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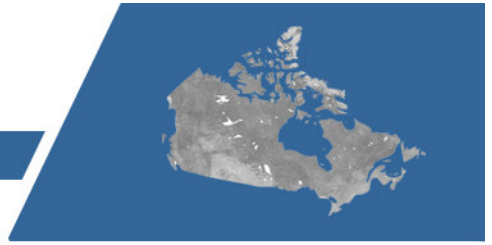


Work of the International Energy Agency Bioenergy – Energy Recovery from Solid Waste

AWMA-OS
Toronto, Ontario
October 6, 2010

René-Pierre Allard

IEA Bioenergy Backgrounder

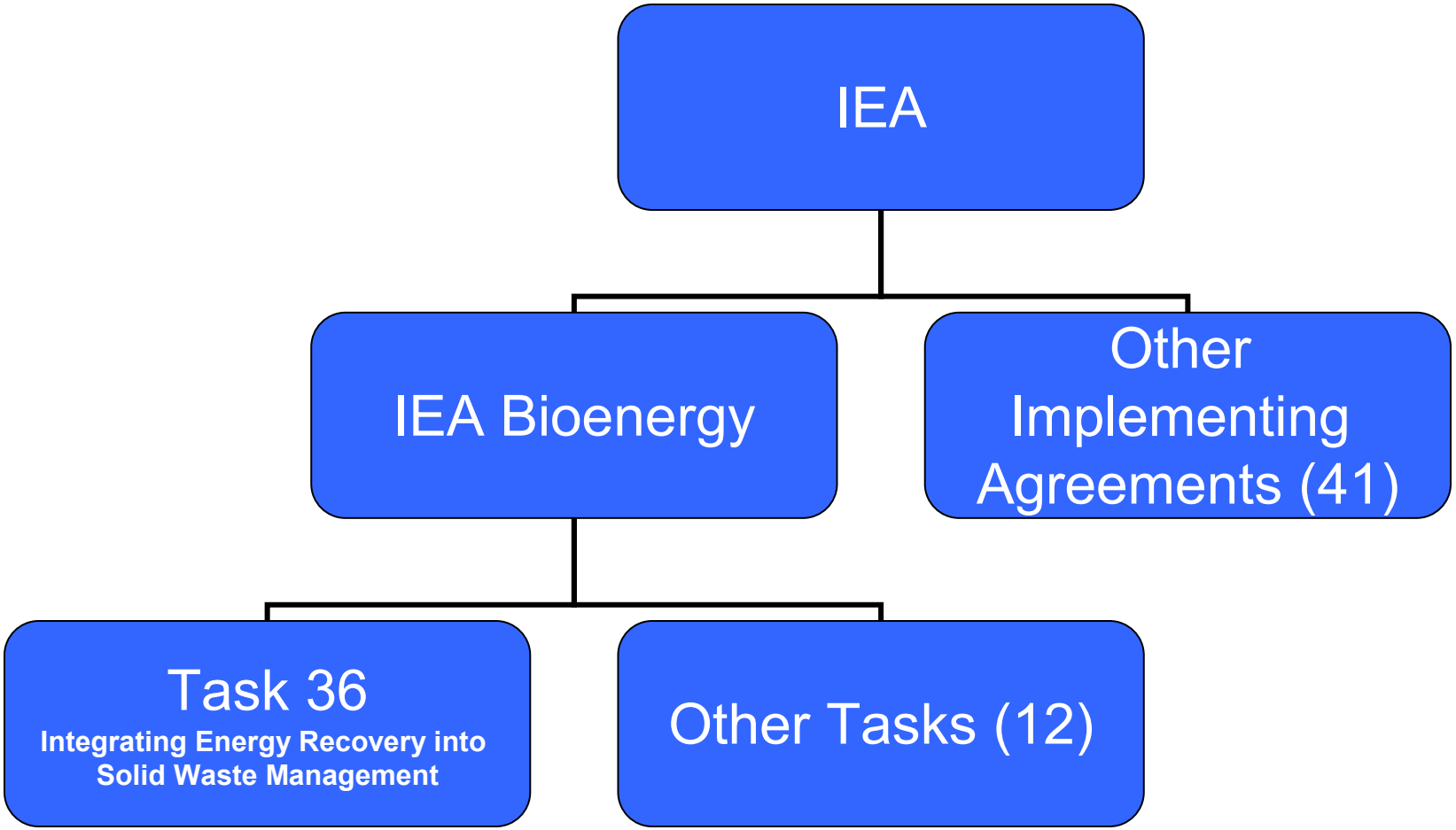
- Initiated in 1978 by the IEA
- Early focus on RD&D now shifting towards Deployment at larger scale (for some Tasks)
- Broad scope of work:
  - Biomass resources, supply systems, conversion platforms and end products
- Emphasis on international collaboration and shared management of Tasks
- Tasks have duration of 3 years

IEA Bioenergy Vision

- *To achieve a substantial bioenergy contribution to future global energy demands by accelerating the production and use of environmentally sound, socially accepted and cost-competitive bioenergy on a sustainable basis, thus providing increased security of supply whilst reducing greenhouse gas emissions from energy use.*

Trondheim Energi Fjernvarme AS, Trondheim, Norway

Organizational Structure of the IEA



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Task 36 – Integrating Energy Recovery into Solid Waste Management

- Members
  - Canada, France, Germany, Italy, Sweden, Norway, UK (lead)
- Objectives
  - Share information between participating members
  - Promote deployment of environmentally sound energy recovery technologies
  - Stimulate interaction between RD&D programs, industry and decision makers
  - Assist non-participants in adopting appropriate waste management practices to improve environmental standards
  - Identify and interact with appropriate international organizations
- Collaboration with other Tasks

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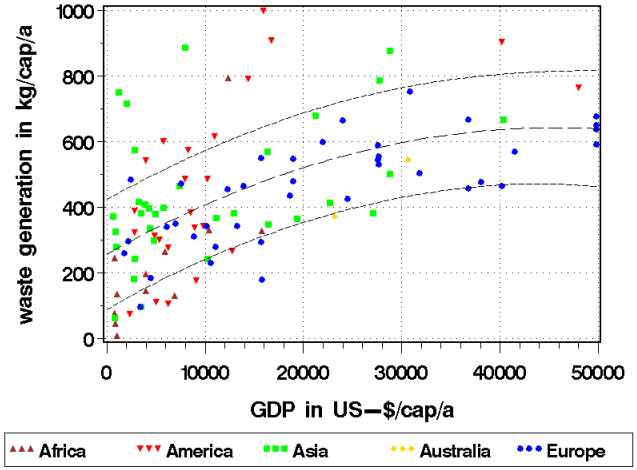
Scope of Work for 2010-2012

- Identify best ways to use heat from waste
- Review policies on monitoring of measurement of the biogenic content of waste
- Techno-economic assessment of current waste processing approaches and identification of energy recovery options
- Review of cost effective small-scale systems
- Life cycle analysis of waste management and energy recovery options
- Management of the residue from energy recovery
- Revision and update of work on fine particulate emissions

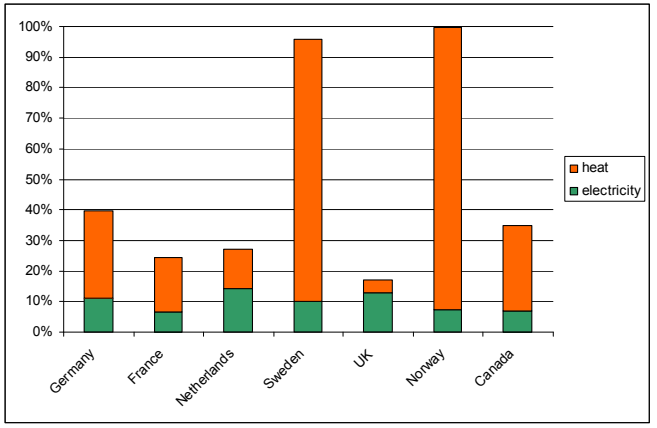
Report on Task 36 2007-2009 Activities

- Status of solid waste management in member countries



Source: Task 36 2007-2009 End of Task Report

- Energy recovery from municipal solid waste



Source: Task 36 2007-2009 End of Task Report

Energy recovery from waste incineration as percentage of the heat content of the input

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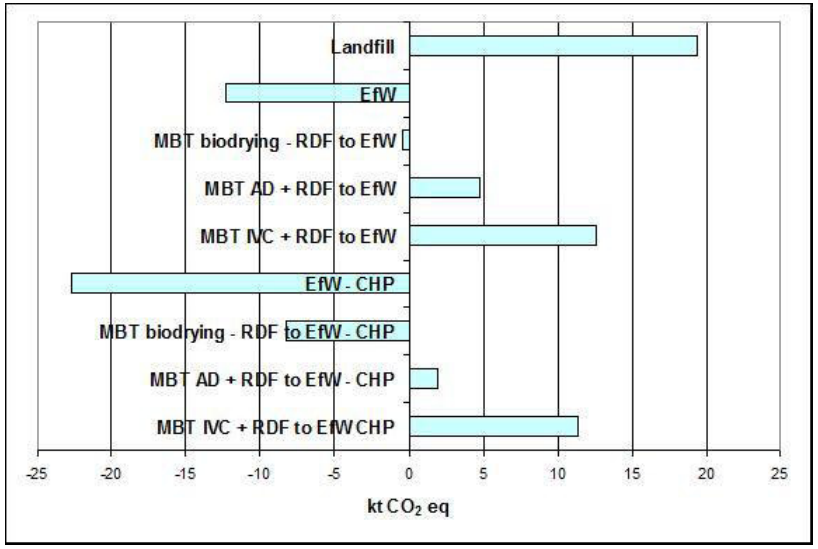
Report on Task 36 2007-2009 Activities

- Impacts of managing residual municipal solid waste
- Overview of technologies used for energy recovery
- Study tour of Japan facilities



Green house gas impact of various management approaches

Source: Task 36 2007-2009
End of Task Report

Summary

- International collaboration and pooling of resources is beneficial:
  - Access to varied and valuable policy, regulatory, finance, technical and cultural information from member countries and others
  - Opportunity to learn from real world examples

Thank you

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IEA links of interest:
www.ieabioenergy.com
www.ieabioenergytask36.org