Advances and drawbacks of biowaste management and composting in the Czech Republic

Jan Habart
Chairman of board
Czech biomass association
Introduction

• Association of 160 companies dealing with biomass from raw material to waste (composting, AD, heating, electricity, biofuels)
• Since 1994
• Providing lobbying, consultancy, promotion and project work
Czech Republic

- 10 mil. habitants
- 3 mil. hectares arable land
- 200 composting plants (capacity 2,2 mil ton/year)
  – including 20 “composting plant” at landfill (0,4 mil ton/year)
- 12 waste biogas (120 th. tons/year)
- Approx. 3,5 mio. tons MSW
Biowaste management

MoE, 2008

* Method of calculation has been changed
Advantages

• Strong driver to divert biowaste from landfills not yet adopted – we can make a good one
• Existing drivers are on the paper only, lack of control and reinforcement
• High share of arable land affected by erosion (40 %) – soil need organic matter!
Many good examples
Disadvantages

• Soil owners are not farmers
• Landfill tax, 500 CZK/t (20 EUR/t)
  – Goes to municipality where landfill is located
  – Technical material to keep proper landfill excluded from payment
• E.g.: Landfill 100 000 t/year = 2 mil EUR tax income for municipality; *who would like to shut down little gold mine?*
• Electricity from landfill gas subsidized as a RES (additional income approx. 8 EUR/t)
Disadvantages

- Biowaste is used for “revitalization of landfill” as a technical material, no landfill tax, price lower than gate fee at regular composting plant
Disadvantages

• Support scheme for electricity produced from mixed municipal solid waste by premium payment

• Producer will get bonus 1830 CZK/MWh (73 EUR) for electricity from B-MSW

• It means approx. 12 EUR/t MSW (if electric efficiency of plant is 10% and biodegradable part of MSW is 60%)

• To calculate amount of biowaste landfilled MoE used 45 %

• To calculate production of RES produced from MSW ministry of industry and trade using figure 60 %
Conclusion

• Investment subsidy to build composting plant has been done without any planning
  – Subsidy for composting plant building shall be given with respect to regional biowaste production capacities to avoid overcapacity

• Composting and compost application to soil compete with RES support scheme
  – EU wide goal to steer biowaste back to soil shall be adopted
  – Support for electricity from landfill gas and WtE plant shall be forbidden – Respect polluter pays principle!
  – Or sustainability criteria of biomass for WtE
Conclusion

- There are few “grey” methods to keep landfill, technically is impossible to control what goes to MSW landfill
  - EU wide ban on untreated waste shall be adopted
- Low compost quality is main excuse to tolerate biowaste landfilling, it is not a real issue
  - Attention has to be focused on reinforcement of biowaste diversion from landfill to proper waste management, composting plant needs enough biowaste to produce quality compost
- Subsidy often break the economy
  - Proper counting of waste management options
But we need biowaste!

We are ready to produce compost
Dr. Jan Habart
CZ Biom – Czech Biomass Association
www.czbiom.cz
habart@biom.cz