



Policy measures for promotion of energy efficiency in the CEE countries

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Agenda

- EU energy efficiency policy
- Energy efficiency in new member states
- Implementation of the EU legislation
 - energy performance of buildings
 - CHP
 - minimum energy performance standards and energy labeling
- Some examples and conclusions

EU policy documents in energy efficiency

- Energy performance of buildings directive (EPBD) 2002/91/EC
- EC plans to expand the scope of EPBD substantially in 2009
- EC Action plan of energy efficiency, 2007
- CHP directive 2004/8/EC
- New directives:
 - Eco-design of energy using products directive 2005/32/EC
 - Directive of energy end-use and energy services 2006/32/EC

EU standards and labeling

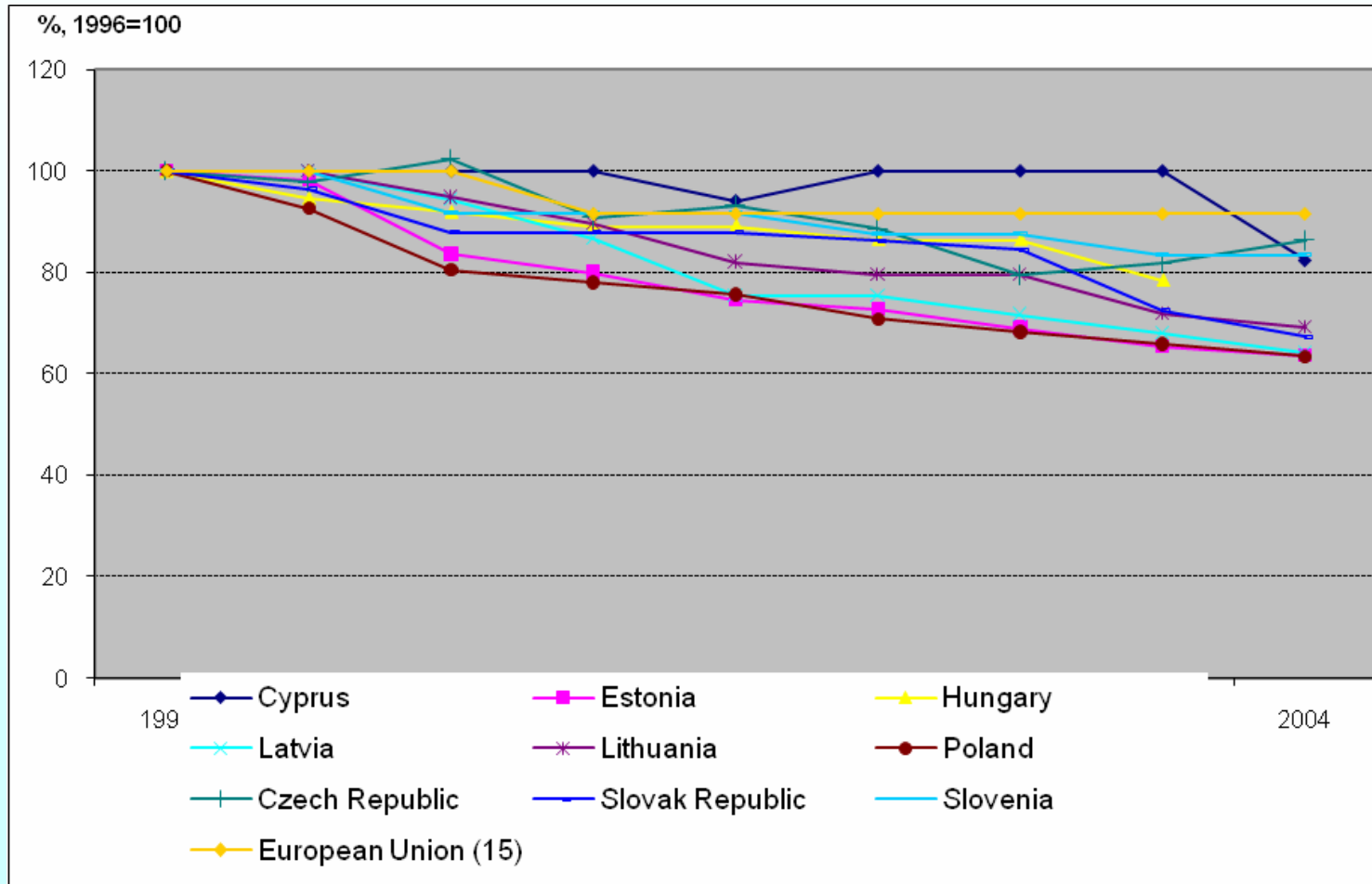
Standards

- 92/42/EEC Efficiency requirements for new hot-water boilers fired with liquid or gaseous fuels
- 96/57/EC Energy efficiency requirements for household electric refrigerators, freezers and combinations thereof
- 2000/55/EC Energy efficiency requirements for ballasts for fluorescent lighting

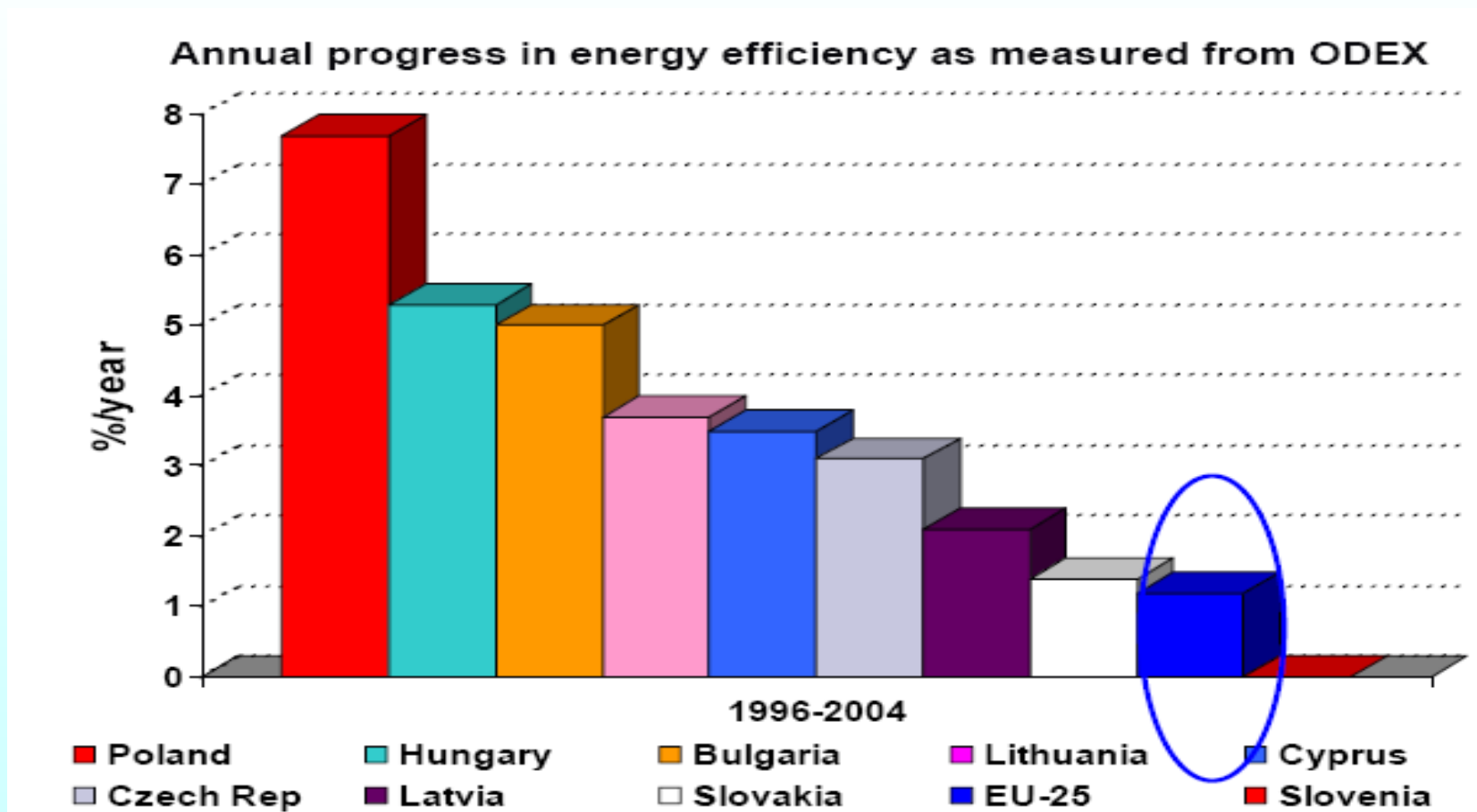
Labeling

- 79/530/EEC Voluntary framework for energy labeling – due to disagreements over technical measurement standards, only the directive for electric ovens was approved (79/531/EEC)
- 92/75/EEC Labeling framework directive – explains the way that information should be provided to consumers, as well as which appliances should be covered by a labeling scheme
- 2003/66/EC Labeling of electric refrigerators, freezers and their combinations and amending Directive 94/2/EEC
- 95/12/EC Labeling of household washing machines
- 95/13/EC Labeling of electric tumble dryers
- 96/60/EC Labeling of combined washers and dryers
- 97/17/EC Labeling of dishwashers
- 98/11/EC Labeling of household lamps
- 2002/40/EC Labeling of household electric ovens
- 2002/31/EC Labeling of household air-conditioners

Final energy intensity at constant structure (climate corrected) in NMS 1996-2004 (1996=100)



Annual progress in energy efficiency in industry



Source: Lapillone and Pollier 2007

Energy efficiency policies and measures in NMS

	CZ	EE	HU	LV	LT	PL	SK
Separate EE law	+	-	-	-	-	+	-
Energy saving targets in secondary legislation	+	+	+	+	+	+	-
Preferential loan schemes for EE	RP	R	RPI	RP	R	RP	-
EE subsidy programmes	RP	-	RPI	RP	R	RP	RI

R – residential, P – public, I - industrial

Energy efficiency policies and measures in NMS

	CZ	EE	HU	LV	LT	PL	SK
R&D funds for EE	-	-	+	-	+	-	-
Provisions for energy audits	Mandatory for large	+	+	+	+	Mandatory for large	-
Reduced VAT	5% DH	5% DH	-	-	9% DH	-	-
Information campaigns	+	+	+	+	+	+	+

Energy Performance in Buildings Directive 2002/91/EC

- the general framework for a calculation methodology of the integrated energy performance of buildings;
- the application of minimum requirements on the energy performance of new and of large existing buildings that are subject to major renovation;
- energy certification of buildings; and
- regular inspection and assessment of boilers and of air-conditioning systems in buildings

Implementation of EPBD

- Among the 25 MS (in 2006) only 10 countries notified transposition of the Directive fully or partially by the deadline
- Lithuania, Latvia, Poland and Slovakia notified partial transposition
- As of the end of 2006 many New Member States have already enacted legislation or have it at a very advanced stage of legislative procedure
- By December 2006 15 Member States received a reasoned opinion from the Commission, out of these 6 are NMS

Implementation of EPBD in NMS

- Hungary and Lithuania have already adopted the calculation procedures and have the software in place, Poland and Slovakia have the procedure in pending legislation, Estonia, Latvia and Slovenia have it under development with a specified date of implementation
- Requirements for new and for existing buildings are mostly in place (Hungary, Latvia, Lithuania, Slovakia and Slovenia) or planned (Poland and Estonia)
- Lithuania introduced certification for new buildings from 2007 and Slovakia introduced certification for small residential buildings, most countries plan introducing certification for new buildings from 2008 and for existing buildings from 2009
- Slovakia, Lithuania and Estonia plan to introduce boiler and air conditioning inspections from 2008, most envisage to introduce from 2009

CHP support schemes

	Purchasing obligation	Tariff support	Capital incentives	Comments
Czech R	+	+	+	
Estonia	+	+		
Hungary	+	+	+	For capacity <50MW
Latvia	+	+		Purchasing obligation for units below 4 MW
Lithuania	+	+		Quotas set by the MoE
Poland	+			Priority for heat produced in CHP units
Slovakia	+			

Minimum energy performance standards and energy labeling of household appliances

- ensure that all suppliers and dealers established in their territory fulfill their obligations under this Directive;
- prohibit the display of labels, marks, symbols or inscriptions relating to energy consumption which do not comply with the requirements of this Directive and which are likely to cause confusion, with the exception of Community or national environmental labels;
- launch educational and promotional information campaigns aimed at encouraging more responsible use of energy by private consumers;
- where Member States have grounds for suspecting that the information contained in labels or fiches is incorrect, they may require suppliers to provide evidence

Institutions for energy efficiency

		Established	Number of staff
CZ	Czech Energy Agency (plus 5 regional energy agencies)		20
HU	Energy centre	2000	65
LV	Development and investment agency	1997	
LT	Energy agency	1993	30
PL	Polish National Energy Conservation Agency and 16 regional energy conservation agencies	1995	25
SK	Energy Agency	1999	70

Example: Czech Republic

- Czech National Energy Policy was adopted in 2004
- National Program to mitigate the impacts of climate change (2004) declares that a reduction of the energy intensity of production, distribution and final consumption of energy to a level of 60-70% of the 2004 consumption should be reached by 2030
- State Energy Concept includes an indicative target of reduction in the energy intensity by 25% until 2010 and by 50% until 2020 compared to 2000

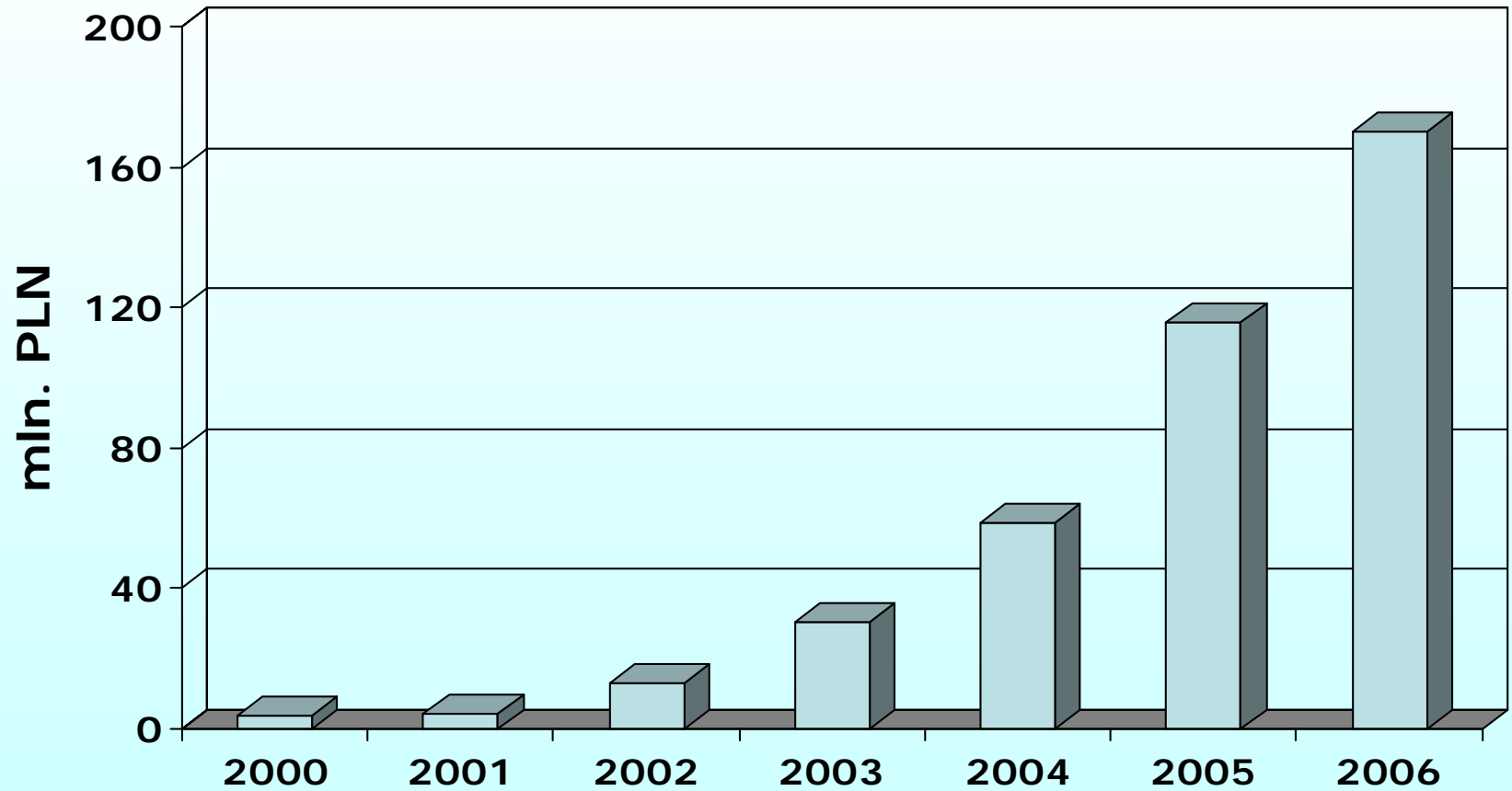
Example: Czech Republic

- Energy audits are obligatory under the Energy Act for the facilities with total consumption higher than that stated in the relevant legal regulations
- The Energy Management Act requires energy facilities or buildings to undergo an energy audit if a state subsidy within the National Programme is obtained
- Under the programs of the Czech Energy Agency subsidies are available for energy audits for buildings, for modernisation of energy supply systems in housing estates, and for the installation of cogeneration
- The Support for repairs of defects in apartment buildings programme assists panel flat owners in necessary repairs to ensure fitness for use of apartment buildings
- In industry for private facilities, audits are mandatory if energy consumption is above 35,000 GJ per year

Example: thermal insulation of buildings in Hungary

- Under the National “Panel” Programme, which ran in 2003-2004, residential buildings made with prefabricated technology and any other residential building or blocks of such buildings for which the renovation results in energy saving can apply for a grant up to 1/3 of investment (with a limit on total support per flat);
- The “Panel Plusz” loan program started in 2005
- grants are provided for investments aimed at the improvement of thermal insulation of buildings (facades, roofs, cellars, doors and windows) and the modernisation of the internal heat supply in buildings with district heating
- In the Environment and Energy Operational Programme for 2007-2013 one priority is about modernising the energy utilisation of municipal and non-municipal owned public buildings

Example: Thermal modernisation fund in Poland



Some recommendations

- Avoid “mechanic” transposition of the EU legislation
- Cost reflective energy prices is a very good incentive to improve energy efficiency
- Strengthen governmental, regional and local energy efficiency institutions to make them capable of efficiently enforcing the adopted legislation and policies and action plans
- Better training and regular professional development training of staff in energy efficiency related institutions is essential
- Improve public awareness about the energy efficiency measures, availability, funding, etc.

Thank you for your attention

