Implementation of energy efficiency targets in the Directive on Energy End-Use Efficiency and Energy Services

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Objectives of Directive

- Promotes cost-effective energy efficiency with targets, mechanisms, incentives, institutional, financial & legal frameworks.

- To develop a commercially viable market for energy efficiency & energy services (market transformation).
Scope

- Covers all energy suppliers (distributors and/or retailers) of: electricity, gas, district heating & cooling, heating oil, coal, lignite, transport fuels, etc. (Small companies may be excluded.)

- End-use sectors include:
  - domestic, agricultural, public and tertiary sectors.
  - non-energy intensive industries
  - transport
  - ET sector excluded (12,000 installations.)
Content on targets 1/2

- 1% annual overall uniform target (Article 4):
  - cumulative to 2012; 6 years (EP wants 9-yr target; mandatory)
    - target fixed; independent of GDP.
  - top-down allows impacts of market, tax changes; (double-counting a problem).
  - annexes: guidelines on M&V (MS want harmonised top-down/bottom-up and committee) EP: 1yr to negotiate differentiated, then uniform and increasing. Avg 1.3%/yr.)

- “white certificates” later. (Have gained in importance.)
Content on targets 2/2

- **1,5 % annual public sector target (Article 5):**
  - a sub-target of the overall 1 % target (PS=10%).
  - uses same methodology as overall target.
  - uses aggregated public procurement to increase demand for energy efficiency & energy services. Leadership by example.

- Precise definition of ”public sector” difficult. M.S. do not want definition or public sector target, but only measures. Possible compromise: strong measures, within overall 1%.
Bottom-up measurements

Harmonised lifetimes of energy efficiency improvement measures
(Some energy measures last decades, others for shorter periods.

- Loft insulation professional - private 30 years
- Cavity wall insulation - private 40 years
- Glazing E to C rated (in m²) 20 years
- Boilers B to A rated 15 years
- Heating controls - upgrade with boiler replacement 15 years
- CFLs - retail 16 years

Source: Energy Efficiency Commitment 2005 - 2008, UK
A Cumulative Target: Bottom-up

The chart illustrates the cumulative energy savings and consumption growth from 2000 to 2012. The y-axis represents the energy consumption growth percentage, while the x-axis shows the years from 2000 to 2012. Each year is color-coded to represent different savings targets and consumption levels, allowing for a visual comparison of energy savings against the baseline consumption.
Top-down intensity indicator

Portugal
Sweden
Netherlands
Luxembourg
Spain
Austria
Germany
Finland
EU
Italy
Ireland
Denmark
Greece
France
Belgium
UK
Norway

% / year
-4%
-3%
-2%
-1%
0%
1%
2%
3%

primary intensity
final intensity
Adjusted energy intensity indicators
Benchmarking

- To establish indicators for all end-use sectors and sub-sectors. (A top-down calculation).
- To establish benchmarks to indicate which Member States need to improve and which are above benchmark.
- To track changes in intensities in sectors and sub-sectors for monitoring compliance with targets.
- Advantage: allows all market and non-market impacts to be credited.
- Has been introduced as an amendment by the EP.
Procedure thus far

- European Parliament Plenary Vote on 7 June.
- Strong support in EP for mandatory target and strong Directive and 2\textsuperscript{nd} reading.
- Luxembourg Presidency has worked hard on proposal. 28 June Energy Council: Political Agreement
- UK Presidency: will have Common Position soon and reach agreement in 2\textsuperscript{nd} Reading by end of 2005.
The Way Forward

- Discussions in Council & E. P. constructive. Favour harmonised measurement regime. E.P. 3+3+3; 1.3%/yr. (3%)
- Committee to harmonise measurement system.
- Mixture of bottom-up & top-down. Increasing share of bottom-up. Benchmarking included in top-down.
- White certificates and bottom-up: UK, IT, FR, DK, NL, BE(FL)