Article 7 of EED & Revised German Notification: Key Issues

Berlin Workshop 7 November 2014

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Calculation of German EED7 Target

- Target to be saved by 2020 is = 42% of average total final energy consumption in 3 years 2010 to 2012
- Germany using exemption of excluding transport energy consumption from the target calculation (-28.6%)
- Germany then excludes a further 893 PJ (-13.8%) due to “own generation/growth and use” i.e. energy not distributed and/or commercially sold
- No details on reduction and some renewable activities are not eligible to be deducted – see later
- Germany intends to use exemptions eligible under Article 7.2 – capped at 25% of EED7 target (>1100 PJ available)
- Uncapped EED7 target likely between 1758 & 2017 PJ
- Only 1468 PJ identified in revised notification
Eligible Measures

- Article 7 is meant to drive end use energy efficiency through a series of individual actions encouraged by policies whose primary aim is to encourage energy efficiency.

- Individual action means an action that leads to verifiable and measurable or estimable, energy efficiency improvements and is undertaken as a result of a policy measure.*

- Policy measure means a regulatory, financial, fiscal, voluntary or information provision instrument formally established and implemented in a Member State to create a supportive framework, requirement or incentive for market actors to provide and purchase energy services and to undertake other energy efficiency improvement measures.*

* EU EED Article 2
Interpretation is the problem!

- Commission guidance says “excludes policy measures that are primarily intended to support policy objectives other than energy efficiency or energy services “*

- Germany initially appeared to interpret along the lines of - if it increases the price of energy, then we can claim an energy saving from this through price elasticity of demand e.g. Feed in Tariffs for renewables

- Revised draft no longer contains FiTs but still some issues to be resolved by lawyers e.g. EU ETS

*Commission Staff Working document SWD(2013) 451 final
Must be End Use Savings

- New cogeneration or district heating schemes without building fabric improvement do not save end use energy; can count energy savings from more efficient production of electricity/heat towards the 25% EED7 cap

- Similarly fuel switching generally not eligible e.g. rooftop PV, biomass/biofuels, LPG for petrol vehicles, CNG/LNG for diesel vehicles, remote electricity generation from renewables, etc.

- However, solar water heating, heat pumps in buildings, hybrid and pure electric vehicles are examples of measures which save end use energy demand

- All EE measures in home/premises/factories count to EED7 target
Measures with Questionable Eligibility

M 03: Renewable Energies Heat Act – justification is that it encourages EE as an alternative compliance option?

M 07: Combined Heat and Power Act – only end use savings count to uncapped EED target

M 14: HGV Toll – road maintenance or energy efficiency?

M 15: Air Traffic Tax – revenue or energy efficiency?

M 16: Emissions trading – EU ETS is a European Commission requirement – Annex V permits only savings that go beyond the minimum requirements originating from EU legislation

For many measures, additionality/free riders is not discussed and likely to be important
German Building Regulations

- Key issues here – how measure the energy savings & how handle EU directive requirements e.g. EPBD, EED and Ecodesign e.g.
- EPBD requires all new build and refurbishments to meet cost-optimal level
- EED uses minimum EU taxation levels from which to count energy savings; sets criteria such as additionality/free riders
- Ecodesign sets minimum performance standards on products such as boilers (2015), heat pumps (2017), air conditioning (2015), motors (2015) – only energy savings above minimum standard are eligible for EED7
Simple Illustration for Building Regulations

Cumulative Effect of Building Regulations

First Time Energy Savings

Annual Energy Savings

Includes minimum boiler standards 2006

2013
2010
2006
2002

2002 2006 2010 2013
How Building Regulations Count to EED7 Target

First Time Annual Energy Savings

- Early Actions

- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020

Boiler lifetime effect

Energy solutions for a changing world
Illustrative Impact of Ecodesign & EPBD on New Energy Savings from Building Regulations

First Time Annual Energy savings

- Early Actions
- EPBD
- Ecodesign

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Legend:
- Black: 2017
- Red: 2013
- Green: 2010
- Brown: 2006
- Blue: 2002
EED Annex V issues

- Annex V defines the methodological rules
- For many measures, **additionality/free riders is not discussed** and likely to be important
  
  - E.g. KfW bank is 22% of identified German savings; especially in buildings; is additionality 100% (free riders =0)?
- Additionality needs to be explored for other measures
- **Taxation measures** are 41% of identified German savings; 3 are questionable, but energy tax (M13) dominates at 35% and is eligible measure
- Question on how inflation on price difference between German and EU minimum taxation levels has been handled
Summary of Revised EED7 Target

No Additionality reduction

- Own use?: 91 PJ
- "Early Actions": 119 PJ
- Building Regs: 375 PJ
- KfW: 166 PJ
- Energy tax: 396 PJ
- Other taxation?: 351 PJ
- Advice & other?: 511 PJ
- Missing: 680 PJ

All Figures are in PJ
About RAP

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- Ensure system reliability
- Allocate system benefits fairly among all consumers

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