

# **Biomass Production for Energy from Sustainable Forestry**

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IEA Bioenergy Task 31**

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# Bioenergy Drivers

- Global climate change
- Need for security of energy supply
- Desire to reduce reliance on imported energy



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Increased demand for forest biomass




# Sustainability of forestry systems

- Environmental
- Economic
- Social



# Sustainability of forestry systems

- Environmental
  - Economic
  - Social
- 
- Needs:
    - Sound science and appropriate technology
    - Careful policy decisions and management strategies

# IEA Bioenergy Task 31

## Biomass Production for Energy from Sustainable Forestry

### OBJECTIVE:

To share, analyse, synthesize, disseminate and promote **scientific knowledge and technical information** leading to the economically and environmentally **sustainable production** of biomass for energy from **integrated forestry systems**.

# Participants

- Canada
- Denmark
- Finland
- Germany
- Netherlands
- Norway
- Sweden
- United Kingdom
- United States

# Task approach

- Global scope
- Naturally-regenerated forests & plantations
- Integration
  - within woodfuel supply chain
  - environmental – economic – social
- Sustainability
  - sound scientific/technical information
  - practical guidelines



# Task activities

- International workshops
- Collaboration & information
- Technology reports
- Technology transfer



# International Workshops

- **2007 Joensuu, Finland**
  - *“Sustainable forestry systems for bioenergy: integration, innovation and information”*
- **2008 Warwick, UK with Tasks 38 and 40**
  - *“Woodfuel Supply Chain – Sharing Experience”*
- **2009 Wershofen, Germany, October 5-8**
  - *“Forests Under Pressure?!  
Bioenergy – Forest Industry – The Public”*



# Collaboration & Information

- with FAO Forest Energy Program – ‘Criteria and indicators for sustainable woodfuel production’ – joint publication
  - aimed at developed and developing countries
  - side-event at World Forestry Congress, Oct 2009
- Country reports – by participating countries
  - available on Task website
  - summary and analysis – Peter Ralevic
- **EU Consultation on Sustainable Biomass**
  - Input provided



# Technology Reports

- **Certification** of forest fuel production systems: a solution for sustainable use of biomass from forest residues for energy (2005)
- Reliability of **Biomass Supply Estimates** is Critical to Realizing the Bioenergy Potential (2006)
- Principles of **nutrient management** for sustainable forest bioenergy production (2008)
- Recent Nordic developments in improving forest biomass **supply chain efficiencies** (2009)

# Technology Transfer

- Task 31 website
  - <http://www.ieabioenergytask31.org>
  - Includes extensive library
- Industry-oriented seminars
- Field visits
- Presentations



# Presentations

- **Tim Young**, University of Tennessee, USA
  - A real-time web-based optimal Biomass Site Assessment Tool (BIOSAT)/Module 2 An economic assessment of mill & logging residues for the eastern US.
- **Jaconette Mirck**, Queens University, Canada
  - The challenges of improving biomass inventory for southeastern Ontario, Canada.
- **Timo Tahvanainen**, Metla, Finland
  - Moisture management, energy density & fuel quality in forest fuel supply chains.
- **Brian Titus**, Natural Resources Canada
  - Sustainable forest biomass harvesting research in the Canadian Forest Service: an overview.
- **Shannon Berch**, BC Ministry of Forests & Range, Canada
  - The framework for sustainable harvest of forest biomass in BC.





# Enjoy the Session!