



**Strengthening Energy Security
in the OSCE Area - Bratislava, 6 – 7 July 2009**

**Energy Efficiency for
Enhancing Energy Security
– Role of UNECE**

Alexandre CHACHINE

Chief
Sustainable Energy Section
UN Economic Commission for Europe



 **UN Economic Commission for Europe -
UNECE**

- **Established in 1947**
- **5 UN Regional Commissions**
- **56 member States**
- **Programmes include:**
 - environment
 - transport
 - statistics
 - trade
 - timber
 - housing and land management
 - economic cooperation and integration
 - energy

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International Energy Cooperation – New Proposals



- **Reliable and Stable Transit of Energy** - Turkmenistan
- **New Legal Framework for Energy Cooperation** – Russian Federation
- **Global Energy Agency** – ENI
- **Green Economy initiative** – UNEP/Norway

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UNECE – Platform for Dialogue



- Multi-stakeholder Dialogue
- Coal – since 1947
- Gas – since 1956
- Energy Efficiency – since 1991
- Energy Security – since 2000

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Energy Efficiency market potential in Eastern Europe and Central Asia



- Reducing the energy efficiency gap by half would save 600 million tonnes of oil equivalent (Mtoe)
- The saving potential of the Russian Federation is estimated at 360-400 million tonnes of oil equivalent

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Energy Efficiency 21 Project



- Launched in 1991 – 6 three-year phases until 2012
- Objectives of the Energy Efficiency 21 (EE21) Project
 - Enhance regional cooperation
 - Promote and finance municipal projects
 - Develop regional policies and standards

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Sub-regional and Country-oriented Projects of EE21



- Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation (FEEI)
- The Regional Network for Efficient Use of Energy and Water Resources in South-East Europe (RENEUER)
- Removing Barriers to Energy Efficiency Improvements in the State Sector in Belarus [Country-oriented]

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Sub-regional and Inter-regional Projects of EE21



- Increasing Energy Efficiency for Secure Energy Supplies
- Development of the Renewable Energy Sector in the Russian Federation and in CIS Countries
- Global Energy Efficiency 21 (GEE21) [Inter-regional]
- BUY SMART – green procurement for smart purchasing

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Interdivisional Cooperation Activities of EE21



- **Energy Efficiency in Housing:** UNECE Action Plan for Energy Efficiency in Housing
- **Wood Energy:** Modern and sustainable heat and power from woody biomass in South-Eastern Europe

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Financing Energy Efficiency Investments for Climate Change Mitigation Project (FEEI)



Long-Term Objective

Promote an investment environment for self-sustaining energy efficiency and renewable energy projects to be developed and financed to reduce greenhouse gas emissions

Activities

- ☞ *Source of financing with dedicated investment funds*
- ☞ *Training to help establish bankable project proposals*
- ☞ *Institutional and policy reforms*

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Financing Energy Efficiency Investments for Climate Change Mitigation Project (FEEI)



- **Co-financing**
 - United Nations Foundation
US\$ 2 million
 - Fonds Français pour l'Environnement Mondial
US\$ 2.5 million
 - Global Environment Facility
US\$ 3 million
- **12 participating countries**
 - 2 European Union countries: Bulgaria, Romania
 - 5 South-Eastern European countries: Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Serbia
 - 5 EECCA countries: Belarus, Republic of Moldova, Kazakhstan, Russia, Ukraine

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Structure of the new Investment Fund



Making "business as usual" through market formation in the ECE region

Terms of transaction:

- **Targeted capital: €250 million**
 - Public-Private Partnership
 - Equity and mezzanine financing
- **Targeted countries: 12 (as listed above)**
- **Investment time:**
 - investment period of 4 years
 - investment term of 10 years

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European Clean Energy Fund – Swiss Re (ECEP)



- **Officially launched in April 2007 under the EE21 Project mandate**
 - Investment capital of € 354 million, 70% committed
 - Mezzanine and Equity Capital (preferred return 7%)
 - 27 European Union member states
- **ECEP targets clean energy projects in 27 EU countries**
 - Renewable energy: wind, solar, biomass
 - Electricity sector: hydro-electric, cogeneration, combined cycle
 - Fuel switching, geothermal, clean coal, waste-to-energy, district heating

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Financing Modalities of the new Investment Fund



- **Examples of projects**
 - Cogeneration, fuel switching, boilers refurbishment, district heating rehabilitation, street lighting renovation
 - Renewable energy: wind, solar, bio fuels
 - Clean technologies
- **Financing of big scale projects**
- **Bundling schemes for smaller projects**
 - ESCOs or other SPVs

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Current Status of Project Implementation



Selection of three major contractors

- ☞ Investment Fund Designer:
CONNING Asset Management Limited, United Kingdom
- ☞ Regional Analysis of Policy Reforms:
POYRY Energy Consulting AG, Switzerland
- ☞ Website and Internet Communications Network:
EnEffect Centre for Energy Efficiency, Bulgaria

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Current Status of Project Implementation



- **Cooperation with National Participating Institutions**
 - ☞ National Project Website
 - ☞ National Energy Policy Information for Regional Analysis
 - ☞ National Case Study
- **Assessment Missions to participating countries**
- **Report on Investor Interest and Capacity Building Needs prepared**

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Training and Institutional Reforms



- **Training courses organised to help establish bankable project proposals**
 - ☞ developing indicative project pipeline
- **Regional study on energy efficiency and renewable energy situation:**
 - ☞ will analyze case studies on successfully overcoming bottlenecks in financing energy efficiency projects
 - ☞ will propose necessary policy reforms

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The Project Will Achieve:



- Reduction of GHG emissions of 10 million tons a year
- Considerable energy savings
- Creation of necessary standards and reforms to make energy efficiency projects perceived as business-as-usual
- Replication of investment funds
- Extension of the EE21 Project to the other UN Regional Commissions

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Energy Efficiency 21 Project



We are confident that Energy Security in the OSCE area could and will be enhanced through, in particular, implementation of these and similar Energy Efficiency projects.

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Thank you for your attention !

Alexandre CHACHINE

Chief, Sustainable Energy Section
UNECE Sustainable Energy Division
+41 22 917 2451
alexandre.chachine@unece.org