

Wuppertal Institute
for Climate, Environment
and Energy

Energy Efficiency Watch: Policy recommendations based on the analysis of the National Energy Efficiency Action Plans

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What is our task?

National Reports – Integrating NEEAP analysis and market feedback

One key product of the EEW project: **27 National Reports** (to be released in summer 2012)

Objectives:

- Highlight **strengths and weaknesses** of national EE policy/ESD implementation (**good practice examples, implementation deficits**)
- Identify **policy gaps** and give policy **recommendations**

Sources of information:

- **NEEAP screening**: analysis of selected aspects
- Broad **survey** among experts/practitioners on their perception of EE policy progress
- In-depth **interviews** with selected national experts

→ NEEAP analysis **just one step** in overall assessment of national EE policy progress & **work in progress** → all results presented are preliminary

Preliminary results

Strengths and weaknesses of EE policy

- Member States analysed so far: SE, DK, UK, EE, IE, BE, MT, NL
- Some **strengths** found:
 - **Energy agencies** (concept has gained widespread acceptance)
 - **Economic incentives** for EE in buildings & **advanced packages** in building sector (→ large potentials recognised & EPBD effect)
 - **Public procurement** (→ result of ESD provisions; however: implementation/ impact unclear)
- Some **weaknesses** found in most of analysed MS:
 - Framework conditions for **energy services**
 - **Education & training** for building sector professionals
 - **Mobility management** in public sector

Preliminary results

Example of an effective EE governance framework (1)

Overarching Governance Framework - Denmark

Criteria	Assessment
Long-term strategy Rating: 2	<ul style="list-style-type: none">• Denmark aims to be independent of fossil fuels by 2050• Government programme “Denmark 2020” - DK aims to become one of the three most energy-efficient countries in the world
Other actors involved Rating: 1.5	<ul style="list-style-type: none">• Involvement of regional and local authorities, e.g. via Voluntary Agreements• Involvement of energy companies via energy savings obligation
Energy agencies Rating: 2	<ul style="list-style-type: none">• Danish Energy Agency as main co-ordinating institution• Strong link to regional and local activities established
Coordination/ Financing Rating: 2	<ul style="list-style-type: none">• Energy savings obligation for energy companies (advice/audits & subsidies for households, businesses, public sector)• Energy Saving Trust (information, campaigns, funding for Knowledge Centre for Energy Saving in Buildings)

Preliminary results

Example of an effective EE governance framework (2)

Overarching Governance Framework - Denmark

Criteria	Content
Energy services Rating: 0	<ul style="list-style-type: none">• No mentioning of energy services in the NEEAP
Horizontal measures Rating: 1.5	<ul style="list-style-type: none">• Energy savings obligation for energy companies; Energy Policy Agreement (22 March 2012) decided that targets be increased by 75% from 2013 and a further 25 % from 2015• Increase of energy tax rates
MRV scheme Rating: 2	<ul style="list-style-type: none">• National bottom-up method: used to assess savings from energy companies' obligations (major part of Danish energy savings), then adjusted to ESD requirements (non-ETS, 2016 savings)• Top-down method (COM recommendation): used to assess savings per sector (except industry)

Recommended sectoral policy packages – Buildings sector

- Minimum Energy Performance Standards for buildings as a whole and for related equipment
- Mandatory Energy Performance Certificates
- Information programmes and demonstration projects (to make benefits tangible)
- Financial incentives (e.g. tax breaks, soft loans) for energy-efficient new-build and renovation
- Education and training for all supply chain actors (architects, planners, builders, installers, financiers, etc.)
- Consideration of energy efficiency aspects in spatial planning (to avoid lost opportunities)
- Funding of R&D on ultra-low energy buildings
- Awards and competitions for exemplary low-energy buildings

Preliminary results

Example of an effective policy package for buildings (1)

Policy package buildings sector - Estonia

Criteria	Content
Minimum Energy Performance Standards Rating: 1.5	<ul style="list-style-type: none">• In place since 2008 & regular tightening foreseen• Control and enforcement strategy unclear
Other regulations Rating: 2	<ul style="list-style-type: none">• Spatial planning for district heating regions• Mandatory advice for buyers of HVAC equipment• Further regulations planned (HVAC inspections, individual metering)
Economic incentives Rating: 2	<ul style="list-style-type: none">• Subsidies for EE renovation of apartment buildings (up to 35% of project costs, depending on level of savings)• Incentives for energy audits• Tax incentives to foster EE renovation
Financing instruments Rating: 2	<ul style="list-style-type: none">• Large soft loan programmes for EE renovation (funded through EU structural funds)

Preliminary results

Example of an effective policy package for buildings (2)

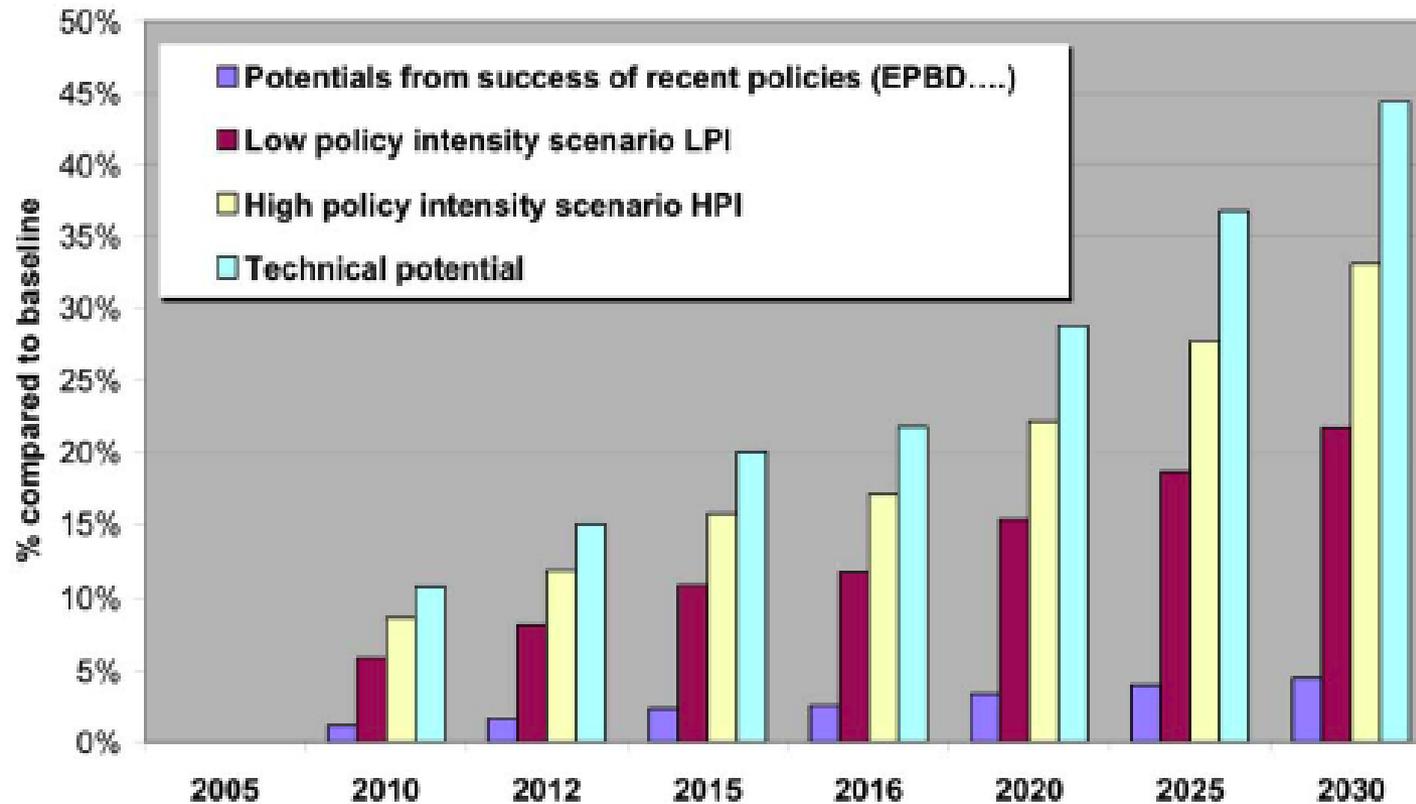
Policy package buildings sector - Estonia

Criteria	Content
Energy performance certificates Rating: 1.5	<ul style="list-style-type: none">• In place since 2009• Publication of EPCs required
Energy advice and audits Rating: 2	<ul style="list-style-type: none">• Subsidies for audits & audits required for public buildings• Assistance during design and construction for apartment associations• Planned: further develop auditing tools; training for auditors
Information tools Rating: 0.5	<ul style="list-style-type: none">• Only one awareness raising programme• Addresses only residential buildings
Demonstration Rating: 2	<ul style="list-style-type: none">• €5 million funding for low-energy demonstration buildings from Swiss-Estonian cooperation programme
Education & training Rating: 0.5	<ul style="list-style-type: none">• Nothing implemented yet, but need for education and training of building professionals clearly recognised• Several measures planned in this area

Art. 6 requires 1.5 % of energy savings per year from measures – is it feasible?

- The **cost-effective potential is 2.5 % per year** above autonomous trend
- Denmark, UK **have achieved 1 to 1.25 % per year** from energy efficiency obligations, while **saving consumers lots of money**;
- Danish distribution network companies to again **double** their efforts by 2015 (DK Energy Agreement, 22 March 2012)
- Hence, **it is feasible and cost-effective**
- **Flexibility** for MS useful: **achieving and proving equivalent results** also from, e.g., economic incentive and energy audit programmes offered from state budget or by energy efficiency funds
- Member States should aim for savings **additional** to autonomous trend

Large untapped energy efficiency potentials in EU-27



Source: FhG-ISI et al. 2009

Obligations and white certificate schemes

Comparison of different schemes in Europe

Country	Target in % of energy consumption of target group	Actor obliged	Period analysed here
Italy	Ca. 0.5%/a	Electricity and gas distribution system operators > 50,000 customers	2008-2012
UK	>1%/a, of which 40% have to be realised in low-income households	6 large electricity and gas suppliers > 50,000 customers	2008-2011
France	0.75%/a	All energy electricity and heat suppliers whose sales exceed a minimum threshold	2009-2012
Flanders (Belgium)	Ca. 0.6%	17 electricity distribution companies < 70 kV	2003-2008
Denmark	1.25%/a Efforts are to increase 75% from 2013	240 electricity, gas and heat distribution system operators	2010-2013

Thank you for your attention!

More information:
EEW Findings Paper

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IMPROVING
NATIONAL ENERGY EFFICIENCY STRATEGIES
IN THE EU FRAMEWORK

FINDINGS FROM ENERGY EFFICIENCY WATCH ANALYSIS
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