

TALLER SOBRE INNOVACIÓN EN LOS SECTORES AGRARIO Y FORESTAL: difusión de los trabajos de los *EIP AGRI FOCUS GROUPS (FG)* y del *GRUPO FOCAL NACIONAL* sobre Innovación en el sector forestal español



#### Focus Group 20 Sustainable mobilisation of forest biomass







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# How to improve the sustainable mobilisation of biomass from our forests in the EU?

- Identification of <u>success and fail factors</u> that stimulate or limit the sustainable mobilisation of forest biomass, and to summarise how to address these factors and explore the role of innovation and knowledge exchange in addressing them.
- Identification and description of <u>adequate examples</u> and comparison of the different means to improve the cooperation of small forest owners with regard to forest biomass availability and production.

 Provision of examples of <u>best practices</u>, and identification of barriers to implementation.



# How to improve the sustainable mobilisation of biomass from our forests in the EU?

- Analysis of supply and demand factors, and the means to provide a link between the two
- Proposing potential innovative actions for stimulating the knowledge and the use of management practices and strategies in sustainably mobilising forest biomass
- Identifying remaining research and innovation needs
- Provision of ideas for Operational Groups and other innovative projects



# IV chapters: key challenges for SMFG

I - Europe's regional profiles of the forest-based sector European map of the regional forest-based sector Forest biomass markets

II - The European stakeholders profile involved in sustainable mobilisation of forest biomass

Forest Ownership types

Involvement of actors and stakeholders in regional initiatives for forest biomass mobilisation



### IV chapters: key challenges for SMFG

III - Europe's toolbox for increasing SMFB
Harvesting and transportation technologies
Decision support tools
Incentives for mobilisation of forest biomass

IV - Mobilising forest biomass in Europe in a sustainable way Sustainable Mobilisation of Forest biomass contribution to Environmental Issues <u>Societal</u> aspects / integration of society



- Investigating, analysing involvement of concerned stakeholders in forest operations across European and in its regions
- 2. Investigating and promoting new potential for new forest products and services
- 3. Identifying and analysing best options for tailor-made initiatives for strengthening regional forest-based value chains to overcome the miss-match of supply and demand of forest biomass.
- 4. Investigating under which conditions cooperation among forest owners enhances the sustainable mobilisation of forest biomass



- Analysing and understanding the development of forest ownership since the beginning of forest research (300 years) and forecasting, modelling scenarios for the next 50 years.
- 6. Examining the functioning of various existing regional forest ownership organisations. How do long-established and well performing associations operate? Are there lessons to be learned?
- 7. Development of measures for reaching and integrating non-traditional owners?
- 8. What is the impact of external policies to sustainable mobilisation of forest biomass in European regions?



- 9. Market analysis of future demand and supply (long-and short term perspectives) of forest biomass including potential new and traditional value chains.
- 10. What is the impact of globalisation on sustainable mobilisation of forest biomass for in Europe and its regions?
- 11. What is the impact of consumer, societal, regulatory shifts in regard to innovative technologies for the demand and supply of forest biomass?
- 12. Analysing and identifying future supply and operational structures for forest biomass on regional level in Europe including shifts of land-use, land mobilisation



- 13. Developing information platforms and new tools (map based) to exchange knowledge in user friendly forest management long term planning (multi-objective approach) across European regions.
- 14. Developing novel DST in a participatory approach for traditional and non-traditional forest owners for long term sustainable management of forest including small-scale woodlots owners.
- 15. Integration and application of machine learning algorithms in the forest-based operations.
- 16. Developing a user friendly ICT platform for smart optimization of WSC to support low GHG emissions and optimisation of the forestry-wood chain from tree harvest to primary wood consumers (DSS that facilitate low carbon and low cost wood supply chains).



- 17. Novel generation of decision support tools for economically feasible wood harvesting while taking into account all forest functions (social, economic and environmental face)
- Developing combined new forest harvesting business models including smart organisation, infrastructure (long distance transportation) and regulatory framework conditions, for optimizing sustainable mobilization of forest biomass.
- 19. Development of efficient machinery and optimised business concepts (timing, relocation of equipment) for forest harvesting operations adapted to the needs within European regions.
- 20. Developing a new generation of efficient, smart forest harvesting machines with low environmental impacts for handling large diameter trees hardwood species in all terrains.



- 21. Optimising and integrating best IT based machine functions into forest harvesting technologies along the whole the forestry-wood chain.
- 22. New integrated forest management for wood, biodiversity and other ecosystem functions: analysing and developing models of integrated forest management systems including wood production, biodiversity, conservation and/or other ecosystem services
- 23. Sustainable forest operation systems: developing new sustainable solutions for forest harvesting and transporting systems
- 24. Options and incentives for carbon sequestration through forest management: Identifying and analysing incentives for carbon sequestration through active forest management and the use of timber and other forest-based products



- 25. Analysing the impact and effectiveness of incentives for sustainable mobilisation of forest biomass including predictions and scenarios of tailor-made designed measures.
- 26. Analysing the potential of new forest-based cross-regional value chains and production systems for enhancing Europe's competitiveness.
- 27. Analysing and identifying the potential of digitalisation and ecommerce for the forest-based sector to enhance employment and creation of added value in European regions





#### Stakeholder involvement

- Means to support the facilitation of forest owner associations in member countries
- Models for improved forest management in small scaled forests (land consolidation, establishment of land registers, cooperatives )
- Evaluate existing participative approaches (i.e. Regional learning laboratories, helix model) to involve stakeholders concerning the increase of synergies of existing EU-programmes and funds (i.e. RDF).



 Review of already existing awareness raising measures of forest owners for the important role their forest fulfil in terms of Ecosystem services. Evaluation of existing communication tools for knowledge transfer and dissemination



- to support the development of stakeholder dialog (along wood supply chains) to develop social and economical network
- To develop DSS for improved forest management in small scaled forests (working/managing together – on larger areas)
- To promotion adaptation of existing good practice examples – to transfer existing knowledge
- To support stronger connections along stakeholders along supply chains



- Real impacts and effectiveness of current incentives across Europe
- Models for innovative virtual timber sales/marketing hubs.
- Models for the development of forest owner groups so that they become more self-sufficient without overdependence on volunteerism.
- Development a general extension framework supporting national or regional inititatives.



- Collecting existing and developing practices and policies along value chains for increased and sustainable supply of wood and biomass according to the quality needs
- Economic models and framework to provide analysis an incentive efficiency giving practical recommendations with guidance for policy-makers and value chain stakeholders, concrete actions for application, possible demonstration activities and dissemination of results.
- Innovative ways of supporting forest owners associations and extension (financial incentivation)
- Incentives for marketing hubs (making market more transparent, easier to evaluate/measure efficiency of incentives, enhancing contact of owners, and information available, etc.)



### ... stay connected!

• Thank you for your attention







# How to improve the sustainable mobilisation of biomass from our forests in the EU?

Disclaimer:

Some important aspects related to the environmental impacts of SMFB and its connections with climate change are not tackled in detailed within this Focus Group: Focus Groups need to have limited scope and the scope of this group focuses on SMFB's economic aspects. The analysis of issues related to environmental and climate aspects of SMFB is being discussed in other fora. However, this Focus Group will always take into account the overall sustainability of SMFB, for instance the analysis of economically promising new ways of mobilising biomass should always take into account their environment-climate and social sustainability.



