Copenhagen Waste Management and Incineration

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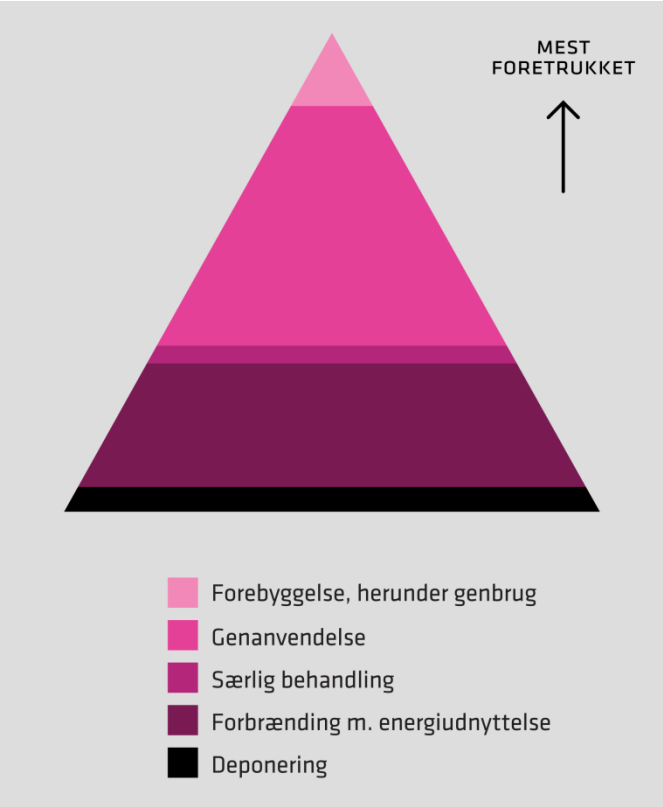
KØBENHAVNS KOMMUNE
Teknik- og Miljøforvaltningen

Presentation

- General introduction to Copenhagen Waste Management System
- National incentives
- Waste Management plan 2012
- Incineration plants

Copenhagen Waste Management System

- Municipality responsible for all waste (currently)
- Municipal waste planning
- Municipal ownership of treatment facilities
  - Incineration plants
  - Land fill
  - Disposal of hazardous waste
- Source separation (easy and logical)
- Waste to be treated as high as possible in hierarchy as possible
  - As much as possible as waste prevention and recycling
  - Hierarchy can be exempt if environmental benefits are higher with other treatments



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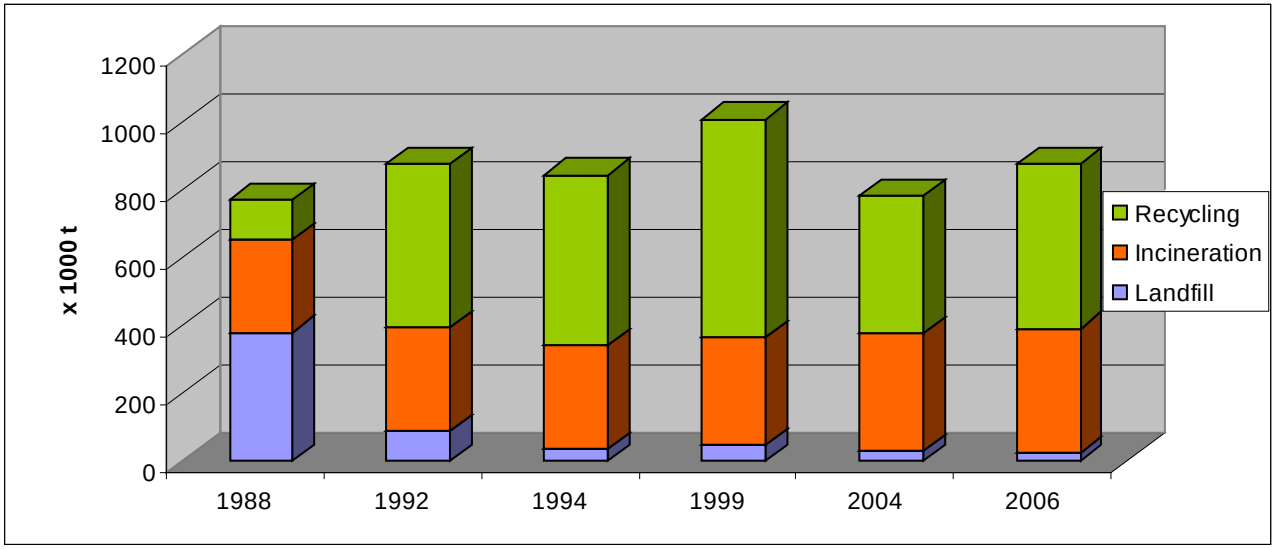
National instruments

Waste tax

- Recycling 0 DKK/ton
- Incineration 330 DKK/ton (44 EURO)
- Landfill 375 DKK/ton (50 EURO)
- On top of this tax comes the treatment fee

- Ban on landfill of combustible waste
- Phase out private landfill owners
- Currently undergoing changes to a CO_2-tax

From land-fill to recycling –result of national instruments



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Waste Management Plan 2012

City of Copenhagen wish to reduce the impacts on the environment, including climatic impact, through sustainable management of waste. Also, we wish to ensure that citizens are satisfied with waste management services

This will be done by:

- More waste prevention and reuse
- Increase in separation of waste
- Treatment system for the future
- Innovative waste solutions in urban spaces
- Tender for collection and treatment of waste

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More waste prevention and reuse

Reducing growth in waste arisings by 10% -corresponding to prevention of 2,500 tonnes of waste in Copenhagen by 2012

- Emphasis both on CO_2-emsssion and resource use
- Difficult to measure waste prevention
- Focus areas
  - Changes in behaviour among consumers and producers
  - City's institutions as frontrunners
  - More options for reuse
- Initiatives
  - Information on waste prevention and climate, survey of waste prevention impact on CO_2 in municipal institutions, small exchange centres in courtyards, partnership with retail trade

Increase in separation of waste

Separating 33,000 tonnes of the waste that would otherwise go to incineration in 2012 to ensure more eco-friendly treatment – corresponding to amounts for incineration being around 10 % lower compared to today.

- Household schemes almost fully developed
  - Collection of hazardous substances, paper, cardboard, gardening and bulky waste in courtyards, collection of glass and beverage containers close to homes, and other fractions at recycling centres
- Focus areas
  - Knowledge and information
  - Separation must be easy
  - Controlling instruments
  - Hazardous waste
- Initiatives
  - Collection of plastic from households, documentation for waste on demolition, multi-annual inspection strategy, establishment of recycling centres

Incineration plants

- Municipality assigns all waste for incineration
- Municipal ownership – City of Copenhagen part in 2:
  - Vestforbrænding
    - Located in Glostrup 10 km away from City Square
    - Owned jointly by 19 municipalities
    - Incinerates about 500.000 tonnes of waste (2007)
    - Generated 1,100,000 MWh heat and 200,000 MWh electricity
  - Amagerforbrænding
    - Situated in City of Copenhagen, 4 km away from City Square
    - Owned jointly by 5 municipalities
    - Incinerates about 400.000 tonnes of waste (2007)
    - Generated 830,000 MWh heat and 200,000 MWh electricity

Public opinion about incineration plants

- Both Amager and Vestforbrænding constructed early 70's
- People are now used to incineration plants
- Incineration plants preferred to land filling
  - Protects ground water resources
  - Generate heat and electricity
- City of Copenhagen planning to build new capacity
  - Need to have environmental approval with public hearing
  - Could expect objections to traffic, noise, general need to build more capacity

Thank you for your attention

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