENERGY MIX**



UNITED NATIONS

GENEVA, 2015

Renewable energy resources are one means to reduce the carbon intensity of the energy sector, improve energy security and encourage sustainable development. Investing in renewable energy resources can also be a cost-effective way to provide access to energy to those without it.

The UNECE region accounts for nearly half of global renewable energy capacity. The potential for developing renewable energy technology is growing and renewable energy is integrating progressively into the energy mix. Nevertheless, in many UNECE member States renewable energy policies do not work well and more can be done to develop suitable frameworks on how to “do renewable energy right” from a systems perspective.

The UNECE’s Group of Experts on Renewable Energy is exploring ways to enhance the uptake of renewable energy. An area of focus is the development of best practice guidance for renewables. The Group has begun its work by filling information gaps to establish a baseline for future activities. It is expected that the development of the best practice guidance will help guide investments in the future. In particular, the Group is examining the interaction of intermittent renewables with fossil fuels, particularly natural gas, to ensure quality of service. A system perspective will focus less on the comparison of the cost of specific intermittent renewables (including the costs of network reinforcements and back-up power) with dispatchable fossil and more on system-wide valuation of energy (kWh), capacity (MW), balancing services, storage, demand-side management and the like that enables every technology to play its role fully.

Investments in renewable energy will be a key factor in reducing the carbon intensity of the energy sector in the UNECE region. To undertake the right path, it is essential to understand the starting point and the challenges by improving the quality of data,

by identifying the right indicators, and by preparing tracking systems to tackle the required changes.

The UNECE Renewable Energy Status Report was launched during COP21 Climate Conference in Paris, the Conference of the Parties of the UN Framework on Climate Change, to contribute to this understanding.

This report represents a comprehensive overview of the renewable energy infrastructure, industry, policy, regulations, market development and potential growth rates in 17 selected countries of the UNECE region. It is a very timely report, coming few months after the adoption of the 2030 Agenda for Sustainable Development with its Goal 7 on ensuring access to affordable, reliable, sustainable, and modern energy for all. UNECE - through its Committee on Sustainable Energy and the Group of Experts on Renewable Energy - will continue to assist member States with specific activities to achieve the objectives of the 2030 Agenda and of the Sustainable Energy for All (SE4All) initiative of the UN Secretary-General, and of the landmark agreement adopted at COP21.

# United Nations Economic Commission for Europe

## Sustainable Energy Division

UNECE's work on sustainable energy is designed to improve access to affordable and clean energy for all and help reduce greenhouse gas emissions and the carbon footprint of the energy sector in the region. It promotes international policy dialogue and cooperation among governments, energy industries and other stakeholders.

The Committee on Sustainable Energy and its six subsidiary bodies carry out concrete and results-oriented activities with the aim to achieve the specific objectives identified for each priority area:

### Areas of work

- Cleaner Electricity Production
- Coal Mine Methane
- Energy Efficiency
- Natural Gas
- Renewable Energy
- Resource Classification
- Energy Security

### For more information



<http://www.unece.org/energy/se/gere.html>



[https://twitter.com/UN\\_ECE](https://twitter.com/UN_ECE)



<https://www.facebook.com/UNECEpage>



<https://www.youtube.com/user/UNECE>