



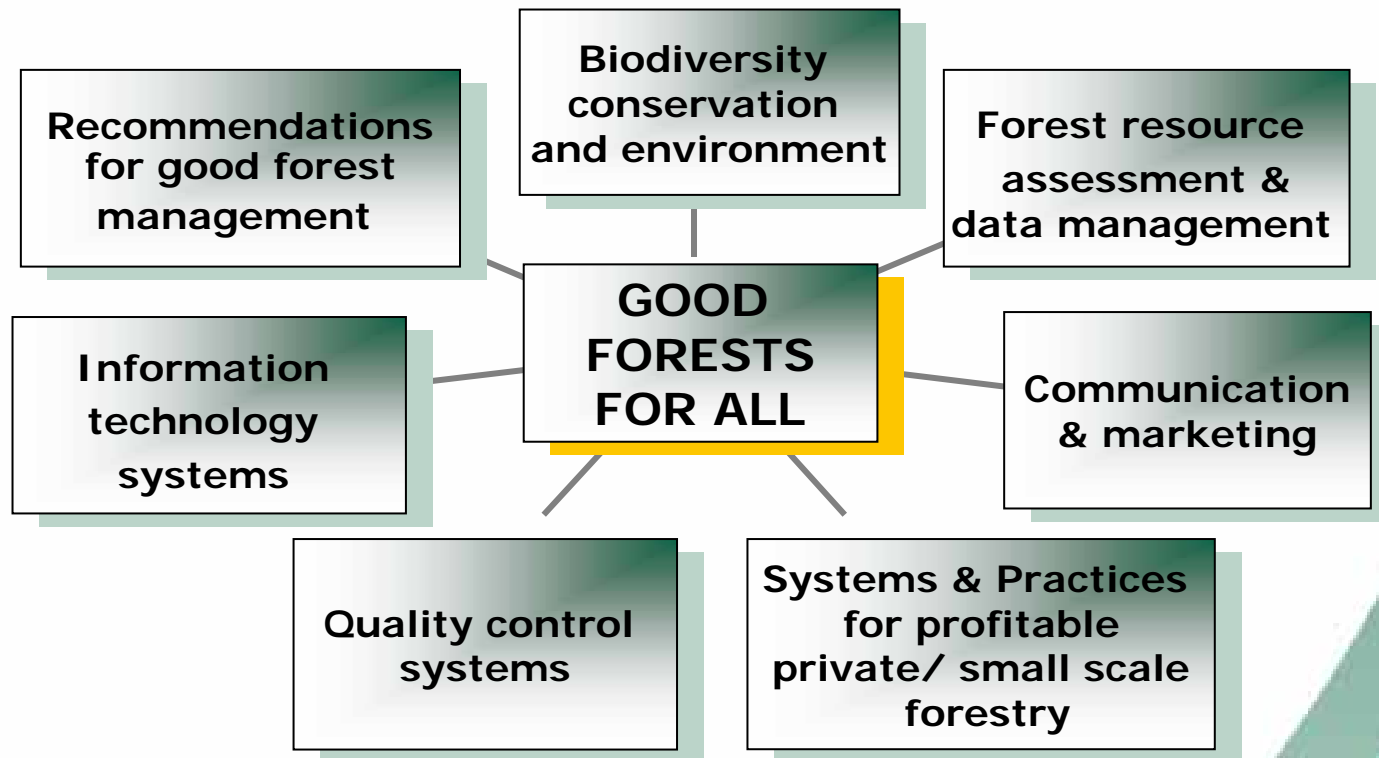
Forestry Development Centre **Tapio**

## Potential areas for co-operation

**Ritva Toivonen**  
**Director General**  
**TAPIO**

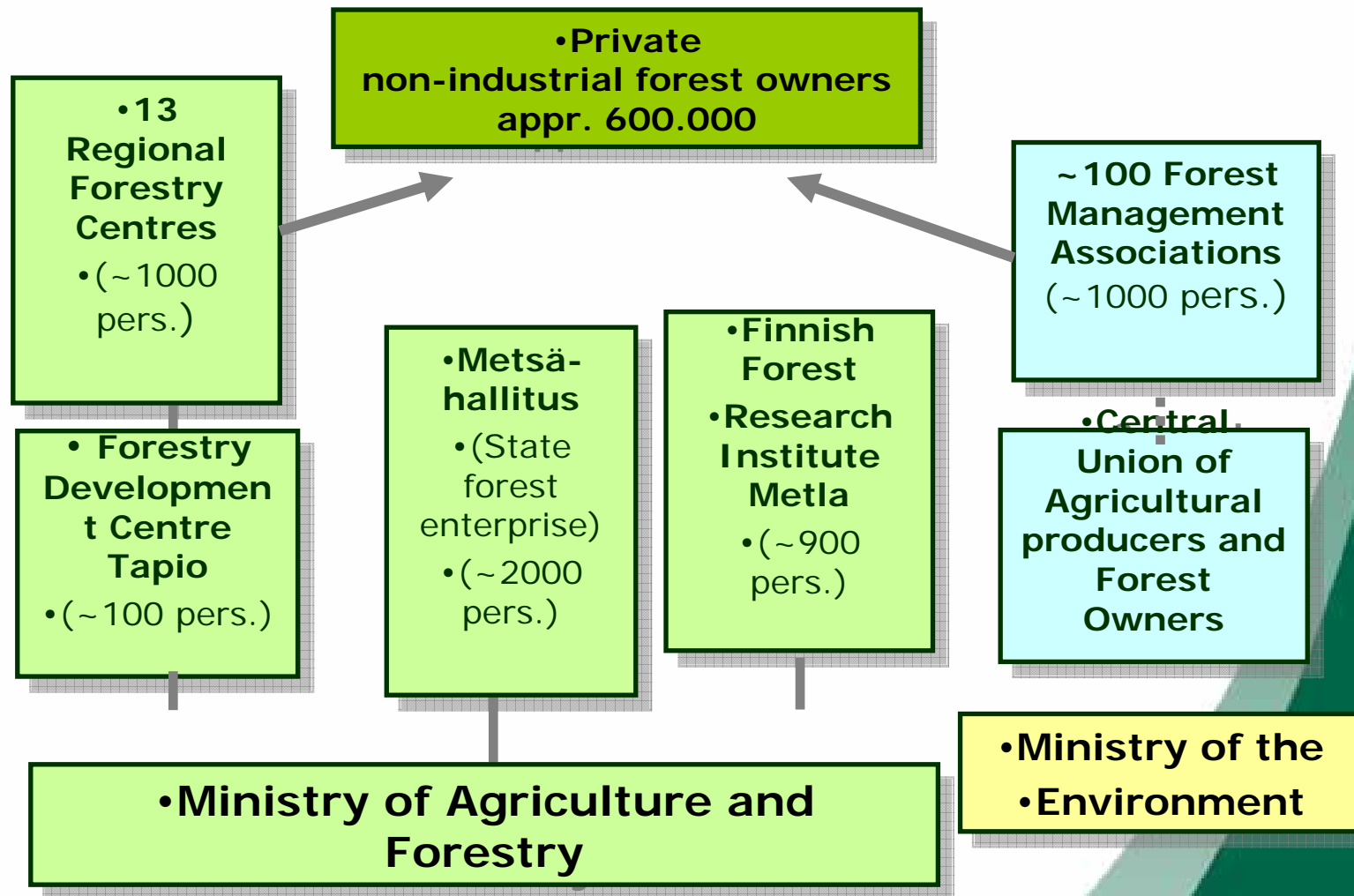
## Forestry Development Centre TAPIO

- Research – Policy – Practice Interface for 102 years: We refine research and the latest technology into best practices and systems for sustainable forestry. Tools and knowledge to achieve better forest management.
  - Turnover 16,5 million €, Personnel 100



- Forest Seedlings and Seeds (daughter companies)
- Publishing Company

## Private forestry administration and organizations



• Forest has always been private property

Everyman's rights

Importance to NA

• ~ 440 000 NIPF  
• ~ 60  
% of forest area



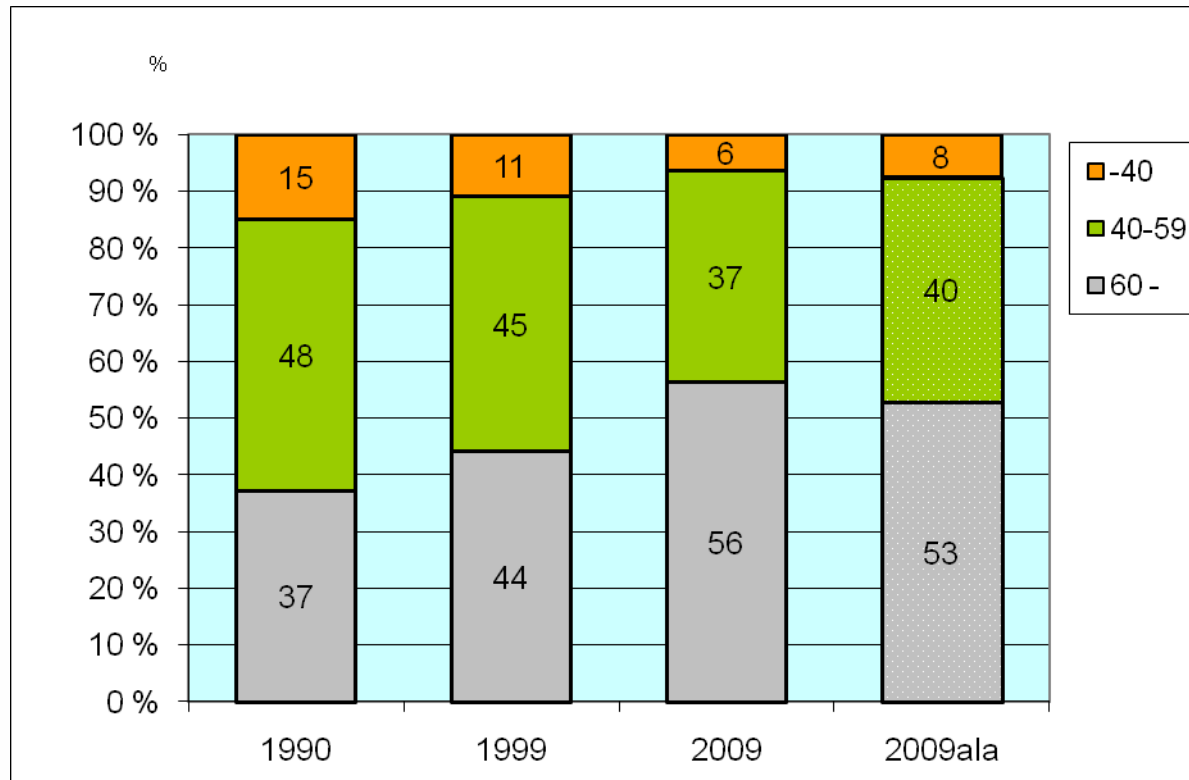
# Potential areas of Co-operation 1

## Trends in forest ownership

- 1) Service development – internet and e-based education
- 2) Development of organizations and management of organizations

- smaller holdings - senior citizens – higher age, - urban (slowly) – “distant ownership”
- higher education, - higher incomes
- changing motives, - more segments

# Age of forest owners 2009 (Metla, Leppänen)



1990 54 v.  
 1999 57 v.  
 • 2009 60 v.

- Profession (2000)
  - 30% wage earners
  - 6% entrepreneurs
  - 22% farmers
  - 37% on pension
  - 5% other

- Forest property is family property
  - Male 75%, female 25%
  - Increasing level of education

# Potential areas of Co-operation 2

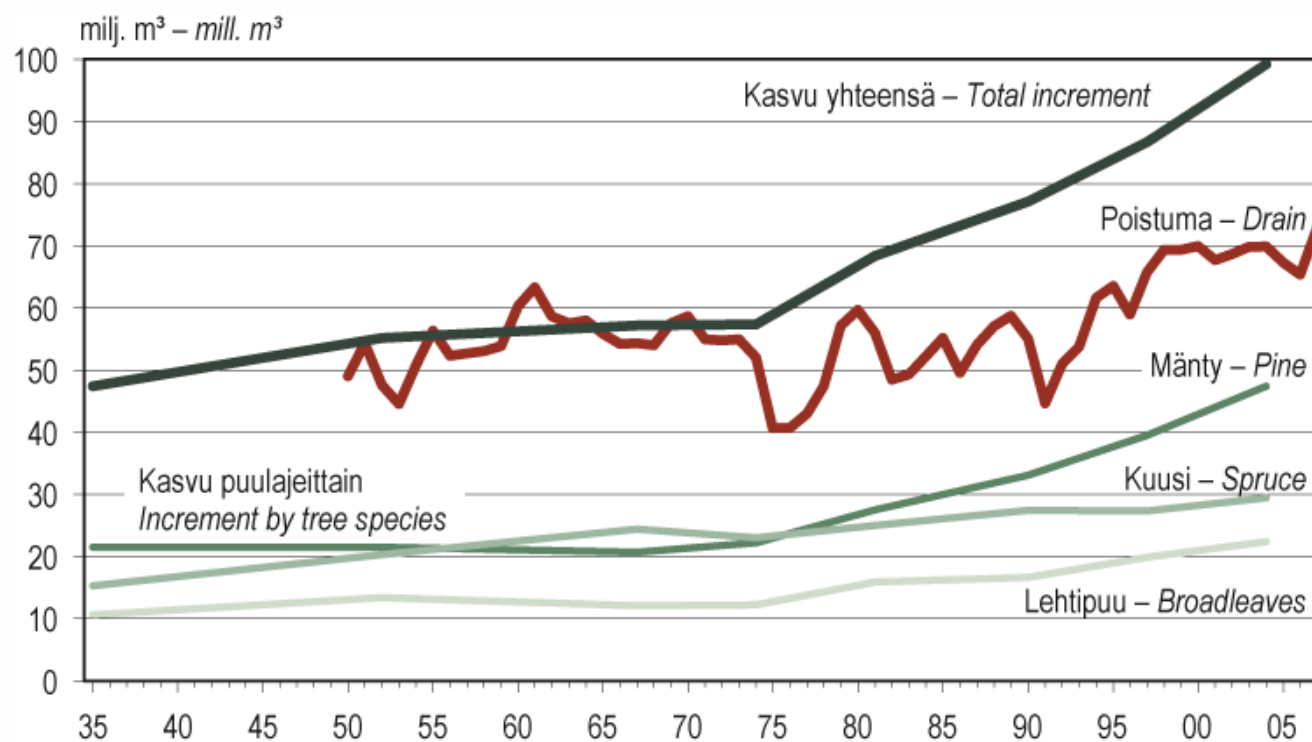
## Trends in forest utilization and services provided from forests

1) Bioenergy

2) Climate change and related services and impacts, policy issues

- Changing forest industry and energy markets => demand and markets for forest products

# The growth of trees and removal



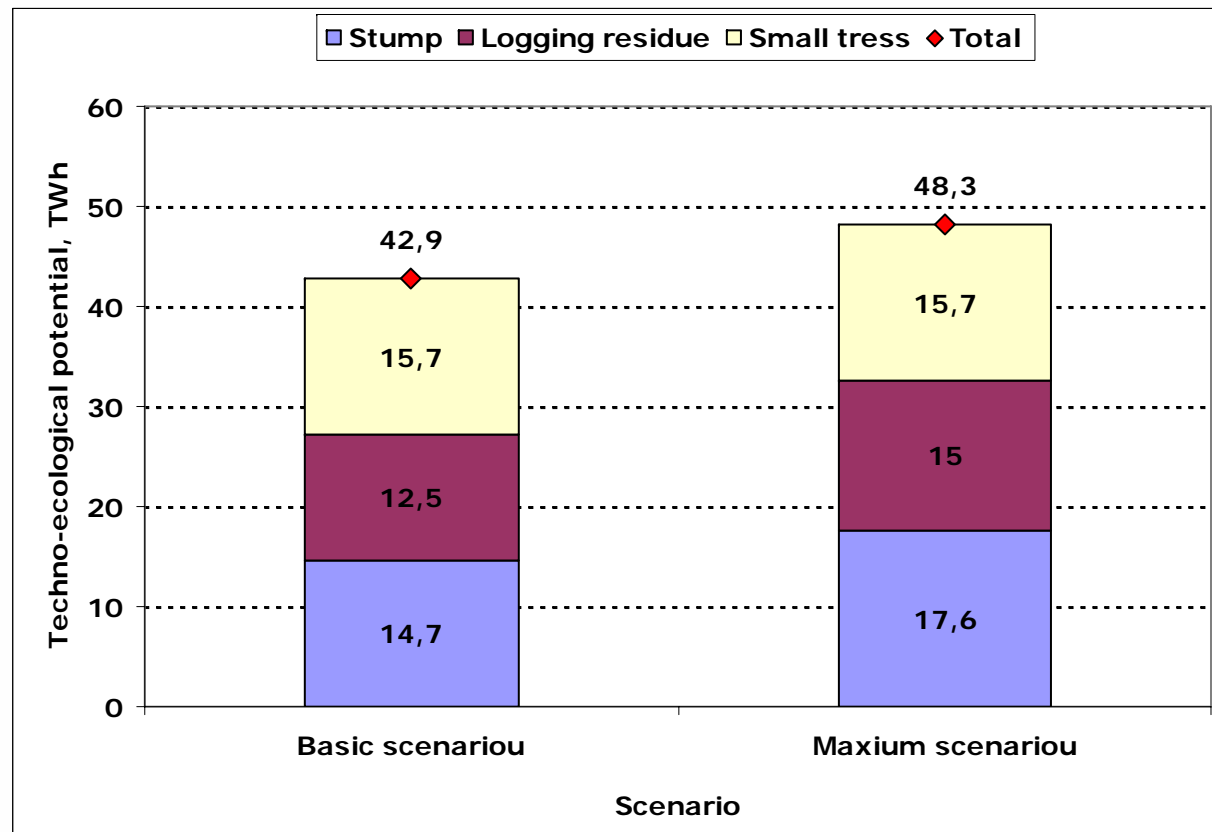
Lähde: Metsäntutkimuslaitos – Source: Finnish Forest Research Institute

**Puuston kasvu ja poistuma**  
Annual increment of growing stock and growing stock drain

Metsätilastollinen vuosikirja 2008



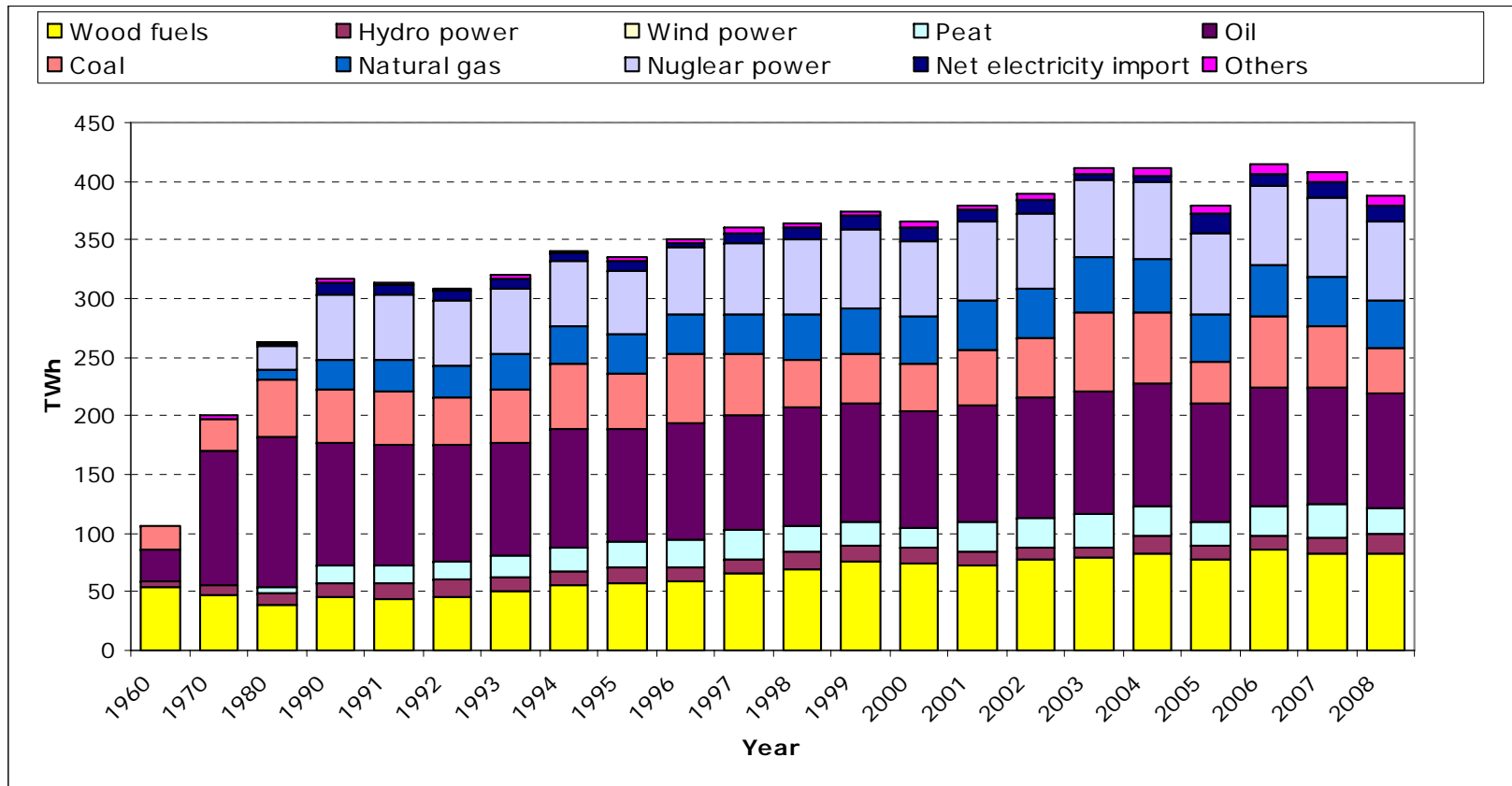
# Energy wood potential



Source: Kärhä et al. 2009

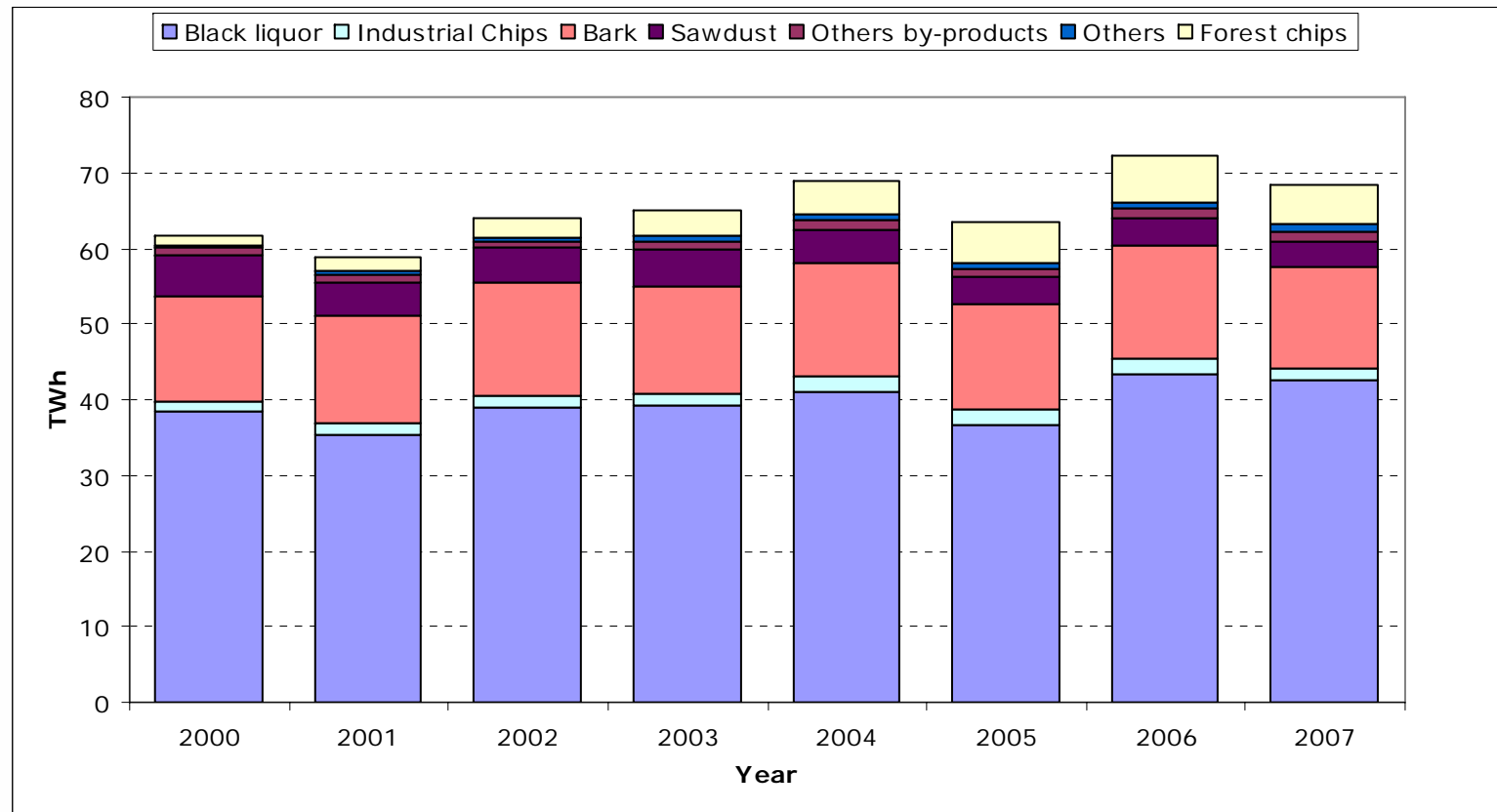
# Total energy consumption in Finland 1960-2008

*1 TWh approx. 0,5 million m<sup>3</sup> wood*



Source: Finnish Forest Research Institute

# Consumption of wood fuels for energy production in 2000-2007



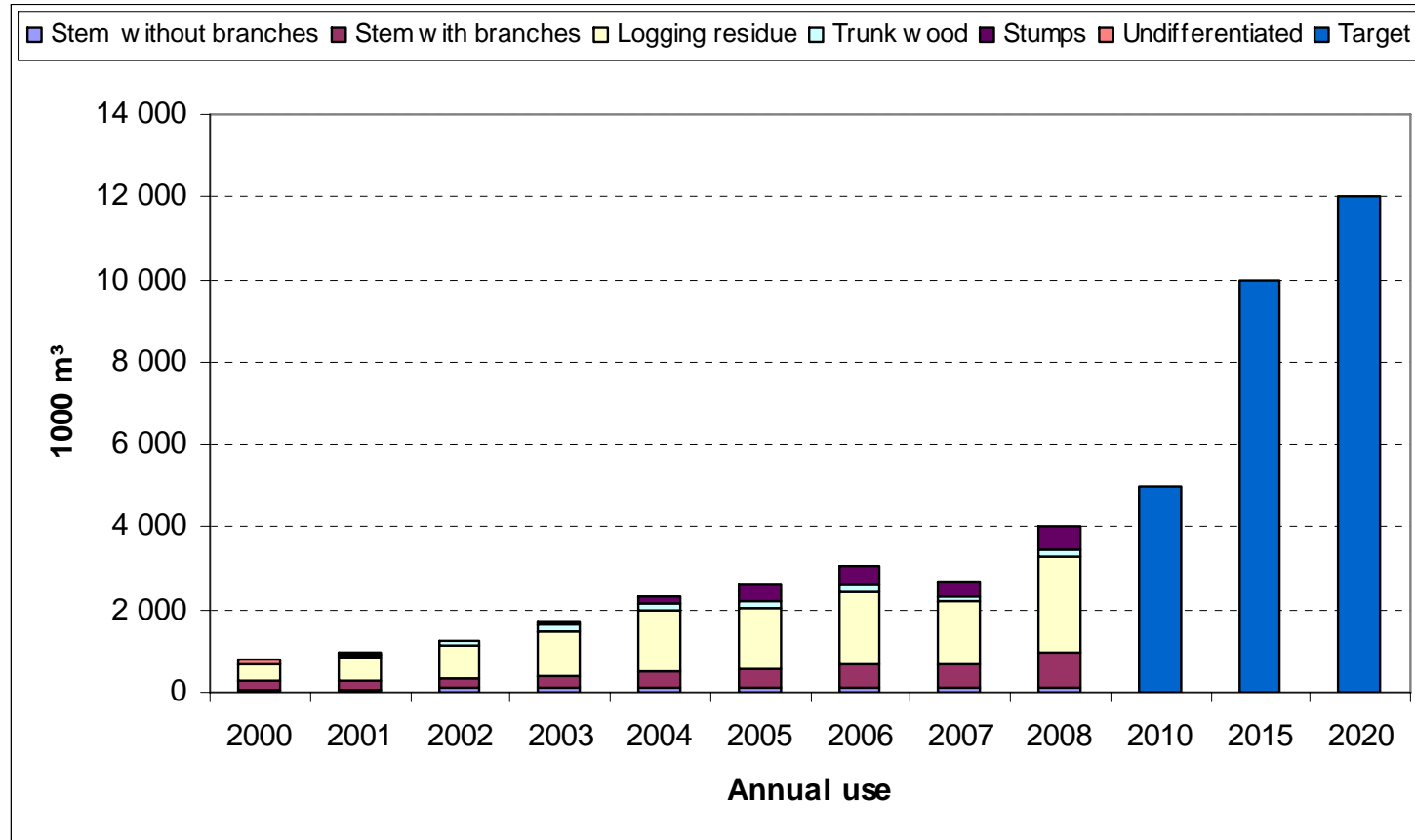
Source: Finnish Forest Research Institute

# Use of renewable energy and target of 2020 (TWh)

	2005	2006	Target of 2020
Black liquor	36,7	43,3	38
Industrial chips	23,1	26,7	22
Hydro power	13,6	11,3	14
Recycled fuels and cheapest biogas	1,7	1,9	3
Forest chips	5,8	7,2	21
Energy wood small-scale use	13,4	13,6	13
Pellets and agriculture biomass	0,1	0,1	3
heat pumps	1,8	2,4	3
Others biogas	0	0	0,5
Liquid biofuels	0	0	6
wind and solar power	0,2	0,1	6
<b>Total</b>	<b>96,4</b>	<b>106,6</b>	<b>129,5</b>

Source: long-term energy and climate strategy

# Forest chips use and targets



Source: Finnish Forest Research Institute

# Potential areas of Co-operation 3

**Trends in forest policy and development – internationalization, EU**

- 1) Co-operation in international projects, EU-funded projects (in F&F, or outside Europe)**
- 2) Co-operation in follow-up and analysis of EU-policies and impacts on policy implementation/service development**

# Thank you for excellent co-operation!

