



Strategic Plan 2021 - 2026

Institut Européen de la Forêt Cultivée
European Institute of Planted Forest
Instituto Europeo del Bosque Cultivado

VISION

IEFC will address critical scientific and technical topics to improve the sustainable management of planted forests under global change.

IEFC Strategic Plan Summary

MISSION

The European Institute of Planted Forest (IEFC) is a formal network of collaborating forest owners, practitioners, researchers, and educators from across Europe who aim to coordinate forest owner/practitioner-driven problem solving initiatives, to promote, facilitate, and improve, through research, networking, and communication, the future resilience and sustainability of Planted Forests in Europe in the context of global change.

The search for such solutions will require close collaboration and the search for synergies with other sectors or areas linked to the bioeconomy and ecosystem services that ensure all three pillars of sustainability: economic, social and environmental are addressed.

Areas of focus: Forest genetic resources, improved resilience of planted forests, bioeconomy, trade-offs in ecosystem services and natural capital valuation.

BACKGROUND

1.1 The value of Planted Forests

The importance of forests for our society has never been more prevalent and the unique and indispensable role they play in our planet is increasingly being recognized throughout Europe and the world. This is reflected in a range of initiatives from the Paris Agreement, the 2030 Agenda for Sustainable Development, the EU Green Deal and EU forest strategy, (EFS) the EU's Bioeconomy Strategy, and the EU's Biodiversity strategy 2030 among others. Political leaders have recognised the growing relevance and importance of the forest sector to the EU and this recognition has put a sharp focus on planted forests and afforestation programs and all that they entail.

In Europe, forests cover about 40% of the territory, of which 8% of this is planted forest, with this forest based sector providing more than 3.5 million jobs. According to FAO Statistics Europe has about 83 million ha of planted forests or 26% of the global planted forest area. This is a significant amount and will need careful management in the future.

The contribution of planted forests to addressing the major socio-economic and environmental challenges of our time -- poverty alleviation, food security, renewable energy, climate change and biodiversity conservation -- is widely acknowledged.

Various estimates indicate that planted forests provide between one third to two thirds of the global industrial roundwood demand and sequester 1.5 gigatons carbon (1.5×10^9 tons) per year.

According to the EU Forest Strategy, priority should be given to promoting the competitiveness and sustainability of the forest sector, supporting both rural and urban areas, expanding the knowledge base, protecting forests and preserving their ecosystems, improving coordination and communication and increasing the sustainable use of wood and non-wood forest products.

1.2 Why we are in existence – our purpose

Despite all the commentary from experts, scientific studies and papers, and policies and strategies that keep stressing the huge potential and benefits of planted forests, they seem to forget one very important element – the forest owner or manager. More and more planted forest is privately owned. Private forest owners and managers, as well as their forests and woodlands, are progressively coming under pressure from more stringent EU regulations, sustainable forest management rules, societal demands, coupled with the problems brought about by climate change such as increased threats from wind, fire, pests, and disease.

There is an increasing disconnect and lack of collaboration among the forest landowners / practitioners on the ground, and the researchers and policy makers. So much so that a lot of research being carried out is not reaching the ordinary practitioner in the forest.

Thus in planted forestry today never has there been more of a need to engage with forest owners or managers, to allay their fears, to incentivise their work, support their needs and requirements, and provide them with the information, tools, and practical help to maintain and grow planted forests. This engagement is crucial for them to realise their woodland's and forest's potential and provide the three pillars of sustainable forest management, namely the social, economic and environmental benefits of planted forests.

To this end, the IEFC with support from the national and regional governments and forest owners associations will continue to promote this unique close collaboration between the forest owners, researchers, and practitioners. This will ensure that the forest owners and managers get the necessary support, research, cutting edge information, and tools to facilitate and encourage them to continue to manage, this hugely important resource, their planted forests, into the future, while also taking into account the demands of the industry and markets that are becoming increasingly more demanding and diverse, within this new context of the bioeconomy, while preserving important ecosystem services such as climate change mitigation and biodiversity conservation.

The sustainable wood value chain is one of the forest value chains which, today, has to coexist with the non-wood forest products value chains and environmental services. In order for this coexistence to succeed, good governance will be critical for managing planted forests for their different values and ensuring the social, economic and environmental benefits from sustainable wood value chains. It is therefore imperative that IEFC members provide cutting edge information, research and expertise to help the forest owners and managers in their understanding of these concepts and empower in them the necessary critical management skills to drive value chain sustainability.

1.3 A brief history of IEFC

Twenty years ago, a joint initiative between USSE and INRA led to the establishment and launch of the Institut Européen des Forêts Cultivées (IEFC). The birth of the institute was led by Yves Lesgourgues, then Director of CRPF Aquitaine, and Michel Arbez, then Director of the INRA site in Pierroton.

The idea for this network originated back in 1987 when the pioneering spirit of foresters from Aquitaine, Galicia and the Spanish Basque Country led them to explore the forests of their neighbouring countries, while building friendships along the way; thus sowing the seed for two fruitful decades of collaboration and networking.

From its Atlantic-centered beginnings, today the IEFC board, led by its president Dr. Nick McCarthy of the Waterford Institute of Technology, together with its committed network of partners and donors, resolutely takes steps to expand its horizon across the entire European continent and position IEFC as the premier resource center for sustainable planted forest management.

1.4 The Challenge Facing the IEFC Network today

The future management of planted forests has to meet a number of challenges. The first challenge is certainly the need to adapt the design and management of planted forests to current climate changes, taking into account the continuous increase of abiotic risks (droughts, heat waves, forest fires, storms) and biotic risks (insect outbreaks, emerging diseases, biological invasions). But other equally important challenges are coping with the high fragmentation of private forest ownership (16 million forest owners in the Europe), the sluggish demand under the current economic crisis aggravated by the COVID19 pandemic, the creation of innovative products, together with the optimization of the value-added chain, and the increasingly important role the forestry sector will play in the bioeconomy.

In fact, in some countries in Europe, the establishment of new planted forests or the replanting of existing ones has decreased due to high land prices, a lack of financial incentives and environmental restrictions; which in turn has led in many cases to the abandonment of land and its management, with the risks that this entails: fires, spread of pests and diseases, etc.

At the same time, forest owners, forest managers and decision makers have to deal with the comparison of planted forests with intensive agriculture. However, planted forests exist in a totally different context because they represent less than 10% of the total world forest area and use very limited inputs, and represent the same ratio as organic farming in agriculture. Planted forest owners and managers also face the comparison between planted and natural/semi-natural forests. The use of tree monocultures and the implementation of intensive management (including clear cutting) are subject to public criticism. Therefore, there is a need to share knowledge on planted forests between different actors, improve science-based information on planted forests, and bring tools, facts and figures to the debate on future forest development.

Indeed the IEFC faces several challenges to operate in an environment where more and more pressure is being put on planted forests on multiple fronts such as: fuelling the bioeconomy, mitigating against climate change, adapting to climate change, resisting emerging pests and diseases, supporting fire prevention organisations and providing regulation services such as carbon, water while at the same time retaining and conserving soil and biodiversity.



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Image from Rawpixel

MISSION

2.1 Mission Statement

Our mission is to use a bottom up approach through collaboration driven by planted forest owners and practitioners and linking researchers and educators to Promote, Facilitate, Improve, Coordinate and Disseminate solutions to aid forest owners and practitioners to manage and ensure Sustainable Management of Planted Forests in Europe. The search for such solutions will require collaboration and the search for synergies with other sectors or areas linked to the bioeconomy and ecosystem services that guarantee the three pillars of sustainability: economic, social and environmental are addressed. This will be achieved, through coordination of research, applied training programs, networking, meetings, conferences and publications.

2.2 IEFC Framework





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VALUE PROPOSITION AND STRATEGIES

3.1 Value propositions: Mission expanded

Promote and Coordinate forest owner/practitioner-suggested research projects to find solutions that are practical, realistic, and science-based to ensure the sustainable management and the multi-functionality of planted forests. Seek funding, develop research collaboration and maintain common R&D infrastructures and resources.

Facilitate cooperation among planted forest owners, practitioners, researchers and educators through networking, field days, brainstorming and collaboration between practitioners, forest owners, researchers, educators and research networks, in order to identify, test and continuously improve these solutions.

Build capacity through applied training programs, workshops, networking, meetings and conferences.

Communicate and disseminate information through publications (e.g. Newsletters) and use of digital media. Become the main documentary resource center on planted forests.

Table 1: IEFC Services

DISCOVER PROBLEMS + DEFINE PROJECT	DEVELOP PARTNERSHIPS + DEPLOY SOLUTIONS	DISSEMINATE INFORMATION
Monitoring and evaluation of the state and context of planted forest in Europe. Gain and centralise knowledge of potential improvements to ensure sustainable management of planted forest.	Facilitate cooperation and networking, identify and build partnerships. Build capacity, improve tools, techniques and methods. Coordinate and lead solutions.	Communication Influence policies through publications of scientific, technical and position papers.

3.2 Goal and Strategies

IEFC aims to promote, facilitate and improve the future resilience and sustainability of planted forests in Europe in the context of global change.

The way to achieve this is based on three **strategic pillars**:

- Align the sustainable development of planted forest in Europe with the opportunities presented by the growing bioeconomy.
- Forge partnerships and network to find climate-smart solutions on how to better leverage the sustainable management of planted forest in Europe to contribute to climate change adaptation and mitigation.
- Preserve and promote ecosystem services derived from the sustainable management of planted forests in Europe.

Our main **focus areas** are as follows:

- Identity, use and conserve the best forest genetic resources and planting material to be made available to forest owners and managers so that they can adapt their planted forests to market demands and the challenges of climate change adaptation and mitigation.
- Improve the resilience of planted forests to climate change, and in particular to the multiple interacting hazards, so as to preserve their commercial value and minimize risks to investors.
- Promote the sustainable management of planted forests, maintaining the associated ecosystem services and targeting the opportunities offered by the bioeconomy so as to maintain their long-term profitability and contribute to regional development and UN sustainable development goals.
- Analyse and determine trade-offs on ecosystem services in planted forests.

The IEFC focus areas are in line with many of the important challenges and strategies outlined in the European Forest Strategy. These focus areas addresses the development of sustainable planted forests adapted to meeting the demands in a growing bioeconomy, as well as maintaining and increasing the value of ecosystem services. In light of climate change, smart solutions to mitigate the negative effects of changed environmental conditions will be of utmost importance.

Other global challenges that will be increasingly important include increased timber consumption, urbanization, migration and digitization. Sustainable forest management approaches must be developed, not only to increase biomass production or to preserve, and in some cases, restore biodiversity, but also to reinforce social benefits and to maintain and enhance ecosystem services derived from planted forests.

Under climate changing conditions, it is important to obtain and manage forest ecosystems with the aim of increasing their resilience to a future of amplified biotic and abiotic stressors.

Table 2: IEFC Strategic Matrix

GOALS	FOCUS AREAS	STRATEGIES	ACTIONS
Promote, facilitate, and improve, the future resilience and sustainability of Planted Forests in Europe in the context of global change.	Forest genetic resource	Promote research activity and improve communication on resilience of specific resources and opportunities presented by the growing bioeconomy.	Research coordination, funding of projects, education grants, etc.
	Improve resilience of planted forest	Forge partnerships and network to find climate-smart solutions on how to better leverage the sustainable management of planted forest in Europe to contribute to climate change adaptation and mitigation.	Participate in research initiatives, expand network, organize, scientific conferences, etc.
	Bioeconomy	Improve practices and products from plantation to meet opportunities presented by the growing bioeconomy	Research coordination, funding of projects, education grants, etc.
	Trade-offs in ecosystem services and natural capital valuation.	Support initiatives to maximise additional ecosystem services associated to wood production or restoration schemes based on tree plantation.	Research coordination, funding of projects, education grants, etc.