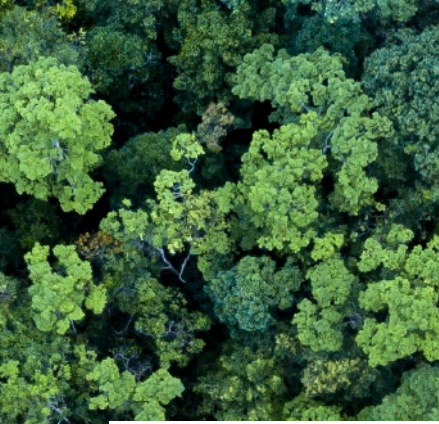


HARNESSING THE DIGITAL REVOLUTION IN THE FOREST-BASED SECTOR

The core objective of Sintetic is to set up and demonstrate a traceability system for trees, logs, and boards based on Information and Communications Technology (ICT) innovations.



Sintetic



THE SINTETIC AMBITION is to define, prototype, and demonstrate a complete solution for a digital platform dedicated to comprehensive forest value chain data management.

Traceability in forests is crucial for ensuring the legality, sustainability, and responsible management of forests, as well as combating illegal logging and promoting transparency in the global timber trade. Sintetic develops a process that involves monitoring the entire supply chain, from the forest of origin to the final product on the market.

By implementing robust traceability systems, the forestry and wood product industry will directly contribute to the conservation of forests, biodiversity, and ecosystem services, while also meeting the growing demand for sustainable and responsibly sourced wood products for a green economy.



Central to the working of Sintetic is the integration of five separate tracking technologies



Radio Frequency Identification, which will allow standing trees as well as round wood to be tagged



Punching code impressed directly onto the wood with a hammer



CT log scanner at the sawmill



Optical vision scanners (fingerprinting)



Bar/QR code that will enable identification through the retail process.

Key objectives of Sintetic:

1

Enhanced estimate of volume and value of forest stands and single trees by means of improved models for LiDAR and optical image data.

2

Introduce an in-forest roundwood quality grading system, improving logistics, reducing overall transportation costs and the related greenhouse gases (GHG) emissions by 5%.

3

Increasing process efficiency and yield of high value products from the roundwood.

4

Increasing the EU forest area under active management for productive and protective use forests.

5

Increasing the timber value and the resilience of eco-systems while developing improved forecasting models relating the different possible silvicultural treatments.

6

Obtain a reduction of illegally harvested area of 15% compared to the present estimates in a Region of the EU with relevant illegal logging issues.

7

Provide specialized skills on digital technologies to forest operators and promote further education by training professional forest trainers.

To learn more about the project, visit <https://sinteticproject.eu/>



PARTNERS:

The Forest Science and Technology Centre of Catalonia (CTFC) coordinates the Sintetic project, which brings together 21 partners from across the European Union:



This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101082051. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Commission. Neither the European Union nor the granting authority can be held responsible for them.