




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

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

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**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

2



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

3



UNECE – Platform for Dialogue



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

4



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

5



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

6



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]

7



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

8



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

9



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*

10

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

11






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

12



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
- **ECEF 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

13



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

14



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

15



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

16



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

17



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

18



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.

19



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Thank you for your attention !

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