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Best Policy Practices for Promoting Energy Efficiency in the UNECE Region

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EU-Eastern Partnership STI Cooperation in Addressing Energy Research and Innovation Policy Stakeholders Conference
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Activities and Projects on Energy Efficiency in UNECE

- UNECE Group of Experts on Energy Efficiency (under the Committee on Sustainable Energy)
- Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development (2012 – 2015)
- Enhancing Synergies in the CIS National Programmes on Energy Efficiency and Energy Saving for Greater Energy Security (2011-2014)
- Promoting the implementation of the Regional Action Plan and Recommendations on development and implementation of energy efficiency policies in the CIS Countries (September 2014 – May 2015)
- Energy Efficiency in Housing and Buildings (jointly with Committee on Housing and Land Management)

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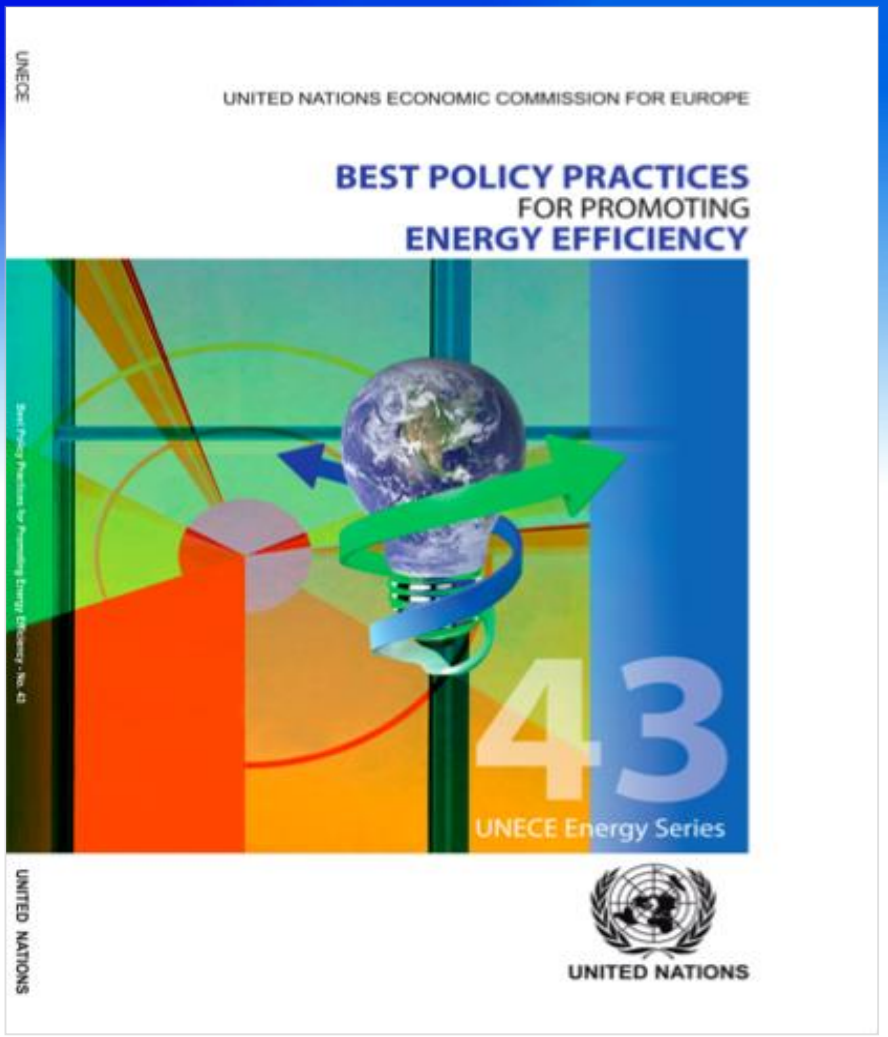
UNECE Publication

A Structured Framework of Best Practices in Policies to Promote Energy Efficiency for Climate Change Mitigation and Sustainable Development



http://www.unece.org/index.php?id=41058&L=0
http://www.unece.org/fileadmin/DAM/energy/se/pdfs/geee/pub/ECE_Best_Practices_in_EE_publication.pdf

Best Policy Practices for Promoting Energy Efficiency

A structured framework of best practices in policies to promote energy efficiency for climate change mitigation and sustainable development

- *Investment Imperative for Energy Efficiency*
- *Identifying Best Practice Policy Options in Energy Efficiency*
- *Best Practices in Energy Efficiency: High Impact Policies and Measures*
- *Implementing the Menu: Developing Policy Implementation Capability*

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Best Policy Practices for Promoting Energy Efficiency (cont.)

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Four key attributes are used to identify best practice policies:

1. Significant outcomes. Demonstrated, quantifiable, ability to contribute to a large energy demand reduction and significant multiple benefits.

2. Complementarity. An easy fit with other national, regional and international efforts for ease of implementation and a supportive complementarity with other policies

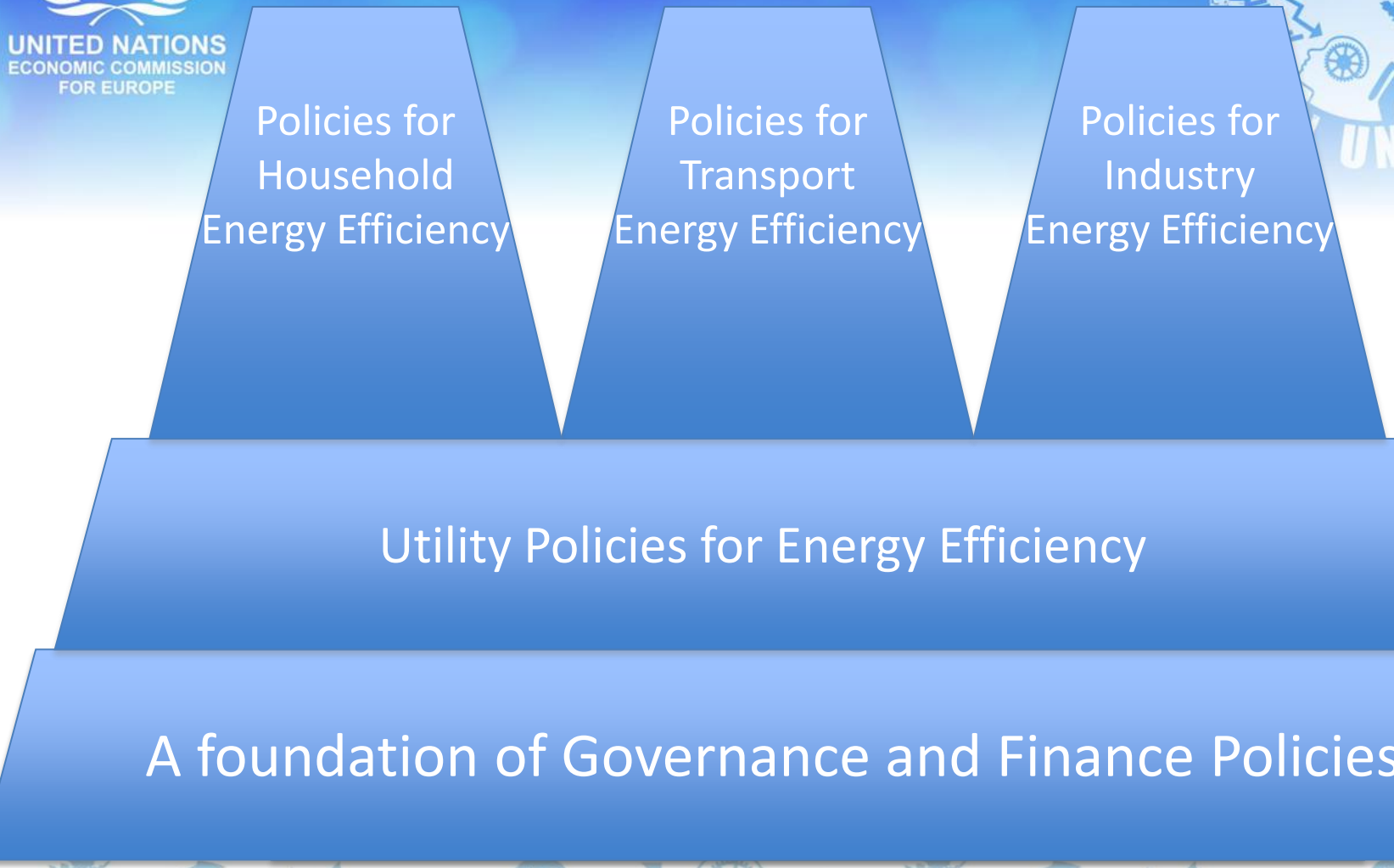
3. Political alignment, governance and accountability attributes help ensure policies are politically palatable, likely to persist in multi-layer governance frameworks.

4. Marketability and market impact ensure policies will work in the global and local energy efficient technology markets, attractive to decision-makers, likely to attract finance.

Menu of energy efficiency policies and measures

- *CROSS-SECTORAL POLICIES: GOVERNANCE*
- *CROSS-SECTORAL POLICIES: FINANCE*
- *POLICIES FOR UTILITIES*
- *POLICIES FOR HOUSEHOLDS: Homes and Appliances*
- *POLICIES FOR TRANSPORT: Passenger and Freight*
- *POLICIES FOR THE BUSINESS SECTOR: Industry and SMEs*

Menu of energy efficiency policies and measures (cont.)



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Why identified policies are best practices?

- *They have been through ongoing policy reviews*
- *They have undergone improvement cycles*
- *Recognized in international reviews*
- *Evolved policies that have a 'survival of the fittest' track record*

Strategic Approach to Balance Selected Policies

- *Focus on priority energy efficiency potentials where tangible economic gains can be made*
- *Ensure balance of effort and actions over sectors in the society*
- *Ensure an effective mix of resources (financing) delivery capability (energy efficiency operational agency, utilities, ESCOs,) and market motivators (labeling, regulations etc.) are developed*
- *Ensure a critical mass of effort*
- *The development of a national strategy within a statutory framework provides the balance and makes clear to all the intent, capabilities that are mobilized, and accountability in order to deliver a balanced and effective programme*

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FOR A STRONGER AND GREENER ECONOMY UNECE

Menu of Policy Options

Examples on EE in buildings

- ***Energy efficiency certification of buildings*** *(Ireland, Energy Performance Certificates scheme)*
- ***Minimum energy performance standards (MEPS) via Building Codes*** *(EU Directive on Energy Performance of Buildings)*
- ***More efficient heating in existing buildings – cogeneration and district heating*** *(Denmark, Germany, PEEREA, EU, China)*

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Barriers to Implementing Best Policy Practices

- *Capacity to implement policies effectively in many countries is overestimated*
- *Institutional commitment and capacity is critical – obstacles: poor governance, unwillingness to commit*
- *Adaptation of policies to country contexts requires capacity and experience with policies*
- *Marketing effort is underestimated: consumers are quite indifferent to energy efficiency*

Outcomes of the Regional Study on CIS National Programmes on Energy Efficiency and Energy Saving

Main legal basis for energy saving in the CIS countries

- *laws on energy saving and energy efficiency*
- *strategic outlook for economic development reflecting goals and objectives of energy efficiency*
- *national programmes and action plans for energy efficiency*
- *targeted programmes for improving energy efficiency in accordance with national priorities*

Outcomes (cont.)

Main shortcomings of the regulatory framework on EE in a number of member States

- *laws are declarative*
- *laws lack mechanisms for direct action*
- *laws are inconsistent with other laws that regulate energy and environmental protection*
- *norms of energy legislation are often not aligned, there are gaps and unresolved issues*
- *no comprehensive and coherent approach to policy implementation*
- *system of performance targets for energy efficiency is insufficiently developed*
- *monitoring and evaluation mechanism is absent or undeveloped*
- *inadequate system of collection of statistical information*
- *no mechanisms of adjustment to medium-term goals and mechanisms for their achievement*
- *insufficiently developed system of regulations and standards*
- *mechanisms of economic incentives for investment in energy efficiency are not yet developed*

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Outcomes (cont.)

Barriers to implementation of energy efficiency measures

- *imperfect tariff policy*
- *cross-subsidies*
- *underdeveloped market for energy services and energy-saving technologies*
- *uncertainty about budget support*
- *high investment risks*
- *insufficient level of qualification of managers for energy management*
- *absence of effective economic incentives for investments*
- *rejection of innovative technologies by many players*
- *impatience for returns on investment*

Regional Action Plan and Recommendations on development and implementation of energy efficiency policies in the CIS Countries

- *Assessment of the situation with respect to the tasks of the CIS region in terms of achieving the EE objective of SE4All Initiative*
- *Improvement of the communication and coordination mechanisms among the CIS member states*
- *Establishing the necessary regulatory environment*
- *Development and implementation of joint projects*
- *Methodological support of energy efficiency*
- *Development and implementation of R&D programmes*
- *Information exchange and knowledge base creation*

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Regional Action Plan: Items on Energy Efficiency in Buildings and Housing

- *Development of recommendations for creation of national strategies to increase energy efficiency in buildings (item 2)*
- *Development of suggestions for improvement of the regulatory framework in the field of energy efficiency in buildings and utility networks (item 2)*
- *Unification of technical regulations and standards in the area of energy efficiency, with particular emphasis on energy saving in buildings and municipal services sector (item 3)*
- *Analysis of administrative, legislative, economic and financial barriers to improving energy efficiency in buildings and in housing sector and exchange of experiences in order to overcome them (item 3)*
- *Development of economic incentives for implementation of energy saving projects in the housing sector (item 3)*

Regional Action Plan: Items on Energy Efficiency in Buildings and Housing (cont.)

- *Development and implementation of construction programmes of energy efficient and "passive" buildings (item 4)*
- *Implementation of pilot projects to improve energy efficiency (including in the area of thermal rehabilitation of buildings, modernization of networks, improving energy efficiency of lighting, etc.) (item 4)*
- *Adopting measures for improvement of the regulatory, normative, and technical documentation for design, construction and maintenance of buildings (item 5)*
- *Assessment of available technology for the construction of energy efficient buildings, lighting and municipal networks (item 5)*
- *Assessment of existing experience in effective methods of construction and modernization of buildings (item 6)*
- *Organization of seminars and exchange of experience on construction and modernization of energy-efficient generating units in housing sector (item 7)*

Analysis of Success Factors for Energy Efficiency Investments Projects

Success Factors

- *identified need for energy saving due to high resource costs*
- *existence of appropriate legislation, norms and standards, government programmes and policies*
- *support from regional and municipal authorities and national government*
- *willingness of company/organization managers to implement energy efficiency improvements*
- *high level of project profitability*
- *energy audits and implementation of energy management*
- *support from international donors*
- *possibility to repay and service loans with savings generated from improved efficiency*

Analysis of Success Factors for Energy Efficiency Investments Projects (cont.)

Recommendations

- *Implementation of pilot projects*
- *Public awareness campaigns (benefits of EE measures, adoption of a mores sustainable lifestyle)*
- *Capacity building, trainings for local commercial banks, businesses, municipal authorities, condominium owners*
- *Finding right balance between own investments and loans*
- *Detailed professional energy audits*
- *Setting priorities by municipal authorities in implementation of projects*
- *Market research*

Analysis of Success Factors and Barriers for Energy Efficiency Investments Projects (cont.)

Recommendations (cont.)

- *Adopt governmental Action Plans and improve coordination of EE policy between ministries and agencies*
- *Ensure ownership rights for land*
- *Coordination with local authorities*
- *Assessment of potential for fuel and energy savings; assessment of actual energy use*
- *More financial and other support from government*
- *Cooperation between local and foreign experts*
- *Learning from experience of implementation of similar projects*

6th International Forum on Energy for Sustainable Development

29 September - 2 October 2015

Yerevan, Armenia

Statement of Common Action

PRIORITY ACTION AREAS

1. Development of national sustainable energy action plans

2. Improvement of national energy statistics programmes.

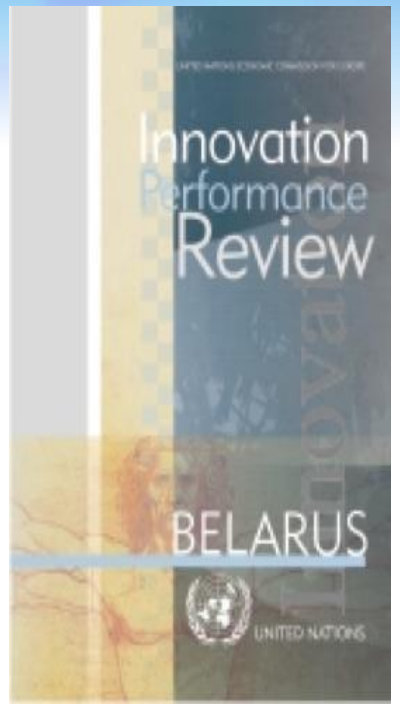
3. Capacity building in: Energy Market Reform, Energy Efficiency, Renewable Energy, Energy Access, Energy Security, Finance and Investment, Technology, and Energy Data, Indicators and Analysis.

4. International dialogue for technological and knowledge exchange on lessons learned and best practices.

5. Development of internationally recognized minimum energy performance standards.

Forum website: http://www.unece.org/index.php?id=39915#/

Innovation Performance Review

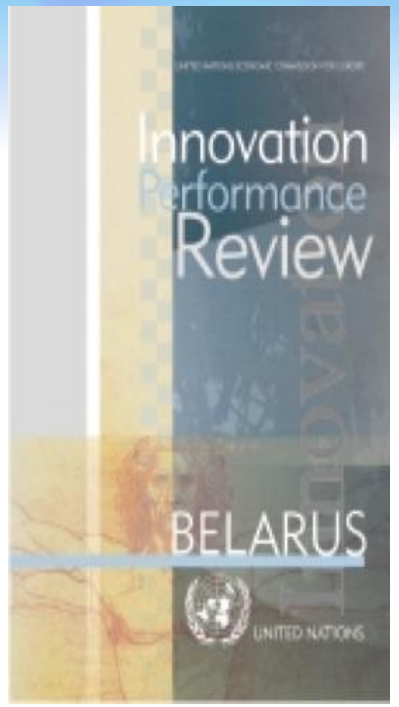


Assessment of national innovation policies based on international good practice

First review 2010-2011

Counterpart: State Committee on Science and Technology

Innovation Performance Review (cont.)



Conference 16-17 November 2015 in Minsk to take stock of lessons learned

Second review 2016 to assess progress

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Thank you for your attention!

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http://www.unece.org/energyefficiency.html