



# forest 4.0

**CENTRE OF EXCELLENCE: FOREST 4.0**

**D6.1: Dissemination and communication plan**

**WP6: Dissemination, exploitation, and communication**

**Version I**







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## Document information

<b>Grant Agreement No.</b>	101059985
<b>Project Acronym</b>	Forest 4.0
<b>Project Title</b>	Creation of the centre of excellence in smart forestry
<b>Type of action</b>	HORIZON Coordination and Support Actions
<b>Horizon Europe Call Topic</b>	HORIZON-WIDERA-2022-ACCESS-01-01-two-stage
<b>Start – ending date   Project Duration</b>	1 May 2023 – 30 April 2029   72 months
<b>Project Website</b>	Forest40.lt
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<b>Work Package</b>	WP6: Dissemination, exploitation, and communication
<b>WP Lead Beneficiary</b>	AFL
<b>Relevant Task(s)</b>	T6.1 : Dissemination, Exploitation & Communication Plan
<b>Relevant Deliverable</b>	D6.1: Dissemination and communication plan
<b>Relevant Milestone</b>	Milestone 1: Dissemination strategy and action plan (AFL)
<b>Deliverable Lead Beneficiary</b>	ART21
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## Document History

Version	Changes	Date	Contributor
01	The first version of the document	03/07/2023	Dovilė Rusytė (AFL)
02	Structural updates and comments	26/07/2023	Kęstutis Skridaila (ART)
03	Structural updates and comments	18/08/2023	Thomas Gitsoudis (AFL)
04	Updated version of the document	21/08/2023	Dovilė Rusytė (AFL)

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## Executive summary

In the era of information and connectivity, effective dissemination and communication are pivotal in realizing the goals of Forest 4.0. Our Dissemination and Communication Plan, designed to ensure the broadest reach and impact of our innovative forest-based initiatives.

**Objective and Purpose:** Our primary objective is to communicate the objectives, progress, and outcomes of Forest 4.0 to diverse stakeholders effectively. This encompasses researchers, policymakers, industry partners, local communities, and the wider public. Our purpose extends beyond mere information sharing; we aim to foster engagement, advocacy, and the practical application of our research.

### **Key Components:**

**Targeted Audience Segmentation:** We have rigorously segmented our audiences, recognizing their distinct needs, interests, and preferences. From scientists to policymakers and from industry leaders to the general public, we tailor our communications to resonate with each group.

**Multichannel Approach:** Our plan harnesses a wide array of communication channels, both traditional and digital. These encompass press releases, social media, dedicated websites, newsletters, webinars, workshops, conferences, and more.

**Message Precision:** Our messaging is characterized by clarity and relevance. We convey the real-world impact of Forest 4.0's innovations and their alignment with broader sustainability and economic goals.

**Content Diversity:** We produce diverse, high-quality content such as research papers, reports, videos, infographics, success stories, and case studies. These materials are designed to inform, inspire, and facilitate sharing among our audiences.

**Feedback Mechanisms:** Continuous monitoring and assessment guide our strategy. We are receptive to audience feedback, adjusting our approach based on insights and data analytics.

**Measuring Success:** Our success will be measured by various key performance indicators, including reach, engagement, media coverage, website traffic, policy impact, and community involvement. Ongoing evaluation and adaptation ensure that our communication strategy remains effective.

The Forest 4.0 Dissemination and Communication Plan is instrumental in achieving our project's ambitions. It not only serves to inform but also to inspire action, fostering a



## **D6.1: Dissemination and communication plan**

wider understanding of the importance of sustainable forest management and the innovative solutions we offer. With our strategic, audience-centered approach, we are confident in our ability to make a lasting impact in advancing forestry practices and contributing to a more sustainable future.

## 1. Introduction

### 1.1. Excellence

We aim to address critical environmental challenges, including climate change, biodiversity loss, deforestation, and forest degradation, by fostering open data sharing. Currently, while government satellite data is becoming more accessible, data directly collected in forests remains limited, scattered among various organizations with no dedicated infrastructure or standards.

Our solution is the creation of a Center of Excellence (CoE) called FOREST 4.0, focused on forest-related Artificial Intelligence (AI) and Internet of Things (IoT) technologies. FOREST 4.0 will develop innovative data-driven solutions for forestry management across the entire value chain, from resource management to end-products.

FOREST 4.0 aligns with Lithuania's Smart Specialisation Strategy, aiming to digitalize forest operations and promote a science-based approach to sustainable forest management. Our goal is to contribute to the EU Green Deal, fulfill key UN Sustainable Development Goals (SDGs), and facilitate the transition to a circular and sustainable bioeconomy through innovative data collection and processing applications.

### 1.2. Objectives

The **overall objective** of the FOREST 4.0 project is to establish a Centre of Excellence to transform the forest environment monitoring, data acquisition, and analysis, and capture value from the collected data.

The proposed project aligns with the Work Programme and focuses on four specific objectives:

#### **Objective 1: Establish the CoE and Operational Processes**

- Create the CoE as an independent legal entity by Month 03.
- Establish CoE governance structures by Month 12.
- Recruit and affiliate 40 research and support staff members by Month 72.
- Implement all autonomous operational processes by Month 24.

#### **Objective 2: Research AI-IoT for Sustainable Forest Applications**

- Develop a research strategy on AI and IoT with CoE research teams by Month 24.
- Build an AI-defined data infrastructure to support cross-disciplinary research by Month 24.
- Investigate sustainable smart forestry practices across the supply chain, leading to at least one annual innovation.
- Create a Forest-related Innovation Start-up Incubator to generate new data-driven business opportunities (5 per year).

**Objective 3: Integrate AI-IoT into Lithuanian ICT Industries**

- Facilitate AI tools integration to enhance industrial efficiency in forestry.
- Offer test labs to companies for system testing (aim: 10 per year by Month 72).
- Work on commissioned projects with companies to develop AI methods (aim: 5 clients per year by Month 72).
- Transfer patented technologies to businesses (aim: 4 by Month 72).
- Provide test and demonstrator facilities (10 prototypes per year) and certification services (10 per year).

**Objective 4: Create a Lithuanian AI and IoT Cluster**

- Organize the Lithuanian forest bioeconomy R&I community as a cluster linked to international networks.
- Set up a smart forestry and regional policy program supported by the ERDF.
- Implement an extensive dissemination, exploitation, and communication plan.
- Enhance the cluster's ability to attract funds, especially international competitive funding.
- These objectives aim to advance AI-IoT applications in sustainable forestry, support private sector knowledge transfer, and establish a prominent Lithuanian AI-IoT cluster to promote a forest-based bioeconomy in line with S3 strategies and SDGs in Lithuania and the Baltic region.

**1.3. Coordination and support measures and methodology**

1.3.1 Justification for the project

As a justification for the project, a SWOT analysis is provided that summarises the context. This analysis reviews the Lithuanian partners' strengths that they will make benefit of, their weaknesses that they must tackle, and the environmental opportunities that they should cease, and threats that they must be prepared to face.

**Table 1 SWOT analysis**

Strengths
<ul style="list-style-type: none"> <li>• Strong technology transfer capabilities.</li> <li>• Rich history of AI research in agriculture and digital manufacturing.</li> <li>• Universities have AI and data analysis specialized study programs.</li> <li>• High scientific potential and successful collaborations with foreign universities in smart forestry.</li> <li>• VMU and KTU are leading AI and IoT R&amp;D in Lithuania.</li> </ul>
Weaknesses
<ul style="list-style-type: none"> <li>• Insufficient data for AI-based decision support tools.</li> <li>• Low enrollment in AI studies to meet market demands.</li> <li>• Lack of a dedicated AI center in Lithuania.</li> </ul>

- Absence of university-wide standards and procedures for quality processes in research, commercialization, and student support.
- Low investment in R&I in the manufacturing sector compared to EU countries.

### Opportunities

- Strategic government initiatives promoting AI development in various sectors.
- Potential grant funding from the Ministry of Economy and Innovation for AI projects.
- Government support for national and international AI collaborations.
- Stakeholder recognition of the value of responsible and sustainable AI solutions.
- Contribution to Lithuania's competitiveness and knowledge-based development through technology transfer from KTU.
- High specialization in the Baltic Sea Region in forest-based economy, offering opportunities for R&D.

### Threats

- Limited AI-related research publications and PhD programs.
- Low trust in AI-based products.
- Uncertainty regarding data protection.
- Slow technological advancement in certain sectors like agriculture and forestry.
- Fragmentation of R&I capacities in the country.

\* Except Lithuania, includes Denmark, Estonia, Finland, Germany, Latvia, Poland, Sweden, and Norway

### 1.3.2. Consortium

Lithuania's project involves two academic and two industrial partners, backed by the Ministry of Education, Science, and Sports. Academic partners include Vytautas Magnus University (VMU) and Kaunas University of Technology (KTU), known for their strong national and international collaborations. They will be guided by Linnaeus University (LNU), an experienced partner with a strong ranking.

The consortium's expertise spans forestry, bioeconomics, AI, and IoT. Real-time data collection at local and remote labs, including forest monitoring, geomatics, and game management, supports the project. Bio-resource and wood quality testing experiments will also be conducted.

VMU and KTU has established an incubator for spin-offs and startups. The consortium has strong connections with organizations like Infobalt, the AI Association of Lithuania, and more. Industrial partners include the Western Wood Group, State Forest Enterprise, Telesoftas, and Teltonika.

InteriorCluster, a branch organization focusing on internationalization and innovation, will aid the CoE in networking in Sweden and internationally.

ART21 UAB, a Lithuanian high-tech company with 16+ years of experience, will commercialize CoE IT applications, specializing in precision agriculture, predictive systems, sustainable farm management, and more.

AgriFood Lithuania, a Digital Innovation Hub and agrifood cluster with 94 members, actively engages in cutting-edge technologies and cross-sector initiatives, strengthening CoE's network in Lithuania.

## 2. Target groups

### 2.1. Target audience

Defining the project's audience is a critical step for **focusing objectives** and pursuing **meaningful impact**.

This will allow for targeted dissemination, communication, and exploitation actions to be planned and undertaken during the project implementation to maximize engagement and extend the reach of the project results. **Key messages** are also used to articulate in a simple straightforward manner the **unique benefit** of engaging with Forest 4.0 for each target group. **Four target groups** have been defined: academic community, private sector, citizens, and the general public. This chapter will present the members of each group and why their engagement is important, as well as key messages and specific activities, tools and channels directed towards them.

#### 2.1.1. Researchers and students

**Table 2 Academic community communication matrix**

Target audience	Communication objective (O) + message (M)	Communication methods/tools	KPI
Researchers and students	<p>O: 1. Promote the academic excellence of the consortium. 2. Attract and retain the best talents.</p> <p>M: Forest 4.0 is a leader in forestry-related digital technology R&amp;D. It offers researchers, technicians and engineers excellent R&amp;I environment and resources.</p>	Production of a several short videos available on video hosting platforms (e.g. YouTube) and shared on social networks	<ul style="list-style-type: none"> <li>• 1 video for recruitment purposes (about 2 min)</li> <li>• 6 videos about the CoE's scientific and institution</li> </ul>

			al achievements as part of the annual reports (about 3 min)
	O: Demonstrate the added value of a Teaming action M: The Teaming funding is critical in helping Forest 4.0 start and step up in research and innovation	Production of one video about the impact of the Teaming programme on Forest 4.0 available on video hosting platforms (e.g. YouTube) and shared on social networks	One 3 min video

2.1.2. Businesses and investors

**Table 3 Private sector communication matrix**

Target audience	Communication objective (O) + message (M)	Communication methods/tools	KPI
Businesses and investors	O: 1. Increase memberships in cluster; 2. Motivate businesses to purchase services; 3. Encourage investments in Forest 4.0 technologies; 4. Boost technology transfer M: Forest 4.0 is helping businesses reach their objectives with innovative technologies and innovation support services and training	Production of one video about the cluster to stimulate membership available on video hosting platforms (e.g. YouTube) and shared on social networks	One 2 min video
		Production of a series of short videos available on video hosting platforms (e.g. YouTube) and shared on social networks	One 1 min video about each type of service for commercialisation purposes
		Brochure about services and technology transfer	1 brochure, updated if necessary
	O: Motivate start-ups to join our incubator M: The Forest 4.0 incubator is a great	Production of one video about the incubator to stimulate membership available on video hosting	One 2 min video

	resource for your start-up and includes seed funding.	platforms (e.g. YouTube) and shared on social networks	
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### 2.1.3. Citizens

**Table 4 Citizen's communication matrix**

Target audience	Communication objective (O) + message (M)	Communication methods/tools	KPI
Citizens	O: Improve citizens' trust in science and address their questions M: We have researchers working towards new technologies that eventually will be transferred to society	Production of one short video available on video hosting platforms (e.g. YouTube) and shared on social networks	One 2 min video

### 2.1.4. General public

**Table 5 General public's communication matrix**

Target audience	Communication objective (O) + message (M)	Communication methods/tools	KPI
All audiences	O: Promote the project and engage audiences in the project's actions. M: Our Teaming project addresses the sustainability of forests and their resources with advanced digital solutions	Website	Tracked KPIs: number of unique visitors per month, bounce rate, time spent on the website / per page.
		Project news on the project website and shared in social media as defined in the online communication.	1+ news per month
		Press releases	3+ press releases (project)

			start, milestones, and end) distributed through press release platforms
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Our communication measures will be sustained beyond the project completion as they will be merged with our institutional Forest CoE communication strategy. Note that we on purpose do not provide any KPI target for the website audience as they are only speculative beforehand and are affected by many factors. However, we will track them and act to improve them along the project.

**Table 6 Target groups summary**

Specific needs	Expected results	D & E & cC measures
<ul style="list-style-type: none"> <li>• Need for the forestry sector to manage the challenges associated with an increased use of timber while considering energy and climate change requirements.</li> <li>• Need to improve carbon storage capacities of forest and reduce GHG emissions from forestry activities.</li> <li>• Improved forest governance using accurate and open data.</li> </ul>	<ol style="list-style-type: none"> <li><b>1.</b> Create a Centre of Excellence (CoE) in forest-related Artificial Intelligence (AI) and Internet of Things (IoT) technologies with highly qualified, top-rated researchers.</li> <li><b>2.</b> A set of strategy plans and pathways to develop and promote innovative data-based solutions in forestry management in the whole value chain, from forest resources management to end products.</li> <li><b>3.</b> Complete set of services relating to forestry management developed and made available to partners, industry, and target groups.</li> <li><b>4.</b> Framework and tool for development Forest IOT devices and services; IOT network management tool; Forest IOT network deployment and Service &amp; Resource Orchestration; Forest risk evaluation tool with XAI.</li> </ol>	<p><b>Dissemination:</b></p> <ul style="list-style-type: none"> <li>• Open access peer reviewed scientific publications.</li> <li>• Presentations at conference.</li> <li>• Organisation of scientific events.</li> <li>• Online seminars.</li> <li>• Summer school.</li> <li>• Brokerage events for businesses.</li> <li>• Participation in existing business events.</li> <li>• Cluster events.</li> <li>• Citizen events.</li> <li>• Project website.</li> </ul>

<ul style="list-style-type: none"> <li>• Open the forestry sectors to other sectors, especially digital.</li> </ul>	<ol style="list-style-type: none"> <li>5. Knowledge base consisting of efficient sustainable forestry methods that utilize the adaptive capacity of forests; efficient value chain strategies to harness disturbances</li> <li>6. Forest DSS(s) with capacity to simulate forests and forestry and a set of planning tools that support informed decision making by forest owners and managers.</li> <li>7. Enhanced science-policy-practice interface &amp; augmented exchange of knowledge between Lithuanian and Swedish scientists first, as well as scientists from other countries</li> <li>8. Knowledge with relevant infrastructure for monitoring eco-physiological processes in forest ecosystems</li> <li>9. Knowledge with relevant infrastructure for advanced data acquisition and computing</li> </ol>	<p><b>Exploitation:</b></p> <ul style="list-style-type: none"> <li>• Services sold to businesses or other academic organisations.</li> <li>• Technology transfer or patent licensing.</li> <li>• Investments in start-ups and incubation support.</li> </ul> <p><b>Communication:</b></p> <ul style="list-style-type: none"> <li>• Visual identity (logo + charter)</li> <li>• Online: website and social media communication.</li> <li>• Offline: printed documents + participation in events.</li> <li>• Videos.</li> <li>• Press releases, conferences, and relationships.</li> </ul>
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Target groups	Outcomes	Impacts
<p><b>Feedstock providers:</b> primary sector (farmers, local cooperatives), waste managers, agro-industry companies, bio refineries, etc.;</p> <p><b>Industry:</b> large industries, start-ups/spin-offs, SMEs,</p>	<ol style="list-style-type: none"> <li>1. At least 5 new contracts with external industrial partners established on development of products/services on data-based solutions in forestry.</li> </ol>	<p><b>Economic impact:</b></p> <p>Contribution to the Lithuanian S3 by developing innovative forest-based Lithuanian bio economy through the digitalisation of forest operations.</p>

<p>brand owners, industrial associations, chambers of commerce, clusters, investors;</p> <p><b>Policy:</b> policymakers, public authorities (local, regional, national and international level), public procurers, lobbies;</p> <p><b>Standardisation and certification:</b> standardisation and certification bodies at national and international level;</p> <p><b>Scientific/research community:</b> universities and research centres, specialized innovation centre, science parks, campus, incubators and technology parks, etc.;</p> <p><b>Academia and education sector:</b> universities, VET centres, other educational institutions</p> <p><b>Civil society:</b> consumer associations, environmental NGOs, trade unions, professionals, general public;</p> <p><b>Multipliers:</b> thematic platforms, regional networks, intermediary organisations and associations (including regional networks, etc.), media Private forest owners and state/community forest managers in the region</p>	<ol style="list-style-type: none"> <li>2. At least 10 research publications on Forestry management and data-based solutions.</li> <li>3. Training at least 25 early career researchers on topic of forestry management and data-based solutions.</li> <li>4. Enhanced forest decision making at municipal, regional &amp; national level, integrating participatory processes and transformative knowledge.</li> <li>5. Permanent practices of research exchange between research communities in Lithuania, Sweden and beyond.</li> <li>6. New specialists trained in the field.</li> <li>7. Higher demand for innovative data-based solutions in forestry management in the whole value chain, from forest resources management to end products by industrial partners.</li> </ol>	<p><b>Technological impact:</b> New sustainable solutions for forestry management; New knowledge based technologies, products and services, patents applied to forestry management.</p> <p><b>Scientific knowledge:</b> New scientific knowledge in forestry management from forest resources management to end products by industrial partners.</p> <p><b>Societal impact:</b> Open sharing of forest data will allow to mitigate climate change, biodiversity loss, deforestation, and forest degradation. Increased public knowledge.</p>
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### 3. Dissemination, communication, and exploitation strategy

The DEC plan has two overarching priorities and has been organized into **four** distinct **phases** (Figure 1) to set clear goals and objectives for the duration of the project. This chapter will describe the work to be accomplished in each phase and the reporting and KPIs used to measure progress and maintain accountability.

#### 3.1. DEC Priorities and Strategic Phases

##### 3.1.1. Strategic Phases

The DEC strategy is divided into **four phases** that span from **M1** of the project and extend **6 years beyond** the project’s completion. Each phase has an overarching objective that will provide focus to activities and create a steady workflow attuned to the work done and results produced by other WPs.

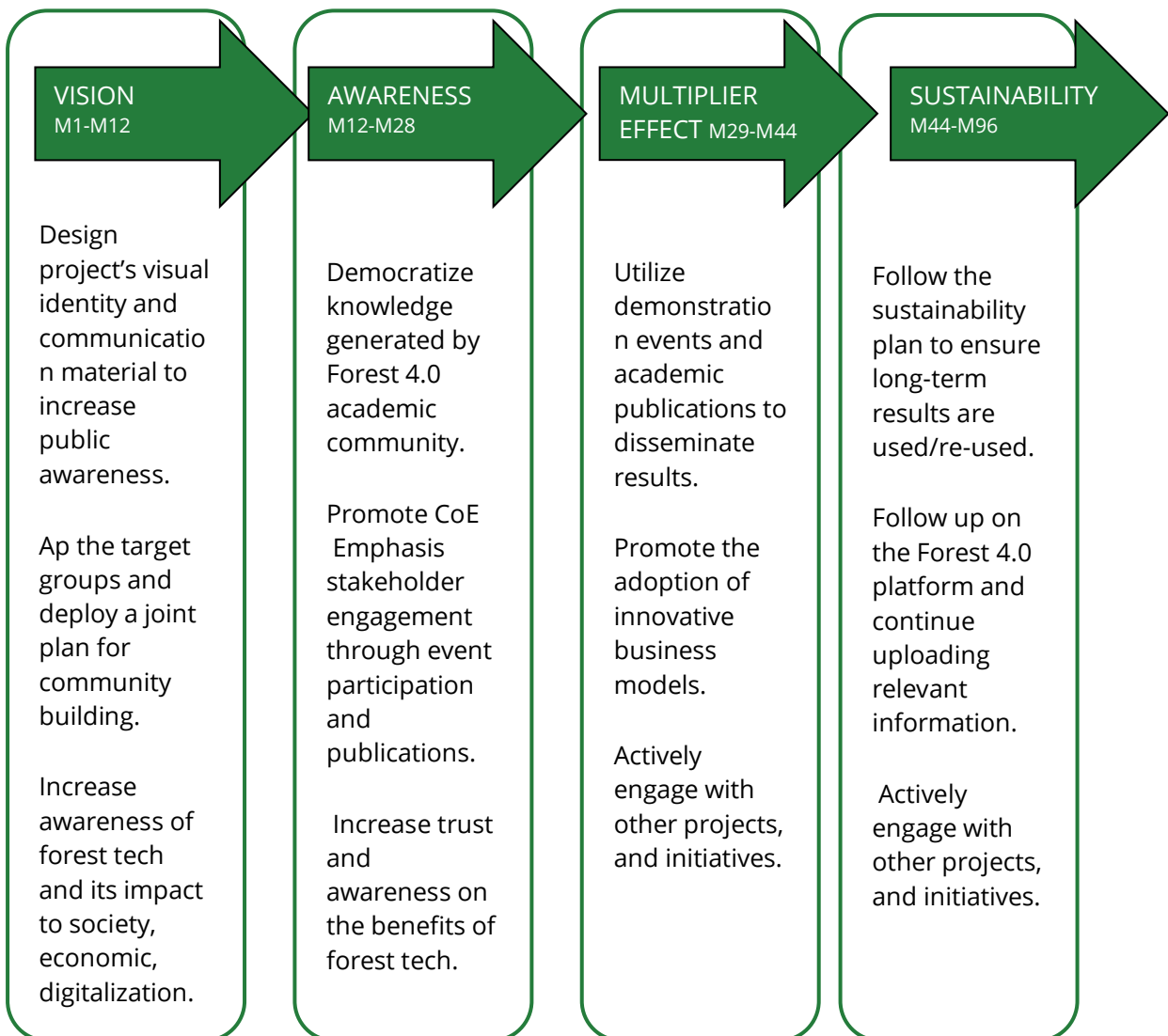


Figure 1 Forest 4.0 Dissemination, communication, and exploitation steps

### 3.1.1.1. Vision (M1-M12)

The first year of the project will **establish the foundation** for all subsequent communication, dissemination, and exploitation of results. The project's visual identity, templates and communication material will be established, and the current DEC plan will act as a guide for partners and a commitment for WP6. This phase will also include promoting forest tech in general public, planning event participation, compiling and evaluation potential synergies and setting the standards and practices for partner reporting on dissemination and communication activities.

### 3.1.1.2. Awareness (M13-M28)

The second phase will involve **more intensive communication** about the project and disseminating the results generated by academic society, use cases and the forest tech market landscape. **Stakeholder engagement** and synergy building is the central focus as increased awareness early will enable more effective exploitation of results later.

### 3.1.1.3. Multiplier effect (M29-M44)

The final phase during the project's duration will focus on **results dissemination and exploitation**, using demonstration events, the CoE showcase as well as creating viable, actionable exploitation scenarios and IPR strategies.

### 3.1.1.4. Sustainability (M44-M96)

An additional phase that extends for 2 years beyond the project's duration will focus on **long term exploitation** through the execution of the **sustainability plan**. Content will continue to be uploaded on to the platform as well as social media and the website. By further expanding the ecosystem, utilizing synergies established during the project and maintaining communication channels, opportunities for use/reuse of results will be extended and positive progress for the forest tech landscape will be made.

## 3.2. Reporting and Key Performance Indicators

The DEC plan deliverable will be reported in the Portal Continuous Reporting tool and in accordance with the timing and conditions set out by the granting authority. The current version is the initial plan due M3, with updates presenting the results of implementation in M24 and M46.

Google Forms will be distributed to partners **monthly** to report on event participation and communication activities (and will help maintain **accountability** and engagement with the dissemination and communication process. The results will be compiled using online reporting tools and serve to monitor targets and inform DEC strategies as the project progresses.

### 3.2.1. Key Performance Indicators

**Key performance indicators** (KPIs) include numbers of activities, tools, and channels as well as numbers of audience members to be reached. KPIs are critical for achieving project objectives because they are **measurable and monitorable targets** for evaluating progress and taking corrective actions when necessary. This section outlines the target audience KPIs, the specific targets each partner has committed to and the breakdown of KPIs for each year of the project.

The expected KPIs that will be achieved each year are presented in Table 8. Changes to this initial plan will be included in subsequent updates with a justification for their necessity.

**Table 7 Dissemination and communication KPIs**

Measurements	Target	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Video for recruitment purposes (about 2 min)	1		1				
Videos about the CoE’s scientific and institutional achievements as part of the annual reports (about 3 min)	6	1	1	1	1	1	1
Production of one video about the impact of the Teaming programme on Forest 4.0	1					1	
Video about the cluster to stimulate membership	1				1		
Production of a series of short videos about each type of service for commercialisation purposes	12		1	2	3	3	3
Brochure about services and technology transfer	1		1				
Production of one video about the incubator to stimulate membership	1			1			
Production of one short video to improve citizens’ trust in science address their questions	1					1	
Project news on the project website and shared in social media	72	6	10	12	14	15	15

Press releases	3	1			1		1
Scientific publications	20		2	3	5	6	4
Open data sets	60 GB		8 GB	12 GB	14 GB	14 GB	12 GB
Presentations in international conferences	30	1	4	6	7	7	5
Conferences	4			1	1	1	1
Online seminars	10		2	2	2	2	2
Summer schools for early-stage researchers	5		1	1	1	1	1
Cluster brokerage/networking events	6		1	1	1	1	1
Participation in existing business events	12	1	2	2	2	2	1
Dedicated website section to technologies to transfer (licencing or sale)	1				1		
Policy white papers	6		1	1	1	1	1
Citizen events and participation in external citizen science events (Science Festivals, the European Researchers' Night, or the Science is Wonderful! Initiative).	6		1	1	1	1	1
Website	1						

Dissemination and Communication (D&C) Committee formally approves the annual communication plan, which includes diligently outlined Key Performance Indicators (KPIs) distribution among project partners. This assignment of KPIs to individual partners will be subject to ongoing examination and oversight during planned D&C committee sessions, a strategic measure meant to limit risks and ensure that all project objectives are achieved. If consortium members reach an agreement, the redistribution of KPIs across partners might have set up due to shifting circumstances. The D&C Committee must approve the new KPI distribution.

#### 4. Dissemination activities

##### 4.1 Dissemination plan

###### **Results to be disseminated**

The provisional and non-exhaustive list of project results to be disseminated is the following: Scientific knowledge acquired by our researchers; Data sets produced at the CoE; Technologies or intellectual property developed by the project; Information about the project, the consortium, the results, the cluster, and the general topic of forestry.

**Dissemination methods and tools and key performance indicators**

*In the following table, we review for each target audience the dissemination method or tool*

**Table 8 Dissemination methods, tools**

Target audience	Dissemination method/tool
<p>Researchers and students</p>	<p><b>Open access peer reviewed scientific publications / preprints / open data sets</b> through each partner's repository of choice.</p>
	<p>Scientists from the consortium partners will present their results <b>at international conferences.</b></p>
	<p><b>Organisation of conferences</b> (with invited guest speakers)</p>
	<p><b>Short (a few hours) online seminars</b> with internationally renowned guests. This will include <b>seminars by younger researchers.</b></p>
	<p><b>Summer schools for early-stage researchers</b></p>
<p>Businesses and investors</p>	<p><b>Organisation of cluster brokerage/networking events</b> for the cluster, open to non-members, to discuss technologies, business opportunities, policies, and to allow members to meet.</p>
	<p><b>Participation in existing business events</b></p>
	<p><b>Technologies to transfer (licencing or sale)</b> provided in a public, regularly updated data base</p>
<p>Policy makers</p>	<p><b>Invitation to the cluster events</b></p>
	<p>Sharing of <b>policy white papers</b> with Lithuanian policy makers</p>
<p>Citizens</p>	<p>Organisation of <b>citizen events</b> to present the technologies and their impact to the society</p>
	<p><b>Participation in external citizen science events</b> (Science Festivals, the European Researchers' Night, or the Science is Wonderful! Initiative).</p>
<p>All</p>	<p><b>Project website</b> used to disseminate information and documents</p>

#### 4.1.1. Dissemination management

A dissemination and communication committee will be created for the kick-off meeting of the project. Each partner will nominate one person to this committee. It will be chaired by a representative from the coordinator VMU. The committee will first prepare the dissemination and communication plan, then ensure each partner implement it accordingly. The performance will be monitored by tracking the KPIs provided above, and the report will be established for the progress reports to be provided to the European Commission. The committee will be the decision maker for any change of strategy required; in that case, it will update the dissemination and communication plan.

A **dissemination log** will be maintained, in which each partner will report any of the dissemination activities it performs. This will allow for easy collection of dissemination data for periodic reporting. It will also allow to inform other partners of dissemination plan and provide 45 days for the partners to check with their confidentiality or intellectual property plans if the item can effectively be disseminated.

#### **Timing of the dissemination activities**

The dissemination and communication plan will be produced by month 4. The dissemination actions will be performed during the whole lifetime of the project and five years beyond its completion. Monitoring of the dissemination actions will be performed in real time, while reporting will be done for each periodic report to the European Commission.

## 5. Communication tools and media kit

### 5.1. Communication plan

This scheme provides a comprehensive overview of the tools and channels used in our professional endeavours and their respective purposes. It serves as a reference guide to understand their significance and application in our work.



Figure 2 Forest 4.0 Communication plan tools and channels

<p><b>Visual identity</b></p> <p>The Forest 4.0 <b>visual identity</b> will be created consisting of a logo and graphic design charter, and the related unified document templates. Each production in the project will make an acknowledgement to the EU funding and indication that the content reflects only the author's view and not that of the Commission.</p>
<p><b>Online communication</b></p> <p>The <b>project website</b> will include a summary of the project, its objectives, its work packages, its consortium. The website will be published in English, Lithuanian, and Swedish. The website will also propose all the documents to disseminate for download and will be regularly updated with project news that will also be published on social media.</p> <p>The performances of the website (unique visitors, pages read, bounce rate etc.) will be tracked using a GDPR-compliant platform such as Matomo, an alternative to Google Analytics.</p> <p>We will use <b>social media</b> such as Twitter, Facebook, and YouTube to communicate the project's scientific results, activities, and progress and to enable networking with different target groups. <b>Twitter</b> will be used to share recent news, event announcements or small comments with a short lifetime. <b>LinkedIn</b> will be used to share website articles and to engage in conversations with professionals. <b>YouTube</b> will be used to share videos produced about the project and the CoE. <b>Facebook</b> will be used for conversations with groups, especially citizens, and to promote events, in a highly</p>

accessible way. We will post content at important moments for the Forest 4.0 project (breakthroughs or milestones, events, when a press release is available etc.). To increase our reach, we will follow the **Horizon Europe accounts** (Facebook: @EUScienceInnov, @horizon.magazine.eu; Twitter: @HorizonEU; @EUScienceInnov; @REA\_research), EU-Life on LinkedIn, and other accounts active in social media in biological sciences. We will ensure that we do not publish sensitive information on social media.

The performance of the social media communication (number of “likes”, number of “reshares”, number of followers) will be tracked using the tools provided by each social media platform.

The preliminary target KPI for online communication at least 500 followers on each social media platform and engagement rate (ER) 1.5 %.

**Videos**

We will rely heavily on videos for our communication to diverse audiences since they are now a widely used communication channel. All our videos will be short (maximum 3 minutes). They will be shared on dedicated social media (YouTube, LinkedIn, Facebook, Instagram etc.) and hosted on our project website.

The preliminary target KPI for videos in total 1 000 000 views.

**Offline communication**

We will print project leaflets, brochures about the CoE, and posters to be used in all the events we will attend (see dissemination plan).

We will also engage our audiences in various outreach activities: Science is wonderful! annual event to target school pupils and teachers; Researchers’ night to target general audiences; local science fairs.

The preliminary target KPI for offline communication – at least 3000 participants in the events.

**Press releases, press conferences and media relationships**

Press releases will be issued at each of the key points of the project (project start, key milestones, and end). They will be distributed through recognised platforms such as EINPRESSWIRE, e-releases or 24-7 press releases.

5.1.1. Communication lines

To ensure purposeful and consistent communication there are planned two main communication lines, which complement each other and help to achieve the project's goal: corporate information and educational channels.

The success of Project Forest 4.0 hinges upon the seamless flow of information between stakeholders, collaborators, and the wider community. By establishing robust corporate communication lines, we aim to create a well-connected network that enables efficient

coordination, transparent decision-making, and informed actions. This line will serve as a conduit for relaying updates, progress reports, and strategic plans among project leaders, departments, and affiliated organizations, fostering a unified approach towards our shared objectives.

In parallel, education holds the key to raising awareness and inspiring positive change in how we perceive and protect our forests. The educational communication line is dedicated to engaging with the public, schools, and educational institutions, empowering them with accurate and relevant knowledge about forest conservation, sustainable practices, and the significance of Project Forest 4.0. Through this channel, we hope to ignite a passion for environmental stewardship, encouraging active participation in safeguarding our natural heritage.

The synergy between corporate information and educational communication lines forms the backbone of our commitment to purposeful and consistent communication. By establishing these channels, we seek to create a well-informed and motivated community, capable of making well-considered decisions and contributing to the long-term success of Project Forest 4.0.

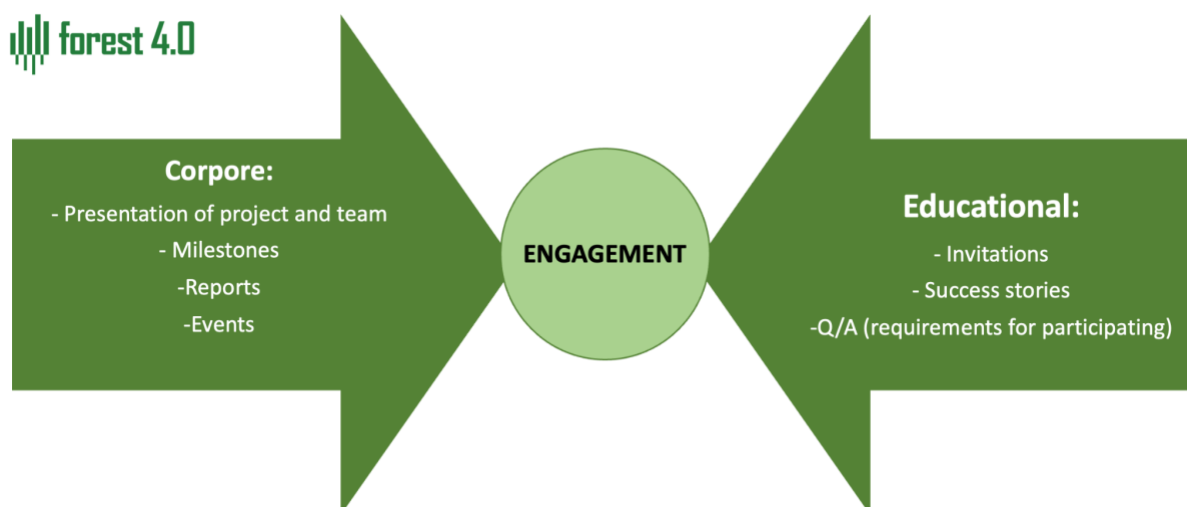
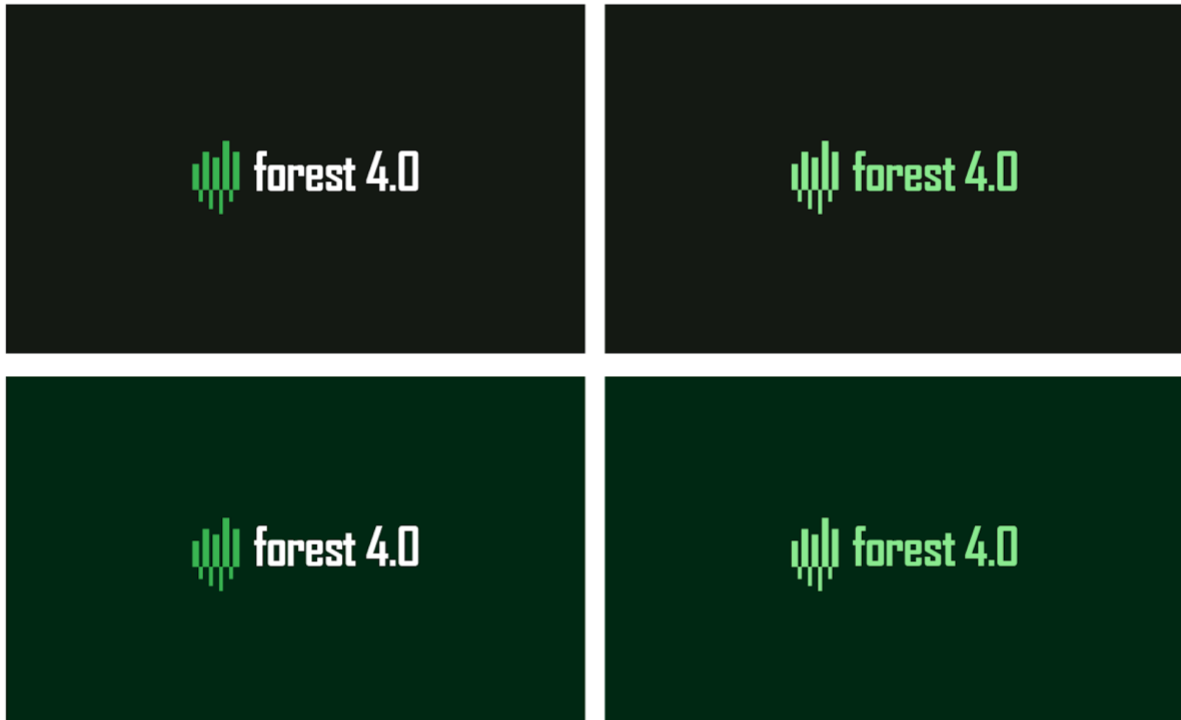


Figure 3 Forest 4.0 Communication lines

## 5.2 Visual identity

The logo of the FOREST 4.0 aims to communicate its brand identity and purpose — research excellence, innovation services, and reputation in forestry management. The logo icon represents both the research data chart and growing trees. The elegant balance between vibrant green and classic colours is eye-catching and depicts nature. The

modern digital font adds a sophisticated touch to it. Overall, the harmonious interaction of all graphic elements also creates a unique and recognizable brand's visual identity.



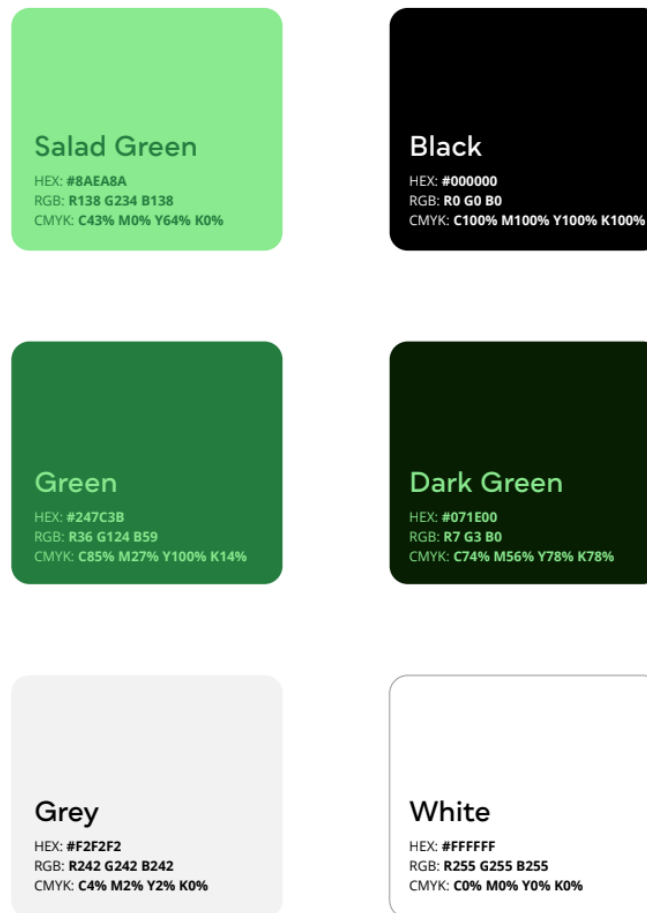
**Safe zone**

This zone should be empty when using them on various backgrounds.



**Colour**

Primary colours are Salad Green and Green. They should be used throughout the projects branding materials. Colours must be flat, the use of gradient colours is not authorised.



### Fonts

1. The main font of graphic design elements is Qualion Demi Bold.
2. The font used for texts (information and descriptions) is Open Sans.
3. Georgia Regular is used as a substitute text font (alternative) in case Serif font is required.
4. To effectively define Forest 4.0 brand experience, typography must be
5. aligned across every touchpoint, from partner to employee.

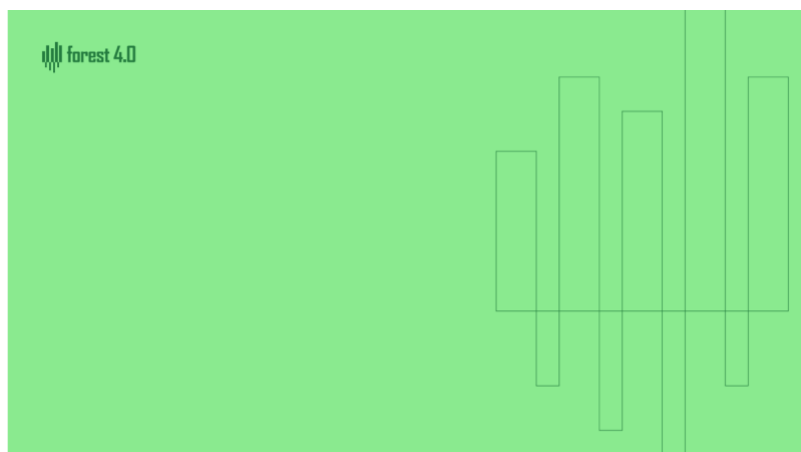
### Posters

Here are some examples of posters that can be used for marketing and communications and feature the key brand design components: brand colours, typography, image style, the mark and lettering.



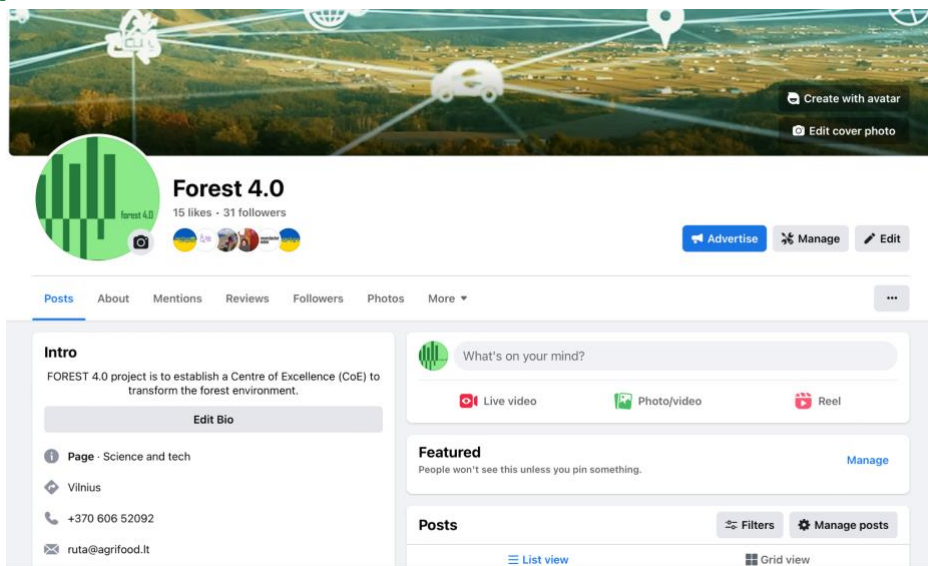
## Backgrounds

Background will be used for video calls. We recommend using light background with a content placed on one side corner so that the person

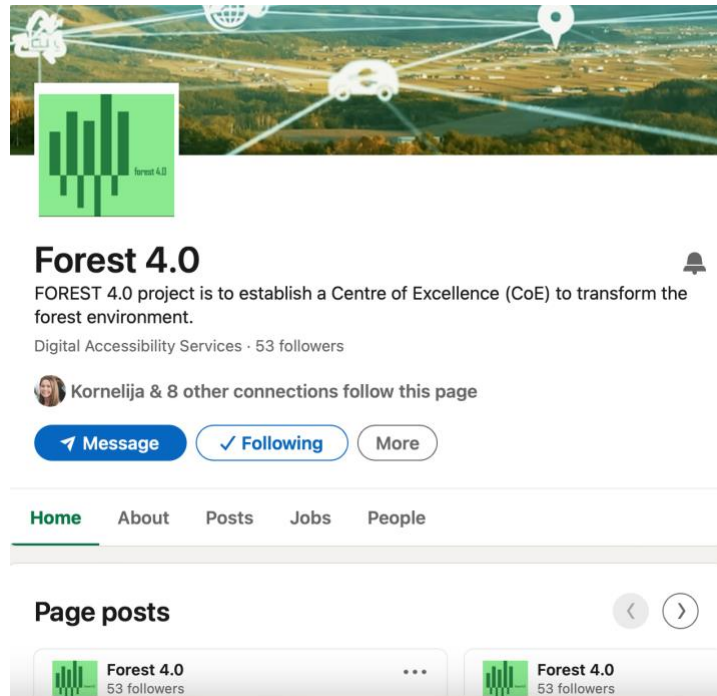




Facebook



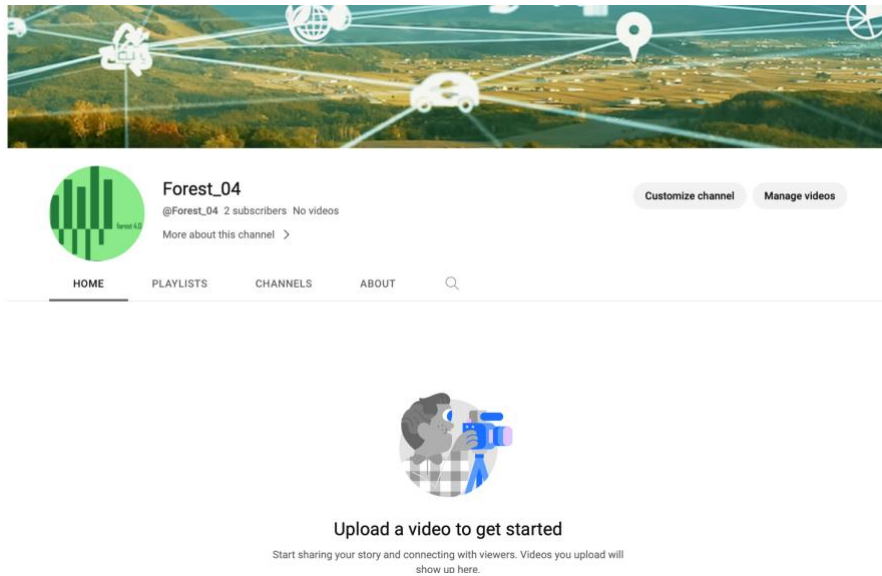
LinkedIn



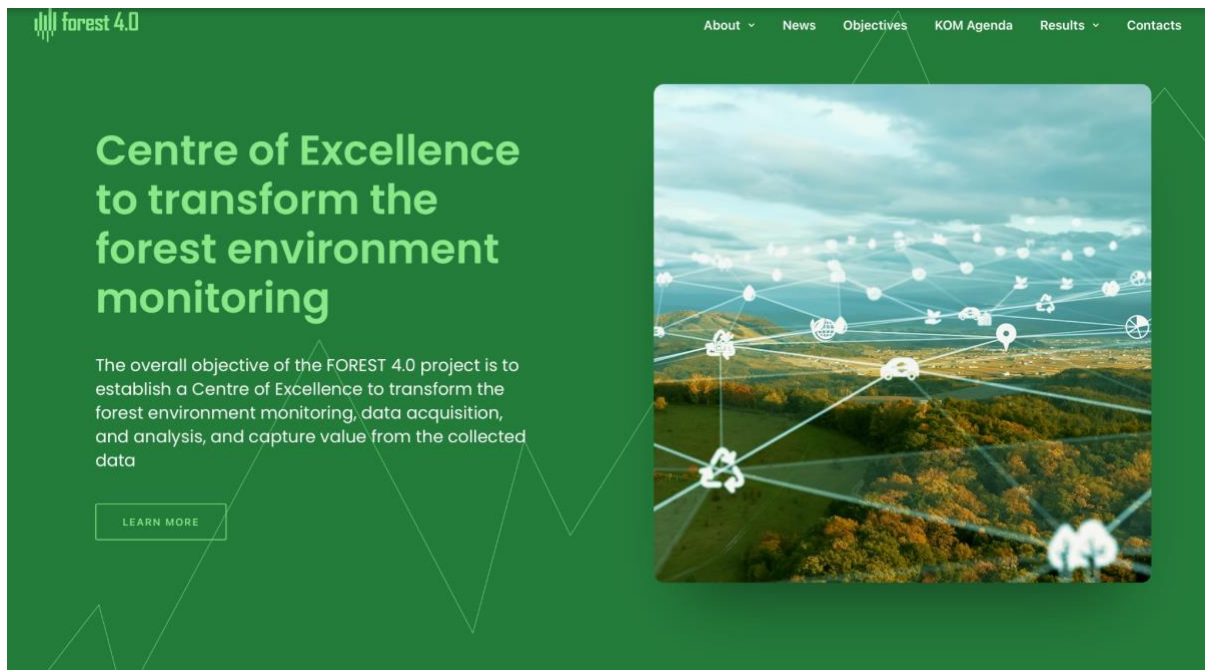
Twitter



## YouTube



## Website



## Table options

Table option 1

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Table option 2

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Table option 3

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Table option 3

Heading			
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Text	Table text		

**Text Colour Palette**  
Salad Green #8AEA8A

Green #247C3B

Dark Green #071E00

Black #000000

Grey #F2F2F2

## 6. Exploitation plan

### Results to be exploited

We will exploit: our services including training; the technologies we will develop and the related intellectual property; the start-ups we will invest seed funding in.

### Exploitation strategy

We will exploit our project results through 4 main approaches: provision of services, especially access to our infrastructure and equipment; transfer of technologies (patent sales or licensing); training; support and investment in start-ups through our incubator. Our main clients will be businesses, especially those members of our cluster.

### Business model

We will commercialise: our services and training through fixed fees; our patents through sales or licensing; start-up access to our incubator through monthly fixed fees; investment of seed funding in start-ups and return on investment through acquisition of some capital in the start-ups.

### Pricing strategy

For our services and training, we apply fixed fees calculated: 1) on the estimated time to spend and therefore the operating (especially use of consumables) and employment costs + 2) the fixed costs +3) a margin. For the patent sales and licensing, we apply a per case negotiation between the potential buyer/licensee and us, considering the potential revenues that may arise from the exploitation of the technology by third parties, the competition, and the supply and demand. For the start-up access to our incubator, we will apply low fees with no margin to help the start-ups. For the seed investment in start-up, we will invest between 20,000 and 200,000 (this is based on benchmarking with similar incubators in Lithuania) and will take an equity of between 5 to 20% of capital. The return of investment will vary between start-ups and will also depend on the time the equity is sold.

### Competition

Our main competitors in the EU will be: **The Forest Science and Technology Centre of Catalunya (CTFC, Spain)**: well-established, this centre focuses more on methods for forest resources management and does not include digital technologies like our Forest 4.0 CoE will do. **The Centre of Excellence of Forest-based Industry (Ligno Silva, Slovenia)**: this young centre (established in 2020) is more focused on transforming the wood industry by providing research on biomass management, adaptation to climate

change, energy utilisation of biomass. It also focuses on decision support systems, which position it more as a competitor to our CoE. **Bio-economic-cluster Ltd, formerly known as Forest Cluster Ltd (Finland):** can be considered as a competitor as it functions as a cluster of partners in Finland that work together on defining the next innovations for the forestry sector. It is not focusing only on digital solutions though and does not rely on its own R&D resources. Needless to say, that beyond being competitors, these centres of excellence can also become partners to Forest 4.0.

## 7. IPR strategy

Intellectual Property Rights (IPR) are the ownership rights for creations of the mind, such as inventions, names, images, or designs and can enable owners to obtain financial benefit from their ideas. Striking the right balance between creator and public interests can foster creativity and innovation.

Forest 4.0 will examine the protection of any results that could potentially be commercially or industrially exploited, and if possible, reasonable, and justified, protect them.

The standard forms of IPR protection include:

- **Patent:** an exclusive right granted for an invention. It allows the owner to decide how and whether the invention can be used by others
- **Trademark:** a sign that distinguishes goods and services of one enterprise from those of another
- **Industrial design:** includes the aesthetic aspect of an object. 2D features can include patterns, lines and colours, whereas 3D features extend to shape and surface
- **Copyright:** is the legal term to describe the rights over literary and artistic work but can also extend to databases, advertisement, maps and technical drawings
- **Trade-secret:** commercially valuable confidential information which may be sold or licensed. This can include technical or nontechnical data, formulas, patterns, methods, lists of customers
- **Confidentiality:** information that is not publicly known and warrants protection
- **Geographical indication:** indicate the specific geographical location of origin or a product and its characteristics that are uniquely attributed to that area.

The choice of the most suitable form will be based upon the specifications of the activity and its results.

More detail will be provided on Deliverable D5.4 – IPR management plan by VMU (M48).

## Conclusions

This document is the initial plan for the dissemination and exploitation, including communication activities for the Forest 4.0 project and its results.

First chapter “Introduction” overviews excellence, objectives, coordination and support measures and methodology and consortium.

In the second chapter “Target groups” target audiences are described. Four target groups have been defined: academic community, private sector, citizens, and the general public. This chapter presents the members of each group and why their engagement is important, as well as key messages and specific activities, tools channels direct towards them.

Third chapter is for Dissemination, communication, and exploitation strategy. The DEC is organised into four distinct phases to set clear goals and objectives for the duration of the project. This chapter describes the work to be accomplished in each phase and the reporting and KPIs used to measure progress and maintain accountability.

Results to be disseminated will be named in forth chapter “Dissemination activities”. The provisional and non-exhaustive list of project results to be disseminated is expected to be the following: Scientific knowledge acquired by our researchers; Data sets produced at the CoE; Technologies or intellectual property developed by the project; Information about the project, the consortium, the results, the cluster, and the general topic of forestry. Chapter reviews dissemination methods and tools and key performance indicators for each target audience.

Communication tools and media kit are represented in the fifth chapter. This chapter provides a comprehensive overview of the tools and channels used in our professional endeavours and their respective purposes. It serves as a reference guide to understand their significance and application in our work.

The sixth chapter “Exploitation plan” overviews exploitation pathways and key exploitable results.

The seventh chapter “IPR strategy” describes the standard forms of IPR protection.



Annexes

Forest\_4.0\_Template

D6.1: Dissemination and communication plan



Document title

**Title text 1**

**Title text 2**

Paragraph text

Body Text



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Forest\_4.0\_Meeting minutes



## Meeting agenda

Time	Session	Leading Partners
10:00 - 10:10	<b>Intro</b> Agenda, process, rules	Partner
10:10 - 10:20	<b>Title</b> Subtitle	All partners
10:20 - 10:25	<b>Title</b> Subtitle	Partner
10:25 - 10:45	<b>Title</b> Subtitle	All partners
10:45 - 10:50	<b>Buffer to discuss</b>	All partners
10:50 - 11:00	<b>Closing round</b> Subtitle	All partners
<b>Next meeting: Every xxx of the month → Month DD, 2022</b>		

## Progress per Task

Tx.1 Title (partner)

Current status:

- 

Next Steps:

- 

Difficulties/ blocking issues:

- 

What we need from the other WPs/partners

- 

Upcoming Deliverable(s):

## Appendix

Paragraph 1 Text text text

 forest 4.0

[Title]

**WPx: [Work Package Title]**

Responsible Author: [Author Name and Surname (Partner)]



**Funded by  
the European Union**

Grant agreement N° 101059985



## Document History

Version	Changes	Date	Contributor
01	<b>Description of changes</b> 01	DD/MM/YYYY	Contributors' Name and Surname (Partner)

Participants	Contact

## Title text 1

### Title text 2

Paragraph text

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## 1. Introduction

Paragraph 1 Text text text

Paragraph 2 Text text text

Paragraph 3 Text text text

## 1. [Chapter Title]

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### 2.1 [Subtitle 1]

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#### 2.1.1 [Subtitle 2]

Paragraph 2 Text text text

Paragraph 3 Text text text

#### 2.1.2 [Subtitle 2]

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Paragraph 3 Text text text

**Visual example**



Figure 1 [Caption]

## Table options

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## Text Colour Palette

**Salad Green #8AEA8A**

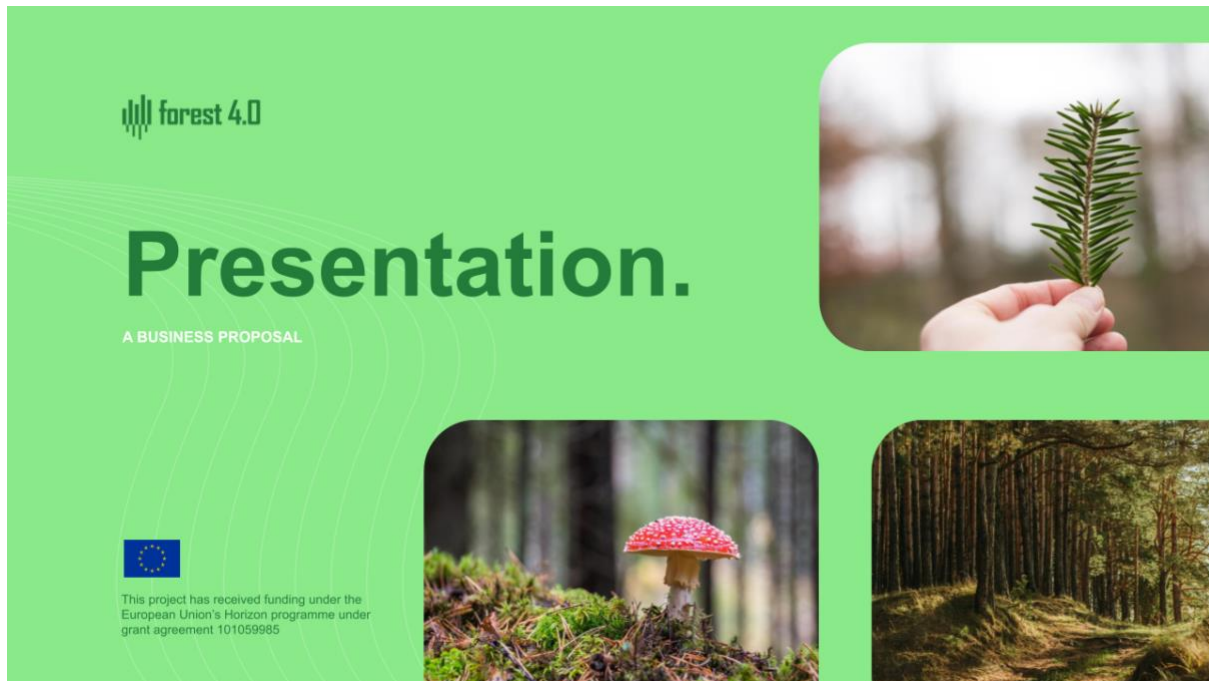


Document title

**Green #247C3B****Dark Green #071E00****Black #000000****Grey #F2F2F2**

## References

[ReferenceTitle] [Link]



## First Title.

How to solve a complex problem?

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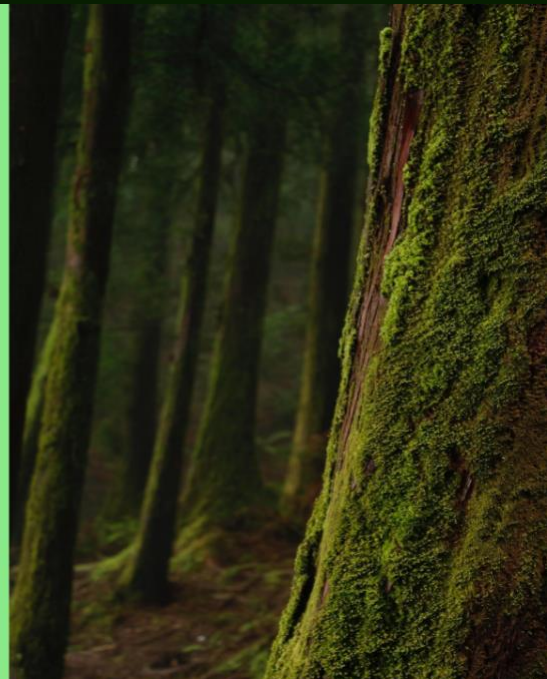
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## Centre of Excellence to transform the forest environment monitoring

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## Centre of Excellence to transform the forest environment monitoring

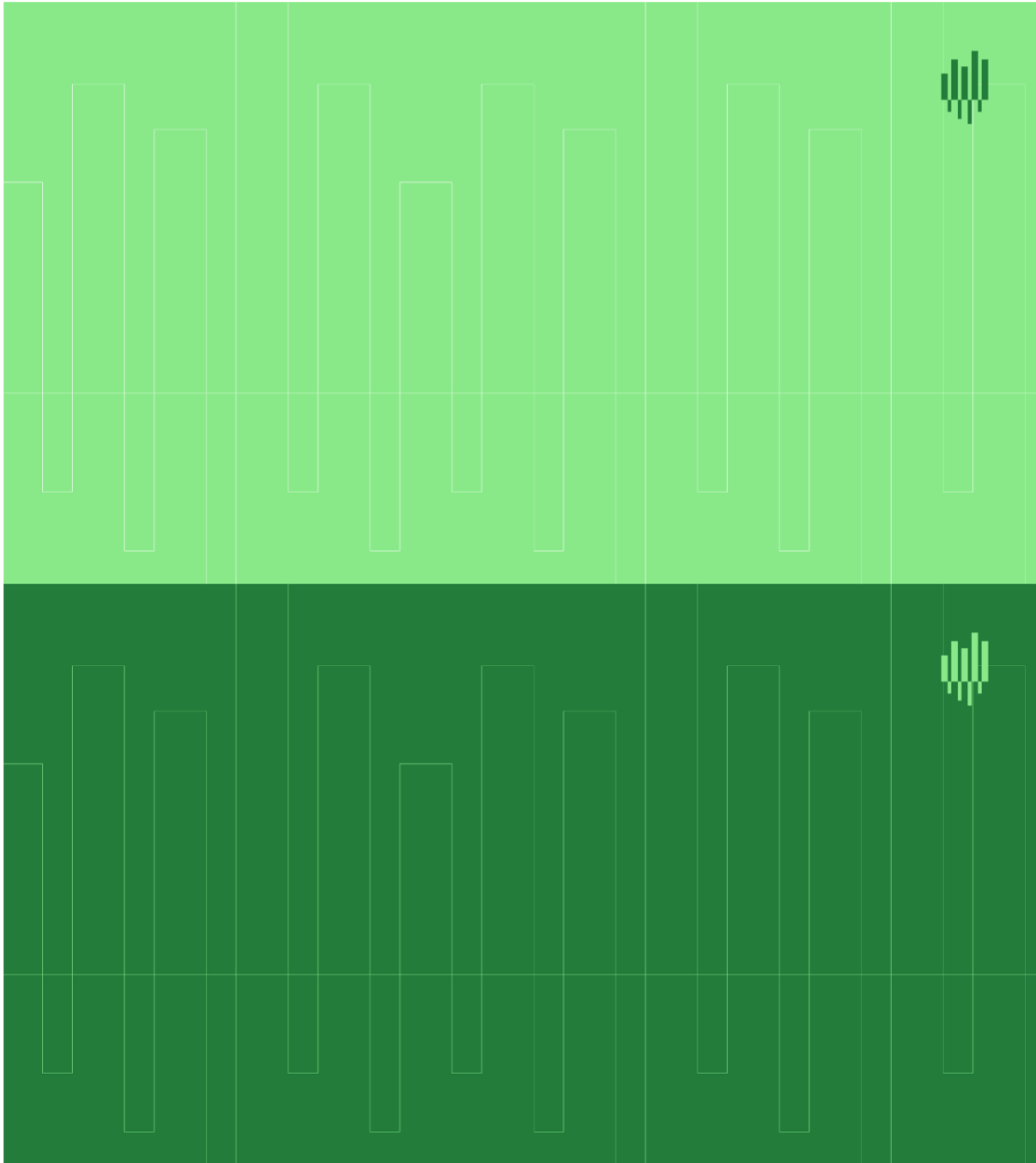
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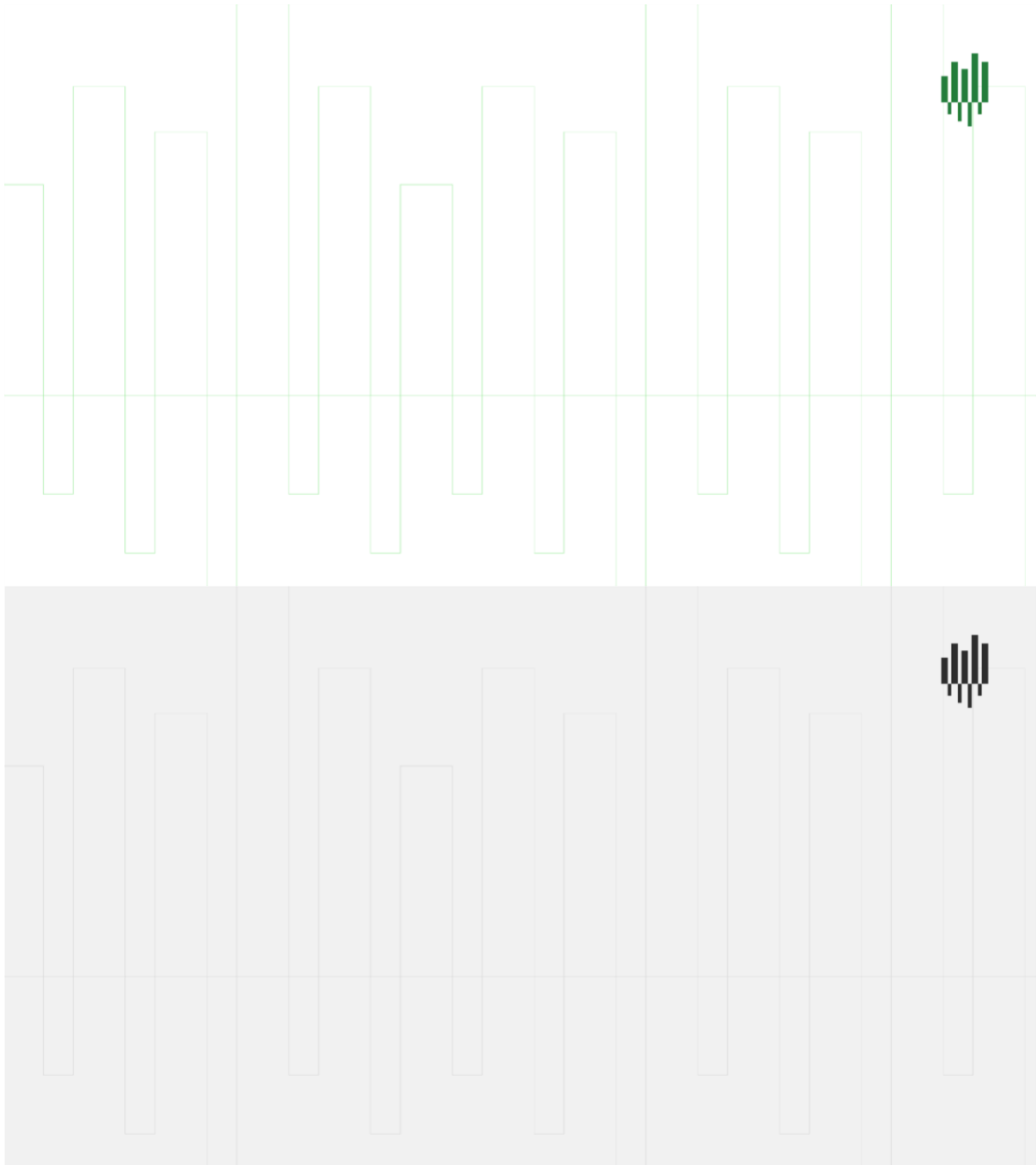


## Centre of Excellence to transform the forest environment monitoring

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# First Title.

How to solve a complex problem?

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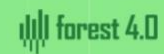
FOR WATCHING THIS PRESENTATION

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This project has received funding under the European Union's Horizon programme under grant agreement 101059985



Project Coordinator



Project Partners



Linnæus University



art21

AgriFood<sup>DM</sup>  
Lithuania