**SHORT DESCRIPTION FOR THE WEB PAGES**

**Project name:** Digital tools and technology systems for the sustainable management of Mediterranean forest resources

**Project number:** 101081928

**Project acronym:** DIGIMEDFOR

**Call:** HORIZON-CL6-2022-CIRCBIO-02-two-stage

**Topic:** HORIZON-CL6-2022-CIRCBIO-02-06-two-stage

**Type of action:** HORIZON-IA

**Service:** REA/B/03

**Project starting date:** 1 June 2023

**Project duration:** 36 months

**Project summary**

With over 25 million hectares of forests and approximately 50 million hectares of other wooded lands in the Mediterranean region, climate changes and socio-economic factors can have far-reaching consequences for forests and the forest-wood supply chain, potentially leading to the loss of vital ecosystem services. These changes pose challenges to forest mangers and industries, mainly due to limited access to modern digital technologies that fail to address emergent industry needs and innovations expected in the coming decades. To tackle these challenges, a multi-actor approach towards digitalising the forest sector is crucial, involving collaboration and identifying stakeholders' needs.

This is the underlying objective of the DigiMedFor project, which aims to modernize the technological landscape of the Mediterranean forest-wood supply chain. The project simultaneously focuses on enhancing competitiveness and sustainable management by ensuring the traceability of wood resources from the forest to end-users. Harnessing the current digital revolution, stakeholders can effectively manage Mediterranean forests and improve the provision of ecosystem services associated with them. DigiMedFor aligns with the forest strategy and digital strategy of the European Union, leveraging advanced and innovative digital solutions to enhance the monitoring and management of forest resources throughout the supply chain, from their origin in the forest to processing in the primary wood industry. The project integrates various technologies, including geospatial analysis, artificial intelligence (AI), and digital twin modeling technologies with information and communication technology (ICT) to improve the sustainability of wood production and optimize traceability and delivery of ecosystem services.

DigiMedFor consortium comprises 21 beneficiaries from European and non-European countries, with diverse expertise covering the entire value chain from research to operations. The consortium includes representatives from the forest industry, forest owners, academic and research institutes and SMEs. The forests belonging to the Mediterranean Model Forest Network serve as case studies for demonstrating and applying the digital and technology solutions developed in the DigiMedFor project. DigiMedFor aims to pave the way for a more competitive, sustainable, and technologically advanced forest-wood supply chain in the Mediterranean region by bringing together key stakeholders and leveraging digital innovations.

**Coordinator:** Department of Agricultural Sciences - University of Naples FEDERICO II

**Partners:**

1. DEEP BLUE SRL
2. ASSOCIAZIONE FORESTA MODELLO DELLE MONTAGNE FIORENTINE
3. FUNDACION CENTRO DE SERVICIOS Y PROMOCION FORESTAL Y DE SU INDUSTRIA DE CASTILLA Y LEON ES
4. TRESTIMA OY
5. EUROPEAN LEADER ASSOCIATION FOR RURAL DEVELOPMENT, aisbl
6. TOPVIEW SRL
7. DIMOS KAVALAS
8. ETHNIKO KENTRO EREVNAS KAI TECHNOLOGIKIS ANAPTYXIS
9. CONSORCI FORESTAL DE CATALUNYA
10. CONSIGLIO NAZIONALE DELLE RICERCHE
11. CENTRO DE INVESTIGACION ECOLOGICA Y APLICACIONES FORESTALES
12. FORÊT MODÈLE DE PROVENCE
13. MODELNA SUMA ISTRA
14. ASOCIACION PARA LA CERTIFICACION ESPANOLA FORESTAL - PEFC ESPANA
15. PEDAL CONSULTING SRO
16. MINISTRY OF AGRICULTURE AND FORESTRY
17. INSTITUT NATIONAL DE RECHERCHES EN GENIE RURAL, EAUX ET FORETS
18. SERVIZI LEGNO-SUGHERO CONSORZIO\*CSLS O CONLEGNO
19. MARE ENGINEERING GROUP SPA
20. FORZA AGENCY FOR SUSTAINABLE DEVELOPMENT OF THE CARPATHIAN REGION NONPROFIT ORGANIZATION

**Key actions:**

Forest digitalization

* DigiMedFor toolkit for forest managers to measure forest variables and attributes
* DigiMedFor digital tool for inventory of Mediterranean forest resources

Grading and traceability of wood resources

* DigiMedFor tool for in-situ wood evaluation and grading
* DigiMedFor Data Traceability Platform System
* DigiMedFor picture-based tracking system
* Guidelines for the digitalization of ecoservices provided by certified forests

Forest management decision support systems

* DigiMedFor Knowledge Platform
* AI-based predictive models
* Process-based mathematical model
* DigiMedFor Virtual Forest Decision Support Systems (VFDSS)