



# Economic Commission for Europe

Financing Energy  
Efficiency Investments

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# Long-Term Objective

## **Financing Energy Efficiency Investments for Climate Change Mitigation**

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

# Potential Market

- Vast Potential Market Eastern Europe & CIS
- US\$ 5 to 10 billion Payback < 5 Years
- Euro €224 billion Payback < 15 Years
- Large Investment Potential – Private Sector
- Private Sector Requires Market

# Market Formation

- Market Formation in Eastern Europe & CIS
- Private Sector - Large Investments
- Low Transaction Costs
- Acceptable Risk to Returns Ratio
- Reasonable Time Period

# Finance Requirements

- Financing Energy Efficiency Investments in Eastern Europe is Possible
- Time Consuming Labour Intensive
- Needs to Become Business-as-Usual
- Framework Conditions Beginning to Emerge
- No Dedicated Source of Financing

# Financing Investments

- Grants, Loan Guarantees, Subsidies
- Public Sector Demonstration Investments
- Project Development – Capacity Building
- Dexia- EBRD Energy Efficiency Emissions Reduction Equity Fund – Euro 71 million

# Innovative Qualities

- Investment Fund
- Investor Interest in Clean Energy Market
- Public Private Partnership
- Fund Manager Separate Legal Entity
- Equity and Mezzanine Financing
- Private 70% - Public 30%

# Innovative Qualities

- Public Sector Leverage Private Investors
- Private & Public Banks
- Insurance Companies
- Local Banks in Beneficiary Countries
- Large Industrial Groups
- Dedicated Environmental & Green Funds

# Innovative Qualities

- EUR 250 million
- Project Selection Criteria
- Internal Rate of Return – 15% Minimum
- 20% Maximum – Leverage Other Investors
- Investments in ESCOs and SPVs
- Large Energy Efficiency Projects

# Innovative Qualities

- Demand Side Energy Efficiency Improvements
- District Heating Modernisation
- Cogeneration
- Equipment Manufacturing
- Renewable Energy Projects
- Replicate Successful Fund

# Donor Institutions

- United Nations Foundation
- Fonds Français pour l'Environnement Mondial
- United Nations Environment Programme – UNEP Global Environment Facility
- European Business Congress e.V.

# Implementing Institutions

## GEF Implementing Agency

- United Nations Environment Programme

## Executing Agency

- UN Economic Commission for Europe

# Countries

Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Kazakhstan, Former Yugoslav Republic of Macedonia, Russian Federation, Romania, Serbia, Moldova, Ukraine and RENEUER

# Objectives

- Identify and develop investment projects
- Strengthen energy efficiency and renewable energy policies
- Promote opportunities for banks and commercial companies to invest in energy efficiency projects

# Develop Investment Projects

Identify, develop, finance and implement demand side and supply side energy efficiency investment projects

- Network of Energy Efficiency Managers
- Trained Business Development Experts
- Investment Project Pipeline

# Strengthen Energy Policies

Assist municipal and national authorities to introduce economic, institutional and regulatory reforms that support investment projects

- Broad analysis policy reforms and case studies
- Senior Decision Maker Seminars
- Policy Advisory Services

# Energy Efficiency Investments

Promote investment opportunities in energy efficiency and renewable energy projects through a professionally managed Fund

- Investment Fund
- Investment Project Development Standards
- Investment Project Pipeline Inventory

# Investment Fund

- Public Private Partnership Equity Fund
- Private 70% – Public 30%
- EUR 250 million – ESCOs & SPVs
- Project Selection Criteria
- EE21 Investment Project Pipeline
- Fund Manager Separate Legal Entity

# Investment Fund Start Up

- Lead Investor
- Investment Memorandum
- Investor Seminars
- Energy Efficiency Investment Fund
- Fund Manager

# Financing Investments

## 2000-2003

- Training Courses
- Business Plans
- Policy Reforms
- Project Finance
- Investments

## 2006-2010

- Investment Fund
- Project Criteria
- Policy Reforms
- ESCO & SPPC
- Investments

# Work Methods – Management

## Regional Management

- Project Management Unit PMU – UNECE
- UNECE Personnel, Travel, Communications, Conference Services, Documents
- Senior Financial Adviser
- Consultants and Contractors
- Coordination – EE21 & UNECE Committees

# Project Management Unit

- George Kowalski – UNECE
- Frederic Romig – UNECE
- Bernard Jamet – UNEP / GEF
- Bernard Laponche – Energy Policy Adviser
- Gianluca Sambucini – UNECE EE21
- Olga Chepelanskaia – UNECE French MAE

# Work Methods – Management

## National Management

- National Coordinator – NC
- National Participating Institutions – NPI
- National Coordination Unit – NUC
- Local, National & International Coordination
- Implement National & Local Activities

# Structure – Governance

## Intergovernmental Body

- Chairman & Vice Chairman – Elected
- Supporting Institutions
- National Coordinators
- Monitoring & Evaluation Officers
- International Partners and Projects

# Work Methods – Monitoring

## Monitoring & Evaluation Advisers

- United Nations Foundation
- French Ministry Foreign Affairs – MAE/FFEM
- UNEP – CO<sub>2</sub>, NO<sub>x</sub> & SO<sub>2</sub> Emissions
- UNECE Programme Performance Review

# Work Methods – Dissemination

- Project Development Standards
- CD-Rom eBook Electronic Publications
- Dedicated Regional Website
- EE21 Steering Committee
- Training Courses, Seminars & Workshops
- UNTV, CNN, EuroNews, EuroVision Network

## Budget – Resources

- US\$ 2 million United Nations Foundation
- US\$ 2.5 million MAE/FFEM
- US\$ 3.0 million UNEP GEF
- US\$ 250,000 European Business Congress
- US\$ 400,000 / year UNECE In-Kind
- US\$ 50,000 / year National In-Kind

# Budget – Components

## Total Expenditures

1. Project Development US\$ 3.570 million
2. Assistance Policy Reform US\$ 3.025 million
3. Investment Fund – US\$ 3.138 million
4. Monitoring & Evaluation – US\$ 0.430 million
5. Project Total – US\$ 10.550 million

## Next Steps

- Steering Committee May 2007
- Work Plan for First Year of Operations
- Initial Donor Disbursements
- Project Operations Begin 2<sup>nd</sup> Half 2007