



Research and innovation in the wood chain

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EU 2030 Strategy



Growth



Smart



Developing an economy based on knowledge and innovation

Sustainable



Promoting a more resource efficiency, greener and competitive economy

Inclusive



Fostering an economy with high levels of employment ensuring a social and territorial cohesion

EU 2030 Strategy



Leadership in technology,
innovation and economic
competitiveness



European Strategic Research Agenda

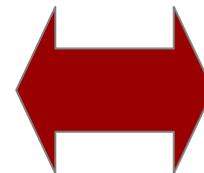
- ➔ Encouraging industry to join R&D and to renew the forest-based sector
- ➔ Agreeing upon research funding priorities between industry, researchers and policy-makers
- ➔ Enabling more ambitious targets for R&I efforts

WOOD CHAIN



PRODUCTION ↔ PROCESSING ↔ CONSUMPTION

Know-how



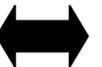
Know-why

PRODUCTION

- Resources availability & sustainability
 - Supply of raw materials
 - Resource efficiency
- Climate change
- Harvest efficiency
 - Optimization
 - Intelligent operations

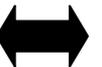
Prevention of
forest fires

Control of pests
and diseases



PROCESSING

- Sawing optimization
- Full-resource use
e.g.: Biorefineries



CONSUMPTION

- Meeting consumer needs



Tackling the societal changes

e.g.

Environmental choices
Design
Price

- Green products

The sustainability of the European, and Portuguese forest in particular, will only be guaranteed if we are able to cope with growing competition from the forest-based industry in other regions of the world with greater abundance of forest resources.

What are the main challenges for the wood chain in Portugal?

“Increase production capacity, improving organization and quality, both in production and transformation.”

Manuel Pires, AJI

“Increasing productivity (mainly for eucalyptus genus), valorization of maritime pine and avoid deforestation”

André Nunes, Gestiverde

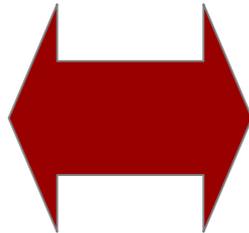
“In the perspective of the use of wood in structures, one of the great challenges is to change the mentality of the community in relation to the use of wood (either due to lack of technical knowledge or, usually, due to durability issues).”

André Marques, serQ - Centro de Inovação e Competências da Floresta

Research



Research



Industry

- ➔ Disclosure of wood-based products and their qualities/potential.
- ➔ Awareness of the prescribers regarding the specification, inspection and application of basic wood products.
- ➔ Increase of R&D in the new products, together with pathogens and protection.
- ➔ Promotion and protection of high value products obtained from pine wood.
- ➔ Implementation of pilot projects for the production of innovative products with higher added value.

Research can help to answer by...

- Promoting  cooperation between public and private R&D centres and companies/industry
- transfer and circulation of knowledge

- Engaging in studies aiming at...

- ➔ Adaptation of stands to edaphoclimatic conditions, focusing on its resilience to climate change;
- ➔ Increasing the resilience of stands to fire and pests attacks;
- ➔ Increasing the productivity of stands already installed;
- ➔ Promoting new planted areas and species improvement;
- ➔ Post-fire mitigation and recovery methods;

- ➔ Diversification of species for the production of wood;
- ➔ Diversification of uses and markets for forest-based products including new processes and methodologies;
- ➔ Valorization of forest residues and by-products;
- ➔ Exploration of “green growth” and bioeconomics.

Innovation



Providing answers to pressing
challenges

- ➔ Offering products that meet the new needs of consumers, e.g. design, confort, technical specifications;
- ➔ Satisfaction of higher environmental requirements, e.g. certification, recycling, energy efficiency;
- ➔ Guarantee the access to the necessary resources, directly or indirectly, to the productive processes (water, energy, soils);
- ➔ New distribution circuits (marketing and transport) and new markets.

Innovative dynamics

Production technologies

Product characteristics

Marketing offer

Market selection

R&D inputs to these challenges

***FINAL
REMARKS***

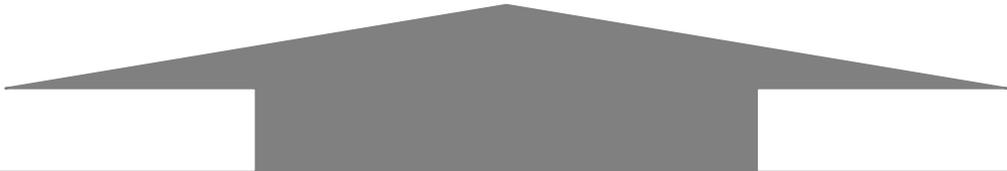
- Responsible use and reuse of renewable resources.
- Using wood products to achieve climate change mitigation targets.
- Sustainable and secure raw material access.
- Expanding the bio-economy.
- Sustainable forest bio-energy.
- New products and services to meet consumer needs.
- Forging industrial leaderships.

Consumer needs and the smart and sustainable use of forest resources are the cornerstones of development in the sector



will help

EU to tackle major societal changes and improve the competitiveness of the european forest-based sector



It requires excellence in forest and biomass management, significant investment in research and development and strong, innovation-driven industry leadership



Thank you!

FCT

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