The Energy Charter experience – making energy efficiency work in diverse economies

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Part 1

What is the Charter?
What is the Charter?

  political commitment – not legally binding

  51 states + EU and Euratom – legally binding
  entered into force April 1998

- Energy Charter Process
  based on the ECT – international policy forum,
  best practices exchange,
  cooperation with interested third parties

www.encharter.org
Key Principles

- Open and efficient energy markets
- Non-discrimination among participants
- Sustainable development
- State sovereignty over natural resources
- Freedom of transit
- Environmentally sound and energy-efficient policies
ECT – Main Focus

- Protection of foreign investments, based on the extension of national treatment or most-favoured nation treatment (whichever is more favourable)
- Non-discriminatory conditions for energy trade based on WTO rules
- Ensuring reliable cross-border energy transit
- Resolution of disputes between participating states, and – in the case of investments – between investors and host states
- Promotion of energy efficiency (PEEREA)
Diversity in Member Countries

GDP/capita: 2,000 to 140,000 USD (2010) at PPP
Population: 36,000 to 142,000,000 people
Area: 160 to 17,000,000 sq. kilometers
Energy Intensity: 0.098 to 0.738 toe/thousand USD ppp
               0.092 to 2.54 toe/thousand USD
CO₂ per capita: 845 to 24,833 kg CO₂/person
Primary energy supply 1,700 to 647,000 ktoe
Part 2

Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA)
## Energy Charter Treaty (ECT) and Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>December 17, 1994</td>
<td>Energy Charter Treaty (ECT) and Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA) signed</td>
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<td>April, 1998</td>
<td>ECT and PEEREA came into full legal force</td>
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<td>Currently</td>
<td>ECT and PEEREA signed by 51 states + European Union</td>
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<td>ECT and PEEREA ratified by 46 states</td>
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<td></td>
<td>Signatories: Australia, Belarus, Iceland, Norway and Russian Federation</td>
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<td>Observers: 24 states; 10 organisations</td>
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Protocol for Energy Efficiency and Related Environmental Aspects - PEEREA

Contracting parties commit to:

- 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
Core Tasks of the PEEREA Working Group

- **Task 1:** Organise periodic reviews of the national energy efficiency policies, strategies, programmes and pricing policies – past and future focus High

- **Task 2:** Provide a forum platform for discussions between Member Countries past and future focus High

- **Task 3:** Develop proposals for specific activities under the Protocol past focus Low future focus High
PEEREA Activities

Review Progress in Member Countries
  • In-depth reviews (22 since 1999)
  • Regular reviews (63 since 1999)
  • Follow-up reviews (8 since 2004)
  • Regular updates from Members

Analytic Studies
  • 20 reports since 1999
  • Progress reports to the Environment for Europe process – for Kiev 2003 and Belgrade 2007

Events, information sharing, cooperation
  • Esp. IEA, UNECE, UNFCCC, EBRD
In-depth Review Process

- Commitments by Parties as review hosts and review experts
- Involvement of a wide variety of institutions, businesses and non-governmental actors in the country
- Product: review report and recommendations for future policy directions
- Discussion and approval in the PEEREA Working Group
- Endorsement by the Energy Charter Conference
Priority areas for activities 2013-2015

- Direct support to implementation of energy efficiency
- Facilitate practical partnerships between developed and transition countries
- Identify capacity building needs and develop training programmes for national and local decision makers
- Facilitate technology and best practise transfer in industry sector
- Facilitate access to financing through improved collaboration with donor and IFIs
- Policy support to national and local decision makers for the implementation of Sustainable energy action plans
General Observations

- Energy efficiency a tool for resolving global energy problems
- States have recognised the need for global interactions
- States have started taking concerted actions to scale up implementation of energy efficiency globally
- Governments in the developed countries and the less developed countries have recognised that by implementing energy efficiency policy and measures internationally they will help alleviate the global energy issues.
Unlocking the Potential, not an Easy Task

- Of 25 IEA energy efficiency policy recommendations only 57% is fully implemented.
- Less developed countries face a wide range of market and institutional failures.
Achievements of PEEREA

- Established strong platform for stimulating the international and national dialogue on energy efficiency
- Active support to the process of energy efficiency implementation in countries with different levels of development and energy profiles
- Working with national policy makers and local decision makers to promote of an integrated approach to energy efficiency and to encourage and support local authorities to develop and implement sustainable local energy policy
Part 3

ECT countries experience in developing and implementing policies in the building sector
In-depth Reviews Analysed

Analysis of 9 countries, over the last 6 years.

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Patterns on background information on buildings

- The RESIDENTIAL sector is the second biggest consumer after the transport sector with 20% and 31% of final energy consumption;
- Approx. 80% of energy consumption in RESIDENTIAL and SERVICES sector are for space heating purposes;
- Energy prices set by Governments and artificially low;
- Increase of public services, increase of energy consumption;
- Among public buildings, schools are the ones most in need of improvement.
Patterns on background information on buildings

Countries with District Heating infrastructure

~ 80%

- Heating represents 80% of the total final energy consumption in buildings;
- Major presence of district heating facilities but with high heating losses;
- No full decentralised / individual heat measurements for DH;
- Sweden: DH based on biofuels, waste & peat.

Photo: CHPA http://www.chpa.co.uk/chp-with-district-heating_187.html

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Buildings insulation is a major problem

- Low insulation (70’s and 80’s: precast & privatisation);
- Low building standards;
- Old buildings built with traditional methods with thick brick or stone walls offer acceptable comfortable level;
- Long and hard Winter conditions puts heavy pressure on the household budget;
- Energy poverty.

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Patterns on background information on buildings

- Importance of biomass for heating purposes;

- Solar energy only symbolic and petroleum products have decreased substantially;

- Increasing importance of electricity consumption for space and water heating;

- Introduction of air conditioning for improvement of summer comfort as well as for winter space heating backup.
Existing Energy Efficiency Policies in Buildings

Motivations:

- Air pollution (cities);
- Hard Winters;
- *Acquis Communautaire* (EPBD, CHP, etc.);
- Low quality pre-fabricated construction (60’s – 80’s);
- No consumption based billing for space heating (individual metering);
- Huge savings potential;
- Support to the market penetration of new technologies;
- Downturn of the economy since 2008;
- Need for re-construction (B&H);
- Projects and Programmes of international donors.
Existing Energy Efficiency Policies in Buildings

Main policy actions being taken:

• Implementation of Building Codes (standards, norms, labels, certificates, targets);
• Transposition of EU Directives / Acquis Communautaire;
• Target Public Buildings: Schools, hospitals, office buildings;
• Tax Exemptions on Energy Efficiency (e.g. Windows);
• Implementation of consumption based billing;
• Loans and subsidies renewable energies (solar thermal, solar PV, biomass);
• Training and awareness;
• Creation of local energy agencies and ESCOs;
• Loans for reconstruction and renovation;
• Bills for encouraging the development of District Heating
Governments should:

- Focus on sectors with the largest potential: energy efficiency in buildings;

- Put emphasis on the adoption of the Buildings Regulations (cost effective implementation of the EPBD and Services Directive);

- Give the example by acting on their own buildings first (building and retrofitting by the highest standards);

- Remove legislative barriers to the full implementation of energy efficiency in buildings;

- Appoint high level decision maker responsible for EE policies;

- Consider EE in urban development plans and infrastructure;
Governments should:

- Promote the use of renewable energies, namely using biomass and solar thermal collectors;
- Implement individual heat metering;
- Properly regulate, maintain, reduce losses and increase the share of CHP in District Heating;
- Take action to alleviate the problem of electricity use in space heating;
- Promote awareness raising;
- Create the conditions for the ESCOs work (low income householders);
- Provide greater support to R&D.
Thank you for your attention