



Food, **A**griculture and **F**isheries, and **B**iotechnology

K n o w l e d g e - B a s e d B i o - E c o n o m y (K B B E)



**Innovative policies for the
sustainable development of the
forest sector**

COST E51 Final Conference

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EUROPE 2020 A strategy for smart, sustainable and inclusive growth

Europe 2020 puts forward three mutually reinforcing priorities:

- Smart growth: developing an economy based on knowledge and **innovation**.
- Sustainable growth: promoting a more resource efficient, greener and more competitive economy.
- Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion.

The EU has identified innovation as a key driver for a prosperous future.

EUROPE 2020 A strategy for smart, sustainable and inclusive growth

The Commission is putting forward seven flagship initiatives to catalyse progress under each priority theme. 3 of them are related to the forest sector:

- **"Innovation Union"** to improve framework conditions and access to finance for research and innovation so as to ensure that innovative ideas can be turned into products and services that create growth and jobs.
- **"Resource efficient Europe"** to help decouple economic growth from the use of resources, support the shift towards a low carbon economy, increase the use of renewable energy sources, modernise our transport sector and promote energy efficiency.
- **"An industrial policy for the globalisation era"** to improve the business environment, notably for SMEs, and to support the development of a strong and sustainable industrial base able to compete globally.

Forthcoming European Plan for Innovation

- Following a review of the Community innovation Policy (COM (2009) 442 final) and a public consultation in 2009, the Commission is currently preparing a **European Innovation and Research Plan** which should be adopted in autumn.
- The Plan will include the creation of European Innovation Partnerships between the EU and national levels to speed up the development and deployment of technologies.
- A proposal on **Innovation Partnership in the bio-economy** is being analysed among others.

A Lead Market Initiative for Europe

- LMI was launched in 2008 to support the uptake of innovative products and services in the market.
- LMI identified a first set of markets with potential to become lead markets, 3 of them relevant to the forest sector: **Sustainable Construction**, **Bio-based products**, and **Renewable Energy**.
- Action Plans (2008-2010) have been developed, based on the following policy instruments:
 - Legislation
 - Public procurement
 - Standardisation, labelling and certification
 - Complementary actions such as training, financial support, etc.
- Final report to be presented in 2011 and likely identification of new markets with innovative potential.

Communication on Forest-Based Industries

- The **Communication on Innovative and Sustainable Forest-based Industries** in the EU (2008) proposes a 19-point Action Plan, with measures such as the promotion of afforestation, reforestation and active sustainable forest management; the use of the FTP Strategic Research Agenda in the research programmes of MS and industry; the use of the opportunities within the 7FP; etc...

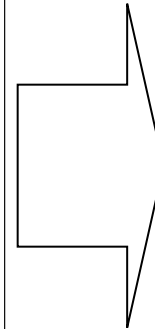
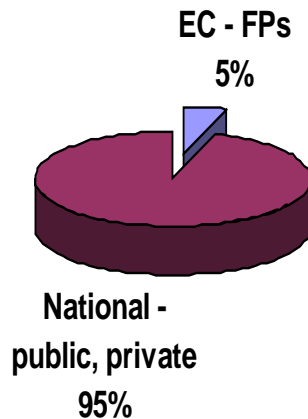
DG RTD: Communication on resource-efficient sustainable bio-economy

- DG RTD will prepare a **Communication on Sustainable Bio-Economy** (expected mid-2011).
- The Communication will provide a vision and action plan for a **sustainable and innovative European bio-economy** by 2020. Some of the main elements will be:
 - completion of the European Research Area in the bio-economy sectors;
 - improving framework conditions for innovation in the bio-economy sectors;
 - integrating the bio-economy approach into the forthcoming reform of the CAP and CFP as well as in waste treatment legislation;
 - encouraging the reforms at Member States level of their R&D and innovation systems to enable the development of the bio-economy at national level

EU Framework funding for research

.... not significant in absolute terms, but contributed to shaping national research agendas and boosting:

European Investment in Research,
a rough idea



- Transnational scientific collaboration
- Integration, pooling of resources
- Transfer of know-how, mobility of researchers and training

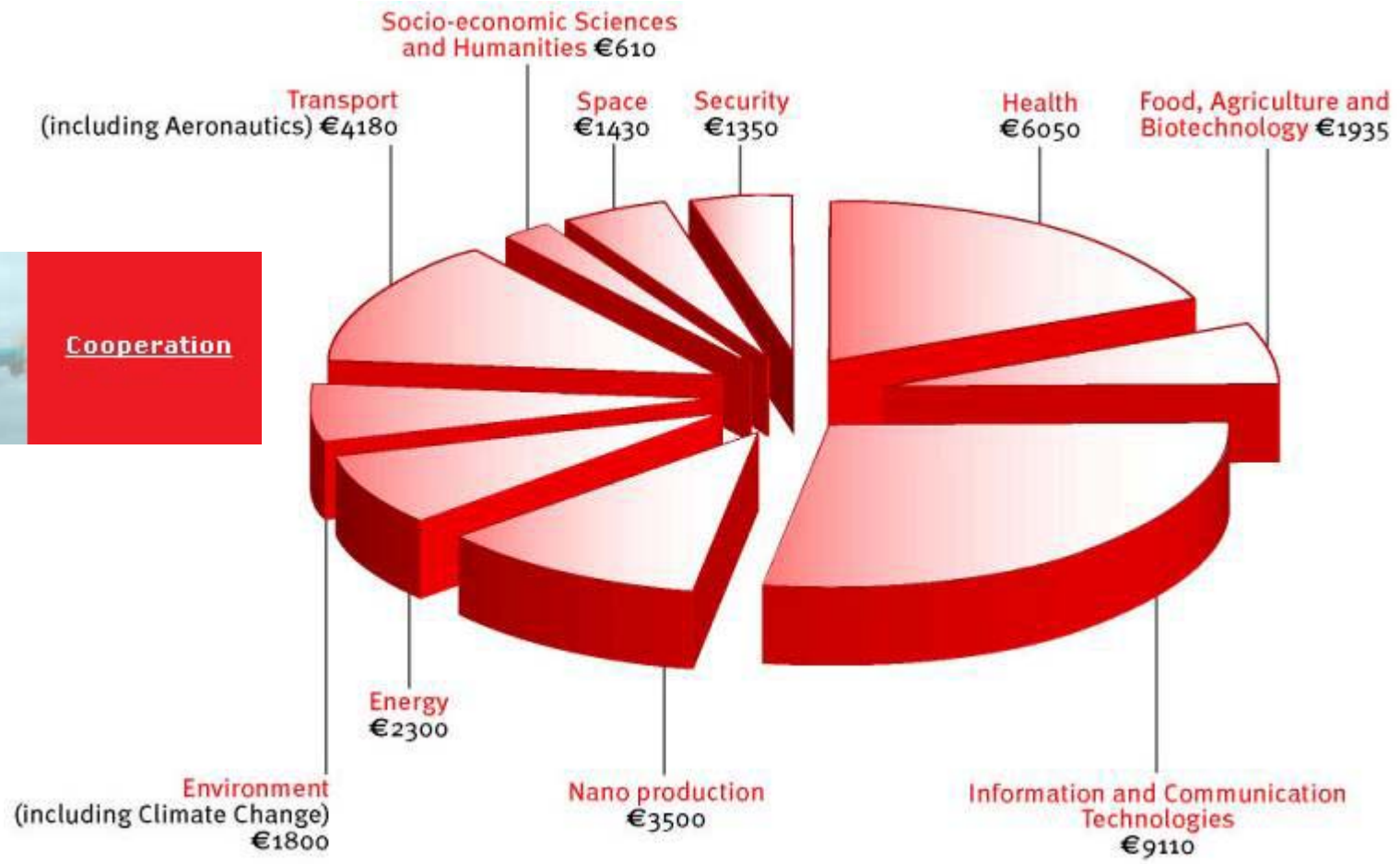
The 7th EU Framework Programme (2007-2013)

<http://cordis.europa.eu/en/home.html>



Total 53 billion € for 7 years

Cooperation Programme – 10 themes



Research in the forest sector in FP7

- Cooperation Programme: 4 themes support research on forest and forest-based industry:
 - 2. Food, Agriculture and Fisheries, and Biotechnology
 - 4. Nano-sciences, Nano-technologies, Materials and New Production Technologies
 - 5. Energy
 - 6. Environment (including Climate Change)

Research in the forest sector in FP7

Theme 2: Food, Agriculture and Fisheries, and Biotechnology

Examples of projects:

- NewForex: New ways to value and market forest externalities
- FlexWood: Flexible wood supply chain
- BACCARA: Biodiversity and climate change, a risk analysis
- ISEFOR: Increasing sustainability of European forests: modelling for security against invasive pests and pathogens under climate change

Research in the forest sector in FP7

Theme 4: Nano-sciences, Nano-technologies, Materials and New Production Technologies

Examples of projects:

- **BIOSTRUCT**: Complex structural and multifunctional parts from enhanced wood-based composites
- **WOODY**: Innovative advanced wood-based composite materials and components
- **AFORE**: Added-value from chemicals and polymers by new integrated separation, fractionation and upgrading technologies
- **RHEA**: Robot fleets for highly effective agriculture and forestry management

Research in the forest sector in FP7

Theme 5: Energy

Examples of projects:

- FibreEtOH: Bioethanol from paper fibres separated from solid waste
- EMPYRO: Polygeneration through pyrolysis: Simultaneous production of fuel oil, process steam, electricity and organic acids
- BEE: Biomass energy Europe
- DEBCO: Demonstration of large scale biomass co-firing and supply chain integration

In addition, the **joint call on BIOREFINERY** in 2008 (€57 million) funded research, development and integration of innovative technologies to prove the viability related to the entire value chain of advanced biorefineries.

Research in the forest sector in FP7

Theme 6: Environment (including Climate Change)

Examples of projects:

- MOTIVE: Models for adaptive forest management
- FunDivEUROPE: Functional significance of forest biodiversity in Europe)
- FireSmart: Forest and land management options to prevent unwanted forest fires
- FoResTTraC: Forest ecosystem genomics research: supporting transatlantic cooperation

Importance of Coordination

- **Coordination mechanisms at policy level:**
 - The EU Forest Action Plan (2007-2011): one of its 4 objectives is to foster coordination between Community actions and the forest policies of the Member States.
 - Inter-service Group on Forestry (DGs within the Commission)
 - Standing Forestry Committee (representatives of the 27 MS),
 - Advisory Group on Forestry and Cork (forest owners, industries, environmental NGOs, traders and consumer groups)
 - Advisory Committee on Community policy regarding forestry and forestry-based industries (forestry sector and the woodworking, pulp and paper, printing and publishing industries)
- **Coordination mechanisms at scientific level:**
 - ERA-NET WoodWisdom-Net 2 - "Networking and Integration of National Programmes in the Area of Wood Material Science and Engineering in the Forest-Based Value Chains" (19 partners from 12 countries)
 - Possible ERA-net on Forest Research in the Mediterranean Region
 - Forest-based Technology Platform