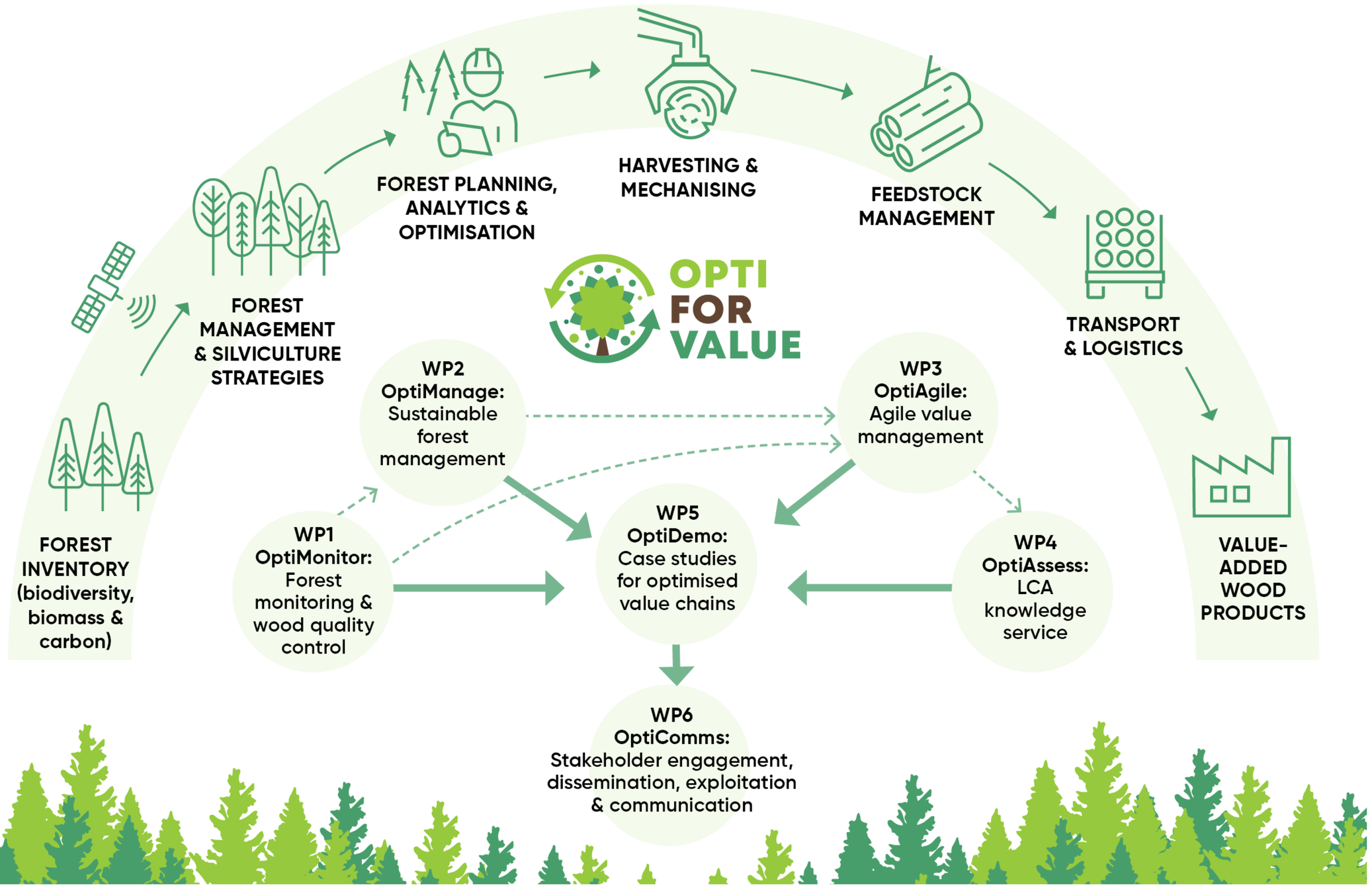
Optimising forest operations for sustainable forest management and high-value applications



The Challenge

Global wood demand is rising, outpacing supply and increasing pressure on forests. Forestry offers a path to boost European competitiveness, reduce reliance on non-renewables, and enhance climate resilience. However, Europe's forests face threats from biodiversity loss and climate change.

OptiForValue tackles these challenges by optimising forest operations with advanced modelling, remote sensing, AI, innovative cascading wood uses and stakeholder collaboration. The project supports adaptive management, early warning systems, and integrated value chain assessments to enhance forest resilience and sustainability.

Expected Outcomes

OptiForValue will deliver innovative tools and guidelines to improve forest and value chain management under climate-related stresses like drought, fire, pests, and snow damage. Solutions for new high-value engineered wood products from both healthy and damaged wood, supporting cascading use of sustainably harvested forest biomass, will be developed - boosting adaptive forest and value chain management for future demands.

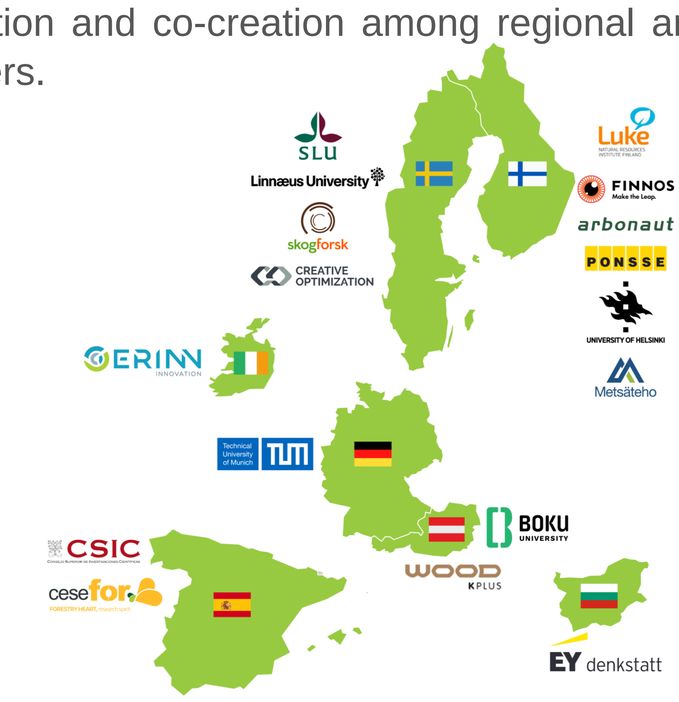
Via case studies in Austria, Spain, Sweden, and Finland, the project aims to strengthen sustainability, resilience, and competitiveness across European forest value chains. Expected long-term impacts include a 10% reduction in wood damage, €350M from improved quality control, €240M annual gains from increased harvest, 5% rise in forestry jobs in climate-impacted areas, and up to 10% cuts in fossil fuel use and emissions.

Goal and Objectives

OptiForValue aims to establish more resilient and sustainable forest-based value chains through an interconnected modelling framework, participatory engagement, and novel scientific approaches. These include early warning systems, adaptive management, remote sensing, and AI for Agile value-management and operations integrated with life cycle assessment.

The project will evaluate environmental, social, and economic impacts and demonstrate solutions through local case studies, while promoting innovation and co-creation among regional and local forestry stakeholders.

Scan to access OptiForValue website



Horizon Europe CBE JU Research and Innovation Action
September 2024 – August 2028
Consortium: 17 partners across 7 European Countries
Coordinator: Luke - National Resources Institute, Finland
Budget: €4.997 million

@OptiForValue
@OptiForValue
www.optiforvalue.eu

Coordination & Management:
Mauricio Acuna | mauricio.acuna@luke.fi
Johanna Routa | johanna.routa@luke.fi

Press & Communications:
Olga Ormond | olga@erinn.eu

Circular Bio-based Europe Joint Undertaking
Bio-based Industries Consortium
Co-funded by the European Union

The **OptiForValue** project is supported by the **Circular Bio-based Europe Joint Undertaking** (**CBE JU**) **and its members** under Grant Agreement N° 101157658. Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CBE JU. Neither the European Union nor the CBE JU can be held responsible for them.