

# Good practices of DSM in Flanders/Belgium

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# Overview

- Belgium: a federal state
- DSM measures in Flanders
- Two good practices:
  - RUE public service obligations for electricity grid managers
  - Implementation of the benchmarking agreement



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# Belgium: a federal state



**Belgium – FPSD (2004):**

**-7,5% (2010)**

**Flanders: -6%** (2007-2012 based on directive proposal 2003)

**Wallonia: -9%** (2008-2016)

**Brussels Federal**

**National energy efficiency plan:**

**Compilation of 3 regional and federal**

**Not yet submitted!!**




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# DSM measures in Flanders

Residential sector	Services sector	Industry
<ul style="list-style-type: none"> <li>•RUE public service obligations for electricity grid managers</li> </ul>		
<ul style="list-style-type: none"> <li>•Energy Performance Regulation</li> </ul>		<ul style="list-style-type: none"> <li>•Implementation of the benchmarking agreement</li> </ul>
<ul style="list-style-type: none"> <li>•Energy Performance Certificate</li> </ul>		<ul style="list-style-type: none"> <li>•Implementation of the audit agreement</li> </ul>
<ul style="list-style-type: none"> <li>•Accreditation of energy experts</li> </ul>	<ul style="list-style-type: none"> <li>•Accelerated modernization of the school infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>•Financial contribution with ecology subsidy</li> </ul>
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# RUE public service obligations for electricity grid managers

- Since 2003
- Grid managers encourage end users
- Obligation to achieve targets
- **Primary** energy savings
  - Electricity: end use x 2,5
  - Other energies: end use = primary



# Target

- Target

	2003	2004	2005	2006	2007	2008 ...
<b>low voltage</b>	1%	2%	2,1%	2,2%	2,2%	2%
<b>high voltage</b>	1%	1%	1%	1%	1%	1,5%

of the amount of electricity supplied two years before

Penalty: 10ct/kWh beneath target



# Annual RUE action plan

- Annual REU action plan, containing:
  - Description of actions
    - Two essential parts in actions:
      - Sensitization and information
      - Financial stimulation
  - Target group
  - Budget
  - Expected primary energy savings
  - Data filed for reporting results



# Annual RUE action plan

- Grid managers put extra effort to:
  - Protected customers
    - Specific plan for actions for this target group
    - Higher financial support
    - Specific communication



# Annual RUE action plan

- Grid managers put extra effort to:
  - Local governments
    - Assistance in planning and implementation of energy policy
    - Assistance in control of energy accounting
    - Support of energy audits
    - Guidance of energy management systems



# Primary energy savings

- Grid manager delivers calculation method
- Administration approves calculation method
  - Only direct quantifiable effects
  - Savings due to sensitization / information not considered
  - Audit: only direct measures from audit report



# Primary energy savings

- Calculation methods checked about consistency and correctness
- Calculating primary energy savings:
  - > minimal information needed from customer
  - > balance between correctness and customer information



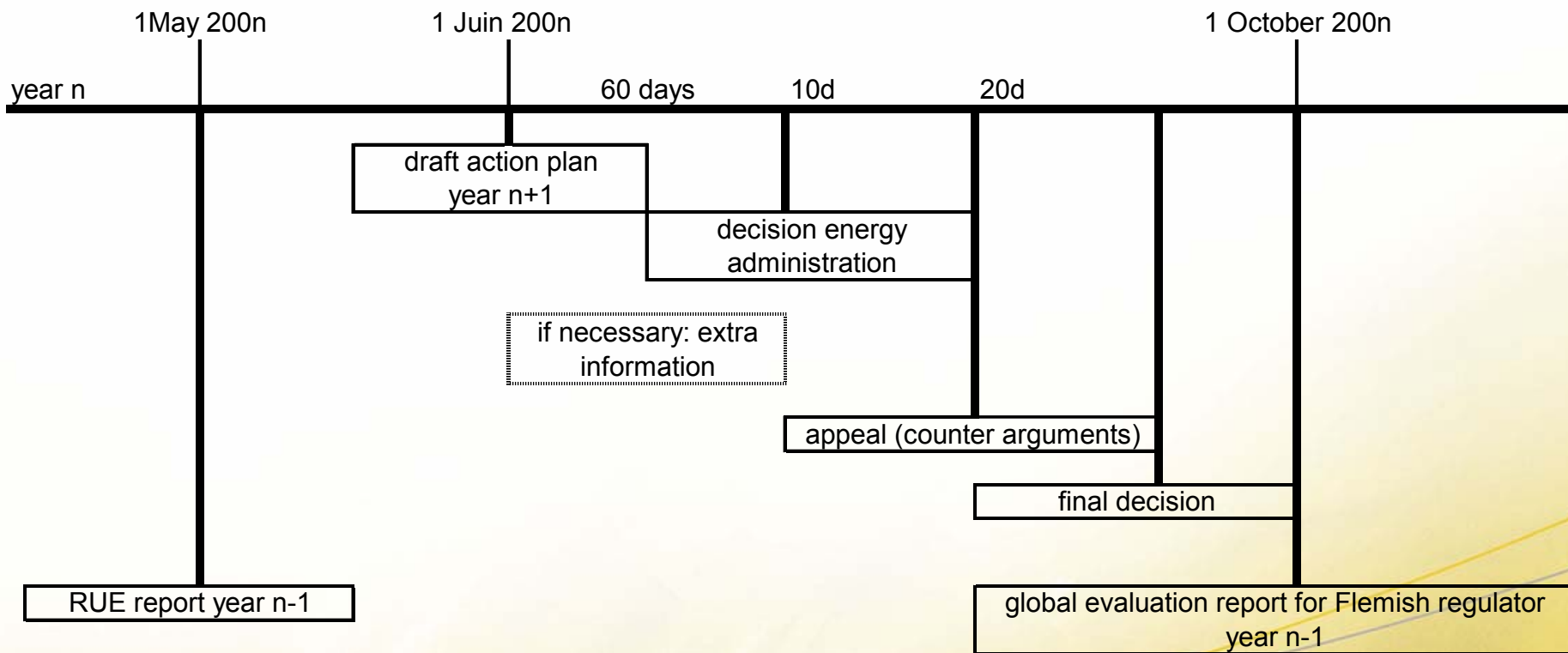
# Annual RUE report

- Before 1 May
- Results of RUE action plan
- Cost efficiency of RUE measures
- Special attention to measures towards protected costumers and local governments

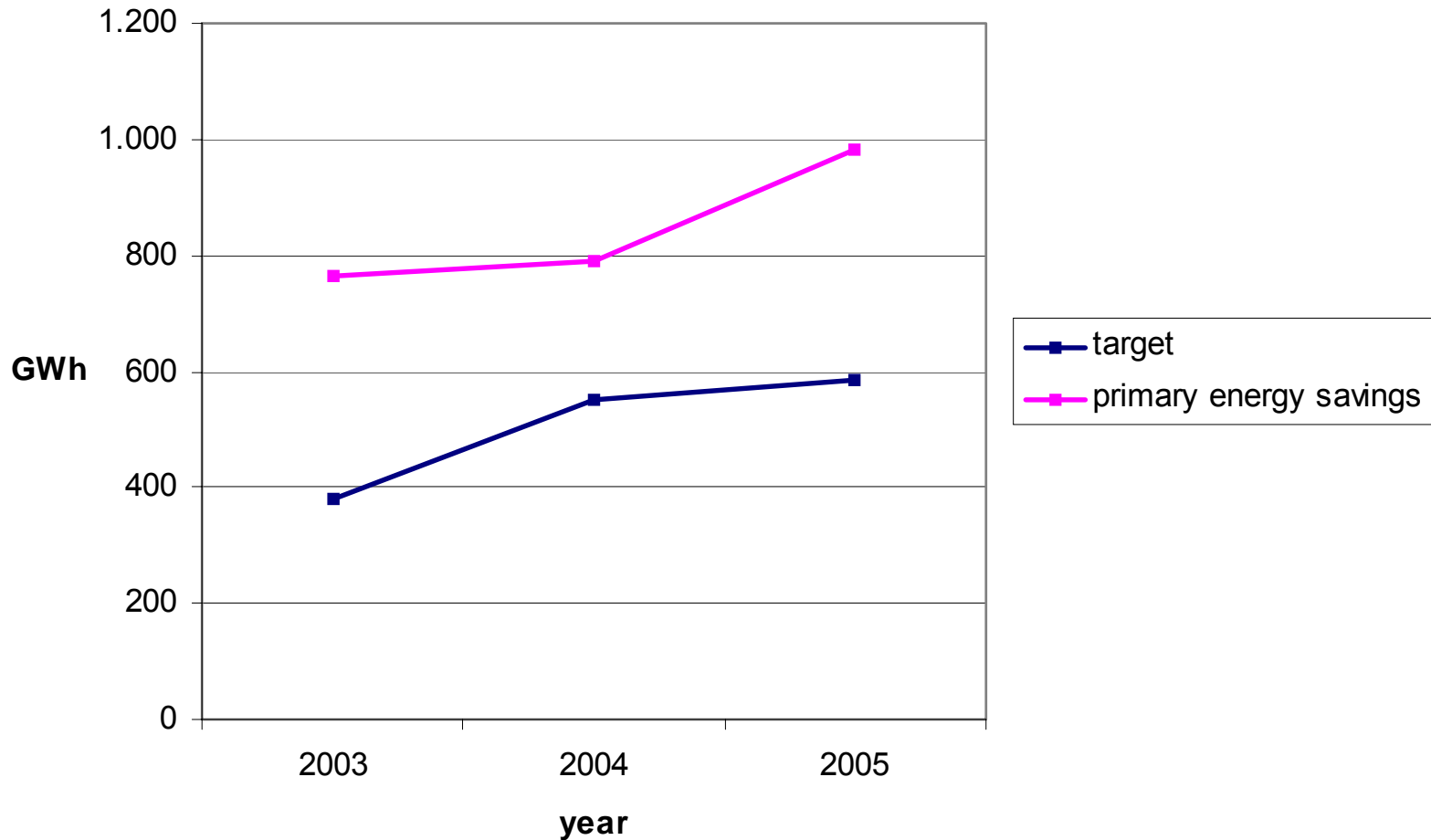




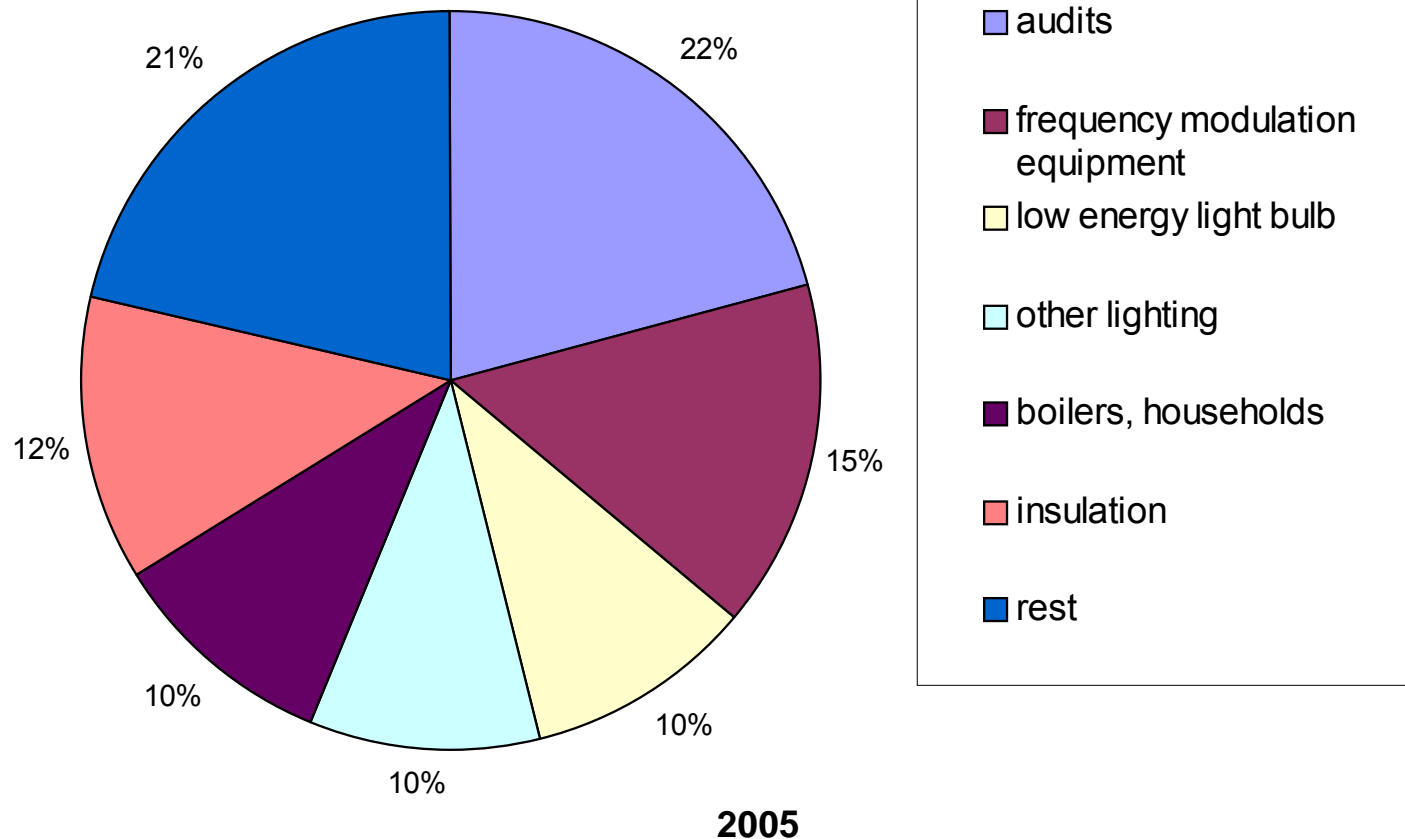
# Time frame annual RUE action plan and report



# Results RUE measures



# Share of energy saving measures



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# Implementation of the benchmarking agreement

- Big energy intensive companies
- All industrial sectors
- Energy consumption  $> 0,5$  PJ
- End: 2012
- Goal for companies: energy-efficiency world top
- Energy plan: 1,5 year after joining



# World top

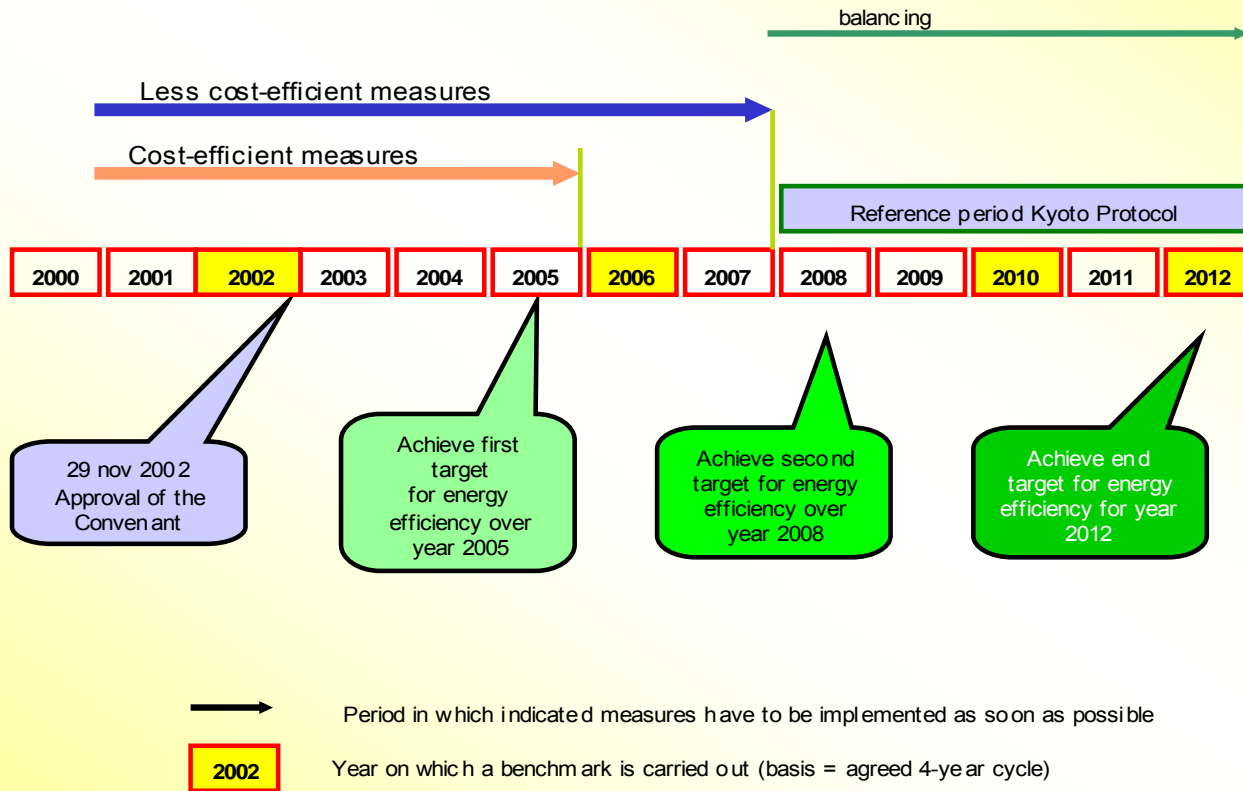
- Full bench mark:
  - All comparable installations worldwide  
World top = best decile
- Regio bench mark
  - World top = mean of region
- Best practice
  - World top = best company + 10%

All previous methods not possible

- Energy scan
- > apply cost-effective measures



# Terms and data Covenant Benchmarking energy efficiency



# Cost-effectiveness

- Cost effective measures
  - $IRR \geq 15\%$
- Less cost-effective measures
  - $IRR \geq 6\%$  (mean interest rate linear 10 year bond, published by NBB)





# Verification bureau bench marking

- Approves bench marking method / consultants
- Approves submitted energie plans
- Monitoring implentation of measures
- Reporting to benchmark committee



# Bench mark committee

- Representatives of government and industry
- Coördination
- Solutions for bottle necks
- Control on progress
- Publish results



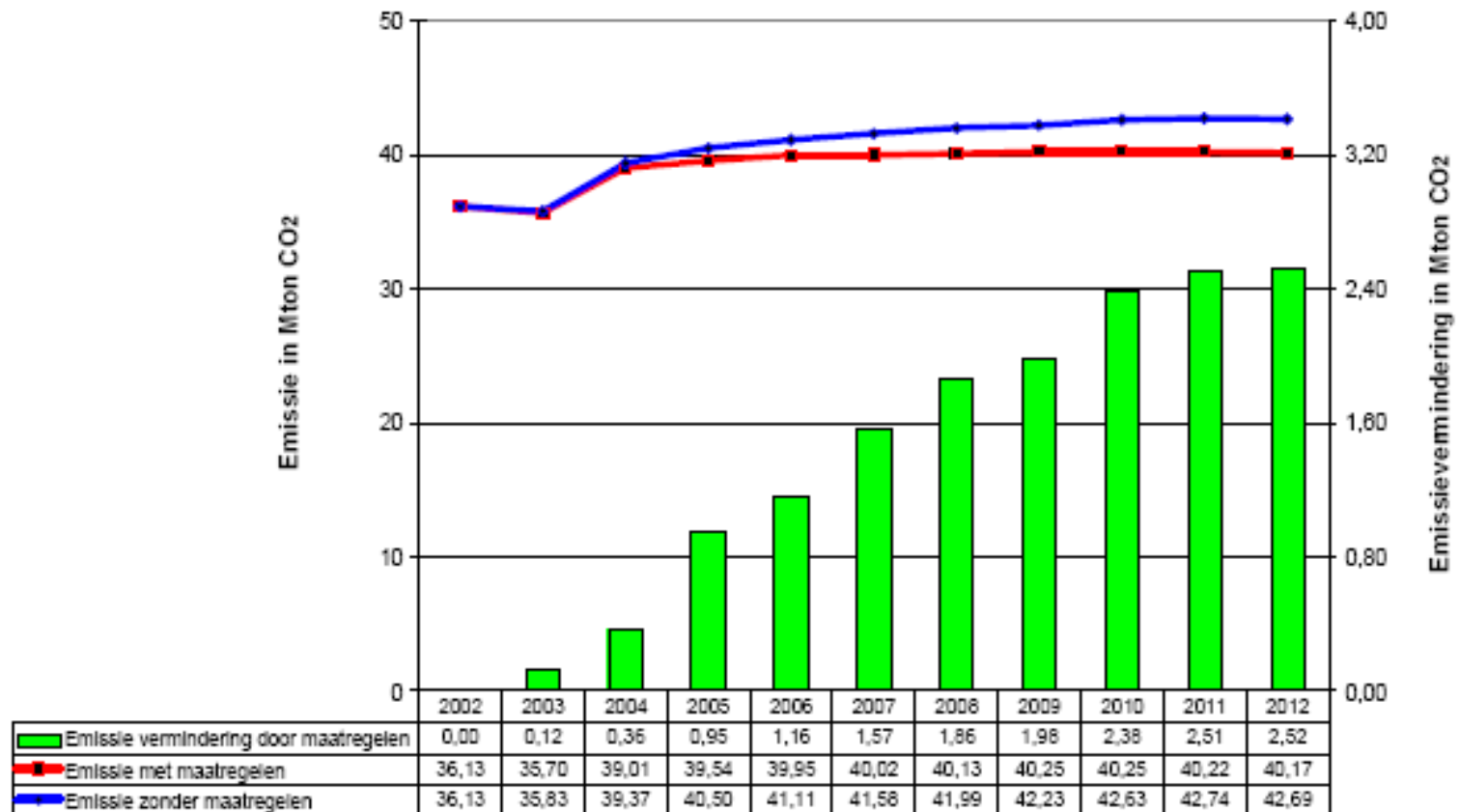
# In return...

- No extra obligations on RUE or GHG emissions



# (Expected) results

CO<sub>2</sub>-emissie met en zonder maatregelen



# Thank you!

