

# Policy Developments and Challenges in Delivering Energy Efficiency

Energy Charter activities  
with focus on some EECCA countries

EE21 event , Geneva, 21-22 February 2008



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# Energy Charter and PEEREA

|                   |   |
|-------------------|---|
| December 17, 1994 | Energy Charter Treaty (ECT) and Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA) signed   |
| April, 1998       | ECT and PEEREA came into full legal force   |
| Currently         | ECT and PEEREA signed by 51 states + European Union<br>ECT and PEEREA ratified by 46 states<br>Signatories: Australia, Belarus, Iceland, Norway and Russia<br>Observers: 20 states, incl. Serbia; 10 organisations, incl. UNECE |



# Energy Charter Institution

Governing Body: Energy Charter Conference

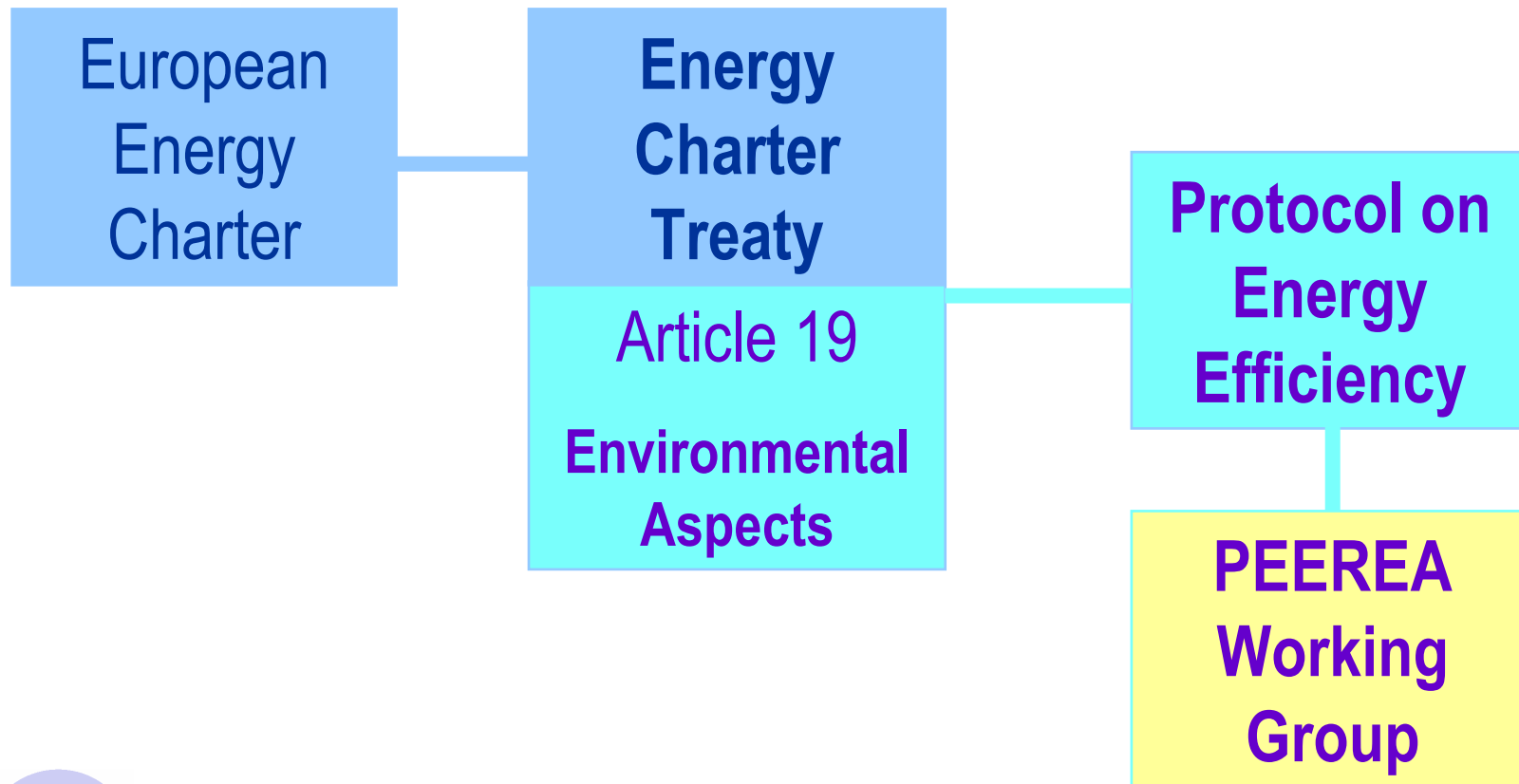
Standing Groups:

- Trade & Transit
- Investment
- Energy Efficiency

Administrative Body: Energy Charter Secretariat  
(monitoring implementation of ECT)



# Energy Efficiency in the Charter Process



# PEEREA Parties' Obligations

- **Formulate and implement EE strategies and policies**
- **Create appropriate legal, regulatory and institutional frameworks**
- **Develop, implement, and update EE programmes**
- **Encourage new approaches of financing EE**
- **Co-operate internationally and assist each other**

# PEEREA Activities

## Process oriented – monitoring and supporting achievement of commitments

- **Regular reviews** – all member countries (Albania 2007, Russian Federation 2007, Romania 2006, Kazakhstan 2006, Bosnia & Herzegovina 2008)
- **In-depth (peer) reviews** - Slovak Republic, Lithuania, Poland, Hungary, **Bulgaria**, **Romania**, Estonia, Turkey, Denmark, Czech Republic, **Moldova (2004)**, **Croatia (2004)**, Georgia, Sweden, Latvia, **FYR Macedonia (2007)**, **Bulgaria (on-going)**
- **Progress report to the Environment for Europe process**  
– for Kiev 2003 and Belgrade 2007

# Support Activities

- Advice support to governments (in-depth review recommendations)
- Analytical reports and policy papers
- Discussions and exchange of experience in the PEEREA Working Group (panel discussions, round table, good practices dissemination)
- Invited presentations by relevant institutions (EU Commission, IEA, UNFCCC, EBRD, UNECE ...)
- Dissemination of information

# PEEREA Activities

## Issues oriented

- Financing mechanisms and third party financing
- Cogeneration and district heating: best practices from municipalities
- Energy efficiency in the residential sector
- Integrating energy efficiency and renewable energy policies
- Renewables on the demand side
- Energy efficiency and emissions trading
- Evaluating energy efficiency policies
- Energy efficiency in transport
- Energy efficiency in the public sector
- Energy Performance Standards and Labelling Schemes (on-going)
- Institutional Capacity for Energy Efficiency Policy Formulation and Implementation (autumn 2008)

# **Policy Developments and Challenges in Delivering Energy Efficiency**

**Report on progress made by countries participating in the Environment for Europe process for improving energy efficiency**

**Input to the Environment for Europe Conference in Belgrade 2007**

# Policy Developments and Challenges in Delivering Energy Efficiency

## Progress and Challenges

- **The Institutional and Policy Framework**
  - The Legal Framework
  - National Institutions for Energy Efficiency
- **Progress in Improving Energy Efficiency:**
  - Energy Efficiency in Buildings
  - Energy Efficiency in Appliances
  - District Heating and Cogeneration

# Policy Developments and Challenges in Delivering Energy Efficiency

## ➤ Challenges – Specific Areas for Concern

Challenge 1: The Challenge to Improve Fuel Efficiency and Reduce GHG Emissions in the Transport Sector

Challenge 2: Ensuring the Kyoto Protocol's Flexible Mechanisms Promote Energy Efficiency

Challenge 3: Financing Energy Efficiency

Challenge 4: Integrating Energy Efficiency and Renewable Energy Sources – Two Pillars of a Sustainable Energy Strategy

# The Institutional and Policy Framework for Energy Efficiency - progress

## ➤ The Legal Framework

Evolving legislation (2005: new EE Law in Albania, amended Energy Conservation Law in Ukraine; 2006: new Energy Law in FYROM, EU Energy Services Directive; 2007 amendment of the Bulgarian EE Law)

No laws or soft laws in some countries

Implementation legislation

## ➤ National Institutions for Energy Efficiency

New agencies recently established: Ukraine (2005), Macedonia (2007), Latvia (2007)

Closed: Czech Energy Agency (2007)

Regional and local agencies

# The Institutional and Policy Framework for Energy Efficiency - assessment

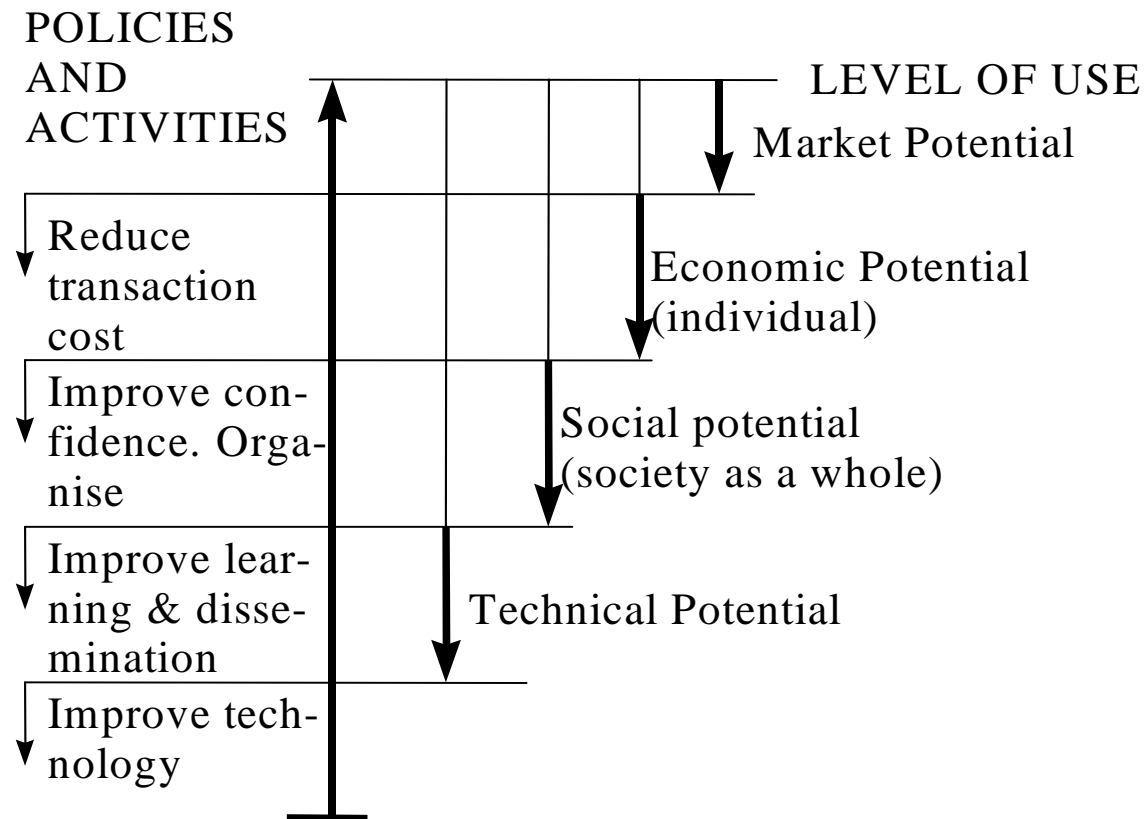
- Priority for improved energy efficiency – major drivers security of supply and climate change: different impact on countries
- Energy efficiency policies development and implementation – uneven results and growing gap between EU and CIS countries
- Target setting – climate change targets, quantitative EE targets (EU, Belarus, Moldova, Russia, Ukraine)
- Policy monitoring and evaluation widely underestimated
- Delivering capability and resources of EE institutions – recommendations for strengthening in most transition countries
- Policy integration – EE and other policies, EE and RES
- Demand analysis and end-use indicators

## Progress in Improving Energy Efficiency in Buildings - Major approaches

- The EU directive on the Energy Performance of Buildings 2003/2006 – integrated approach to different aspects of buildings energy use, 28% energy saving potential, energy performance certificate (Bulgaria and Romania well advanced)
- Moldova - Energy certificate (an energy passport) for new and existing buildings
- Russia – federal and regional codes on the thermal properties of buildings with EE requirements introduced after 1995 and 2000
- Ukraine - a new building code in 2006/2007, focusing on total building heat loss (or performance), as in most IEA countries

# Progress in Improving Energy Efficiency in Buildings - Major results

- Still high potential for cost-efficient energy saving
- Various market barriers – role for governments



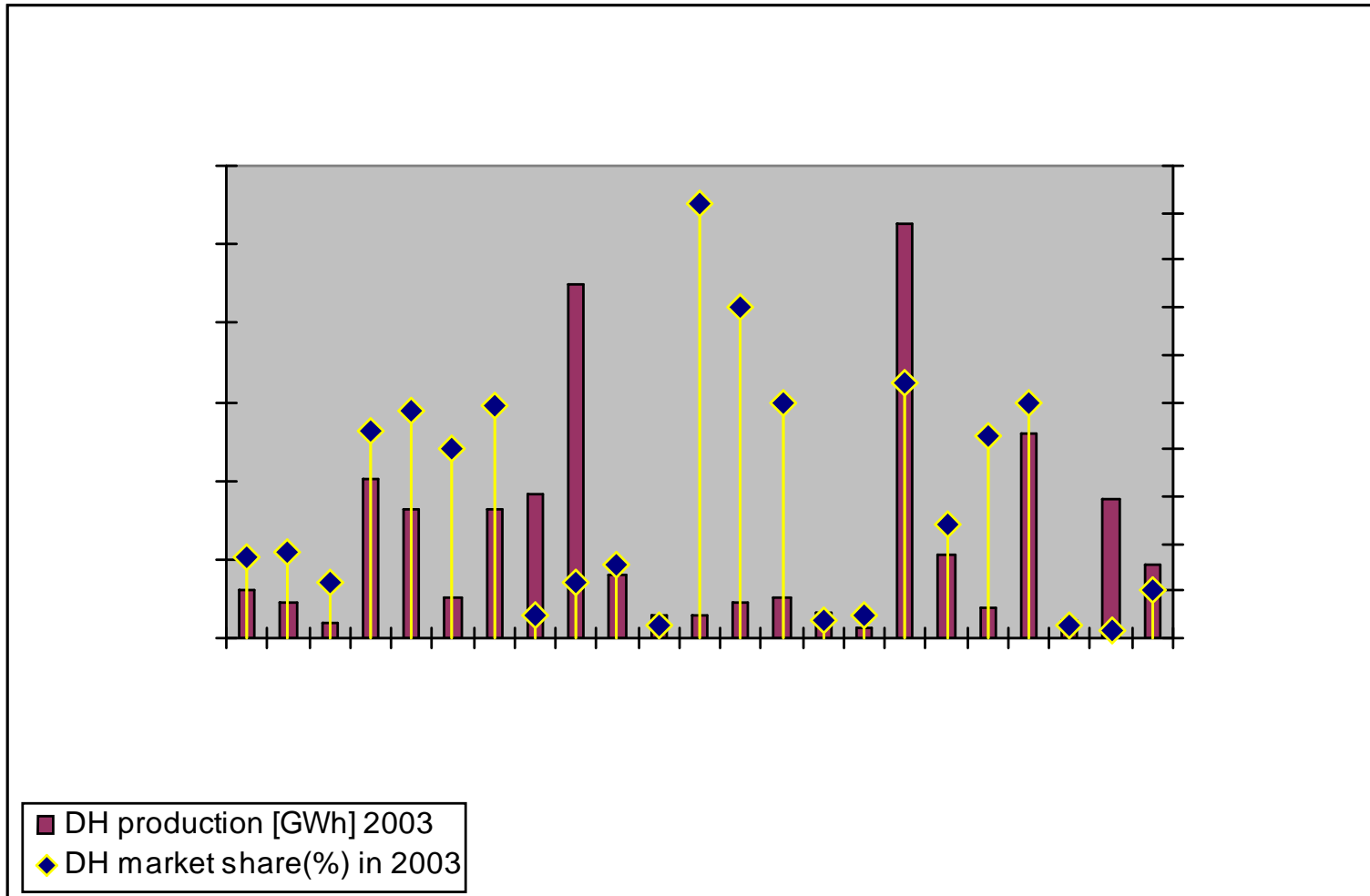
# Progress in Improving Energy Efficiency in Appliances - Major approaches

- **OECD/IEA studies**
- **EU progress - Directives on labelling, EU minimum energy performance requirements (standards), EU Eco-design Directive 2005**
- **Japan – Top Runner Programme**
- **White Certificates in France and Italy**
- **Russia – minimum energy performance standards since 1980**
- **Ukraine – appliance standards and labelling based on the EU ones**

## **Progress in Improving Energy Efficiency in Appliances - Major results**

- **Market transformation towards more efficient appliances**
- **Rising overall consumption – continuing efforts needed**
- **International cooperation**
- **Energy Charter planned work**

# Progress in Improving Energy Efficiency by District Heating and Cogeneration



# Progress in Improving Energy Efficiency by District Heating and Cogeneration

- Major developments
  - EU Cogeneration Directive 2004
  - EU benchmarks for efficient CHP 2007
  - Investments for extension and rehabilitation
  
- Barriers for the DH sector, especially in transition countries – structural, pricing, investment, management, financial

## The Challenge to Improve Fuel Efficiency and Reduce GHG Emissions in the Transport Sector – major approaches

- Fuel efficiency standards for new vehicles (Japan, US)
- Labelling of fuel consumption
- Driver behaviour
- EU passenger car CO2 strategy:
  - car industry's 'self commitments' or 'voluntary agreements'
  - consumer information through CO2 emission labelling
  - CO2-differentiation of taxation.

Fuel efficiency improvement proved difficult, high growth rate of transport, major focus on fuel and vehicles so far – major challenge

## Challenge 2: Ensuring the Kyoto Protocol's Flexible Mechanisms Promote Energy Efficiency

- **JI developments (Russia, Ukraine)**
- **CDM developments – 2% of the registered projects are on EE (May 2007)**
- **EU ETS and energy efficiency:**
  - EE impact on direct emissions – direct savings
  - Indirect impact on consumers via the energy price
  - Effects on EE still to be evaluated

## **Challenge 3: Financing Energy Efficiency**

- **Energy prices – EE investments  
(EBRD: 1% price increase - 0.5% energy intensity reduction)**
- **Financial instruments used: subsidy / grant schemes, soft loans, funds**
- **Problems for transition economies – widely studied**
- **Important support by IFIs**
- **Market barriers still exist for commercial financing**

# Financing Energy Efficiency in FYR Macedonia

- **Mostly through international cooperation: EBRD, Austria, Netherlands, Switzerland**
- **Since 2006 some budget finance for Energy Agency and awareness campaigns**
- **No commercial financing**
- **Sustainable Energy Project GEF / World Bank**
  - Market framework: capacity building (Energy Agency)
  - Utility-based ESCO
  - Sustainable Energy Financing Facility (Macedonian Bank for Development Promotion): \$ 3.7 M guarantee facilities and loans from GEF, Additional leveraging

# Integrating Energy Efficiency and Renewable Energy Sources

- Energy Efficiency and Renewable Energy Sources – Two Pillars of a Sustainable Energy Strategy
- Possible integration and expected benefits from the integration of some policy instruments for promotion of energy efficiency and renewable energy – ECS study
- Criteria/success factors: effectiveness, cost-effectiveness, certainty for industry, market efficiency, transparency, transaction cost and administrative capacity, equity (fair distribution of benefits), market conformity

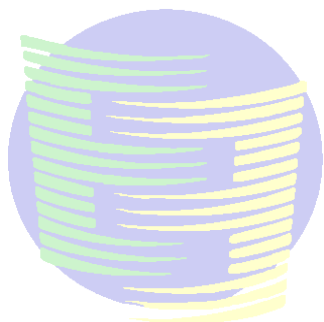
# International Cooperation for Energy Efficiency

28 May 2008



Palais des Nations  
Geneva, Switzerland

International Cooperation on Energy Efficiency:  
Working together for a Low-carbon Economy



**All interested are invited!**

**[www.encharter.org](http://www.encharter.org)**