Central European Stakeholders Propose Clear Priorities for Further Development of Bioenergy-Markets

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The European Technology Assessment Conference: “Technology Assessment and Policy Areas of Great Transitions”

Prague, March 13-15, 2013

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This Presentation

1 The Project “4Biomass” (www.4biomass.eu)

2 Results of a Survey of Biomass-Stakeholders in 8 Central European Countries

3 Some lessons learned during 4 years of co-operation

1. Project Objectives “4Biomass”

“Fostering the Sustainable Usage of Renewable Energy Sources in Central Europe – Putting Biomass into Action”, implemented through the Central Europe Programme, co-financed by ERDF; Austrian part co-financed by Austrian Ministry of Agriculture, Forestry, Environment and Water Management

- **Exchange of best practice** concerning technology, demonstration projects and management approaches throughout CE
- **Direct support to regional stakeholders** by turning know-how to show-how (workshops, project development, field trips).
- **Transnational Action Plan** directed at policy makers and implementing authorities
- Internationally aligned **stakeholder dialogue and -survey**

Participating Countries and Institutions

- Poland: AGH University of Science & Technology, Institute of Power Engineering Warsaw
- Germany: Fachagentur Nachwachsende Rohstoffe
- Czech Republic: CZ Biom - Česká asociace pro biomasu
- Slovak Republic (until 2010): Technical University Zvolen
- Austria: AEA
- Hungary: Energy Center Hungary
- Slovenia: Energy Restructuring Agency
- Italy: ENEA
- Ukraine (associated): Scientific Engineering Centre BIOMASS

2. Biomass-Stakeholder Survey

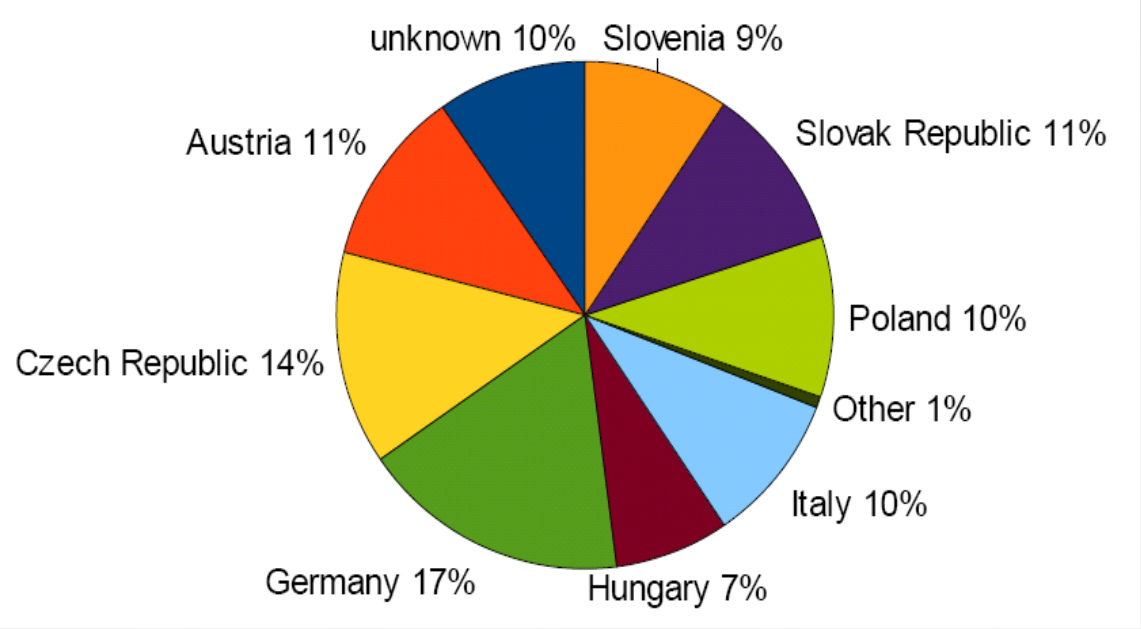
Online-Survey between Nov. 2009 and Sept. 2010 in the eight 4Biomass-countries

Questions concerned:

- framework conditions of bioenergy,
- the national biomass action plans,
- measures and instruments for the support of bioenergy,
- prospects and most favourable markets of bioenergy deployment and
- the role of bioenergy in relation to the other renewable energy sources

Full report available for download at: http://www.4biomass.eu/en/publications

Response rate



Total respondents: 1,221 (part of questions was skipped by some answerers)

Working Hypothesis: total respondents

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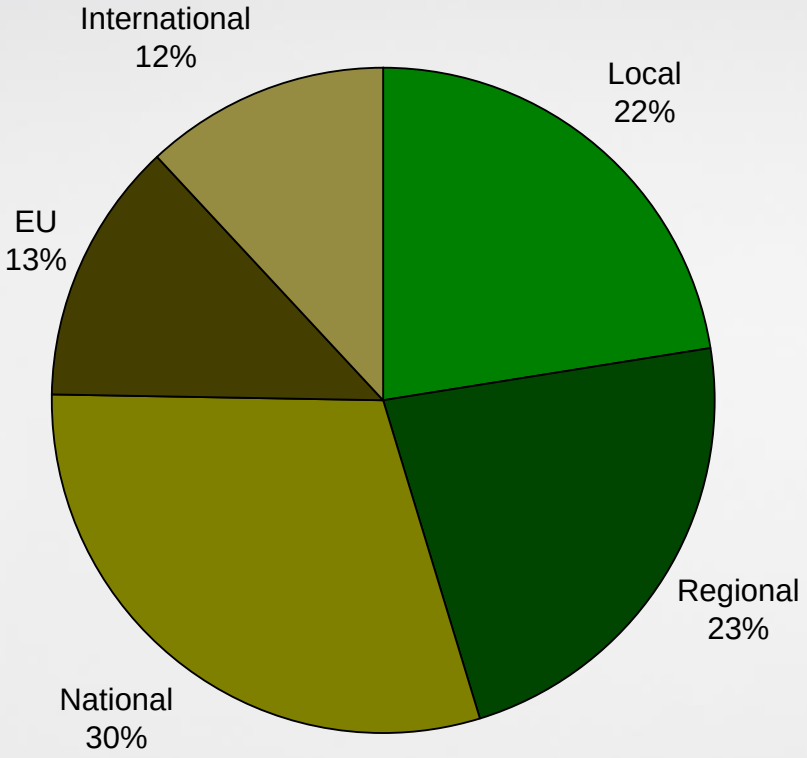
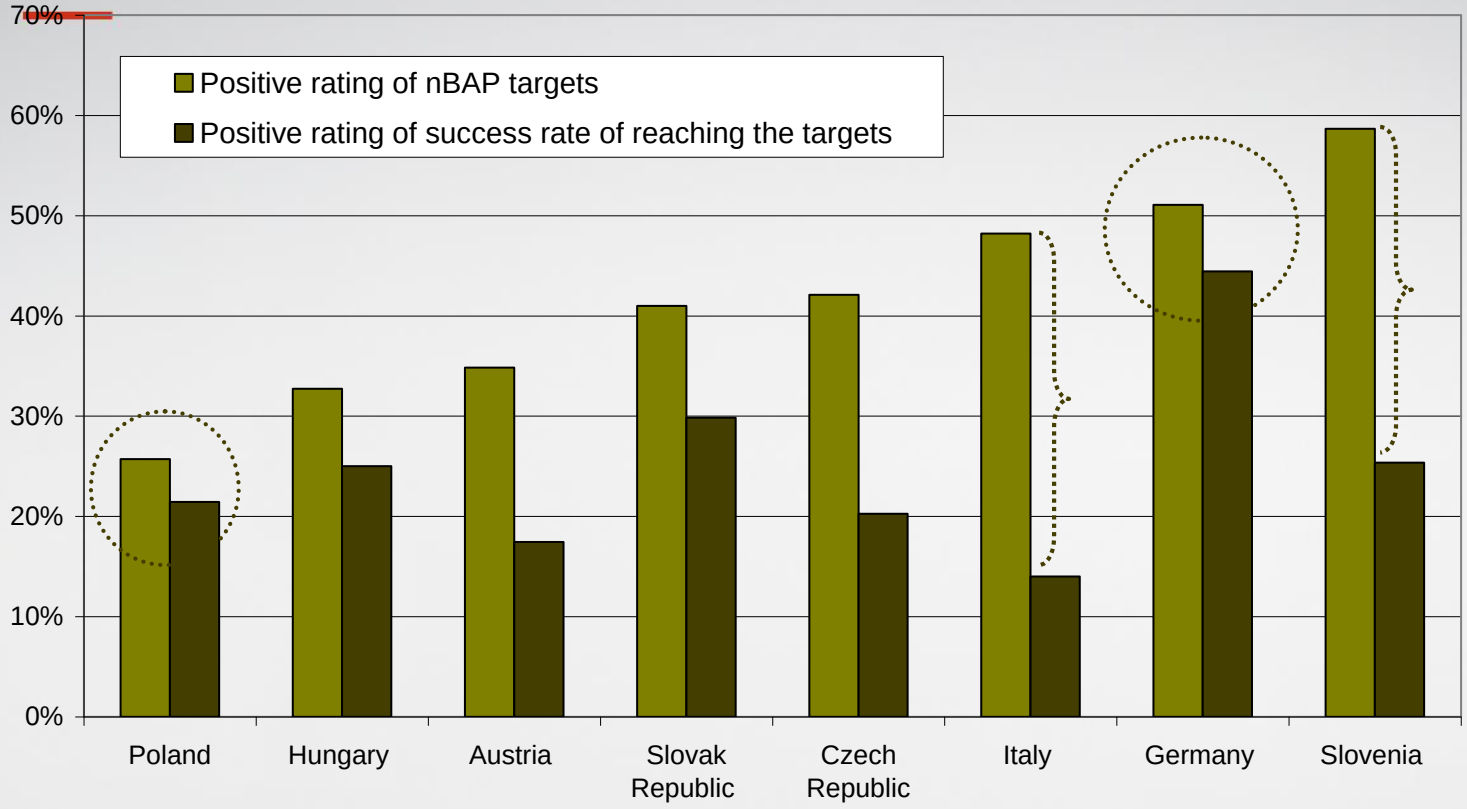
Composition of responding experts: Level of professional activity



n=1067 | Question: On what scale do you primarily

nBAP (=national Biomass Action Plans)-targets and anticipated success-rate



Positive = "very good" and "good" | Questions: How do you rate the nBAP targets of your country? (n=580); How do you rate the success rate of your country in reaching these targets in the future? (n=550)

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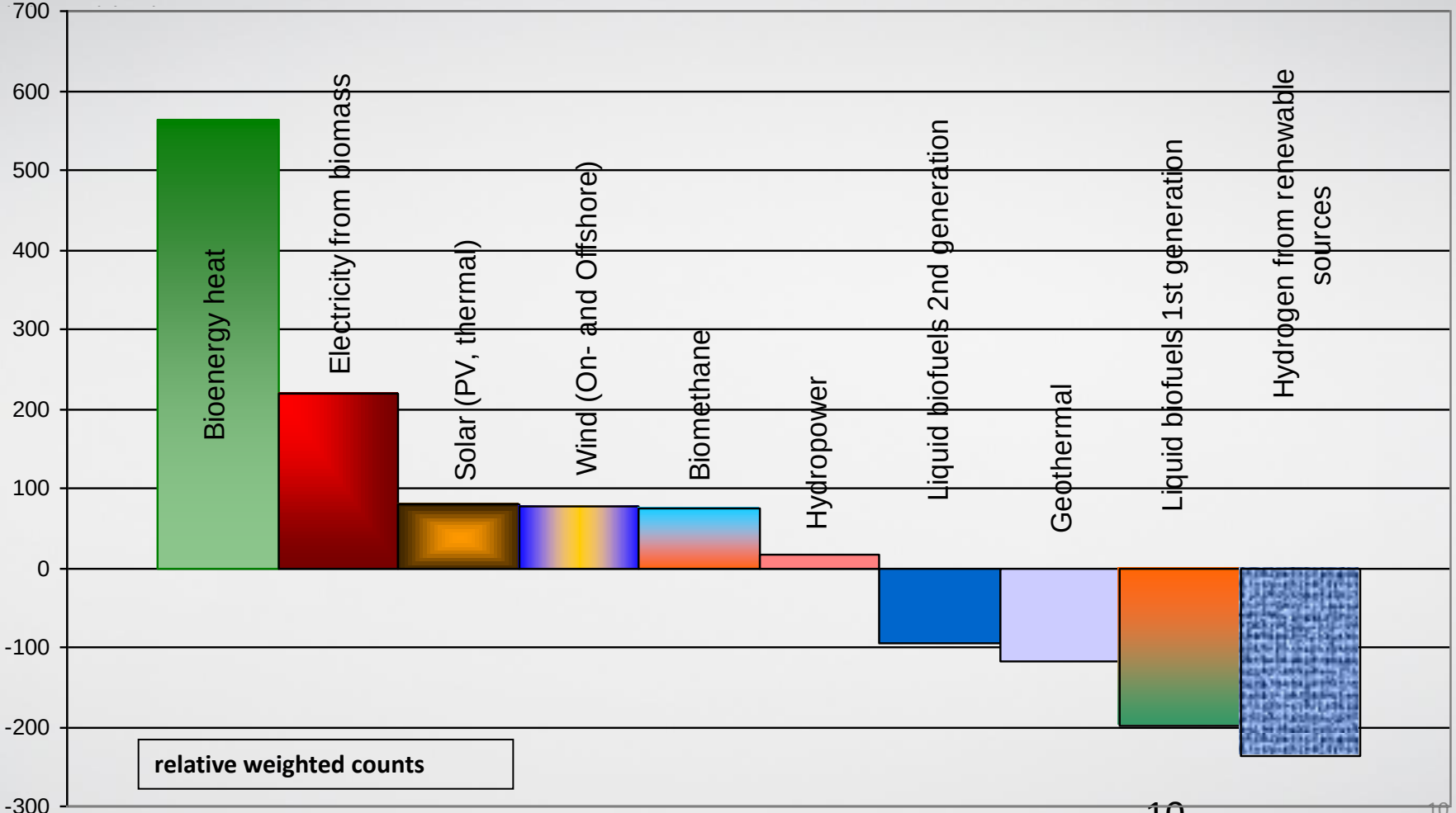
Supporting instruments for reaching the goals

	Most important	Least important
Biomass for electricity	• Financial support for investments • Feed-in tariffs • Cost reduction	• Quota systems for biofuels • Voluntary schemes • Premium tariffs • More information
Biomass for heat	• Reduce the costs of products • Increase availability of biomass • Financial incentives for investments	• Quota systems for biofuels • Premiumtrariffs • Voluntary schemes • More information
Biofuels	• Reduce the costs of products • Implement tax exemptions, reductions or refunds • Financial support for research • Biofuel availability	• Premiumtariffs • Voluntary schemes • More information • Tradeable certificates

Comparing all Renewables: Which renewables could provide most additional gain in primary energy supply of your country in 2020?



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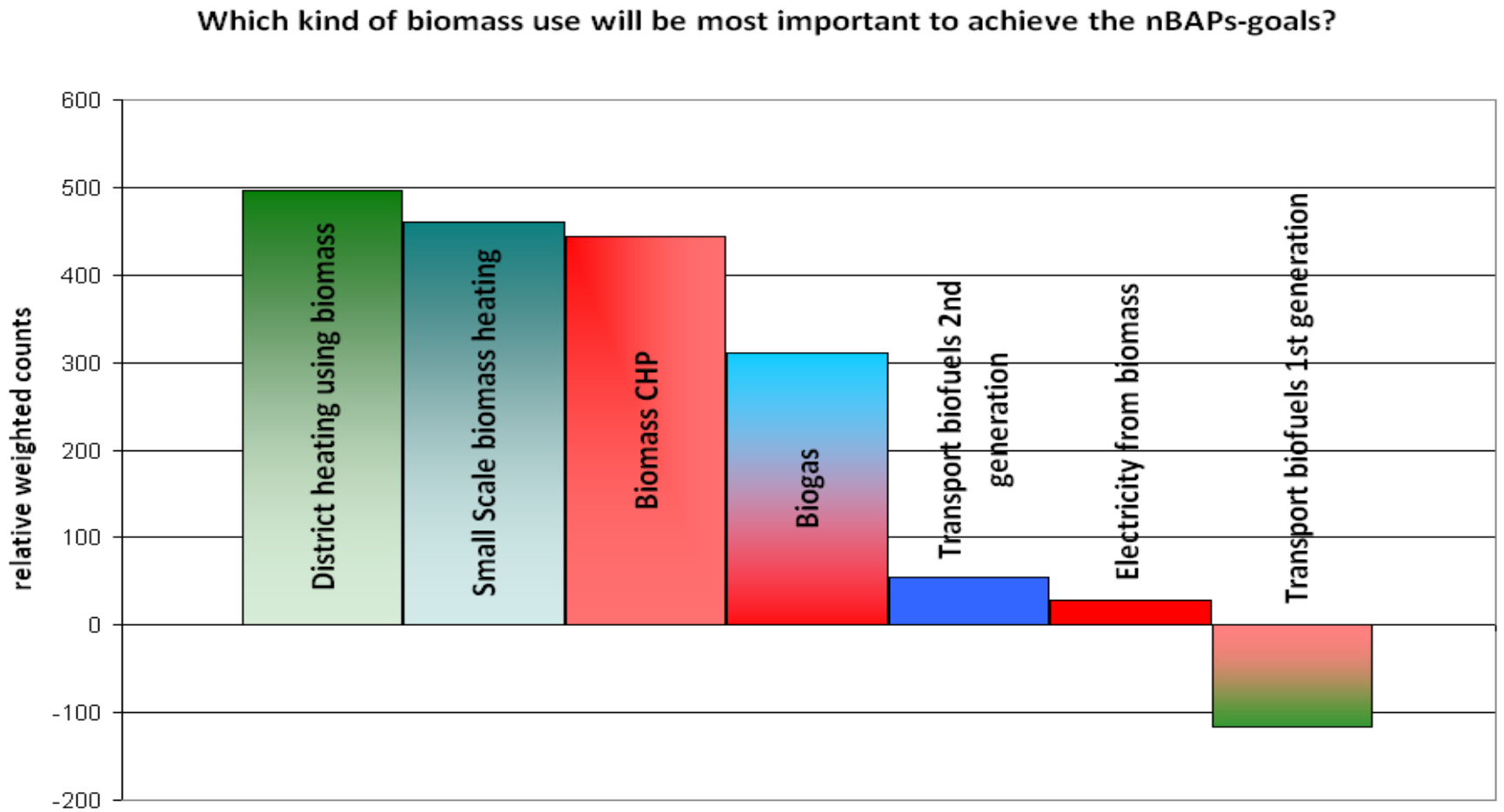
Biomass in Detail: Which kind of biomass use will be most important to achieve the nBAPs-goals?



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3. Lessons Learned (1)

Summary of Findings from Stakeholder Survey

Political declarations (nBAP) are perceived sceptically

trust in reaching declared nBAP-goals is limited ….

Instruments for Support

- use securely established instruments like feed-in tariffs (for el.) and support of investments (for heat)
- little trust in voluntary schemes and premium tariffs

Strategy: Heat for biomass shall be the defined goal

- among renewables in general
- among biomass in detail

Lessons learned (2): Example Poland

strong political support for co-firing of biomass in existing coal power plants has unwanted side-effects. Background: 2001/77/EC

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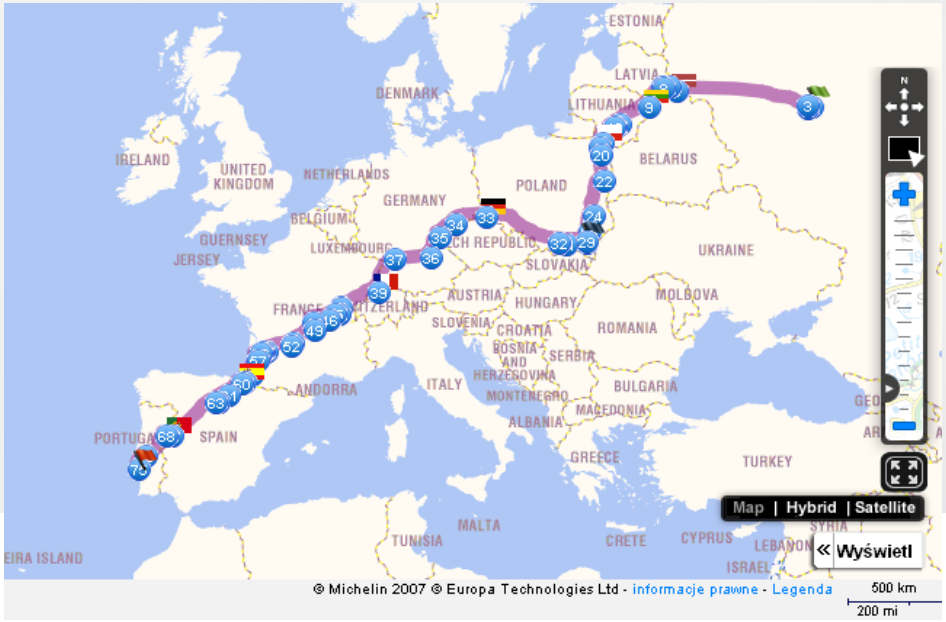
500 tons/day, i.e
50 trucks with **10** tonnes load per day
times **100 km**
gives **5000 km/day (one way)**
i.e. Moscow – Lisbon **every day**
i.e. ca. 2000-3000 litres of Diesel oil.
Energy embedded in truck maintenance & construction, maintenance of roads, etc gives about 25% loss of energy at the power station gate

Equivalent of a 10-tons-truck running Moscow- Lisboa via Poland, 5,100 km, every day



Źródło: Opracowanie własne

Example Poland (continued): slagging and corrosion in parts of coal power plants due to co-firing of biomass. High additional costs are compensated for by feed-in-tariffs.

Source: Siwek T., Panaś K., Polish Journal of Environmental Studies, 20(2011), no. 4A

Source: Jasiński A., Kwiecień M., Energetyka, 11(2011)

Source: Trojan M., “Identification of the Degree of Foulness of Heated Surfaces of Boilers”, PhD Thesis, Cracow University of Technology, 2009

Example Poland (continued): some farmers sell their wood to coal-power-plants and buy coal for their heating-purposes in return

One possible alternative:

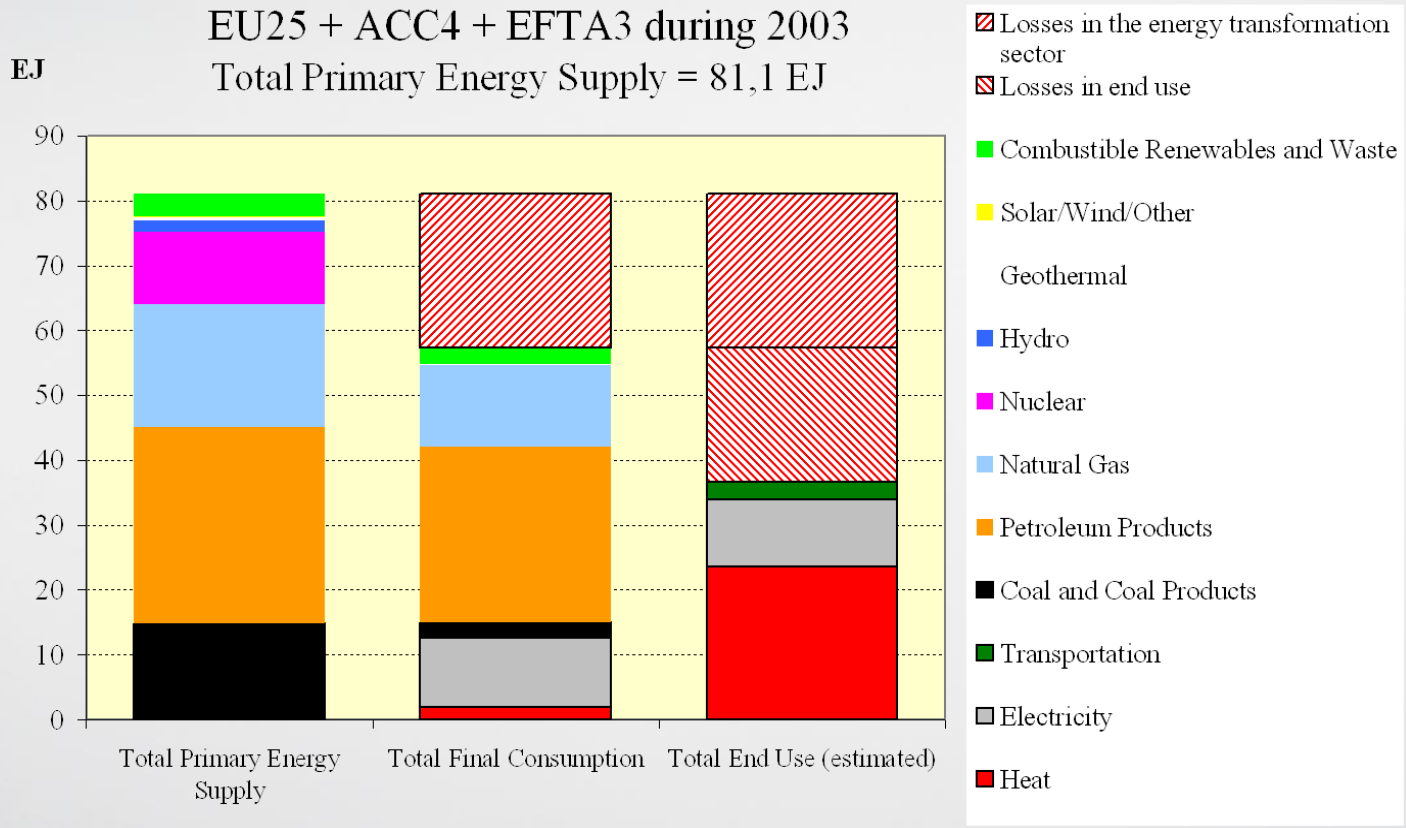
- Simple, small scale biomass heating plants
  - District heat and single-house
- Straw as a fuel
  - Emissions from combustion are high, but emissions from replaced coal-boilers are high as well
- (Re-) establishment of farmers-co-operatives for construction and operation of such plants

Lessons learned (3)

- Political advise from abroad goes best via convinced national stakeholders of the partner-country, not directly to decision makers in the partner-country
- Concerning co-operation with CEE, the positive elements of the old planned economy should be taken into consideration as well. District heating systems, co-operatives etc. are worth being put back on the stage!

Lessons learned (4):

The heat-market receives significantly less attention, as compared to the electricity-market. „Electricity“ is often generally misperceived as „energy“.



Thank you for your attention!

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