



Interreg Alpine Space Programme 21-27

Carbon neutral and resource sensitive Alpine region

SO 2.2: Promoting the transition to a circular and resource efficient economy

**Forest EcoValue:**

**Supporting multiple forest ecosystem services through new circular/green/bio markets and value chains**

Project ID: ASP0100005



# COLLECTION OF BEST PRACTICES FOR FOREST ECOSYSTEM SERVICES

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## Introduction

This collection provides accessible information on best practices that can be presented to forest owners. The term "best practices" encompasses a wide range of actions, including policies, economic instruments, procedures, and behaviours deemed effective and suitable for achieving specific goals or standards in forest ecosystem management.

This collection focuses on a curated selection of case studies illustrating markets for Forest Ecosystem Services (FES) and Payments for Ecosystem Services (PES). The examples are drawn primarily from various contexts within the European Union, with additional references to relevant practices outside the EU. These case studies aim to highlight successful instances of FES markets and PES mechanisms and document good practices observed within these frameworks.

The information gathered serves a dual purpose: to showcase exemplary cases of best practices in FES and PES, and to identify and analyze the enabling conditions and critical success factors that support their effective application across diverse settings. The findings will provide actionable insights into strategies for ecosystem service management and payment systems, contributing to developing and implementing these models in diverse environmental contexts.

This collection will also be subject to further refinement and integration to ensure its relevance and applicability for stakeholders, focusing on advancing sustainable practices in forest management.

## 1. Donation based/crowdfunding: Huella del Futuro (Costa Rica)

FACTS IN SHORT			
<p>The Donation-Based/Crowdfunding model enables projects to be fully financed through voluntary contributions, typically facilitated via the Internet. To attract supporters, it is crucial to conduct awareness-raising campaigns that detail the project’s objectives and environmental benefits. The involvement of a regulatory authority is essential for managing funds and overseeing practical forestry activities. This Business Model Archetype (BMA) is highly adaptable and can be applied to the conservation of various regulating or supporting ecosystem services (FES), depending on the specific forestry or conservation project. For example, reforestation efforts following extreme weather events can be effectively funded through this BMA.</p>			
<b>Key words</b>	Crowdfunding, reforestation		
DESCRIPTION, GOALS & FUNDING			
<b>Detailed description of Good Practice</b>	<p>An example of the donation model is the project “<a href="#">Huella del Futuro</a>” (Footprints for our Future), a reforestation campaign launched in 2020 in Costa Rica and funded through crowdfunding. The campaign successfully raised over \$1.8 million USD in donations, facilitating the planting of more than 250,000 trees in northern Costa Rica, a region significantly impacted by climate change.</p>		
<b>Goals of the Good practice</b>	<ul style="list-style-type: none"> <li>• Restore forest ecosystems in Costa Rica, with an emphasis on biodiversity conservation and carbon sequestration.</li> <li>• Enhance community well-being by creating green jobs.</li> <li>• Support Costa Rica’s objective of achieving 60% forest cover by 2030</li> </ul>		
<b>Financing / Funding description</b>	<ul style="list-style-type: none"> <li>• Funded through crowdfunding, raising over \$1.8 million</li> <li>• Supported by international platforms</li> </ul>		
TOPIC, ECOSYSTEM SERVICE & TYPE OF SOLUTION			
<b>Key topic</b>	ESS and natural capital-based economy		
<b>Forest Ecosystem Service mainly affected</b>	<b>Provisioning Services</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Raw material provision</li> <li><input type="checkbox"/> Food provision</li> <li><input type="checkbox"/> Other</li> </ul>	<b>Regulating Services</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Air quality</li> <li><input type="checkbox"/> Groundwater quality</li> <li><input type="checkbox"/> Surface Water quality</li> <li><input type="checkbox"/> Natural hazard</li> <li><input checked="" type="checkbox"/> Biodiversity habitat</li> <li><input checked="" type="checkbox"/> CO<sub>2</sub> storage and sequestration</li> <li><input type="checkbox"/> Other</li> </ul>	<b>Cultural Services</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Recreation</li> <li><input type="checkbox"/> Health maintenance</li> <li><input type="checkbox"/> Spirituality</li> <li><input type="checkbox"/> Contemplation</li> <li><input type="checkbox"/> Inspiration for Art</li> <li><input type="checkbox"/> Other</li> </ul>
<b>Economic sector (NACE category)</b>	Agriculture, forestry and fishing		
<b>Type of solution</b>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Business model</li> <li><input type="checkbox"/> Technical solution</li> <li><input type="checkbox"/> Organisational solution</li> </ul>		

	<input checked="" type="checkbox"/> Management solution (farming, regional development) <input type="checkbox"/> Labeling solution (e.g. certificates) <input type="checkbox"/> Motivating solution (e.g. awards) <input type="checkbox"/> Other (please describe it here):	
<b>TARGET GROUPS, POLICY &amp; GOVERNANCE</b>		
<b>Target groups</b>	<input type="checkbox"/> National public authority (TG 1 and 2) <input checked="" type="checkbox"/> Regional public authority (TG 3 and 4) <input checked="" type="checkbox"/> Local public authority (TG 5) <input type="checkbox"/> Enterprise, except SME (TG 6 and 7) <input type="checkbox"/> SMEs (TG 8 and 9) <input type="checkbox"/> Business support organization (TG 10) <input type="checkbox"/> Sectoral agency (TG 11)	<input type="checkbox"/> Interest groups including NGOs (TG 12-14) <input checked="" type="checkbox"/> General public (TG 13) <input type="checkbox"/> Financial/banking players (TG15) <input checked="" type="checkbox"/> Public and private forest owners (TG16) <input type="checkbox"/> Higher education and research organisations (TG 17) <input type="checkbox"/> International organisation, EEIG (TG 18 – 19)
<b>Policy fields mainly affected</b>	<input checked="" type="checkbox"/> Forestry <input type="checkbox"/> Timber production <input checked="" type="checkbox"/> Nature Conservation <input checked="" type="checkbox"/> Bio-economy <input type="checkbox"/> Energy	<input checked="" type="checkbox"/> Climate protection / -mitigation <input type="checkbox"/> Water management <input type="checkbox"/> Tourism <input type="checkbox"/> Other
<b>Governance actions</b>	Public policy and strategies	
<b>BENEFITS, TRANSFERABILITY &amp; SCALABILITY</b>		
<b>Economic and/or social benefits</b>	<b>Ecological benefits</b> <ul style="list-style-type: none"> <li>Planting over 250,000 trees to mitigate the effects of climate change.</li> <li>Benefits include carbon sequestration, soil protection, biodiversity restoration, and the creation of habitats for pollinators and birds.</li> </ul>	<b>Economic and Social benefits</b> <ul style="list-style-type: none"> <li>Empowerment of local communities and women-led organizations.</li> <li>Creation of long-term jobs and improvement of living conditions.</li> <li>Strengthening of community connections to nature</li> </ul>
<b>Scalability</b>	<ul style="list-style-type: none"> <li>Expanding to Costa Rica's Greater Metropolitan Area to establish urban forests.</li> <li>Potential for replication in other regions using a similar model.</li> </ul>	
<b>SUCCESS FACTORS AND BARRIERS</b>		
<b>Success factors</b>	<ul style="list-style-type: none"> <li>Collaboration with six partners and several organizations.</li> <li>Commitment to a five-year tree maintenance plan.</li> <li>Innovative use of geospatial tools for monitoring and transparency</li> </ul>	
<b>Obstacles</b>	<ul style="list-style-type: none"> <li>Requires sustained local engagement and resources for long-term tree care</li> </ul>	

## 2. Subscription-based model: Forest for Dinner (Canada)

FACTS IN SHORT			
<p>A subscription model offers periodic access to a product or service, allowing customers to regularly receive or use these offerings. This model can be applied to both provisioning and cultural services. For example, customers can subscribe to monthly or yearly plans to receive forest edible products (e.g., fruits or mushrooms) or materials (e.g., resin, sawdust, timber) with free delivery. Additionally, a subscription model can provide access to forests for activities such as direct harvesting, mushroom picking, or sports. However, implementing this model requires a regulatory framework to establish limitations on public forest access.</p>			
<b>Key words</b>	Subscription mode, sustainable foraging, biodiversity conservation		
DESCRIPTION, GOALS & FUNDING			
<b>Detailed description of Good Practice</b>	<p>A real-world example of a subscription model is Forest for Dinner, a Canadian initiative on Vancouver Island that bridges the gap between sustainable foraging and consumer education. It offers subscription services for wild food products, including dried mushrooms, botanical ingredients, and curated food boxes. Additionally, it organizes guided foraging tours, teaching participants sustainable harvesting techniques and fostering a deeper connection with nature. This project promotes biodiversity conservation while delivering high-quality wild food experiences to customers.</p> <p>More info: <a href="https://forestfordinner.ca/?srsltid=AfmBOor7L9JyI4D-QeU6_rXR9PWxyTQMgNofgOhUTK3g7LYUsCq1Esec">https://forestfordinner.ca/?srsltid=AfmBOor7L9JyI4D-QeU6_rXR9PWxyTQMgNofgOhUTK3g7LYUsCq1Esec</a></p>		
<b>Goals of the Good Practice</b>	<ul style="list-style-type: none"> <li>• Promote sustainable foraging and wild food consumption.</li> <li>• Educate individuals about ecosystem-friendly harvesting.</li> <li>• Encourage appreciation and preservation of forest biodiversity.</li> </ul>		
<b>Financing / Funding description</b>	<ul style="list-style-type: none"> <li>• Revenue through subscription services for wild food boxes.</li> <li>• Income from seasonal foraging tours and educational workshops.</li> </ul>		
TOPIC, ECOSYSTEM SERVICE & TYPE OF SOLUTION			
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<b>Forest Ecosystem Service mainly affected</b>	<b>Provisioning Services</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Raw material provision</li> <li><input checked="" type="checkbox"/> Food provision</li> <li><input type="checkbox"/> Other</li> </ul>	<b>Regulating Services</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Air quality</li> <li><input type="checkbox"/> Groundwater quality</li> <li><input type="checkbox"/> Surface Water quality</li> <li><input type="checkbox"/> Natural hazard</li> <li><input checked="" type="checkbox"/> Biodiversity habitat</li> <li><input type="checkbox"/> CO<sub>2</sub> storage and sequestration</li> <li><input type="checkbox"/> Other</li> </ul>	<b>Cultural Services</b> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Recreation</li> <li><input type="checkbox"/> Health maintenance</li> <li><input type="checkbox"/> Spirituality</li> <li><input type="checkbox"/> Contemplation</li> <li><input type="checkbox"/> Inspiration for Art</li> <li><input type="checkbox"/> Other</li> </ul>
<b>Economic sector (NACE category)</b>	Agriculture, forestry and fishing		

<b>Type of solution</b>	<input checked="" type="checkbox"/> Business model <input type="checkbox"/> Technical solution <input type="checkbox"/> Organisational solution <input type="checkbox"/> Management solution (farming, regional development) <input type="checkbox"/> Labeling solution (e.g. certificates) <input type="checkbox"/> Motivating solution (e.g. awards) <input type="checkbox"/> Other (please describe it here):	
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<b>Governance actions</b>	Public policy and strategies	
<b>BENEFITS, TRANSFERABILITY &amp; SCALABILITY</b>		
<b>Economic and/or social benefits</b>	<b>Ecological benefits</b> <ul style="list-style-type: none"> <li>• Ensures sustainable harvest practices to protect ecosystems.</li> <li>• Raises awareness of forest conservation among participants and subscribers.</li> </ul>	<b>Economic and Social benefits</b> <ul style="list-style-type: none"> <li>• Builds community engagement with nature.</li> <li>• Promotes outdoor education and healthy food practices.</li> <li>• Encourages cultural interest in wild, natural ingredients.</li> <li>• Supports local jobs in foraging, product packaging, and tourism.</li> <li>• Boosts the regional economy through demand for wild, high-quality culinary ingredients.</li> </ul>
<b>Scalability</b>	The program has expanded its offerings, including more product lines and seasonal events. It demonstrates the potential for replication in other biodiverse regions with consumer interest in wild food.	
<b>SUCCESS FACTORS AND BARRIERS</b>		
<b>Success factors</b>	<ul style="list-style-type: none"> <li>• Focus on sustainability, education, and local engagement.</li> <li>• High-quality products paired with immersive, nature-based experiences.</li> </ul>	
<b>Obstacles</b>	<ul style="list-style-type: none"> <li>• Dependence on seasonal and weather conditions for foraging tours.</li> </ul>	



- Logistical challenges in ensuring a consistent supply of wild products.
- Risk of ecosystem damage if harvesting exceeds sustainable limits.

### 3. Experience selling and freemium models: Oasi Zegna (Italy)

#### FACTS IN SHORT

The freemium business model: a pricing strategy where a service or good is offered for free to customers, but a price is charged for "premium" options. Applying this model could help generate revenues from recreational and cultural services: people are allowed to access the forest for free, but a ticket can be charged, for instance, for accessing specific sports and touristic facilities, or some limited "high conservation" areas, or to practice certain sports (e.g. mountain bike), to pick up mushrooms or harvest wild fruits, and more.

In this case, also the experience selling model can be adopted side by side. The result is a broad BMA based on the organization of activities of a different kind that seeks to enhance the value of a product or service by offering enriching experiences alongside it. They include guided tours by certified alpine or naturalistic guides, workshops on wild herbs and animal recognition, religious/spiritual activities, hiking/trekking, climbing, rafting, canoeing, and other sports, organized for individuals and/or groups within the area of the LL, addressed both to tourists or local communities, aimed at generating value from forest recreational and cultural services.

<b>Key words</b>	Recreation, tourism Sustainable forest management
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#### DESCRIPTION, GOALS & FUNDING

<b>Detailed description of Good Practice</b>	<p>An example of these BMAs is "Oasi Zegna", which is born in the 1930s when Ermenegildo Zegna, a local textile industrialist, launched a big patronage program of environmental reclamation around Trivero (Biella, Italy), where the Ermenegildo Zegna wool mill is still operating. The current Oasi Zegna, a freely accessible nature park covering around 100 km<sup>2</sup> between Trivero and Valle Cervo in the Biella Alps, in Piemonte, was created in 1993 as a natural development of Ermenegildo Zegna's "green thought".</p> <p>The oasis is part of the FAI (Italian National Fund for Environment) and makes it possible to preserve and widen a large area of forest through various tourist, cultural, and recreational activities that contribute to the funding of the Project. In the oasis, it is possible to do forest bathing, horseback riding, Nordic walking, biking, and trekking. It is possible to visit the forest for free, or book guided tours for a fee. The Zegna Oasis also organizes services for companies, for a fee, thanks to a team that provides corporate team-building sessions in the forest (outdoor sports, mindfulness) and can host conferences and workshops.</p>
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<b>Goals of the Good Practice</b>	<ul style="list-style-type: none"> <li>• Sustainable forest management</li> <li>• enhancing the local economy</li> <li>• Preserving the biodiversity</li> </ul>
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<b>Financing / Funding description</b>	<ul style="list-style-type: none"> <li>• Guided tours foresee the payment of a fee</li> <li>• Team building and corporate welfare services offered to organizations and groups</li> </ul>
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#### TOPIC, ECOSYSTEM SERVICE & TYPE OF SOLUTION

<b>Key topic</b>	ESS and natural capital based economy		
<b>Forest Ecosystem Service mainly affected</b>	<b>Provisioning Services</b> <input type="checkbox"/> Raw material provision <input type="checkbox"/> Food provision <input type="checkbox"/> Other	<b>Regulating Services</b> <input type="checkbox"/> Air quality <input type="checkbox"/> Groundwater quality <input type="checkbox"/> Surface Water quality <input type="checkbox"/> Natural hazard <input checked="" type="checkbox"/> Biodiversity habitat <input type="checkbox"/> CO <sub>2</sub> storage and sequestration <input type="checkbox"/> Other	<b>Cultural Services</b> <input checked="" type="checkbox"/> Recreation <input type="checkbox"/> Health maintenance <input checked="" type="checkbox"/> Spirituality <input type="checkbox"/> Contemplation <input type="checkbox"/> Inspiration for Art <input checked="" type="checkbox"/> Other
<b>Economic sector (NACE category)</b>	Agriculture, forestry and fishing		
<b>Type of solution</b>	<input checked="" type="checkbox"/> Business model <input type="checkbox"/> Technical solution <input type="checkbox"/> Organisational solution <input type="checkbox"/> Management solution (farming, regional development) <input type="checkbox"/> Labeling solution (e.g. certificates) <input type="checkbox"/> Motivating solution (e.g. awards) <input type="checkbox"/> Other (please describe it here):		
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<b>Policy fields mainly affected</b>	<input checked="" type="checkbox"/> Forestry <input type="checkbox"/> Timber production <input checked="" type="checkbox"/> Nature Conservation <input checked="" type="checkbox"/> Bio-economy <input type="checkbox"/> Energy	<input type="checkbox"/> Climate protection / -mitigation <input type="checkbox"/> Water management <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other	
<b>Governance actions</b>	Public policy and strategies		
<b>BENEFITS, TRANSFERABILITY &amp; SCALABILITY</b>			
<b>Economic and/or social benefits</b>	<b>Ecological benefits</b> <ul style="list-style-type: none"> <li>Sustainable forest and biodiversity management</li> </ul>	<b>Economic and Social benefits</b> <ul style="list-style-type: none"> <li>Economic sustainability of the management and conservation project</li> <li>Community engagement</li> <li>Mental well-being support</li> </ul>	

<b>Transferability</b>	The project is adaptable to any forest type.
<b>Scalability</b>	This scheme applies to regional/local contexts. It is difficult to apply to a larger scale.
<b>SUCCESS FACTORS AND BARRIERS</b>	
<b>Success factors</b>	<ul style="list-style-type: none"> <li>• Presence of an "enlightened" entrepreneur</li> <li>• Cohesion of local entities and stakeholders</li> <li>• Involvement of a major national charity (FAI) with experience in heritage management</li> </ul>
<b>Obstacles</b>	<ul style="list-style-type: none"> <li>• Presence of outstanding natural beauty</li> <li>• Significant need of maintenance and staff to ensure a high level service</li> <li>• Both fixed and variable costs can be high</li> </ul>
<b>CONTACT DATA</b>	
<b>Name</b>	
<b>Telephone Nr.</b>	+39 340 1989593
<b>E-mail</b>	info@oasizegna.com
<b>Address</b>	
<b>Name of the institution</b>	Oasi Zegna
<b>Type of institution</b>	<input type="checkbox"/> Private enterprise <input type="checkbox"/> Public administration <input type="checkbox"/> Non Governmental Organisation <input type="checkbox"/> Association <input checked="" type="checkbox"/> Other
<b>Brief description of institution (optional)</b>	Oasi Zegna born in the '30s when Ermenegildo Zegna, the textile industrialist, launched a big patronage program of environmental reclamation around Trivero (Biella, Italy), where the Ermenegildo Zegna wool mill is still operating. Oasi Zegna, a freely accessible nature park covering around 100 km <sup>2</sup> between Trivero and Valle Cervo in the Biella Alps, in Piemonte, was created in 1993 as a natural development of Ermenegildo Zegna's "green thought".
<b>Street</b>	<a href="https://www.google.com/maps?ll=45.669837,8.15726&amp;z=15&amp;t=h&amp;hl=en-US&amp;gl=US&amp;mapclient=embed&amp;cid=9866193016805827311">https://www.google.com/maps?ll=45.669837,8.15726&amp;z=15&amp;t=h&amp;hl=en-US&amp;gl=US&amp;mapclient=embed&amp;cid=9866193016805827311</a>
<b>ZIP-code</b>	
<b>City</b>	Biella
<b>Country</b>	Italy
<b>Website of the project</b>	<a href="https://www.oasizegna.com/it/">https://www.oasizegna.com/it/</a>

## 4. Public-Private Partnership (PPP) model: Vittel PES scheme (France)

FACTS IN SHORT			
<p>PPP are agreements between governments and local private enterprises typically employed for the realization of large infrastructure projects, financed through public funds and executed by private partners (or vice versa). The model involves significant actions performed by the private actor to support simultaneously public and private interest at a financially viable cost. This broad model can be employed for forest conservation, management and reforestation activities aimed at supporting regulating services (water) and generating value from their conservation</p>			
<b>Key words</b>	PES, PPP, water quality		
DESCRIPTION, GOALS & FUNDING			
<b>Detailed description of Good Practice</b>	<p>The Vittel PES (Payment for Ecosystem Services) scheme was designed to ensure the protection of water quality for the company's natural mineral water sources in the Vosges region, France. The project involves collaboration with local farmers to transition their practices to more sustainable methods that reduce nitrate and pesticide use. This transformation was achieved through partnerships with research institutions like the French National Institute for Agricultural Research (INRAE), and financial support from Vittel itself.</p> <p>The scheme introduced agroforestry, crop rotation, and the use of natural meadows to maintain soil quality and biodiversity.</p> <p>More info:</p> <ul style="list-style-type: none"> <li>- <a href="https://www.vittel.com/vittel-water-conservation">https://www.vittel.com/vittel-water-conservation</a></li> <li>- <a href="https://www.iied.org/sites/default/files/pdfs/migrate/G00388.pdf">https://www.iied.org/sites/default/files/pdfs/migrate/G00388.pdf</a></li> <li>- <a href="https://openknowledge.fao.org/server/api/core/bitstreams/aacd78a5-15f9-48ab-866e-1af46d5b5f56/content">https://openknowledge.fao.org/server/api/core/bitstreams/aacd78a5-15f9-48ab-866e-1af46d5b5f56/content</a></li> </ul>		
<b>Goals of the Good Practice</b>	<ul style="list-style-type: none"> <li>• Protect the natural water recharge area from agricultural pollutants.</li> <li>• Enhance local biodiversity by reducing human impact and reintroducing sustainable farming practices.</li> <li>• Maintain the long-term quality and sustainability of Vittel's water sources</li> </ul>		
<b>Financing / Funding description</b>	<p>The initiative was funded by Vittel SA, a private company. It provided farmers with financial incentives and technical assistance to adopt sustainable practices. This included covering transition costs, supporting adopting eco-friendly methods, and offering subsidies to maintain profitability during the shift. Additional support came from institutional collaborations with INRAE and local agencies, which provided expertise and scientific backing to the operation.</p>		
TOPIC, ECOSYSTEM SERVICE & TYPE OF SOLUTION			
<b>Key topic</b>	ESS and natural capital-based economy		
<b>Forest Ecosystem Service mainly affected</b>	<b>Provisioning Services</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Raw material provision</li> <li><input type="checkbox"/> Food provision</li> <li><input type="checkbox"/> Other</li> </ul>	<b>Regulating Services</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Air quality</li> <li><input checked="" type="checkbox"/> Groundwater quality</li> <li><input checked="" type="checkbox"/> Surface Water quality</li> </ul>	<b>Cultural Services</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Recreation</li> <li><input type="checkbox"/> Health maintenance</li> <li><input type="checkbox"/> Spirituality</li> </ul>

	<input type="checkbox"/> Natural hazard <input checked="" type="checkbox"/> Biodiversity habitat <input type="checkbox"/> CO <sub>2</sub> storage and sequestration <input type="checkbox"/> Other	<input type="checkbox"/> Contemplation <input type="checkbox"/> Inspiration for Art <input type="checkbox"/> Other
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<b>TARGET GROUPS, POLICY &amp; GOVERNANCE</b>		
<b>Target groups</b>	<input checked="" type="checkbox"/> National public authority (TG 1 and 2) <input checked="" type="checkbox"/> Regional public authority (TG 3 and 4) <input type="checkbox"/> Local public authority (TG 5) <input checked="" type="checkbox"/> Enterprise, except SME (TG 6 and 7) <input type="checkbox"/> SMEs (TG 8 and 9) <input type="checkbox"/> Business support organization (TG 10) <input type="checkbox"/> Sectoral agency (TG 11)	<input type="checkbox"/> Interest groups including NGOs (TG 12-14) <input type="checkbox"/> General public (TG 13) <input type="checkbox"/> Financial/banking players (TG15) <input checked="" type="checkbox"/> Public and private forest owners (TG16) <input checked="" type="checkbox"/> Higher education and research organisations (TG 17) <input type="checkbox"/> International organisation, EEIG (TG 18 – 19)
<b>Policy fields mainly affected</b>	<input checked="" type="checkbox"/> Forestry <input type="checkbox"/> Timber production <input checked="" type="checkbox"/> Nature Conservation <input type="checkbox"/> Bio-economy <input type="checkbox"/> Energy	<input type="checkbox"/> Climate protection / -mitigation <input type="checkbox"/> Water management <input type="checkbox"/> Tourism <input type="checkbox"/> Other
<b>Governance actions</b>	Public policy and strategies	
<b>BENEFITS, TRANSFERABILITY &amp; SCALABILITY</b>		
<b>Economic and/or social benefits</b>	<b>Ecological benefits</b> <ul style="list-style-type: none"> <li>• Significant increases in biodiversity, including the return of rare species.</li> <li>• Enhanced soil health and ecosystem resilience reduced environmental risks</li> </ul>	<b>Economic and Social benefits</b> <ul style="list-style-type: none"> <li>• Farmers maintained or improved their income due to subsidies and more sustainable farming practices.</li> <li>• Strengthened community ties through partnerships and collaborative decision-making. Farmers, researchers, and local organizations worked towards common goals, fostering shared responsibility and innovation.</li> </ul>
<b>Scalability</b>	The project demonstrated scalability through its potential replication in other regions with similar environmental challenges.	

	<p>However, scalability is constrained by the need for significant upfront investments, extensive partnerships with local stakeholders, and tailored solutions for each region's unique ecological and agricultural dynamics.</p> <p>The presence of a major private funding provider can also be challenging to ensure.</p>
<b>SUCCESS FACTORS AND BARRIERS</b>	
<b>Success factors</b>	<ul style="list-style-type: none"> <li>• Presence of a company strongly committed to sourcing a high-quality input (water), vital to its core business and largely dependent on ecological services.</li> <li>• Strong partnerships with research institutions, local farmers, and governmental bodies.</li> <li>• Comprehensive financial and technical support offered to farmers during the transition.</li> <li>• Measurable environmental benefits, such as increased biodiversity and water quality improvements.</li> <li>• Collaborative governance involving various stakeholders to align goals and execution</li> </ul>
<b>Obstacles</b>	<ul style="list-style-type: none"> <li>• High initial costs and long timelines for measurable results, which may deter immediate replication.</li> <li>• Resistance from farmers due to disruptions to traditional practices and economic uncertainties.</li> <li>• Dependency on corporate funding and public support to sustain the initiative</li> </ul>

## 5. Ecotourism: National forest sustainable tourism and small grants scheme (UK)

<b>FACTS IN SHORT</b>	
<p>Ecotourism can be defined as responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education. Establishing eco-friendly tourist facilities can generate revenues from forest recreational and cultural services while avoiding the negative environmental impacts of mass tourism.</p>	
<b>Key words</b>	Tourism, recreation, business
<b>DESCRIPTION, GOALS &amp; FUNDING</b>	
<b>Detailed description of Good Practice</b>	<p>“The National Forest” in the UK is an environmental project aimed at transforming a large area of central England into a new, sustainable forest. It promotes sustainable tourism by encouraging businesses to adopt green practices and foster connections between visitors and the environment. This is achieved through funding projects that make woodlands and habitats more accessible and engaging. The “Small Grants Scheme” supports small businesses and community projects that align with these goals, promoting greener, more inclusive visit experiences.</p>

<b>Goals of the Good Practice</b>	<ul style="list-style-type: none"> <li>• Protect and enhance the local natural environment by making it more accessible and promoting sustainable use of resources.</li> <li>• Support the recovery and growth of local tourism businesses post-pandemic, while driving them toward sustainable practices that benefit the local economy.</li> <li>• Ensure the tourism sector is inclusive and accessible, offering opportunities for diverse groups to connect with nature. Projects also aim to improve wellbeing through outdoor activities and creative engagement</li> </ul>		
<b>Financing / Funding description</b>	<p>The National Forest Company is the organization that leads the National Forest project. It funds its grants through a combination of public funding from Defra (UK Department for Environment, Food &amp; Rural Affairs), income from its commercial subsidiary (National Forest Enterprises), and other charitable contributions. These grants are an example of “blended finance” derived from multiple sources.</p>		
<b>TOPIC, ECOSYSTEM SERVICE &amp; TYPE OF SOLUTION</b>			
<b>Key topic</b>	ESS and natural capital based economy		
<b>Forest Ecosystem Service mainly affected</b>	<b>Provisioning Services</b> <input type="checkbox"/> Raw material provision <input type="checkbox"/> Food provision <input type="checkbox"/> Other	<b>Regulating Services</b> <input type="checkbox"/> Air quality <input type="checkbox"/> Groundwater quality <input type="checkbox"/> Surface Water quality <input type="checkbox"/> Natural hazard <input checked="" type="checkbox"/> Biodiversity habitat <input type="checkbox"/> CO <sub>2</sub> storage and sequestration <input type="checkbox"/> Other	<b>Cultural Services</b> <input checked="" type="checkbox"/> Recreation <input checked="" type="checkbox"/> Health maintenance <input type="checkbox"/> Spirituality <input checked="" type="checkbox"/> Contemplation <input type="checkbox"/> Inspiration for Art <input type="checkbox"/> Other
<b>Economic sector (NACE category)</b>	Agriculture, forestry and fishing		
<b>Type of solution</b>	<input checked="" type="checkbox"/> Business model <input type="checkbox"/> Technical solution <input type="checkbox"/> Organisational solution <input checked="" type="checkbox"/> Management solution (farming, regional development) <input type="checkbox"/> Labeling solution (e.g. certificates) <input type="checkbox"/> Motivating solution (e.g. awards) <input type="checkbox"/> Other (please describe it here):		
<b>TARGET GROUPS, POLICY &amp; GOVERNANCE</b>			
<b>Target groups</b>	<input type="checkbox"/> National public authority (TG 1 and 2) <input type="checkbox"/> Regional public authority (TG 3 and 4) <input checked="" type="checkbox"/> Local public authority (TG 5) <input type="checkbox"/> Enterprise, except SME (TG 6 and 7) <input type="checkbox"/> SMEs (TG 8 and 9) <input type="checkbox"/> Business support organization (TG 10) <input type="checkbox"/> Sectoral agency (TG 11)		
	<input checked="" type="checkbox"/> Interest groups including NGOs (TG 12-14) <input checked="" type="checkbox"/> General public (TG 13) <input type="checkbox"/> Financial/banking players (TG15) <input checked="" type="checkbox"/> Public and private forest owners (TG16) <input type="checkbox"/> Higher education and research organisations (TG 17) <input type="checkbox"/> International organisation, EEIG (TG 18 – 19)		

<b>Policy fields mainly affected</b>	<input checked="" type="checkbox"/> Forestry <input type="checkbox"/> Timber production <input type="checkbox"/> Nature Conservation <input type="checkbox"/> Bio-economy <input type="checkbox"/> Energy	<input type="checkbox"/> Climate protection / -mitigation <input type="checkbox"/> Water management <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other
<b>Governance actions</b>	Public policy and strategies	
<b>BENEFITS, TRANSFERABILITY &amp; SCALABILITY</b>		
<b>Economic and/or social benefits</b>	<b>Ecological benefits</b> <ul style="list-style-type: none"> <li>• Protection and restoration of the National Forest’s biodiversity</li> <li>• Promotion of the sustainable use of natural resources.</li> </ul>	<b>Economic and Social benefits</b> <ul style="list-style-type: none"> <li>• The grants stimulate local economies by supporting small businesses and diversifying the tourism sector with sustainable offerings.</li> <li>• Projects enhancing accessibility to woodlands ensure that nature can be enjoyed by a larger and more diverse audience</li> </ul>
<b>Scalability</b>	<p>The initiatives are scalable within the National Forest and can be extended to other regions with similar ecological characteristics.</p> <p>For a transfer to other countries, a similar governance model and organization is needed.</p>	
<b>SUCCESS FACTORS AND BARRIERS</b>		
<b>Success factors</b>	<ul style="list-style-type: none"> <li>• Strong partnerships between local authorities, businesses, and community groups are crucial for the success of tourism initiatives.</li> <li>• Ensuring that all visitors, including those facing mobility challenges, can access and enjoy the forest through innovative solutions</li> </ul>	
<b>Obstacles</b>	<ul style="list-style-type: none"> <li>• Securing sufficient match funding for some projects can be a challenge, especially for smaller businesses.</li> <li>• Ensuring that tourism activities remain environmentally and economically viable after initial funding phases is critical for long-term success</li> <li>• Most of the contributions paid by the National Forest Company are grants – so they require a relatively large amount of funding.</li> </ul>	

## 6. Creation of value from waste: trash to cash model and VAIA Wood case study (Italy)

### FACTS IN SHORT

Based on the concept of “circular economy”, the trash to cash model uses products, production scratches, and waste, that are collected and transformed (upcycled) into new products. At the same time, recycling/upcycling timber production scratches can provide environmental benefits while supporting sustainable forest management for timber extraction (provisioning service).



<p>A company uses waste and scraps left in the forest or from timber production, to produce artisanal furniture and small wooden objects, employing local artisans. The material used for the production might be more volatile and of lower quality, but it is also cheaper than virgin wood, helping lowering production costs. The same model can be applied to a forest hit by a storm, pests, or natural disasters that fell a considerable number of trees.</p>			
<b>Key words</b>	Circular economy; upcycling		
<b>DESCRIPTION, GOALS &amp; FUNDING</b>			
<b>Detailed description of Good Practice</b>	<p>Vaia Wood produces wooden objects from timber scraps, from the trees that fell during the devastating "Vaia" storm (2018), being 42M trees in Prealpi Venete and Dolomiti (Italy), reinvesting their profits in local afforestation activities (&gt;30.000 trees planted) and communication on environmental and social issues.</p> <p>Products are sold in shops or online, also in cooperation with natural parks and forest owners.</p>		
<b>Goals of the Good Practice</b>	Sustainable forest management enhancing the local economy		
<b>Financing / Funding description</b>	Sale of the upcycled products Public funding		
<b>TOPIC, ECOSYSTEM SERVICE &amp; TYPE OF SOLUTION</b>			
<b>Key topic</b>	Resource efficient economy		
<b>Forest Ecosystem Service mainly affected</b>	<b>Provisioning Services</b> <input checked="" type="checkbox"/> Raw material provision <input type="checkbox"/> Food provision <input type="checkbox"/> Other	<b>Regulating Services</b> <input type="checkbox"/> Air quality <input type="checkbox"/> Groundwater quality <input type="checkbox"/> Surface Water quality <input type="checkbox"/> Natural hazard <input type="checkbox"/> Biodiversity habitat <input type="checkbox"/> CO <sub>2</sub> storage and sequestration <input type="checkbox"/> Other	<b>Cultural Services</b> <input type="checkbox"/> Recreation <input type="checkbox"/> Health maintenance <input type="checkbox"/> Spirituality <input type="checkbox"/> Contemplation <input type="checkbox"/> Inspiration for Art <input type="checkbox"/> Other
<b>Economic sector (NACE category)</b>	Agriculture, forestry and fishing		
<b>Type of solution</b>	<input checked="" type="checkbox"/> Business model <input type="checkbox"/> Technical solution <input type="checkbox"/> Organisational solution <input type="checkbox"/> Management solution (farming, regional development) <input type="checkbox"/> Labeling solution (e.g. certificates) <input type="checkbox"/> Motivating solution (e.g. awards) <input type="checkbox"/> Other (please describe it here):		
<b>TARGET GROUPS, POLICY &amp; GOVERNANCE</b>			

<b>Target groups</b>	<input type="checkbox"/> National public authority (TG 1 and 2) <input type="checkbox"/> Regional public authority (TG 3 and 4) <input type="checkbox"/> Local public authority (TG 5) <input type="checkbox"/> Enterprise, except SME (TG 6 and 7) <input checked="" type="checkbox"/> SMEs (TG 8 and 9) <input type="checkbox"/> Business support organization (TG 10) <input type="checkbox"/> Sectoral agency (TG 11)	<input type="checkbox"/> Interest groups including NGOs (TG 12-14) <input type="checkbox"/> General public (TG 13) <input type="checkbox"/> Financial/banking players (TG15) <input checked="" type="checkbox"/> Public and private forest owners (TG16) <input type="checkbox"/> Higher education and research organisations (TG 17) <input type="checkbox"/> International organisation, EEIG (TG 18 – 19)
<b>Policy fields mainly affected</b>	<input type="checkbox"/> Forestry <input checked="" type="checkbox"/> Timber production <input type="checkbox"/> Nature Conservation <input type="checkbox"/> Bio-economy <input type="checkbox"/> Energy	<input type="checkbox"/> Climate protection / -mitigation <input type="checkbox"/> Water management <input type="checkbox"/> Tourism <input type="checkbox"/> Other
<b>Governance actions</b>	Public policy and strategies	
<b>BENEFITS, TRANSFERABILITY &amp; SCALABILITY</b>		
<b>Economic and/or social benefits</b>	<b>Ecological benefits</b> <ul style="list-style-type: none"> <li>• Decrease resource (timber) consumption, lowering waste and emissions.</li> <li>• Benefits for the forest itself if revenues are reinvested in sustainable forest management.</li> <li>• Reforestation activities produce a general increase in the ecosystem quality and quantity of FES.</li> </ul>	<b>Economic and Social benefits</b> <ul style="list-style-type: none"> <li>• Job creation for local artisans</li> <li>• Community engagement</li> <li>• Lower production costs under special conditions (e.g. waste, fallen trees, etc.)</li> </ul>
<b>Scalability</b>	This scheme applies to regional/local contexts. On a larger scale, benefits for local workers may be lost.	
<b>SUCCESSFACTORS AND BARRIERS</b>		
<b>Success factors</b>	<ul style="list-style-type: none"> <li>• Low-cost raw material from production scraps, waste and fallen trees</li> </ul>	
<b>Obstacles</b>	<ul style="list-style-type: none"> <li>• Alternative activities that already have a supply chain based on scrap and waste.</li> <li>• Potential high cost of labor for transformation of raw materials</li> <li>• Limited cost advantages from using waste wood if not supported by funding programs</li> </ul>	
<b>CONTACT DATA</b>		
<b>Name</b>	Federico Stefani	
<b>Telephone Nr.</b>	+39 350 139 5944	
<b>E-mail</b>	vaiasrl@pec.it	
<b>Address</b>		

<b>Name of the institution</b>	Vaia Wood Srl
<b>Type of institution</b>	<input checked="" type="checkbox"/> Private enterprise <input type="checkbox"/> Public administration <input type="checkbox"/> Non Governmental Organisation <input type="checkbox"/> Association <input type="checkbox"/> Other
<b>Brief description of institution (optional)</b>	Young start-up that was born in the aftermath of Storm Vaia from the idea of three friends.
<b>Street</b>	Via Puisle, 23
<b>ZIP-code</b>	38051
<b>City</b>	Borgo Valsugana (Trento)
<b>Country</b>	Italy
<b>Website of the project</b>	<a href="https://www.vaiawood.eu">https://www.vaiawood.eu</a>

## 7. Green health models and community gardens: urban gardens (Spain)

<b>FACTS IN SHORT</b>	
<p>Community gardens aim to connect and support vulnerable people in the local community, especially in towns and cities. The beneficiaries often come from different backgrounds (such as refugees, elderly, and disabled people) and community gardens offer them a safe space for growing and harvesting fruits, mushrooms, and local plants. This BMA helps generate positive environmental benefits, revenues from provisioning services (harvesting), and important social benefits for the community and some specific subgroups.</p>	
<b>Key words</b>	Urban ES, Nature Based Solutions
<b>DESCRIPTION, GOALS &amp; FUNDING</b>	
<b>Detailed description of Good Practice</b>	<p>This BMA is based on Barcelona’s urban gardening projects: they aim to repurpose unused urban spaces into ecological and social hubs that benefit local communities and the environment. These gardens combine sustainable agricultural practices with inclusivity, providing spaces where diverse groups, including vulnerable populations like the elderly and migrants, can grow food and foster social ties. Institutionally supported by the city’s “Green Infrastructure and Biodiversity Plan”, these gardens also contribute to biodiversity, soil health, and urban climate resilience. They serve as platforms for education on sustainability, and enhance public awareness of urban ecology and the importance of local food systems. Municipal support, alongside partnerships with NGOs and local organizations, ensures the long-term viability of these initiatives.</p>

	<p>More info:</p> <ul style="list-style-type: none"> <li>- <a href="https://www.greeneuropeanjournal.eu/cultivating-resilience-urban-and-guerrilla-gardening-in-barcelona/">https://www.greeneuropeanjournal.eu/cultivating-resilience-urban-and-guerrilla-gardening-in-barcelona/</a></li> <li>- <a href="https://www.sciencedirect.com/science/article/abs/pii/S0169204617302141">https://www.sciencedirect.com/science/article/abs/pii/S0169204617302141</a></li> </ul>		
<b>Goals of the Good Practice</b>	<ul style="list-style-type: none"> <li>• Enhance urban biodiversity and ecological services.</li> <li>• Foster social inclusion and interaction among diverse groups, including vulnerable populations.</li> <li>• Strengthen local food systems by providing access to fresh, organic produce.</li> <li>• Promote environmental awareness and education</li> </ul>		
<b>Financing / Funding description</b>	<ul style="list-style-type: none"> <li>• Financing primarily comes from local government programs such as Barcelona’s “Green Infrastructure and Biodiversity Plan.”</li> <li>• Additional financial support is secured through partnerships with NGOs, private donors, and grants for nature-based solutions</li> </ul>		
<b>TOPIC, ECOSYSTEM SERVICE &amp; TYPE OF SOLUTION</b>			
<b>Key topic</b>	ESS and natural capital-based economy		
<b>Forest Ecosystem Service mainly affected</b>	<p><b>Provisioning Services</b></p> <input type="checkbox"/> Raw material provision <input checked="" type="checkbox"/> Food provision <input type="checkbox"/> Other	<p><b>Regulating Services</b></p> <input type="checkbox"/> Air quality <input type="checkbox"/> Groundwater quality <input type="checkbox"/> Surface Water quality <input checked="" type="checkbox"/> Natural hazard <input checked="" type="checkbox"/> Biodiversity habitat <input type="checkbox"/> CO <sub>2</sub> storage and sequestration <input type="checkbox"/> Other	<p><b>Cultural Services</b></p> <input checked="" type="checkbox"/> Recreation <input checked="" type="checkbox"/> Health maintenance <input type="checkbox"/> Spirituality <input type="checkbox"/> Contemplation <input type="checkbox"/> Inspiration for Art <input type="checkbox"/> Other
<b>Economic sector (NACE category)</b>	Agriculture, forestry and fishing		
<b>Type of solution</b>	<input checked="" type="checkbox"/> Business model <input type="checkbox"/> Technical solution <input type="checkbox"/> Organisational solution <input checked="" type="checkbox"/> Management solution (farming, regional development) <input type="checkbox"/> Labeling solution (e.g. certificates) <input type="checkbox"/> Motivating solution (e.g. awards) <input type="checkbox"/> Other (please describe it here):		
<b>TARGET GROUPS, POLICY &amp; GOVERNANCE</b>			
<b>Target groups</b>	<input type="checkbox"/> National public authority (TG 1 and 2) <input type="checkbox"/> Regional public authority (TG 3 and 4) <input checked="" type="checkbox"/> Local public authority (TG 5) <input type="checkbox"/> Enterprise, except SME (TG 6 and 7) <input type="checkbox"/> SMEs (TG 8 and 9) <input type="checkbox"/> Business support organization (TG 10) <input type="checkbox"/> Sectoral agency (TG 11)	<input checked="" type="checkbox"/> Interest groups including NGOs (TG 12-14) <input checked="" type="checkbox"/> General public (TG 13) <input type="checkbox"/> Financial/banking players (TG15) <input type="checkbox"/> Public and private forest owners (TG16) <input type="checkbox"/> Higher education and research organisations (TG 17) <input type="checkbox"/> International organisation, EEIG (TG 18 – 19)	

<b>Policy fields mainly affected</b>	<input type="checkbox"/> Forestry <input type="checkbox"/> Timber production <input checked="" type="checkbox"/> Nature Conservation <input checked="" type="checkbox"/> Bio-economy <input type="checkbox"/> Energy	<input checked="" type="checkbox"/> Climate protection / -mitigation <input type="checkbox"/> Water management <input type="checkbox"/> Tourism <input type="checkbox"/> Other
<b>Governance actions</b>	Public policy and strategies	
<b>BENEFITS, TRANSFERABILITY &amp; SCALABILITY</b>		
<b>Economic and/or social benefits</b>	<b>Ecological benefits</b> <ul style="list-style-type: none"> <li>Increases biodiversity in urban areas.</li> <li>Improves soil health and supports pollinators by adopting organic farming methods.</li> <li>Contributes to climate resilience by reducing urban heat islands</li> </ul>	<b>Economic and Social benefits</b> <ul style="list-style-type: none"> <li>Strengthens community bonds through shared spaces.</li> <li>Provides therapeutic and recreational benefits, especially for the elderly and vulnerable groups.</li> <li>Enhances public understanding of sustainability and local food systems</li> <li>Creates job opportunities in urban agriculture and ecological education</li> </ul>
<b>Scalability</b>	Its participatory model can be replicated in other cities with similar urban challenges and available land	
<b>SUCCESS FACTORS AND BARRIERS</b>		
<b>Success factors</b>	<ul style="list-style-type: none"> <li>Strong municipal support and integration into broader urban planning strat engagement and partnerships with NGOs and local groups.</li> <li>Use of participatory approaches to ensure inclusivity and local ownership</li> </ul>	
<b>Obstacles</b>	<ul style="list-style-type: none"> <li>Limited availability of urban land and competition for space.</li> <li>Challenges in maintaining long-term participants.</li> <li>Potential conflicts with residents</li> <li>Large dependency on public funding schemes.</li> </ul>	

## 8. Green chemistry model: SustForest project (Interreg Sudoe program – France, Spain and Portugal)

<b>FACTS IN SHORT</b>	
The “green chemistry model” involves extracting and utilizing non-wood biomass for the production of sustainable biofuels, biodegradable plastics, or natural solvents. This model promotes ecological restoration while sustainably managing the forest, supporting rural economies through sustainable extraction methods, and technological innovation.	
<b>Key words</b>	Green chemistry
<b>DESCRIPTION, GOALS &amp; FUNDING</b>	

<b>Detailed description of Good Practice</b>	<p>The “SustForest Plus” project is an initiative funded by the Interreg V B Sudoe program to support sustainable forest management and the European natural resin industry. It focuses on mobilizing resin resources, improving rural employment, and advancing market opportunities through technological innovation, and cross-border collaboration. The project emphasizes the role of natural resins in the bio-economy by addressing the challenges of resource extraction, market access, and labor quality.</p> <p>More info: <a href="https://www.sust-forest.eu/en/contenido/sustforest-plus">https://www.sust-forest.eu/en/contenido/sustforest-plus</a></p>		
<b>Goals of the Good Practice</b>	<p>The main goals are to ensure sustainable management of resin resources, enhance the quality of labor in the natural resin industry, and create opportunities to expand markets for natural resins.</p>		
<b>Financing / Funding description</b>	<p>The project is financed by the Interreg Sudoe Program with a total budget of €1.48 million. This funding enables technological development, cross-border collaboration, and sustainable resource mobilization</p>		
<b>TOPIC, ECOSYSTEM SERVICE &amp; TYPE OF SOLUTION</b>			
<b>Key topic</b>	ESS and natural capital based economy		
<b>Forest Ecosystem Service mainly affected</b>	<b>Provisioning Services</b> <input checked="" type="checkbox"/> Raw material provision <input type="checkbox"/> Food provision <input type="checkbox"/> Other	<b>Regulating Services</b> <input type="checkbox"/> Air quality <input type="checkbox"/> Groundwater quality <input type="checkbox"/> Surface Water quality <input type="checkbox"/> Natural hazard <input type="checkbox"/> Biodiversity habitat <input type="checkbox"/> CO <sub>2</sub> storage and sequestration <input type="checkbox"/> Other	<b>Cultural Services</b> <input type="checkbox"/> Recreation <input type="checkbox"/> Health maintenance <input type="checkbox"/> Spirituality <input type="checkbox"/> Contemplation <input type="checkbox"/> Inspiration for Art <input type="checkbox"/> Other
<b>Economic sector (NACE category)</b>	Agriculture, forestry and fishing		
<b>Type of solution</b>	<input checked="" type="checkbox"/> Business model <input type="checkbox"/> Technical solution <input type="checkbox"/> Organisational solution <input checked="" type="checkbox"/> Management solution (farming, regional development) <input type="checkbox"/> Labeling solution (e.g. certificates) <input type="checkbox"/> Motivating solution (e.g. awards) <input type="checkbox"/> Other (please describe it here):		
<b>TARGET GROUPS, POLICY &amp; GOVERNANCE</b>			
<b>Target groups</b>	<input type="checkbox"/> National public authority (TG 1 and 2) <input checked="" type="checkbox"/> Regional public authority (TG 3 and 4) <input checked="" type="checkbox"/> Local public authority (TG 5) <input type="checkbox"/> Enterprise, except SME (TG 6 and 7) <input type="checkbox"/> SMEs (TG 8 and 9) <input type="checkbox"/> Business support organization (TG 10) <input checked="" type="checkbox"/> Sectoral agency (TG 11)	<input checked="" type="checkbox"/> Interest groups including NGOs (TG 12-14) <input type="checkbox"/> General public (TG 13) <input type="checkbox"/> Financial/banking players (TG15) <input checked="" type="checkbox"/> Public and private forest owners (TG16) <input checked="" type="checkbox"/> Higher education and research organisations (TG 17) <input checked="" type="checkbox"/> International organisation, EEIG (TG 18 – 19)	

<b>Policy fields mainly affected</b>	<input checked="" type="checkbox"/> Forestry <input type="checkbox"/> Timber production <input checked="" type="checkbox"/> Nature Conservation <input checked="" type="checkbox"/> Bio-economy <input type="checkbox"/> Energy	<input type="checkbox"/> Climate protection / -mitigation <input type="checkbox"/> Water management <input type="checkbox"/> Tourism <input type="checkbox"/> Other
<b>Governance actions</b>	Public policy and strategies	
<b>BENEFITS, TRANSFERABILITY &amp; SCALABILITY</b>		
<b>Economic and/or social benefits</b>	<b>Ecological benefits</b> <ul style="list-style-type: none"> <li>• Promotes sustainable forest management through responsible natural resin extraction.</li> <li>• Contributes to biodiversity protection and forest ecosystem restoration</li> </ul>	<b>Economic and social benefits</b> <ul style="list-style-type: none"> <li>• Supports innovation and market expansion, improving job prospects in a novel industry.</li> <li>• Strengthens local economies reliant on sustainable natural resource extraction.</li> </ul>
<b>Scalability</b>	<ul style="list-style-type: none"> <li>• Building strong cross-border networks for bigger results.</li> <li>• It is important to share innovative technologies to scale impact across European regions.</li> </ul>	
<b>SUCCESS FACTORS AND BARRIERS</b>		
<b>Success factors</b>	<ul style="list-style-type: none"> <li>• Collaborative transnational partnerships.</li> <li>• Supported by EU funds</li> </ul>	
<b>Obstacles</b>	<ul style="list-style-type: none"> <li>• Socio-economic challenges that affect the long-term sustainability of resin extraction and forest management</li> <li>• Limited financial sustainability of the network in the long run (after project closure)</li> </ul>	

## 9. Biodiversity credits: Swedbank (Sweden)

<b>FACTS IN SHORT</b>	
<p>Biodiversity credits are financial instruments that support conservation projects by assigning monetary value to preserving or restoring ecosystems, wildlife habitats, and species. They function similarly to carbon credits but focus on financing ecological outcomes, such as habitat restoration, reforestation, or species protection. Companies or governments can purchase these credits mainly to offset their environmental impacts or align to legal obligations by investing in verified biodiversity projects with measurable results.</p>	
<b>Key words</b>	Biodiversity, offsetting, finance solution
<b>DESCRIPTION, GOALS &amp; FUNDING</b>	

<b>Detailed description of Good Practice</b>	<p>Swedbank, a leading Nordic bank, has been playing an active role in the biodiversity credits market by purchasing biodiversity credits generated from a Swedish forest conservation project. The project spans 13 hectares of the Orsa forest (a forest cooperative), and focuses on three main areas: restoration of open old-growth pine forest, sustainable management of production forests, and overall forest conservation.</p> <p>The SLU (Swedish University of Agricultural Sciences) team developed a scoring system that assigns points to various actions aimed at protecting or restoring biodiversity. Factors considered include the presence of rare species, the amount of deadwood in the forest (which supports numerous organisms), and the level of sunlight reaching the forest floor. This detailed scoring system is essential for determining the quality of a conservation project. The points are converted into biodiversity credits, with higher scores reflecting higher conservation value. Every five years, a third-party organization verifies these credits to ensure that conservation goals are being met and that new credits are issued as progress continues. These credits represent financial investments aimed at restoring biodiversity, supporting habitat recovery, and halting biodiversity loss.</p> <p>The identification of clear biodiversity outcomes and the setup of a credible mechanism for their assessment is essential to issue biodiversity credits, subject to external verification by a third-party organization.</p> <p>Then private companies can or investors buy these credits to offset environmental impacts, fulfill ESG objectives, or speculate on future value. Credits can be bought directly from the issuer (e.g. the responsible organization for a conservation project) or on the market from other investors that bought the credits before.</p> <p>The relative scarcity of biodiversity credits available, especially against some increased demand due to new regulations can drive their price up and allow for speculative returns for investors. Returns can incentivize the issue of other credits and their trade, with increased financing for conservation initiatives.</p> <p>More info:  <a href="https://www.swedbank.com/sustainability/environment/biodiversity.html">https://www.swedbank.com/sustainability/environment/biodiversity.html</a></p>		
<b>Goals of the Good Practice</b>	<ul style="list-style-type: none"> <li>• Combat biodiversity loss by financing conservation projects through a market-based approach</li> <li>• Encourage other financial institutions to engage in biodiversity markets.</li> </ul>		
<b>Financing / Funding description</b>	<p>Swedbank’s financial investment in biodiversity credits comes through a direct purchase from an initiative that supports conservation in Sweden. This financial contribution is used to support habitat restoration projects. Unlike traditional government subsidies or grants, this purchase operates through voluntary market transactions—drawing private funding toward biodiversity projects.</p>		
<b>TOPIC, ECOSYSTEM SERVICE &amp; TYPE OF SOLUTION</b>			
<b>Key topic</b>	ESS and natural capital based economy		
<b>Forest Ecosystem Service mainly affected</b>	<b>Provisioning Services</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Raw material provision</li> <li><input type="checkbox"/> Food provision</li> <li><input type="checkbox"/> Other</li> </ul>	<b>Regulating Services</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Air quality</li> <li><input type="checkbox"/> Groundwater quality</li> <li><input type="checkbox"/> Surface Water quality</li> <li><input type="checkbox"/> Natural hazard</li> <li><input checked="" type="checkbox"/> Biodiversity habitat</li> </ul>	<b>Cultural Services</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Recreation</li> <li><input type="checkbox"/> Health maintenance</li> <li><input type="checkbox"/> Spirituality</li> <li><input type="checkbox"/> Contemplation</li> <li><input type="checkbox"/> Inspiration for Art</li> </ul>



	<input type="checkbox"/> CO <sub>2</sub> storage and sequestration <input type="checkbox"/> Other	<input type="checkbox"/> Other
<b>Economic sector (NACE category)</b>	Agriculture, forestry and fishing	
<b>Type of solution</b>	<input checked="" type="checkbox"/> Business model <input type="checkbox"/> Technical solution <input type="checkbox"/> Organisational solution <input type="checkbox"/> Management solution (farming, regional development) <input type="checkbox"/> Labeling solution (e.g. certificates) <input type="checkbox"/> Motivating solution (e.g. awards) <input type="checkbox"/> Other (please describe it here):	
<b>TARGET GROUPS, POLICY &amp; GOVERNANCE</b>		
<b>Target groups</b>	<input type="checkbox"/> National public authority (TG 1 and 2) <input type="checkbox"/> Regional public authority (TG 3 and 4) <input type="checkbox"/> Local public authority (TG 5) <input type="checkbox"/> Enterprise, except SME (TG 6 and 7) <input type="checkbox"/> SMEs (TG 8 and 9) <input type="checkbox"/> Business support organization (TG 10) <input type="checkbox"/> Sectoral agency (TG 11)	<input checked="" type="checkbox"/> Interest groups including NGOs (TG 12-14) <input type="checkbox"/> General public (TG 13) <input checked="" type="checkbox"/> Financial/banking players (TG15) <input checked="" type="checkbox"/> Public and private forest owners (TG16) <input type="checkbox"/> Higher education and research organisations (TG 17) <input type="checkbox"/> International organisation, EEIG (TG 18 – 19)
<b>Policy fields mainly affected</b>	<input checked="" type="checkbox"/> Forestry <input type="checkbox"/> Timber production <input checked="" type="checkbox"/> Nature Conservation <input type="checkbox"/> Bio-economy <input type="checkbox"/> Energy	<input type="checkbox"/> Climate protection / -mitigation <input type="checkbox"/> Water management <input type="checkbox"/> Tourism <input type="checkbox"/> Other
<b>Governance actions</b>	Public policy and strategies	
<b>BENEFITS, TRANSFERABILITY &amp; SCALABILITY</b>		
<b>Economic and/or social benefits</b>	<b>Ecological benefits</b> <ul style="list-style-type: none"> <li>• Supports restoration of degraded habitats by reintroducing forested areas and other conservation efforts.</li> <li>• Enhances forest resilience by supporting sustainable forestry practices and protecting vulnerable ecosystems.</li> </ul>	<b>Economic and social benefits</b> <ul style="list-style-type: none"> <li>• Strengthened community resilience through employment opportunities created by restoration efforts.</li> <li>• A collaborative approach that integrates local conservation needs with corporate finance and international strategies</li> <li>• Stimulation of a new market and trading scheme</li> <li>• Financial flows for certified projects</li> </ul>
<b>Scalability</b>	<ul style="list-style-type: none"> <li>• The market-based mechanism allows financial flexibility for other corporations and financial institutions.</li> </ul>	

	<ul style="list-style-type: none"> <li>• A replicable model could be scaled to other forested regions and EU member states facing similar conservation challenges.</li> </ul>
<b>SUCCESS FACTORS AND BARRIERS</b>	
<b>Success factors</b>	<ul style="list-style-type: none"> <li>• Strong commitment from private financial institutions (like Swedbank) to support environmental sustainability.</li> <li>• Collaboration with innovative environmental finance mechanisms and market opportunities (biodiversity credits).</li> </ul>
<b>Obstacles</b>	<ul style="list-style-type: none"> <li>• The technical and logistical challenges of creating verifiable, high-quality biodiversity credits.</li> <li>• Scaling these models requires broader private sector engagement and appropriate policy support</li> </ul>

## 10. Reverse auction pilots for forest ecosystem services in rural and peri-urban areas (Belgium)

<b>FACTS IN SHORT</b>	
<p>A reverse auction model is a type of auction where sellers compete to offer the lowest price for a product or service, rather than buyers bidding up prices. A reverse auction model applied to forests involves landowners competing to offer the lowest cost for providing specific ecosystem services, such as carbon sequestration, reforestation, biodiversity conservation, or watershed protection. Governments or organizations act as buyers, selecting the most cost-effective and efficient options from competitive bids to ensure environmental goals are met at the lowest cost.</p>	
<b>Key words</b>	Reverse auction; Payment for FES; Habitat restoration.
<b>DESCRIPTION, GOALS &amp; FUNDING</b>	
<b>Detailed description of the Good practice</b>	<p>This project comes from SINCERE project. Forests in Flanders are small, scattered, and often lack features that support biodiversity. Restoring habitats aims to improve biodiversity protection and create better conditions for wildlife. Restoration efforts often focus on improving habitats for species that can be hunted, which indirectly benefits other endangered species as well. Regulations and subsidies already exist to encourage environmentally friendly forestry practices.</p> <p>Recent laws introduced a new way to manage land, allowing for comprehensive plans that address various types of land use and ecosystem services (ES). These plans are created through collaboration between private landowners and government agencies and include customized subsidy schemes. While forest owners are generally not required to have specific management plans, they are mandatory for nature reserves and public lands managed for conservation. Subsidies play a key role in encouraging landowners to participate in these plans.</p> <p>A new funding source was established to support this initiative. This fund, if sustained by its governing board, could become a long-term financial resource for meeting societal needs for forest ecosystem services (FES). To encourage participation across Flanders, a reverse auction was implemented. In this auction,</p>

	<p>landowners proposed habitat improvements for a fixed amount of funding (€5,000, €10,000, or €15,000), creating a positive incentive to participate.</p> <p>The auction received enough bids to finalize 15 contracts with landowners and managers. These contracts focused on improving habitat quality by changing land management practices. The auction process was efficient, with low coordination and transaction costs, resembling existing flat-rate subsidy schemes but with a competitive, auction-based approach.</p> <p>Although there is no direct evidence yet of how much additional benefit this approach will bring, the contractual restrictions suggest significant improvements in habitat quality, ultimately supporting biodiversity.</p> <p>More info:  <a href="https://sincereforests.eu/wpcontent/uploads/2019/12/Flanders_factsheet_SINCERE.pdf">https://sincereforests.eu/wpcontent/uploads/2019/12/Flanders_factsheet_SINCERE.pdf</a></p>		
<b>Goals of the Good Practice</b>	<ul style="list-style-type: none"> <li>• Provide financial support to initiatives for habitat restoration that currently are not covered by the existing subsidy system</li> <li>• Stimulate the creation of wild boar buffers in order to limit the negative impact of the species on forest biodiversity and on crop production</li> </ul>		
<b>Financing / Funding description</b>	<p>Targeting all of Flanders, the reverse auction was implemented as a discriminative price auction, where landowners were asked to describe the actions and improvements proposed for a pre-set amount (5,000€, 10,000€ or 15,000€).</p>		
<b>TOPIC, ECOSYSTEM SERVICE &amp; TYPE OF SOLUTION</b>			
<b>Key topic</b>	ESS and natural capital based economy		
<b>Forest Ecosystem Service mainly affected</b>	<p><b>Provisioning Services</b></p> <input type="checkbox"/> Raw material provision <input type="checkbox"/> Food provision <input type="checkbox"/> Other	<p><b>Regulating Services</b></p> <input type="checkbox"/> Air quality <input type="checkbox"/> Groundwater quality <input type="checkbox"/> Surface Water quality <input type="checkbox"/> Natural hazard <input checked="" type="checkbox"/> Biodiversity habitat <input checked="" type="checkbox"/> CO <sub>2</sub> storage and sequestration <input checked="" type="checkbox"/> Other	<p><b>Cultural Services</b></p> <input type="checkbox"/> Recreation <input type="checkbox"/> Health maintenance <input type="checkbox"/> Spirituality <input type="checkbox"/> Contemplation <input type="checkbox"/> Inspiration for Art <input type="checkbox"/> Other
<b>Economic sector (NACE category)</b>	Agriculture, forestry and fishing		
<b>Type of solution</b>	<input checked="" type="checkbox"/> Business model <input type="checkbox"/> Technical solution <input type="checkbox"/> Organisational solution <input type="checkbox"/> Management solution (farming, regional development) <input type="checkbox"/> Labeling solution (e.g. certificates) <input type="checkbox"/> Motivating solution (e.g. awards) <input type="checkbox"/> Other (please describe it here):		
<b>TARGET GROUPS, POLICY &amp; GOVERNANCE</b>			

<b>Target groups</b>	<input type="checkbox"/> National public authority (TG 1 and 2) <input type="checkbox"/> Regional public authority (TG 3 and 4) <input checked="" type="checkbox"/> Local public authority (TG 5) <input type="checkbox"/> Enterprise, except SME (TG 6 and 7) <input type="checkbox"/> SMEs (TG 8 and 9) <input type="checkbox"/> Business support organization (TG 10) <input type="checkbox"/> Sectoral agency (TG 11)	<input type="checkbox"/> Interest groups including NGOs (TG 12-14) <input type="checkbox"/> General public (TG 13) <input type="checkbox"/> Financial/banking players (TG15) <input checked="" type="checkbox"/> Public and private forest owners (TG16) <input type="checkbox"/> Higher education and research organisations (TG 17) <input type="checkbox"/> International organisation, EEIG (TG 18 – 19)
<b>Policy fields mainly affected</b>	<input checked="" type="checkbox"/> Forestry <input type="checkbox"/> Timber production <input checked="" type="checkbox"/> Nature Conservation <input type="checkbox"/> Bio-economy <input type="checkbox"/> Energy	<input type="checkbox"/> Climate protection / -mitigation <input type="checkbox"/> Water management <input type="checkbox"/> Tourism <input type="checkbox"/> Other
<b>Governance actions</b>	Public policy and strategies	
<b>BENEFITS, TRANSFERABILITY &amp; SCALABILITY</b>		
<b>Economic and/or social benefits</b>	<b>Ecological benefits</b> <ul style="list-style-type: none"> <li>nature conservation/habitat restoration</li> </ul>	<b>Economic and Social benefits</b> <ul style="list-style-type: none"> <li>More actors willing to engage in activities that contribute to forest protection management</li> <li>compensation for land owners</li> </ul>
<b>Scalability</b>	The habitat reverse auction in Flanders could expand nationally if funded, replacing less efficient policies with cost-effective alternatives. Its simple coordination suits similar schemes, though pricing models may vary with service diversity. EU-wide scaling depends on regulations, ecology, and flexible private forest management.	
<b>SUCCESS FACTORS AND BARRIERS</b>		
<b>Success factors</b>	<ul style="list-style-type: none"> <li>Strong partnership</li> <li>Community engagement</li> </ul>	
<b>Obstacles</b>	<ul style="list-style-type: none"> <li>No legal framework that takes into account the format of a reverse auction as a subsidy scheme</li> <li>Different points of view between relevant actors regarding land use and priorities</li> <li>Constant need to mitigate the risk of interfering with other existing subsidy systems</li> <li>Relative experimental nature of the practice developed within an EU Horizon project (research)</li> </ul>	
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<b>E-mail</b>	alexander.therry@vlaanderen.be	

<b>Address</b>	
<b>Name of the institution</b>	Natuurinvest
<b>Type of institution</b>	<input type="checkbox"/> Private enterprise <input type="checkbox"/> Public administration <input type="checkbox"/> Non Governmental Organisation <input type="checkbox"/> Association <input checked="" type="checkbox"/> Other
<b>Brief description of institution (optional)</b>	<p>On behalf of the Agency for Nature and Forests, Natuurinvest invests in projects that enhance the experience of nature. In this way, Natuurinvest ensures that people can fully enjoy our nature. It does so together with private entrepreneurs and government partners.</p> <p>For the optimal management of forests, nature and green spaces in Flanders, Natuurinvest also invests in programs that increase people's knowledge.</p>
<b>Street</b>	Herman Teirlinckgebouw Havenlaan 88 bus 75
<b>ZIP-code</b>	B-1000
<b>City</b>	Brussel
<b>Country</b>	Belgium
<b>Website of the project</b>	<a href="https://sincereforests.eu/">https://sincereforests.eu/</a> <a href="https://sincereforests.eu/wp-content/uploads/2019/12/Flanders_factsheet_SINCERE.pdf">https://sincereforests.eu/wp-content/uploads/2019/12/Flanders_factsheet_SINCERE.pdf</a>

## 11. PES Scheme: METSO - forest biodiversity (Finland)

<b>FACTS IN SHORT</b>	
<p>A Payment for Ecosystem Services (PES) scheme in forest ecosystems is a financial mechanism where landowners or managers are compensated by governments, companies, or organizations for maintaining or enhancing ecosystem services such as carbon sequestration, water purification, biodiversity conservation, or climate mitigation. These incentives encourage sustainable forest management by linking financial rewards to the provision of measurable environmental benefits.</p>	
<b>Key words</b>	Voluntary-based conservation; Financial compensation; Nature management;
<b>DESCRIPTION, GOALS &amp; FUNDING</b>	
<b>Detailed description of Good Practice</b>	<p>The METSO project, promoted by the Finnish government for the protection and conservation of forests, foresaw the voluntary participation of forest owners in exchange for financial compensation based on opportunity cost (i.e. the value of lost timber income).</p> <p>Forest owners can voluntarily offer their forest sites for protection in the METSO Programme.</p>

	<p>The program can be implemented using three methods:</p> <ol style="list-style-type: none"> <li>1. Permanent protection (Establishment of Private nature reserves or Selling the land to the State for conservation purposes).</li> <li>2. Temporary conservation (Environmental forestry subsidy agreement for 10 years, or set up of a Temporary nature reserve for 20 years).</li> <li>3. Nature management projects (focused on restoring and preserving valuable habitats in private forests).</li> </ol> <p>The site selection criteria define which habitats are accepted for conservation purposes, based on scientific criteria (forest habitat types, structural features of forests relevant for biodiversity). Further criteria are then applied to each main forest habitat type (e.g. sites where habitats are in their natural state or close to it, can easily be restored, host rare or endangered species, or are important for ecological connectivity are preferred). Decaying wood, burnt or charred wood, mature broad-leaved trees, large aspen trees, nutrient-rich soils, springs, brooks, or other natural water features are the structural elements that increase the ecological value of the site. Recreation, tourism, and cultural and landscape values may increase the site's significance if they support biodiversity conservation.</p> <p>Forest and environmental authorities assess the suitability of the offered sites based on ecological criteria.</p> <p>More info: <a href="https://metsonpolku.fi/en/metso-programme">https://metsonpolku.fi/en/metso-programme</a></p>		
<b>Goals of the Good Practice</b>	<p>Main goal: prevent the decline of woodland habitats and forest species.</p> <p>It specifically refers to halting the ongoing decline in the biodiversity of forest habitats and species and ensuring that a favorable trend in forest biodiversity is established by 2025.</p>		
<b>Financing / Funding description</b>	<p>Forest owners get full financial compensation equivalent to the value of timber at the protected site (<i>opportunity cost</i>). In case the land is sold to the state for permanent protection, its value is also compensated. For permanent protection, the private forest owner's compensation is tax-free. The nature management projects come at no cost to the forest owner. Protected and managed sites can be used for nature-based tourism and recreation, creating additional revenue for land managers.</p>		
<b>TOPIC, ECOSYSTEM SERVICE &amp; TYPE OF SOLUTION</b>			
<b>Key topic</b>	ESS and natural capital-based economy		
<b>Forest Ecosystem Service mainly affected</b>	<p><b>Provisioning Services</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Raw material provision</li> <li><input type="checkbox"/> Food provision</li> <li><input type="checkbox"/> Other</li> </ul>	<p><b>Regulating Services</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Air quality</li> <li><input type="checkbox"/> Groundwater quality</li> <li><input type="checkbox"/> Surface Water quality</li> <li><input type="checkbox"/> Natural hazard</li> <li><input checked="" type="checkbox"/> Biodiversity habitat</li> <li><input checked="" type="checkbox"/> CO<sub>2</sub> storage and sequestration</li> <li><input type="checkbox"/> Other</li> </ul>	<p><b>Cultural Services</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Recreation</li> <li><input type="checkbox"/> Health maintenance</li> <li><input type="checkbox"/> Spirituality</li> <li><input type="checkbox"/> Contemplation</li> <li><input type="checkbox"/> Inspiration for Art</li> <li><input type="checkbox"/> Other</li> </ul>
<b>Economic sector (NACE category)</b>	Agriculture, forestry and fishing		

<b>Type of solution</b>	<input checked="" type="checkbox"/> Business model <input type="checkbox"/> Technical solution <input type="checkbox"/> Organisational solution <input checked="" type="checkbox"/> Management solution (farming, regional development) <input type="checkbox"/> Labeling solution (e.g. certificates) <input type="checkbox"/> Motivating solution (e.g. awards) <input type="checkbox"/> Other (please describe it here):	
<b>TARGET GROUPS, POLICY &amp; GOVERNANCE</b>		
<b>Target groups</b>	<input checked="" type="checkbox"/> National public authority (TG 1 and 2) <input type="checkbox"/> Regional public authority (TG 3 and 4) <input type="checkbox"/> Local public authority (TG 5) <input type="checkbox"/> Enterprise, except SME (TG 6 and 7) <input type="checkbox"/> SMEs (TG 8 and 9) <input type="checkbox"/> Business support organization (TG 10) <input type="checkbox"/> Sectoral agency (TG 11)	<input checked="" type="checkbox"/> Interest groups including NGOs (TG 12-14) <input type="checkbox"/> General public (TG 13) <input type="checkbox"/> Financial/banking players (TG15) <input checked="" type="checkbox"/> Public and private forest owners (TG16) <input type="checkbox"/> Higher education and research organisations (TG 17) <input type="checkbox"/> International organisation, EEIG (TG 18 – 19)
<b>Policy fields mainly affected</b>	<input checked="" type="checkbox"/> Forestry <input checked="" type="checkbox"/> Timber production <input checked="" type="checkbox"/> Nature Conservation <input type="checkbox"/> Bio-economy <input type="checkbox"/> Energy	<input type="checkbox"/> Climate protection / -mitigation <input type="checkbox"/> Water management <input type="checkbox"/> Tourism <input type="checkbox"/> Other
<b>Governance actions</b>	Public policy and strategies	
<b>BENEFITS, TRANSFERABILITY &amp; SCALABILITY</b>		
<b>Economic and/or social benefits</b>	<b>Economic and ecological benefits</b> <ul style="list-style-type: none"> <li>• Forest conservation, species, and nature protection</li> </ul>	<b>Social benefits</b> <ul style="list-style-type: none"> <li>• new income for local communities;</li> <li>• new job opportunities (sustainable forest management, tourism and recreation)</li> </ul>
<b>Scalability</b>	The project is on a regional scale, but the same scheme is applicable to the entire state with due consideration.	
<b>SUCCESSFACTORS AND BARRIERS</b>		
<b>Success factors</b>	<ul style="list-style-type: none"> <li>• Voluntary-based approach</li> <li>• Independence in decision making</li> <li>• Retention of property rights</li> <li>• Tax-free</li> <li>• Established network and collaboration</li> </ul>	
<b>Obstacles</b>	<ul style="list-style-type: none"> <li>• High costs</li> <li>• Large need of liquid funds</li> <li>• Dependent on public funding</li> </ul>	

<b>CONTACT DATA</b>	
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<b>Address</b>	
<b>Name of the institution</b>	Ministry of the Environment
<b>Type of institution</b>	<input type="checkbox"/> Private enterprise <input checked="" type="checkbox"/> Public administration <input type="checkbox"/> Non Governmental Organisation <input type="checkbox"/> Association <input type="checkbox"/> Other
<b>Brief description of institution (optional)</b>	The Ministry of environment comprises four departments and one support function of the Ministry of the Environment (Natural Environment Department, Built Environment Department, Climate and Environmental Protection Department and Ministerial Governance and International Affairs Department, and Communications ) that are responsible for legislative and policy preparation for the Government and Parliament concerning communities, climate issues, built environment, housing, biodiversity and sustainable use of natural resources, and environmental protection.
<b>Street</b>	Aleksanterinkatu 7,
<b>ZIP-code</b>	FI-00023
<b>City</b>	Helsinki
<b>Country</b>	Finland
<b>Website of the project</b>	<a href="https://metsonpolku.fi/en/frontpage">https://metsonpolku.fi/en/frontpage</a>

## 12. PES Scheme: Groundwater protection (Denmark)

<b>FACTS IN SHORT</b>	
The project aims to clean up ground waters that supply Copenhagen through afforestation measures and designated wellhead protection zones with no pesticides.	
<b>Keywords</b>	Groundwater quality Land use Sustainable forest management PES
<b>DESCRIPTION, GOALS &amp; FUNDING</b>	



<b>Detailed description of Good Practice</b>	<p>The main environmental problem related to groundwater resources in Denmark is the threat of groundwater pollution from pesticides and fertilizers in agriculture. In the last years, this has led to a sharp decrease in groundwater abstraction from two well fields used for water supply (e.g. the abstraction from Solhøj well field was reduced from about 5M m<sup>3</sup> per year to 3M m<sup>3</sup>).</p> <p>Forest-groundwater PES scheme has been developed to combat the further pollution of important groundwater bodies. It aims to two main effects:</p> <ul style="list-style-type: none"> <li>- land-use change from agriculture to forests through afforestation of mainly broadleaf species;</li> <li>- in existing forest areas, restrictions on the use of fertilizers or pesticides, and in some cases also underplanting of conifer stands with broadleaf tree species, as the latter increase groundwater recharge.</li> </ul> <p>The “Copenhagen Energy Corporation” delivers drinking water to around 1M consumers in and around the municipality of Copenhagen from these wells. Over the last 20 years, the company lost about 14M m<sup>3</sup> of groundwater per year (e.g. from the Vigersted well field ca. 5M m<sup>3</sup> per year were lost, corresponding to the consumption of 100.000 Copenhageners). Thus, protecting ground waters through afforestation and the designation of wellhead protection zones (no pesticides) is important.</p> <p>To secure the quality of the groundwater resources from the Vigersted well field an agreement has been made between Copenhagen Energy and the owner of a private forest nearby, according to which the private forest owner has to set aside 95 ha of his forest where no pesticides are allowed. In addition, Copenhagen Energy bought 530ha of farmland hosting broadleaf trees on which the state and local municipalities implemented afforestation activities. The time frame of the agreements is 30 years being the same as for groundwater abstraction licenses (both can be extended). A review of the contracts is carried out every 5 years. As a result:</p> <p>The service providers/sellers are private forest owners (who eliminate pesticides in their forests) and farmers (who sell their land where forests are planted and managed).</p> <p>The service buyers and beneficiaries are individuals and households (customers of Copenhagen Energy) using the water supplied, and contributing to financing Copenhagen Energy’s fund.</p>		
<b>Goals of the Good Practice</b>	Protection of groundwater quality and quantity		
<b>Financing / Funding description</b>	Direct payment: private owners are compensated by Copenhagen Energy Corporation to change forest management practices. Energy consumers eventually pay for the services securing groundwater extraction and supply.		
<b>TOPIC, ECOSYSTEM SERVICE &amp; TYPE OF SOLUTION</b>			
<b>Key topic</b>	ESS and natural capital-based economy		
<b>Forest Ecosystem Service mainly affected</b>	<b>Provisioning Services</b> <input type="checkbox"/> Raw material provision <input type="checkbox"/> Food provision <input type="checkbox"/> Other	<b>Regulating Services</b> <input type="checkbox"/> Air quality <input checked="" type="checkbox"/> Groundwater quality <input type="checkbox"/> Surface Water quality <input type="checkbox"/> Natural hazard	<b>Cultural Services</b> <input type="checkbox"/> Recreation <input type="checkbox"/> Health maintenance <input type="checkbox"/> Spirituality <input type="checkbox"/> Contemplation

	<input type="checkbox"/> Biodiversity habitat <input type="checkbox"/> CO <sub>2</sub> storage and sequestration <input type="checkbox"/> Other	<input type="checkbox"/> Inspiration for Art <input type="checkbox"/> Other
<b>Economic sector (NACE category)</b>	Agriculture, forestry and fishing	
<b>Type of solution</b>	<input checked="" type="checkbox"/> Business model <input type="checkbox"/> Technical solution <input type="checkbox"/> Organisational solution <input type="checkbox"/> Management solution (farming, regional development) <input type="checkbox"/> Labeling solution (e.g. certificates) <input type="checkbox"/> Motivating solution (e.g. awards) <input checked="" type="checkbox"/> Other (please describe it here): PES	
<b>TARGET GROUPS, POLICY &amp; GOVERNANCE</b>		
<b>Target groups</b>	<input type="checkbox"/> National public authority (TG 1 and 2) <input type="checkbox"/> Regional public authority (TG 3 and 4) <input type="checkbox"/> Local public authority (TG 5) <input type="checkbox"/> Enterprise, except SME (TG 6 and 7) <input type="checkbox"/> SMEs (TG 8 and 9) <input type="checkbox"/> Business support organization (TG 10) <input checked="" type="checkbox"/> Sectoral agency (TG 11)	<input type="checkbox"/> Interest groups including NGOs (TG 12-14) <input checked="" type="checkbox"/> General public (TG 13) <input type="checkbox"/> Financial/banking players (TG15) <input checked="" type="checkbox"/> Public and private forest owners (TG16) <input type="checkbox"/> Higher education and research organisations (TG 17) <input type="checkbox"/> International organisation, EEIG (TG 18 – 19)
<b>Policy fields mainly affected</b>	<input checked="" type="checkbox"/> Forestry <input type="checkbox"/> Timber production <input checked="" type="checkbox"/> Nature Conservation <input type="checkbox"/> Bio-economy <input type="checkbox"/> Energy	<input type="checkbox"/> Climate protection / -mitigation <input checked="" type="checkbox"/> Water management <input type="checkbox"/> Tourism <input type="checkbox"/> Other
<b>Governance actions</b>	Public policy and strategies	
<b>BENEFITS, TRANSFERABILITY &amp; SCALABILITY</b>		
<b>Economic and/or social benefits</b>	<b>Ecological benefits</b> <ul style="list-style-type: none"> <li>• elimination of the use of pesticides</li> <li>• wider forested area</li> <li>• improvement in groundwater quality</li> </ul>	<b>Economic and Social benefits</b> <ul style="list-style-type: none"> <li>• water availability</li> <li>• payment for landowners</li> </ul>
<b>Transferability</b>	The project is highly adaptable to similar contexts	
<b>SUCCESS FACTORS AND BARRIERS</b>		
<b>Success factors</b>	<ul style="list-style-type: none"> <li>• Direct commitment of a large utility company</li> <li>• Availability of funds by the utility company</li> </ul>	

	<ul style="list-style-type: none"> <li>• Clear problem statement and solid scientific analysis in support</li> </ul>
<b>Obstacles</b>	<ul style="list-style-type: none"> <li>• Innovative, complex contracts/agreements are needed to manage ecosystem services and the related obligations</li> <li>• Opportunity cost of converting agricultural land to forest land</li> </ul>

### 13. Slowing the flow project (UK)

<b>FACTS IN SHORT</b>			
<b>Key words</b>	Flood management; Risk protection, stakeholder collaboration		
<b>DESCRIPTION, GOALS &amp; FUNDING</b>			
<b>Detailed description of Good Practice</b>	<p>The "Slowing the Flow at Pickering" project is a natural flood management initiative aimed at reducing flood risk in Pickering, North Yorkshire. By implementing measures such as constructing "leaky dams," reforesting riparian areas, and creating bunds to store water, the project slows down water flow during heavy rainfall, reducing the likelihood of flooding downstream. These interventions are low-cost, environmentally friendly, and involve collaboration between multiple stakeholders, including government agencies, local communities, and academic institutions. More info: <a href="https://www.forestresearch.gov.uk/research/slowing-the-flow-at-pickering/slowing-the-flow-at-pickering-partners-and-funders/">https://www.forestresearch.gov.uk/research/slowing-the-flow-at-pickering/slowing-the-flow-at-pickering-partners-and-funders/</a></p>		
<b>Goals of the Good Practice</b>	Reduce flood risk for the town of Pickering.		
<b>Financing / Funding description</b>	<ul style="list-style-type: none"> <li>• Funded by a mix of governmental grants, including contributions from Defra (Department for Environment, Food &amp; Rural Affairs), the Forestry Commission, and the Environment Agency.</li> <li>• Additional funding and in-kind support came from local stakeholders and organizations.</li> </ul>		
<b>TOPIC, ECOSYSTEM SERVICE &amp; TYPE OF SOLUTION</b>			
<b>Key topic</b>	ESS and natural capital based economy		
<b>Forest Ecosystem Service mainly affected</b>	<b>Provisioning Services</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Raw material provision</li> <li><input type="checkbox"/> Food provision</li> <li><input type="checkbox"/> Other</li> </ul>	<b>Regulating Services</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Air quality</li> <li><input type="checkbox"/> Groundwater quality</li> <li><input type="checkbox"/> Surface Water quality</li> <li><input checked="" type="checkbox"/> Natural hazard</li> <li><input checked="" type="checkbox"/> Biodiversity habitat</li> <li><input type="checkbox"/> CO<sub>2</sub> storage and sequestration</li> <li><input type="checkbox"/> Other</li> </ul>	<b>Cultural Services</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Recreation</li> <li><input checked="" type="checkbox"/> Health maintenance</li> <li><input type="checkbox"/> Spirituality</li> <li><input type="checkbox"/> Contemplation</li> <li><input type="checkbox"/> Inspiration for Art</li> <li><input type="checkbox"/> Other</li> </ul>
<b>Economic sector (NACE category)</b>	Agriculture, forestry and fishing		

<b>Type of solution</b>	<input type="checkbox"/> Business model <input checked="" type="checkbox"/> Technical solution <input type="checkbox"/> Organisational solution <input type="checkbox"/> Management solution (farming, regional development) <input type="checkbox"/> Labeling solution (e.g. certificates) <input type="checkbox"/> Motivating solution (e.g. awards) <input type="checkbox"/> Other (please describe it here):	
<b>TARGET GROUPS, POLICY &amp; GOVERNANCE</b>		
<b>Target groups</b>	<input checked="" type="checkbox"/> National public authority (TG 1 and 2) <input type="checkbox"/> Regional public authority (TG 3 and 4) <input checked="" type="checkbox"/> Local public authority (TG 5) <input type="checkbox"/> Enterprise, except SME (TG 6 and 7) <input type="checkbox"/> SMEs (TG 8 and 9) <input type="checkbox"/> Business support organization (TG 10) <input checked="" type="checkbox"/> Sectoral agency (TG 11)	<input type="checkbox"/> Interest groups including NGOs (TG 12-14) <input type="checkbox"/> General public (TG 13) <input type="checkbox"/> Financial/banking players (TG15) <input checked="" type="checkbox"/> Public and private forest owners (TG16) <input checked="" type="checkbox"/> Higher education and research organisations (TG 17) <input type="checkbox"/> International organisation, EEIG (TG 18 – 19)
<b>Policy fields mainly affected</b>	<input checked="" type="checkbox"/> Forestry <input type="checkbox"/> Timber production <input type="checkbox"/> Nature Conservation <input type="checkbox"/> Bio-economy <input type="checkbox"/> Energy	<input checked="" type="checkbox"/> Climate protection / -mitigation <input checked="" type="checkbox"/> Water management <input type="checkbox"/> Tourism <input type="checkbox"/> Other
<b>Governance actions</b>	Public policy and strategies	
<b>BENEFITS, TRANSFERABILITY &amp; SCALABILITY</b>		
<b>Economic and/or social benefits</b>	<b>Ecological benefits</b> <ul style="list-style-type: none"> <li>Improved habitat connectivity and increased biodiversity due to reforestation and wetland creation.</li> <li>Enhanced water quality through sediment trapping and reduced runoff.</li> <li>Strengthened ecosystem resilience to climate change impacts.</li> </ul>	<b>Economic and social benefits</b> <ul style="list-style-type: none"> <li>Reduced flood damage costs for Pickering residents and businesses.</li> <li>Lower long-term expenditure compared to traditional engineered flood defenses.</li> <li>Improved community resilience to flooding.</li> <li>Increased awareness and engagement among local residents regarding sustainable water management.</li> </ul>
<b>Scalability</b>	The methods used are replicable in other flood-prone rural areas with similar hydrological conditions.	
<b>SUCCESS FACTORS AND BARRIERS</b>		
<b>Success factors</b>	<ul style="list-style-type: none"> <li>Strong collaboration between stakeholders, including local communities, government agencies, and scientists.</li> <li>Use of evidence-based practices tailored to the local catchment's unique hydrology.</li> </ul>	

	<ul style="list-style-type: none"> <li>• Effective communication and community involvement, which ensured public support and cooperation</li> </ul>
<b>Obstacles</b>	<ul style="list-style-type: none"> <li>• Limited availability of long-term monitoring data to fully quantify benefits.</li> <li>• Dependence on voluntary landowner cooperation, which may delay implementation in certain areas</li> </ul>

## 14. PES scheme: Forests for water (Spain)

<b>FACTS IN SHORT</b>	
<p>This Spanish (Catalan) case explores the implementation of a PES scheme relating to forests and water. It works on strengthening governance for joint forest-water strategic planning and on finding new resources to support forest owners in providing water-related services.</p>	
<b>Key words</b>	
<b>DESCRIPTION, GOALS &amp; FUNDING</b>	
<b>Detailed description of Good Practice</b>	<p>This initiative under the SINCERE project operates within the Rialb water reservoir and surrounding forests, addressing key challenges such as underutilized forest management, wildfire risks, and the declining provision of ecosystem services, particularly water regulation. The program facilitates agreements between forest owners and downstream water users—primarily municipal water utilities and companies interested in corporate social responsibility—linking sustainable forest management practices to downstream benefits like improved water quality and fire mitigation.</p> <p>A Forest and Water Fund underpins the scheme, with a forest owner association created to reduce transaction costs for small landowners. This association is responsible for crafting adaptive forest management plans certified by the regional forest agency (Centre de la Propietat Forestal). Sustainable management techniques, including selective thinning and biodiversity-focused measures, aim to enhance forest resilience while hydrological impacts, biodiversity, and carbon metrics are assessed using the CLIMARK framework.</p> <p>The innovative mechanism consists of a PES scheme focused on forests and water, strengthening governance for joint forest-water planning, and finding new resources to support forest owners in providing water-related services.</p> <p>More info: <a href="https://sincereforests.eu/wp-content/uploads/2019/11/CatalanCS_factsheet_SINCERE.pdf">https://sincereforests.eu/wp-content/uploads/2019/11/CatalanCS_factsheet_SINCERE.pdf</a></p>
<b>Goals of the Good Practice</b>	<ul style="list-style-type: none"> <li>• Include forests and forestry in a joint strategic planning tool with the participatory design of a local forest fund</li> <li>• Raise awareness on the role of forestry in mitigating the effects of climate change on water, including water availability for citizens</li> </ul>
<b>Financing / Funding description</b>	<p>The PES scheme operates on contributions from downstream beneficiaries, such as water utility companies and also companies interested in corporate social responsibility. Payments compensate forest owners for implementing targeted management practices, with costs tied to measurable ecological outcomes like improved water quality and reduced wildfire risks. Public funding and pilot grants also supported the initial setup and stakeholder engagement phases.</p>

TOPIC, ECOSYSTEM SERVICE & TYPE OF SOLUTION			
<b>Key topic</b>	ESS and natural capital based economy		
<b>Forest Ecosystem Service mainly affected</b>	<b>Provisioning Services</b> <input type="checkbox"/> Raw material provision <input type="checkbox"/> Food provision <input type="checkbox"/> Other	<b>Regulating Services</b> <input type="checkbox"/> Air quality <input checked="" type="checkbox"/> Groundwater quality <input checked="" type="checkbox"/> Surface Water quality <input type="checkbox"/> Natural hazard <input checked="" type="checkbox"/> Biodiversity habitat <input type="checkbox"/> CO <sub>2</sub> storage and sequestration <input type="checkbox"/> Other	<b>Cultural Services</b> <input type="checkbox"/> Recreation <input type="checkbox"/> Health maintenance <input type="checkbox"/> Spirituality <input type="checkbox"/> Contemplation <input type="checkbox"/> Inspiration for Art <input type="checkbox"/> Other
<b>Economic sector (NACE category)</b>	Agriculture, forestry and fishing		
<b>Type of solution</b>	<input checked="" type="checkbox"/> Business model <input type="checkbox"/> Technical solution <input type="checkbox"/> Organisational solution <input type="checkbox"/> Management solution (farming, regional development) <input type="checkbox"/> Labeling solution (e.g. certificates) <input type="checkbox"/> Motivating solution (e.g. awards) <input type="checkbox"/> Other (please describe it here):		
TARGET GROUPS, POLICY & GOVERNANCE			
<b>Target groups</b>	<input type="checkbox"/> National public authority (TG 1 and 2) <input checked="" type="checkbox"/> Regional public authority (TG 3 and 4) <input checked="" type="checkbox"/> Local public authority (TG 5) <input type="checkbox"/> Enterprise, except SME (TG 6 and 7) <input type="checkbox"/> SMEs (TG 8 and 9) <input checked="" type="checkbox"/> Business support organization (TG 10) <input type="checkbox"/> Sectoral agency (TG 11)	<input type="checkbox"/> Interest groups including NGOs (TG 12-14) <input checked="" type="checkbox"/> General public (TG 13) <input type="checkbox"/> Financial/banking players (TG15) <input checked="" type="checkbox"/> Public and private forest owners (TG16) <input type="checkbox"/> Higher education and research organisations (TG 17) <input type="checkbox"/> International organisation, EEIG (TG 18 – 19)	
<b>Policy fields mainly affected</b>	<input checked="" type="checkbox"/> Forestry <input type="checkbox"/> Timber production <input type="checkbox"/> Nature Conservation <input type="checkbox"/> Bio-economy <input type="checkbox"/> Energy	<input type="checkbox"/> Climate protection / -mitigation <input checked="" type="checkbox"/> Water management <input type="checkbox"/> Tourism <input type="checkbox"/> Other	
<b>Governance actions</b>	Public policy and strategies		
BENEFITS, TRANSFERABILITY & SCALABILITY			
<b>Economic and/or social benefits</b>	<b>Ecological benefits</b> <ul style="list-style-type: none"> <li>Improves water quality and retention, addressing hydrological challenges in the region.</li> </ul>	<b>Economic and social benefits</b> <ul style="list-style-type: none"> <li>Provides additional revenue streams for forest owners, improving the economic viability of maintaining forest land.</li> </ul>	

	<ul style="list-style-type: none"> <li>• Promotes biodiversity by encouraging forest management practices that support diverse ecosystems</li> <li>• Reduces wildfire risks</li> </ul>	<ul style="list-style-type: none"> <li>• Enhances the sustainability of water supply systems by reducing treatment costs through improved water quality</li> <li>• Strengthens collaboration between forest owners, municipalities, and water utilities, fostering a shared responsibility for ecosystem conservation.</li> </ul>
<b>Scalability</b>	<p>The Catalonia PES scheme demonstrates significant potential for national and international replication. The demand for improved water quality and quantity, coupled with widespread issues of unmanaged forests, makes it adaptable to other areas in Spain and beyond. The CLIMARK framework establishes clear links between forest treatments and ecosystem service (FES) provisioning, while certified management practices create incentive structures that ensure sustainable financing for forest owners. Lessons learned, particularly around stakeholder involvement and carefully designed instruments, are key for scaling similar PES schemes to other regions or even federal levels.</p> <p>Beyond water provision, the initiative has already broadened its scope to include carbon credits and biodiversity conservation, demonstrating flexibility and wider applicability. Globally, PES schemes are well-documented as effective mechanisms for sustainable ecosystem financing, especially in contexts where clear upstream-downstream relationships exist</p>	
<b>SUCCESS FACTORS AND BARRIERS</b>		
<b>Success factors</b>	<ul style="list-style-type: none"> <li>• A clear linkage between upstream forest management and downstream benefits, particularly water quality and fire prevention.</li> <li>• Strong engagement from stakeholders, including forest owners, water utilities, and local governments.</li> <li>• Effective monitoring frameworks that verify ecological improvements and ensure trust between parties.</li> </ul>	
<b>Obstacles</b>	<ul style="list-style-type: none"> <li>• Dependency on continued funding and political support to sustain the program long-term.</li> </ul>	

## 15. Spiritual forests and forest kindergartens (Switzerland)

<b>FACTS IN SHORT</b>	
This case study introduced market-based offering of burial sites of human ashes near a specific, demarcated tree and thus directed at enhancing cultural ecosystem services of forests	
<b>Key words</b>	Spiritual FES
<b>DESCRIPTION, GOALS &amp; FUNDING</b>	

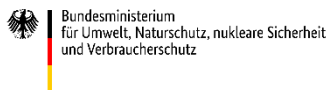
<b>Detailed description of Good Practice</b>	<p>The Swiss case study under the SINCERE project focuses on funeral forests in the Aargau canton, where burial sites are offered under specific trees. This initiative leverages cultural ecosystem services (CES) by creating spiritual forests that provide emotional, cognitive, and physical experiences. Forest owners sell burial sites for human ashes, conserving the designated tree and its surrounding forest area for 30-50 years. The payment system is formalized through contracts, linking economic incentives to the maintenance of forest cultural services.</p> <p>More info: <a href="https://sincereforests.eu/wp-content/uploads/2022/08/SINCERE-findings_06_switzerland.pdf">https://sincereforests.eu/wp-content/uploads/2022/08/SINCERE-findings_06_switzerland.pdf</a></p>		
<b>Goals of the Good Practice</b>	<ul style="list-style-type: none"> <li>• Enhance the value of the cultural ecosystem. cultural ecosystem services by providing spiritual and recreational forest experiences.</li> <li>• Motivate forest owners to supply cultural FES by offering sustainable economic incentives.</li> <li>• Conserve forests through modest silvicultural interventions that preserve their aesthetic and spiritual value</li> </ul>		
<b>Financing / Funding description</b>	<ul style="list-style-type: none"> <li>• Payments for burial sites are made directly by individuals or families.</li> <li>• Forest owners receive compensation, covering opportunity costs for conserving specific forest areas</li> </ul>		
<b>TOPIC, ECOSYSTEM SERVICE &amp; TYPE OF SOLUTION</b>			
<b>Key topic</b>	ESS and natural capital based economy		
<b>Forest Ecosystem Service mainly affected</b>	<b>Provisioning Services</b> <input type="checkbox"/> Raw material provision <input type="checkbox"/> Food provision <input type="checkbox"/> Other	<b>Regulating Services</b> <input type="checkbox"/> Air quality <input type="checkbox"/> Groundwater quality <input type="checkbox"/> Surface Water quality <input type="checkbox"/> Natural hazard <input checked="" type="checkbox"/> Biodiversity habitat <input type="checkbox"/> CO <sub>2</sub> storage and sequestration <input type="checkbox"/> Other	<b>Cultural Services</b> <input type="checkbox"/> Recreation <input type="checkbox"/> Health maintenance <input checked="" type="checkbox"/> Spirituality <input checked="" type="checkbox"/> Contemplation <input type="checkbox"/> Inspiration for Art <input type="checkbox"/> Other
<b>Economic sector (NACE category)</b>	Agriculture, forestry and fishing		
<b>Type of solution</b>	<input checked="" type="checkbox"/> Business model <input type="checkbox"/> Technical solution <input type="checkbox"/> Organisational solution <input type="checkbox"/> Management solution (farming, regional development) <input type="checkbox"/> Labeling solution (e.g. certificates) <input type="checkbox"/> Motivating solution (e.g. awards) <input type="checkbox"/> Other (please describe it here):		
<b>TARGET GROUPS, POLICY &amp; GOVERNANCE</b>			
<b>Target groups</b>	<input type="checkbox"/> National public authority (TG 1 and 2) <input type="checkbox"/> Regional public authority (TG 3 and 4) <input checked="" type="checkbox"/> Local public authority (TG 5) <input type="checkbox"/> Enterprise, except SME (TG 6 and 7)	<input type="checkbox"/> Interest groups including NGOs (TG 12-14) <input checked="" type="checkbox"/> General public (TG 13) <input type="checkbox"/> Financial/banking players (TG15) <input checked="" type="checkbox"/> Public and private forest owners (TG16)	



	<input type="checkbox"/> SMEs (TG 8 and 9) <input type="checkbox"/> Business support organization (TG 10) <input type="checkbox"/> Sectoral agency (TG 11)	<input type="checkbox"/> Higher education and research organisations (TG 17) <input type="checkbox"/> International organisation, EEIG (TG 18 – 19)
<b>Policy fields mainly affected</b>	<input checked="" type="checkbox"/> Forestry <input type="checkbox"/> Timber production <input type="checkbox"/> Nature Conservation <input type="checkbox"/> Bio-economy <input type="checkbox"/> Energy	<input type="checkbox"/> Climate protection / -mitigation <input type="checkbox"/> Water management <input type="checkbox"/> Tourism <input checked="" type="checkbox"/> Other
<b>Governance actions</b>	Public policy and strategies	
<b>BENEFITS, TRANSFERABILITY &amp; SCALABILITY</b>		
<b>Economic and/or social benefits</b>	<b>Ecological benefits</b> <ul style="list-style-type: none"> <li>• Conservation of old-growth trees and surrounding habitats, enhancing biodiversity.</li> <li>• Encourages light silvicultural practices, reducing environmental impact</li> </ul>	<b>Economic and social benefits</b> <ul style="list-style-type: none"> <li>• Forest owners gain a new revenue stream through payments for burial sites.</li> <li>• Support to local economies by maintaining forest-based services, attracting visitors for cultural and recreational purposes.</li> <li>• Provides spaces for emotional and spiritual connections with nature.</li> <li>• Offers an alternative, nature-based method for burial practices</li> </ul>
<b>Scalability</b>	<p>National Upscaling: Expansion within Switzerland is contingent on local legal frameworks that permit the burial of ashes in forests.</p> <p>Upscaling to Other Countries: Similar models already exist in the UK and Denmark, and legal adaptations could facilitate implementation elsewhere.</p> <p>Expanding Scope: The approach could incorporate other cultural activities, such as weddings or naming ceremonies, to diversify forest services</p>	
<b>SUCCESS FACTORS AND BARRIERS</b>		
<b>Success factors</b>	<ul style="list-style-type: none"> <li>• Simple and low-cost implementation by forest owners.</li> <li>• Supportive local legal frameworks in Aargau canton.</li> </ul>	
<b>Obstacles</b>	<ul style="list-style-type: none"> <li>• Legal restrictions in some regions regarding ash burial in forests.</li> <li>• Resistance due to cultural norms or perceptions about forest use for spiritual purposes.</li> <li>• Limited public awareness of such services, requiring targeted communication efforts</li> </ul>	



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des Deutschen Bundestages