

The Flemish Biomass Action Plan

Favoring Green Options in a Densely Populated Region

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Wels - Austria

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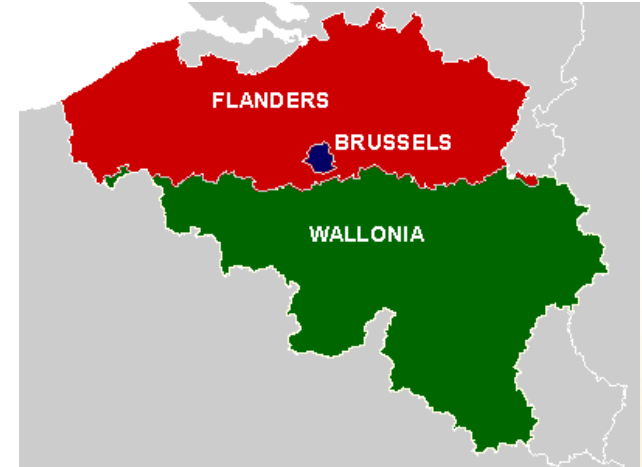
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Three of a different kind

- Belgium
 - Constitutional reforms
 - Transfer of responsibilities
- Flemish Region
 - Rational energy use and RE-policies
 - Not all responsibilities are transferred
- European Union
 - Addresses Belgium as a State
 - Intensive negotiations on federal/regional level



EU leading its MS to renewable energy

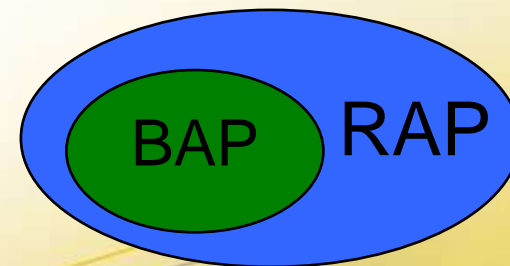
- EU-directives are a driver for Flemish RE and biomass policy making
 - Reference to define regional targets & goals
 - cf. Renewable electricity directive & Bio-fuel directive
- Coming to the Renewable energy directive: a gradual approach



- 2004 Share Renewable Energy **(communication)**
- 2005 EU Biomass Action Plan **(invitation)**
- 2008 Renewable Energy Directive **(obligation)**

- Renewable energy directive

- RAP to be notified to EU-Commission by 30/06/10
- Major role for Biomass
 - RAP should include policies to develop existing and mobilise new BM-resources



Regionalizing EU policies: Coming to the Flemish BAP

- 1997 Flemish biomass knowledge center
 - Biomass contact point & bio-energy policy development
- 1999 Flemish biomass platform
 - Involvement of stakeholders, active and actual development of biomass support & strategy
- 2004 Biomass bottleneck analysis and action plan
- 2005 Flemish Action Plan on green electricity (∃ BIOMASS)
- 2008 Flemish Action Plan on renewable energy + CHP (∃ BIOMASS)
- 2010 **Regional Biomass Action Plan ∈ reg-RAP**



The Flemish Biomass Action Plan in Action (1)

- Approved by the Flemish government
- Biomass related electricity prod. >80% of all renewable electricity
- Listing of bottlenecks in the bio-energy field:
 - Legislation
 - Financing & economics
 - Permits & Licenses
 - Communication
 - Availability & trade
 - Technology & knowledge
- Specific definition of actions (studies, legislative adaptations,...)
- Yearly follow-up, progress reports & approval by the Flemish Government → **ACTUAL RESULTS**



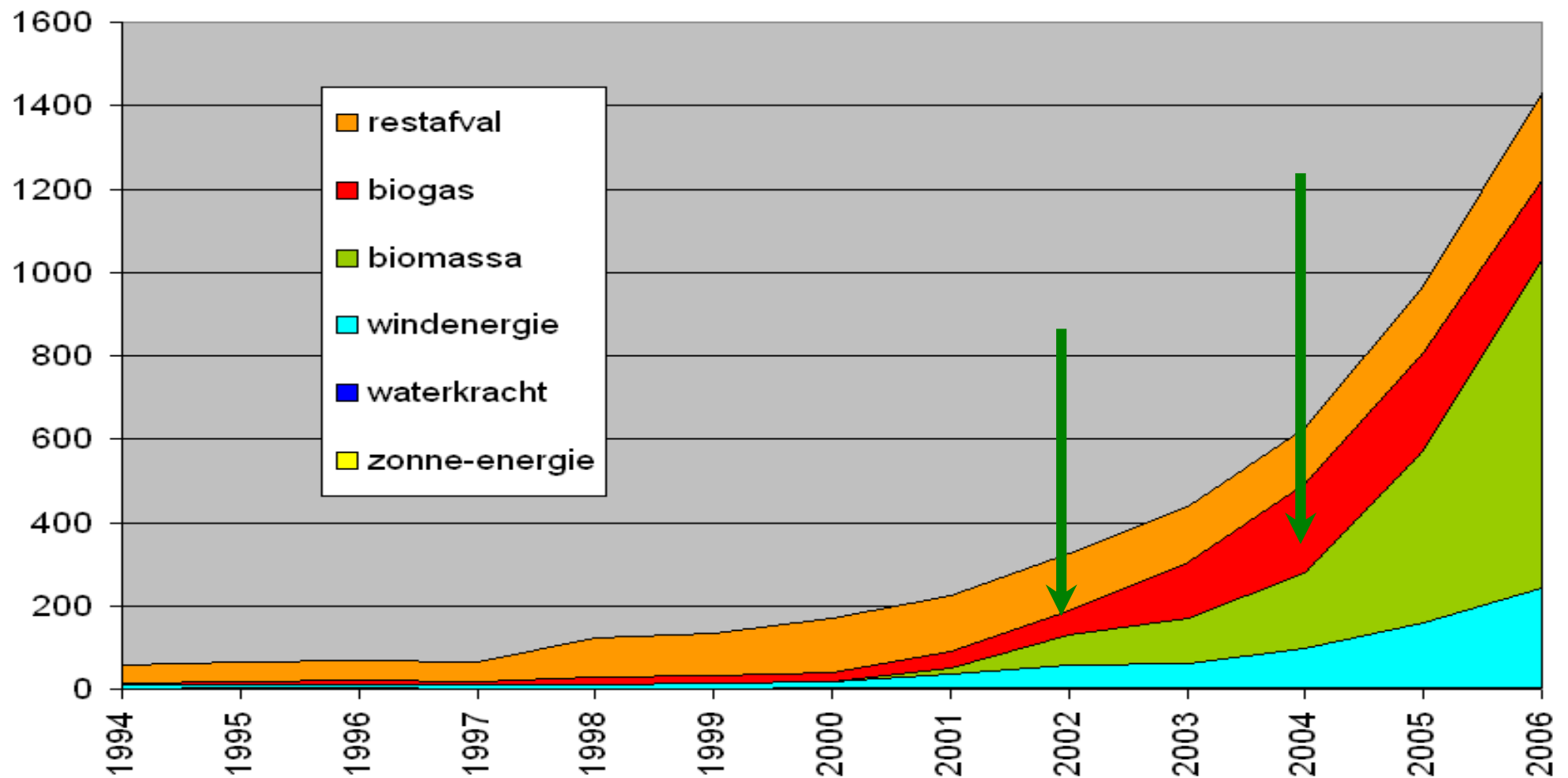
Results - Green electricity production (1)

- Since 2002 Green Electricity System
 - Obligation for electricity suppliers (penalty = 75 → 125 €/MWh)
- Flemish target 2010 = 6%
- Minimal value GEC 2002 = 20 €/MWh
 - Too low to create a solid investor climate
 - Financial Gap analysis
- Minimal value GEC 2004 = 80 €/MWh (for biomass-based electricity)
 - Guarantee of 10 years
- Vito-study 2005 – further differentiate between sources and technologies
 - New proposal under discussion (January 2009)
- Adaptations led to results
 - 2007: 1350 MWh BM-related production out of 1640 MWh RE-production



Results - Green electricity production (2)

groenestroomproductie in GWh (miljoen kWh)



Results – Biomass heat & CHP (1)

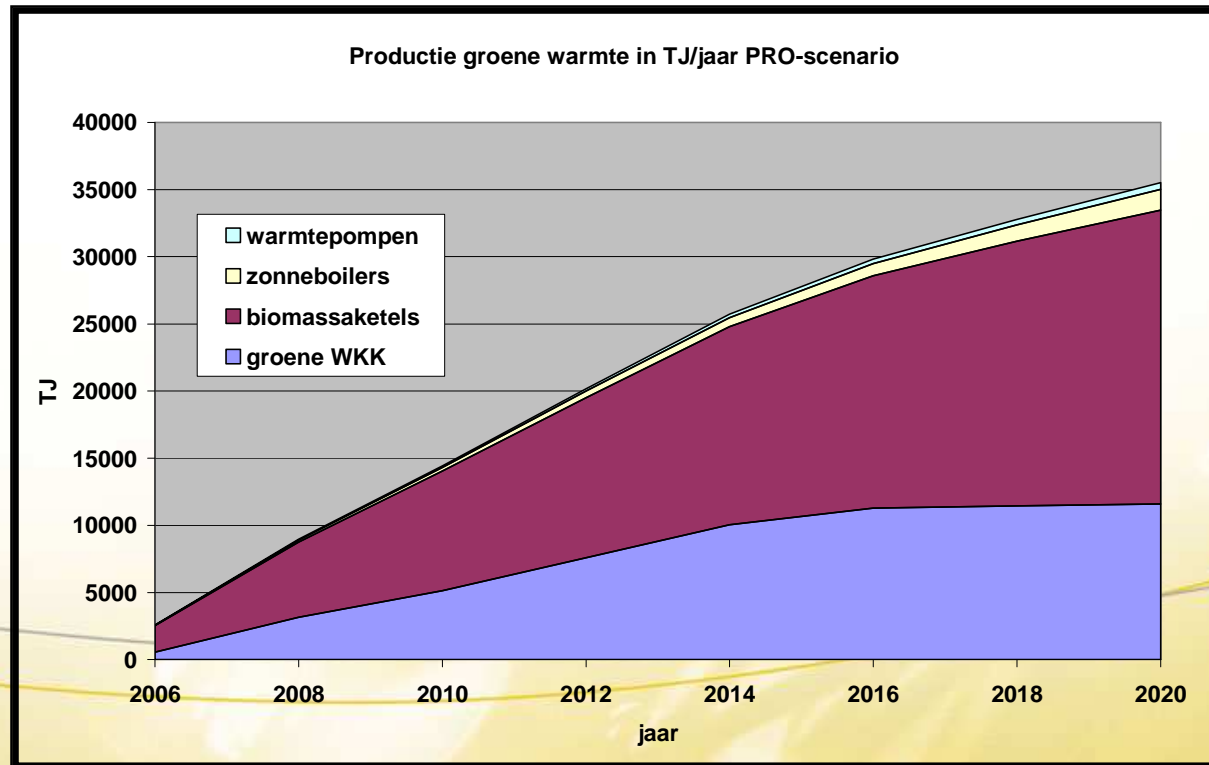
- CHP-decree lack of possibilities for Biomass-CHP
 - Need for a ‘Qualitative’ installation to generate CHP-certificates (RPE>5%)
 - Based on reference efficiencies not adapted to biomass installations (cf STAG)
 - Only fossil fuel CHP benefit from CHP-certificates
- Reference efficiencies where adapted (lowered) for wood & wood waste resources
- Possibility for bio-CHP to generate certificates

$$RPE = 1 - \frac{1}{\frac{\alpha_Q}{\eta_Q} + \frac{\alpha_E}{\eta_E}}$$



Results – Biomass heat & CHP (2)

- 2007 (preliminary figures)
 - 8.9 TJ green heat production (1/3 CHP & 2/3 dedicated)
 - 95% biomass related (other: solar boiler, heat pumps)
 - 1.9% of total heat production

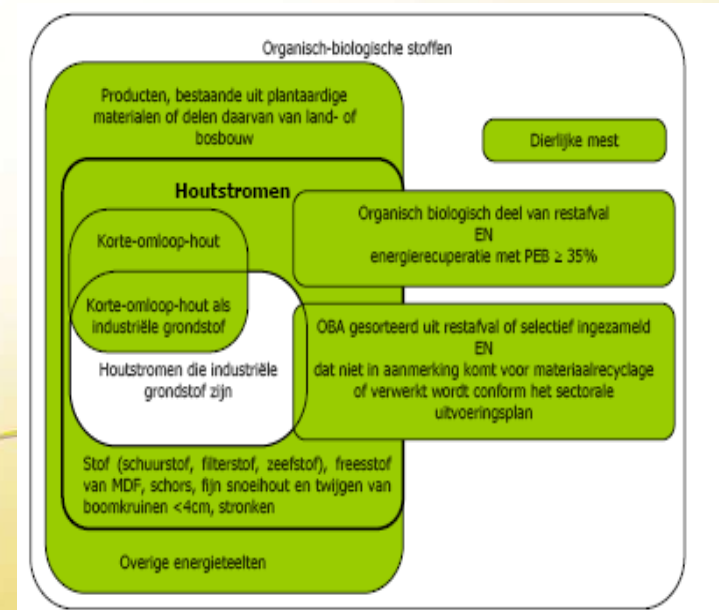


Results – Biomass potential

- 2004: lack of data on availability of BM-streams
 - No investors interest, no security on long term



- 2006: start biomass-inventory by the Flemish Waste Agency (published 2008)
 - Overview of all biomass waste streams
 - Overview of biomass imports
 - Overview of eligibility for certificates
 - Will be extended to all biomass streams
 - Yearly updated



The BAP-driver project



- Aim: leveraging the development of national biomass strategies & action plans for policy makers.
- Key outcomes:
 - A European Best Practice report (12 country-profiles)
 - An operational guideline for policy makers
 - Systematic assessment of national biomass resources
 - Criteria and methods applied for defining national priorities.
 - Formulation of long-term biomass targets 2020.
 - Formulation of national BAP
 - Development of a monitoring approach
 - Positioning papers (stakeholders involvement)
- www.bapdriver.org



Contact & info

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