Need for centralised and decentralised solutions

Austrian Compost Quality Society

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Introduction Austrian compost quality society

- Founded in April 1995
- Chairman **Prof. Dr. Peter Lechner**, University of Natural Resources and Applied Life Sciences, Vienna, Institute of Waste Management
- Managing committee 7 members

www.wau.boku.ac.at/abf.html



Introduction Austrian compost quality society (2)

• Members:

- 25 compost plants
- 30 members of compost related areas

Biggest plant:

- City of Vienna, ~ 40.000 m³ compost/a
- Smallest plant:
 - Drexler, horticulture plant, ~ 900 m³ compost/a



Introduction Austrian compost quality society (3)

- Information, consulting and coordination of members for compost–production
- quality—evaluation to get the "compost quality label"





Introduction Austrian compost quality society (4)

- Intensive dialogue with government
- Participation in standardisation work by managing director and members of the managing committee
- Support of scientific projects
- Participation in ECN especially WG 2
 "Standardisation/QAS" for establishing a
 European Quality Assurance System (QAS)



Background

- ~ 1975: first steps of composting MSW to reduce the waste amount for land filling
- ~ 1985: Austrian standards for analyses, quality requirements and use of MSW compost
- ~ 1995: Austrian standards for analyses, quality requirements for input materials/compost and use of compost from source separate collected biowaste!



Steps to a compost ordinance

- 1996: Decision for revising waste management law by ministery for environment to establish an ordinance for quality requirements for inputmaterials and compost and for trading compost on the market
- 1996 2001: Experts group
- 1996 2001: Governmental group with federal countries
- 2001: Compost ordinance!



Source separate collected Biowaste

- Wet waste fraction water content >50 % up to 90 %
- 30 % DM = 700 kg Water / t Biowaste
- Food-, kitchen-, gardenwaste minimum PTEs
- Negative calorific value
- Perfect compostition for biological treatment aerobic/anaerobic
- Bad storeability
- High effort for transport of water
- High quality source for producing compost



Centralised/decentralised solutions

- Centralised solutions for urban areas
- Collection and start of treatment within one day high treatment capacity
- Distribution of compost for different purposes
- Decentralised solutions for rural areas
- Minimum transport distances after collection
- Minimum transport distances before use of compost



Conclusions

- Only source separate collected Biowaste!
- Water content too high for long transport distances, storage and incineration!
- Combination of centralised/decentralised aerobic/anaerobic!
- High potential to avoid emissions!
- High potential of carbon sequestration!
- High potential of resource protection!



Thank you

for your attention!!!!

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