

FTP at 21st Session of the FAO Committee of Forestry



How the research community can support private sector activities

FAO, 21st session on the FAO Committee of Forestry
(COFO)

26 September 2012, Rome

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Forest-based Platform (FTP) main mission:

Realise the vision of the sector through a Strategic Research Agenda (SRA)

- Being an interface between industry, researchers and policy-makers in setting research funding priorities
- Mobilise a ***Critical Mass of RTD and Innovation Capacity***
- Supporting exploitation and dissemination of results
- Set more ambitious targets for research & innovation
- Reduce research fragmentation through European cooperation

Forest-based sector image?



Forest-based sector vision?

Wood-based carbon-fibre

batteries on car surface (SvD 24 Sept 2012)



Om materialet i karossen kan fungera även som batteri kan elbilens vikt sänkas radikalt. Då kan elektricitet bli ett realistiskt alternativ till dagens bilbränsle.

Text: Karin Börs Grafik: Stefan Wörthmann

Tak, dörrar, golv, motorhuv och baklucka är delar på bilen som passar utmärkt att konstruera av kolfiberbaserade batterier.

Litiumjoner

Kolfiberplast

Glasfiber

Kolfiberplast

Materialet fungerer som vanligt batteri

Kolfiberplasten är indränkt med litiumjoner. De rör sig mellan kolfibrerna som fungerar som batteriets elektroder. Ett tunt skikt av glasfiber fungerar som batteriets separator. Kolfiberplasten är både lätt och stark och lätt att forma, förutom att den kan lagra energi. Eftersom hela karosshellen utgör ett batteri behövs inga extra kablar, vilket sparar ytterligare vikt.

Andra användningsområden

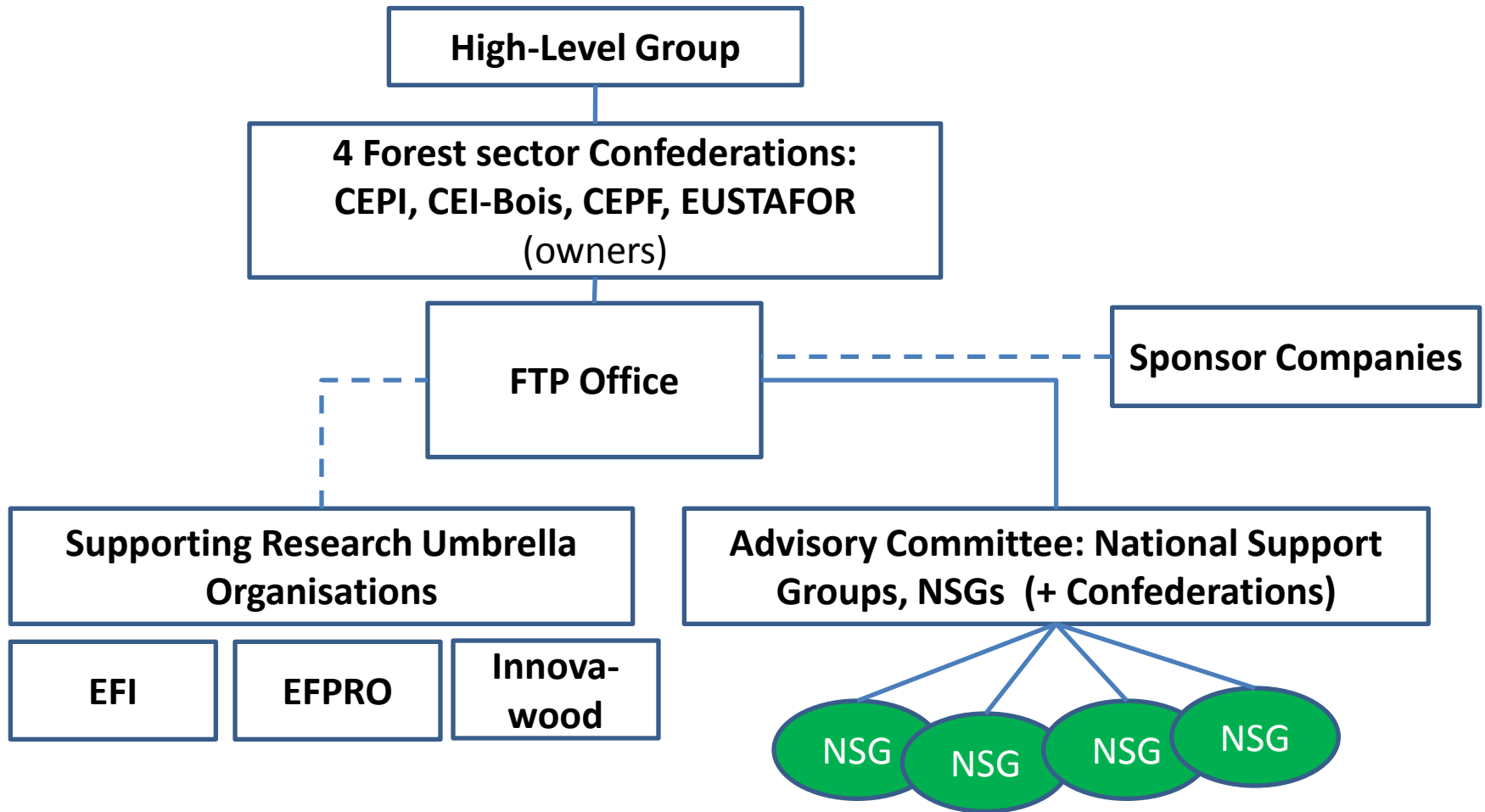
Även datorer, mobiltelefoner och många andra elektroniska produkter kan bli lättare och få mer prestanda med framtidens kolfibrbaserade batterier. Kolfibrenna behöver inte komma från fossila källor, som i dag, utan kan hämtas från skogens träd eller alger.

Så laddas batteriet

De framtida batterier som forskare arbetar med kan laddas upp på någon minut. I dag är den långa laddningstiden ett av hindren för elbilarnas genomslag.

Batteriet kan också utnyttja den kraft som uppstår när bilen bromsas.

FTP organisation



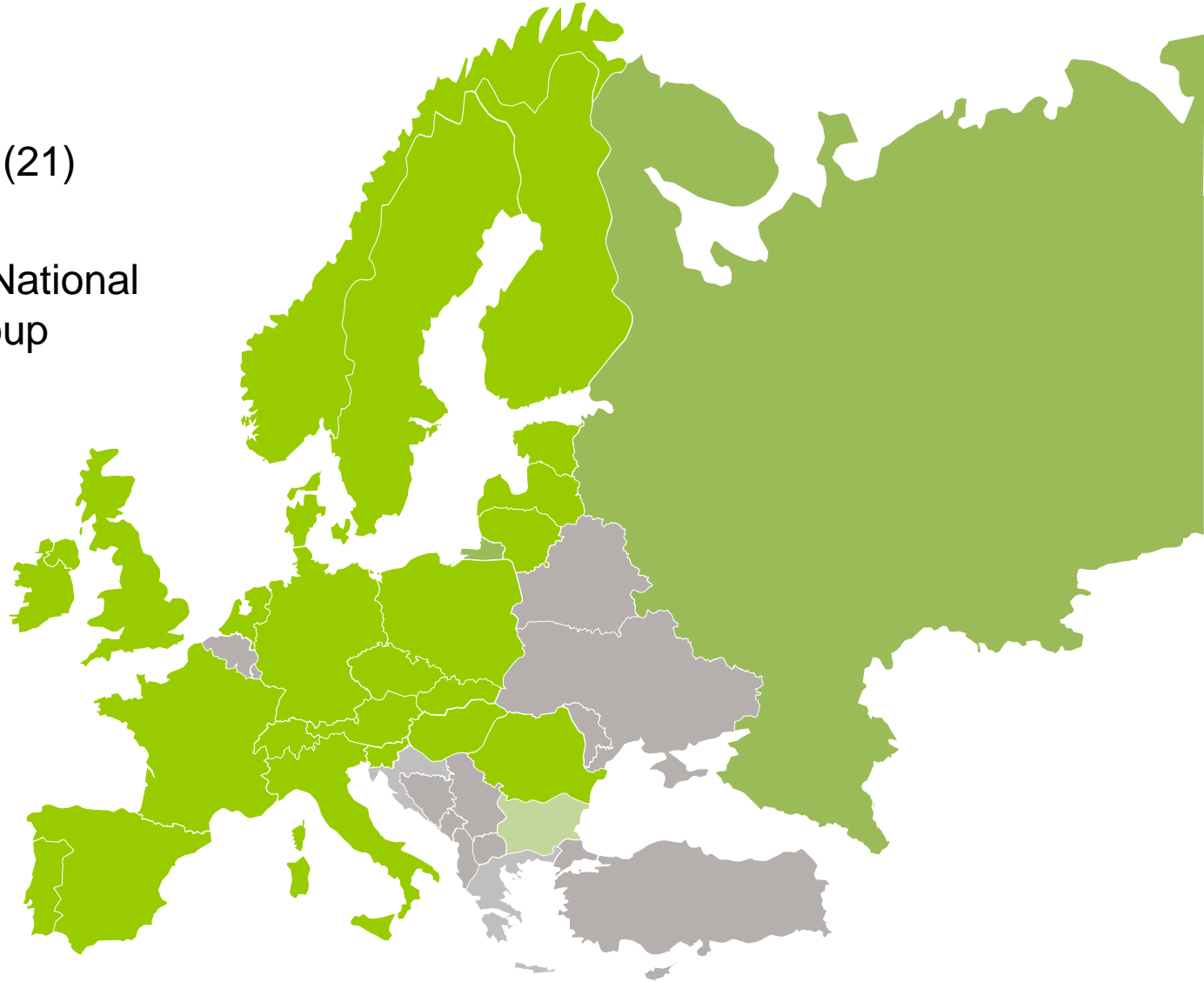
FTP National Support Groups



Established (21)



Sister ETP/National
Support Group



Renewal of key documents

- Existing documents prepared 2004-2006

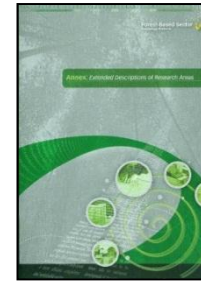
Vision



Strategic Research Agenda (SRA)



Main document



Annex with Research Areas

- Revision of documents started 2011

Vision 2030



Strategic Research & Innovation Agenda (SIRA)



Main document

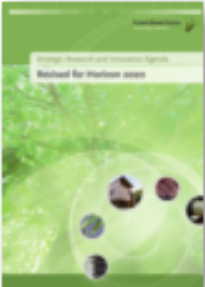


Annex with Research & Innovation Areas

Hierarchy of key documents



Vision 2030
10 Vision Targets for 2030



Strategic Research Agenda 2020
Main Document - Addressing Horizon 2020



Strategic Research Agenda 2020 - Annex
Strategic Themes and Research & Innovation Areas

1. The Forest-based Sector in a biobased society

2. Responsible management
of forest resources

3. Creating industrial
leadership

4. Fulfilling consumer
needs

SIRA Structure



Strategic Research Agenda 2020 - Annex Strategic Themes and Research & Innovation Areas

1. The Forest-based Sector in a biobased society

1.1 Monitoring and mitigating climate change

1.2 Citizen's perception of the sector

1.3 Policies and good governance

2. Responsible management of forest resources

2.1 Multi-purpose management of forest

2.2 Forest ecology and eco-system services

2.3 Enhanced biomass production

2.4 Secure wood supply, forest operations and logistics

2.5 Cascade use and recycling of materials

3. Creating industrial leadership

3.1 Resource efficiency in manufacturing

3.2 Sustainable water management

3.3 Renewable energy solutions

3.4 Biorefinery concepts

3.5 New business models and service concepts

4. Fulfilling consumer needs

4.1 Building with wood Housing structures

4.2 Indoor wood products and functional furniture

4.3 New bio-based products

4.4 Intelligent packaging solutions

4.5 Hygienic, diagnostic and healthcare products

4.6 Integration of new solutions in printed products

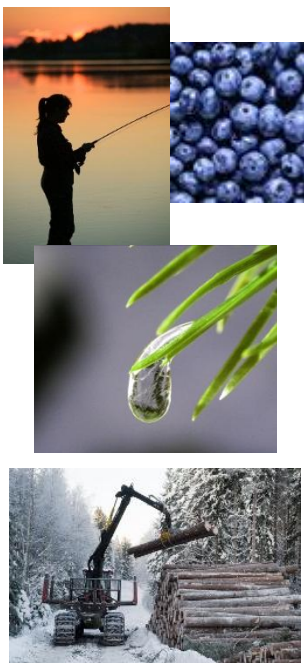


Strategic Research Agenda 2020

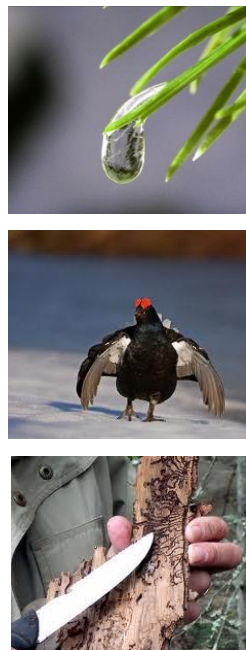
Annex – Research & Innovation Areas

Responsible use of forest resources

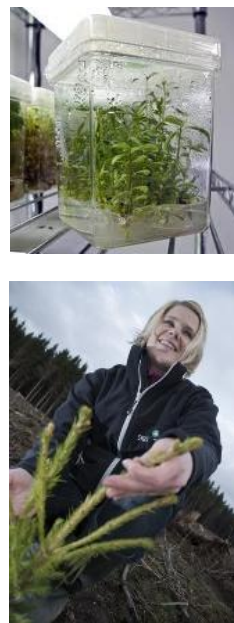
2.1 Multi-purpose use of forests



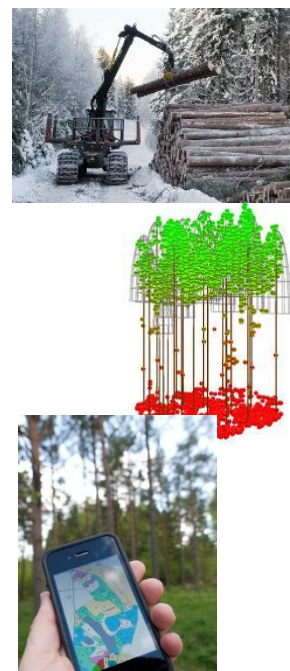
2.2 Forest ecology and eco-system services



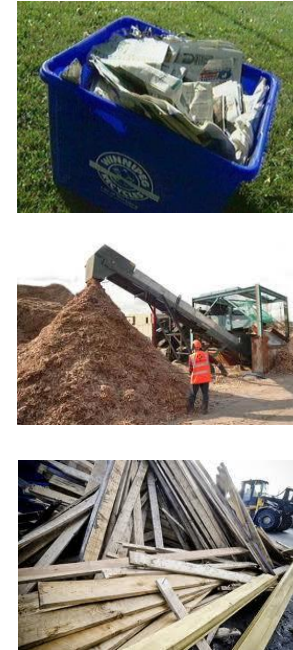
2.3 Enhanced biomass production and climate action



2.4 Forest operations and logistics



2.5 Cascade use and recycling of materials



Joint Action of five European Technology Platforms on **Biorefineries** finished end of 2011.

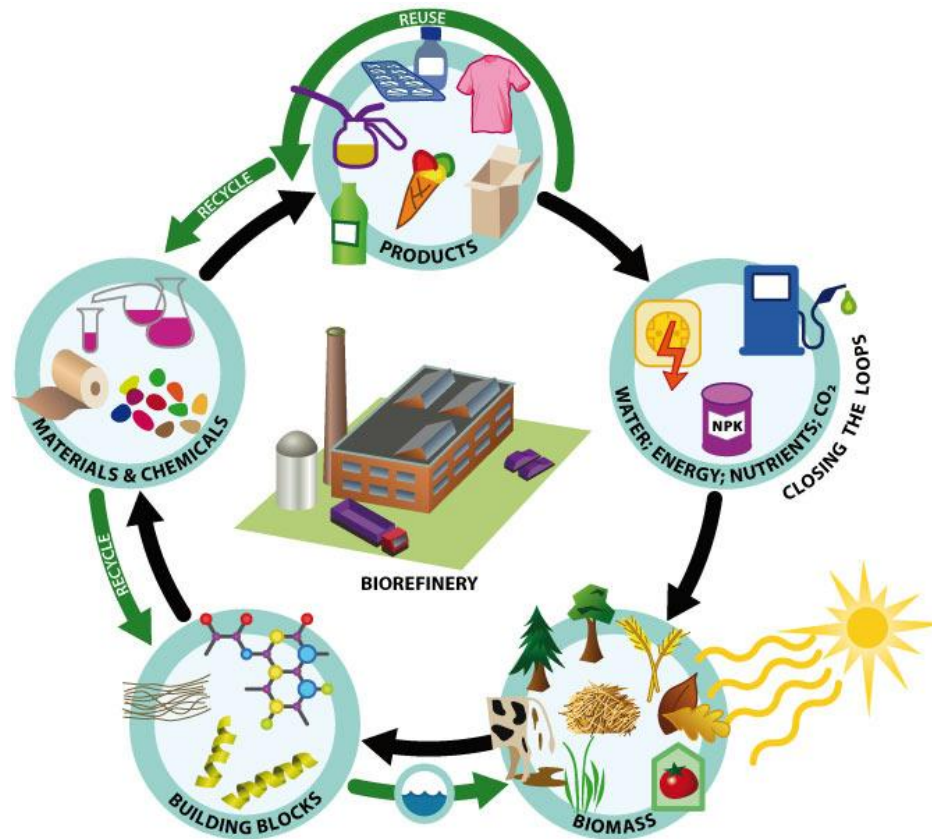


- **Joint European Biorefinery Vision 2030**
- **Joint Strategic Research Roadmap 2020**
- **Policy Recommendations**
- **Mapping Biorefinery Research Projects**

<http://www.star-colibri.eu/>



PPP Biobased for Growth, or Biobased Industries Initiative





Coming FTP conference...

8th FTP Conference scheduled for 11-14 March 2013 in Barcelona

Inspiring Horizons

*– A renewed Strategic Research and Innovation
Agenda for the forest-based Sector*

Tentative scheduling

- **1 day COST-FTP Early Stage Researchers Forum**
Audience selects two young researchers that will present in FTP conference plenary
- **1,5 days FTP Conference**
Interesting sessions related to the Strategic Themes of the renewed SIRA and how to realise the Vision Targets
- **½ day Woodwisdom.Net launch ERA-Net Plus Call**



Thank you for your attention!

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The European Association for Bioindustries



Forest-Based Sector
Technology Platform



copa*cogeca

european farmers

european agri-cooperatives



Forest-Based Sector
Technology Platform



The structure of the Main SIRA reflects EU:s budget Horizon2020

The forest-based sector and Scientific Excellence

Improving industrial competitiveness by achieving leadership in Key Enabling Technologies

1. ICT
2. Nanotechnology
3. Advanced materials
4. Biotechnology
5. Advanced manufacturing and processing technologies
6. Space technology
7. Supporting innovation in SMEs

The forest-based sector addressing Societal Challenges

1. Health, demographic change and wellbeing
2. Food security, sustainable agriculture, maritime research, bio-economy
3. Secure, clean and efficient energy
4. Smart, green and integrated transport
5. Climate action, resource efficiency and raw materials
6. Inclusive, innovative and secure societies





The Main SIRA link Horizon2020 to the Research and Innovation Areas in SIRA Annex



Advanced manufacturing and processing technologies

Improving resource efficiency and reducing CO₂ emissions are vital to increase the competitiveness of forest-based industries and expand the market for their products.

Manufacturing and processing technologies that offer significantly reduced energy use and optimised energy management and recovery systems have to be developed for timber and wood harvesting, pulping, stock preparation and drying processes in paper manufacture or wood processing and treatment. Enhanced breakdown, separation and fractionation technologies will allow the selection of suitable material components and optimise resource efficiency. Manufacturing technologies for composite structures, like multi-layered paper and board or wood-based panels, allow the production of functional products using the least raw materials. Closed process cycles, for example water in manufacturing, contribute to resource efficiency and reduced environmental impact. New approaches to the increased recovery of used wood and fibre-based products, together with new information and decision-support systems, enable optimal re-use of recovered material.

New advanced manufacturing technologies in the production of wood-based building solutions have great potential for the development of more energy efficient buildings. These solutions can offer excellent insulation performance, functionalised surfaces and retrofitting potential.

New business models have to be developed to enable the full potential of forest-based materials and products to be realised, in areas such as the co-production of fibres, chemicals and fuels or integration with other industries or economies for networked utilisation of raw materials, residues, heat, water and logistics.

Highly relevant Research and Innovation Areas:

(Resource efficiency in manufacturing); 3.2 (Sustainable water management); 3.4 (Biorefinery concepts); 4.1 (Building with wood); 4.2 (Indoor wood products and functional furniture)

