

## The European Forest-based Sector Technology Platform & international cooperation towards the Bioeconomy

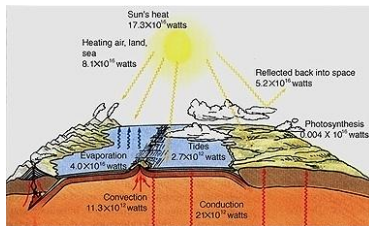
Johan Elvnert, Managing Director  
Forest-based Sector Technology Platform (FTP)

Bioeconomy in the Baltics. Inspiration conference.  
June 15, 2012 Tallinn, Hotell Euroopa

Forest-Based Sector  
[www.forestbasedsector.eu](http://www.forestbasedsector.eu)

### The Bioeconomy Challenge:

- The global human power consumption is more than twice as high as the total, global photo-synthetic energy production



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### Cascade utilisation - The benefits of a true bioeconomy



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



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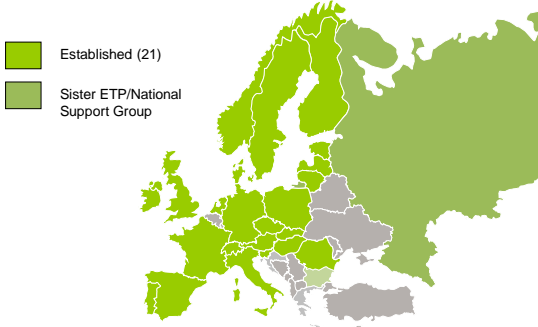
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FTP National Support Groups



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Revising FTP Key documents  
Vision 2030 and SRA 2020



Existing key documents prepared 2004-2006



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**Revised Vision 2030**  
**a) Vision Statement**  
**b) 10 Vision Targets for 2030**



Revised FTP Vision 2030 ready




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**Responsible use of forest resources**

**Vision Targets for 2030**

- 1) A resilient and diverse European forest is sustainably managed by a variety of owners and owner cooperatives who, assisted by new multi-purpose management systems, provide all the functions of the forest including raw material production, biodiversity and recreation
- 2) Taking account of the full range of demand and production constraints, harvesting possibilities in Europe has increased by 30%, enabling forest owners to manage their forests more efficiently and sustainably
- 3) Cascade use of renewable material is established throughout the entire value chain. Recovery, reuse and recycling of forest-based products accounts for 70% of all recyclable material. When recycling opportunities have been exhausted, the remaining material is used for energy production




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## Creating Industrial Leadership

### Vision Targets for 2030

- 4) Activities to foster resource efficiency have resulted in a significant reduction in specific energy consumption, specific raw material input and specific water use
- 5) The sector will continue to be the leading provider of green energy and the biggest producer of green electricity and biofuels in Europe, with a production capacity of 10 Mtoe per annum (equivalent to 50 Mm<sup>3</sup> forest and mill residues) in 2030
- 6) The forest-based sector is taking advantage of its long experience in biorefining to help the concept achieve its full potential
- 7) New business concepts based on forest ecosystem services have been developed on 30% of the land by forest owner cooperatives, in collaboration with sectors including agriculture, water, and tourism
- 8) Added value from new markets for non-wood forest goods (mushrooms, berries, clean water) and services (recreation, tourism, climate change mitigation) has increased 10-fold




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## Fulfilling consumer needs

### Vision Targets for 2030

- 9) Wood-based construction in Europe has tripled its market share from the 2010 level, reaching a turnover of €200 billion
- 10) In 2030, the value added by the wood working industries will have doubled. For the pulp and paper industries it is well on its way to reach the targets set by the CEPI 2050 Roadmap. Growth will come from new products and services, as well as more wide-spread use of energy-saving modular housing structures and functional furniture. Novel, smart packaging solutions and innovative hygiene products for increased efficiency and safety (e.g. anti-counterfeit measures, smart food packaging etc.) will evolve.




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**Strategic Research Agenda 2020**  
Main Document – Addressing Horizon2020

- 1. Forest-based sector today and in 2030
- 2. Strategic Themes and prioritised Research and Innovation Areas
- 3. European investments in research and innovation (**Horizon2020**)
- 4. **Excellence in Science underpinning research in the Forest-Based Sector**
- 5. **Creating industrial competitiveness - leadership in Key Enabling Technologies**
- 6. **The forest-based sector addressing Societal Challenges**
- 7. Implementing the SRA

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Strategic Research Agenda 2020  
Annex – Research & Innovation Areas

Responsible use of forest resources



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Strategic Research Agenda 2020  
Annex – Research & Innovation Areas

Creating industrial leadership



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Strategic Research Agenda 2020  
Annex – Research & Innovation Areas

Fulfilling consumer needs



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# Cooperation for the bioeconomy

Star-COLIBRI example  
(Strategic Collaboration Initiative for Biorefineries)




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## Strategic Targets for 2020 – Collaboration Initiative on Biorefineries (Star-COLIBRI)



- EU Coordination Action project funded under FP7
- Project duration: 2 years (November 2009 – October 2011)
- 2 MEuro EC contribution, total budget 2.4 MEuro
- **11 partners in the Star-COLIBRI consortium**

**6 Technology Platforms & Industry Confederations**  
 Forest-Based Sector ETP  
 CEI-Bois (Coordinator)  
 Plants for the Future ETP  
 Sustainable Chemistry ETP  
 Biofuels ETP  
 AET MANUFUTURE sub-ETP

**5 Research Organisations**  
 UoY \* University of York  
 VTT \* Technical Research Centre of Finland  
 IAR \* Association Industries et Agro-Ressources  
 A+F part of Wageningen University  
 DBFZ - German Biomass Research Centre




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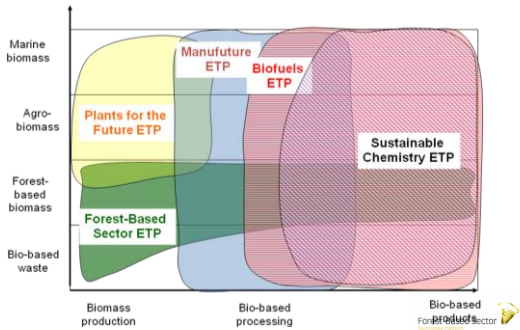
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## The Star-COLIBRI project engaged stakeholders from five industry sectors




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## Some results...

### Reports

- Joint European Biorefinery Vision for 2030
- Joint European Biorefinery Research Roadmap 2020
- .... and more



Final results will be disseminated in the High-Level Policy Maker Conference Brussels, 5 October




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**INSPIRED BY STAR-COLIBRI, A PUBLIC-PRIVATE PARTNERSHIP IS CURRENTLY FORMING, THE; "BIOBASED INDUSTRIES INITIATIVE", OR "BIOBASED FOR GROWTH PPP"**



**The focus is threefold:**

**Feedstock:** creating value chains and providing secure and sustainable supply of biomass

**Biorefineries:** R&D and upscaling through large scale demo/flagship biorefineries

**Markets, Products and policies:** ensuring market pull and optimising policy frameworks.

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### "BIOBASED INDUSTRIES PPP"

Example of committed companies:

- Abengoa Bioenergia
- Billerud
- Cargill
- DSM
- Kemira
- Mondi
- Nortstucker
- Novozymes
- Roquette
- SCA
- StoraEnso
- Solvay/Rhodia
- etc....
- etc...



Private players might commit at least 1 billion Euro for R&D&I during 2014-2020

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By a strong ETP involvement in strategic initiatives such as the BioIndustries PPP, we can address all three pillars of the **Bioeconomy Strategy and Action Plan**:

1. Investments in research, innovation and skills
2. Reinforced policy interaction and stakeholder engagement
3. Market development and enhanced competitiveness of bioeconomy sectors

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Forest-based sector public image?!  
Bioeconomy public image?!



Forest-Based Sector  
Sustainable Forestry

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**Thank you for your attention!**

[www.forestplatform.org](http://www.forestplatform.org)

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Forest-Based Sector  
Sustainable Forestry