

# THE GUIDEBOOK TO SUPPORT INNOVATION IN ECOSYSTEM RESTORATION IN THE DANUBE REGION

## An introduction

**This guidebook was developed to support innovators, support organisations, and other key actors working to advance ecological restoration and sustainability in the Danube region.**

For instance, this guidebook could be beneficial for project developers and practitioners implementing NBS, start-ups and SMEs developing environmental technologies or services, research and innovation teams, public authorities and river basin organisation, NGOs, and intermediaries such as incubators, accelerators, and innovation hubs that support sustainable innovation.

This Guidebook helps users to **navigate innovation-related challenges and to identify practical support services** that can accelerate the development, scaling, and implementation of innovative solutions.

Its objectives are the followings:

- **Provide actionable insights and practical guidance** tailored to the specific needs of innovation actors in the region; and
- **Assist in identifying and understanding the types of support available** and how to access them.

### What you will find in this section:

The guidebook provides information and insights on the following topics:

- ✓ Financial support (grants, venture capital, subsidies), as access to funding remains the most critical barrier to scaling innovation.
- ✓ Market intelligence and networking opportunities, responding to stakeholders' need for better access to market data, visibility, and collaboration platforms to foster connections and synergies within the regional innovation ecosystem.
- ✓ Regulatory procedures, addressing strong concern over complex or unclear regulations that can hinder or delay innovation processes, particularly in areas related to ecosystem restoration and sustainability.
- ✓ Access to expert mentoring and coaching, highlighting the importance of strategic guidance, experience-sharing, and individual support throughout different innovation stages.
- ✓ Training on business models and commercialisation and tailored consulting on business model design and market analysis, as these were recognised as valuable enablers.

These support services are seen as essential for helping innovators refine their strategies, improve market readiness, and successfully scale their solutions. .

## HOW TO USE THE GUIDEBOOK

This Guidebook is made of a series of fiches, one for each of the support services identified above. Each fiche includes practical information, tools, figures and practical examples, as follows:



A summary of the contents of the fiche



Figures and key insights



Operational tools



Practical examples



Challenges to be addressed

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## An introduction

## WHERE TO FIND THE FICHES COMPOSING THE GUIDEBOOK

You can find all fiches on the EcoDaLLi portal!

<https://portal.ecodalli.eu/wp5>

## HOW IT WAS DEVELOPED

This guidebook was created by the EcoDaLLi project as part of the Work Package on fostering innovation in the Danube region. It builds on a structured analytical process designed to capture both theoretical and practical perspectives on innovation support within the Danube region.



### The EcoDaLLi PROJECT

EcoDaLLi is the acronym for „ECOsystem-based governance with DANube lighthouse Living Lab for sustainable Innovation processes“ and a Horizon Europe project within the EU Mission “Restore our Ocean and Waters by 2030“.

The main objective of EcoDaLLi is to centralise Danube governance structures in terms of innovative solutions for improved ecological restoration, protection and preservation of the Danube basin and its delta by fostering a stronger innovation ecosystem within a well-connected Living Lab system.

A mixed-method approach was adopted, combining desk-based research with direct input from regional stakeholders, to ensure that the findings reflect both established knowledge and current on-the-ground realities. The development of the Guidebook built on:

- 1. A thorough review of existing literature**, project reports, policy frameworks, and relevant European initiatives.
- 2. A dedicated survey was carried out among stakeholders in the Danube region**. The survey targeted a broad range of actors—innovators, research institutions, businesses, NGOs, and public bodies — who are engaged in developing or supporting innovative solutions for ecosystem restoration. The goal was to better understand the challenges they face in accessing the support they need and to identify unmet needs that hinder the development or scaling up of their actions.



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## #1 - Financial Support

### THE NUMBER 1 CHALLENGE FOR INNOVATORS IN THE DANUBE REGION

**Financial support is the number one identified need by stakeholders in the Danube region**, reflecting the real difficulties innovators face in mobilising resources to fund and/or upscale their innovations for ecosystem restoration.

#### What you will find in this section:



- ✓ An overview of existing funding sources for NBS.
- ✓ Practical guidance for innovators: a four-step approach to find the right funding opportunities for innovative ecosystem restoration projects.

## EXISTING FUNDING SOURCES FOR NBS



#### Funding for NBS: some figures

While NBS are gaining policy momentum, **most projects still depend heavily on public money and remain small in scale**: the UNEP-WCMC, FFI, and ELP (2020)<sup>1</sup> report on funding ecosystem restoration in Europe confirms that between 2010 and 2020, the majority of funding for restoration projects came from public institutions (e.g., EU programmes and national governments).

Across 1 364 EU/UK NBS projects, only 3% reported private finance covering more than 50% of costs, with the vast majority relying on EU or national public sources and average ticket sizes below €10 million.

#### Public funding: the backbone of NBS financing in Europe

At the European level, there are **several well-established sources that support NBS and ecosystem restoration**, which are shown in the table below. These funds are often grant-based, reducing financial risk for innovators, but they usually require co-financing and compliance with strict eligibility and reporting requirements.



Sources of EU public funding and financing sources (adapted from MERLIN project, D3.5<sup>2</sup>).

Funding Source	Purpose	Relevance for NBS: funding provided for...	Eligible Beneficiaries	Budget (2021–2027)
<b>LIFE Programme</b>	Supports environmental and climate action projects	Ecosystem restoration at large, thus including NBS	EU-based public/private entities, international organisations	€5.43 billion
<b>Horizon Europe</b>	Research and innovation	NBS pilots and upscaling, as well as governance structures supporting ecosystem restoration	Public/private legal entities in eligible countries	€95.5 billion
<b>Cohesion Fund &amp; ERDF</b>	Reduce regional disparities, promote cohesion	Environmental infrastructure and climate adaptation measures	Regions and Member States, especially less developed	€392 billion

1 UNEP-WCMC, FFI and ELP (2020). Funding Ecosystem Restoration in Europe: A summary of funding trends and recommendations to inform practitioners, policymakers and funders. 24pp. [https://resources.unep-wcmc.org/products/WCMC\\_RT286](https://resources.unep-wcmc.org/products/WCMC_RT286)

2 Rouillard, J., Anzaldúa, G., Meier, J., Scholl, L., Carmen, E., Waylen, K., Kok, S., Malveira Cavalcanti, V., Grondard, N., Lenz, M.-I., Demus, Y., Andrez, P., Saviak, V., Birk, S., 2025. Diversifying Funding for Freshwater Restoration using Nature-Based Solutions: Lessons from the MERLIN project. MERLIN Deliverable 3.5. EU H2020 research and innovation project MERLIN deliverable 3.5. 55 pp. <https://project-merlin.eu/outcomes/deliverables.html>

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Funding Source	Purpose	Relevance for NBS: funding provided for...	Eligible Beneficiaries	Budget (2021–2027)
<b>CAP (EAFRD &amp; EAGF)</b>	Sustainable agriculture, rural development	Agri-environmental and climate measures relevant for NBS in rural landscapes	Farmers, rural businesses, local authorities	€386.6 billion combined
<b>Interreg Danube Transnational Programme</b>	Cross-border and regional cooperation in the region	Green infrastructure and climate adaptation	Regional/local authorities, NGOs, research institutions	€8.05 billion
<b>Just Transition Fund</b>	Support green transition in carbon-intensive regions	Ecosystem restoration and NBS	Regions, workers, businesses	€19.32 billion
<b>InvestEU</b>	Stimulate sustainable investment	Funding landscape for ecosystem restoration	Public/private entities, NGOs	€372 billion (mobilised)

In addition to these EU-level instruments, many countries operate national environmental funds and climate adaptation programmes that can finance NBS.

In parallel, the European funding landscape is currently undergoing significant changes, which are expected to affect the availability and structure of public funding for NBS and ecosystem restoration in the coming years. The current Multiannual Financial Framework (MFF) 2021–2027 is approaching its final phase, and major research and innovation programmes such as Horizon Europe will gradually come to an end, with future EU funding frameworks expected to place stronger emphasis on strategic autonomy, competitiveness, security, and defence, alongside climate and biodiversity objectives<sup>3,4</sup>. Recent policy discussions at EU level also point to increasing budgetary constraints and a stronger focus on leveraging private investment and results-based financing, rather than relying solely on grant-based public support.

In this evolving context, continued reliance on public grants alone may limit the long-term sustainability and scalability of NBS. This reinforces the need to diversify revenue streams and financing models, combining public funding with private investment, innovative financial instruments, and market-based mechanisms. Developing robust business models and blended finance approaches is therefore increasingly critical to ensure the long-term viability and survival of ecosystem restoration initiatives beyond individual funding cycles<sup>5,6</sup>.

### *Private funding remains limited, but it is increasingly recognised as essential for scaling up innovation in ecosystem restoration*

Private funding includes the following sources:

- **Corporate investment**, where companies integrate NBS into their sustainability and Environmental, Social, and Governance (ESG) strategies to reduce operational risks, secure supply chains, and meet climate commitments.
- **Impact investors and green funds** seek projects that deliver both financial returns and measurable environmental and social benefits, but they require robust monitoring frameworks and clear governance structures.
- **The insurance sector** is also emerging as a key player, supporting NBS that reduce climate-related risks such as flooding or erosion, sometimes through co-financing or premium reductions.
- **Innovative financial instruments** such as green bonds, sustainability-linked loans, and carbon or biodiversity credits are gaining traction, although they demand strong verification systems and long-term performance guarantees.

3 [https://commission.europa.eu/strategy-and-policy/eu-budget/long-term-eu-budget/eu-budget-2028-2034\\_en#protecting-europe](https://commission.europa.eu/strategy-and-policy/eu-budget/long-term-eu-budget/eu-budget-2028-2034_en#protecting-europe)

4 [https://commission.europa.eu/strategy-and-policy/strategic-foresight/2025-strategic-foresight-report\\_en#areas-for-action](https://commission.europa.eu/strategy-and-policy/strategic-foresight/2025-strategic-foresight-report_en#areas-for-action)

5 Breil, M., Castellani, C. Keestra S., Zimmer, D., Nieminen, H., Trozzo, C. & Galluccio, G. Economic enabling conditions for scaling of Nature Based Solutions. ETC CA Technical Paper published 2023 via European Topic Centre on Climate change adaptation and LULUCF, (ETC CA)

6 <https://www.eib.org/en/press/all/2023-217-nature-based-solutions-eib-report-finds-scope-for-regulatory-and-subsidy-reforms-as-well-as-a-more-flexible-spectrum-of-financial-instruments>

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#### Main barriers to the diversification of investment, and to accessing private finance

- Demonstrating predictable revenue streams, risk-sharing mechanisms, and clear exit strategies—conditions that many NBS projects struggle to meet due to their public-good nature and long payback periods.
- Language and knowledge gaps when engaging with financial actors.
- Limited awareness of existing funding and investment opportunities.
- Challenges in defining viable business models that can attract private capital.

#### Overcoming the barriers to diversifying investments: blended finance models

Blended finance models were identified as **one of the most efficient approaches to fund NBS**<sup>7</sup>.

Private actors often perceive NBS as high-risk with uncertain or long-term returns, which discourages direct investment. Public authorities can play a critical role in de-risking these projects by providing grants, guarantees, or concessional loans, and by leveraging public budgets to attract private capital.

By combining public grants with private capital, these models can effectively:

- Reduce risk;
- Improve bankability of projects; and
- Create incentives for private sector participation.

In practice, blended finance can take the form of **layered capital structures, public-private partnerships, or co-investment schemes**, ensuring that public funds catalyse larger volumes of private investment while maintaining the environmental and social integrity of NBS projects. This approach not only mobilise additional resources but also fosters long-term sustainability by aligning public policy objectives with private sector innovation and efficiency<sup>8</sup>.



#### Zoom on the Danube Region: existing funding mechanisms

A recent EcoDaLLi deliverable (D5.1) investigated funding opportunities for the Danube Region and found that access to finance is a vital factor for the **productivity and sustainability of the innovation ecosystem**. A resilient ecosystem depends on a diverse range of financial institutions that can provide resources across different stages of growth — from idea development to scale-up. These include **accelerators and incubators, angel investors, private foundations, impact investors, venture capital firms, crowdfunding platforms, public and semi-public funders, and banks**.

Several initiatives and proposals illustrate the breadth of mechanisms available in the region. These include:

- A cross-border private equity fund to address growth capital gaps;
- A proposed hub for mapping, comparing and pooling national recovery and restoration plans (as Member States prepare National Nature Restoration Plans and reflect restoration priorities in existing Recovery and Resilience Plans);
- A fintech sandbox to test regulatory compliance, digital platforms offering alternative funding channels; and
- Structures to promote green and ESG-linked bonds, improve transparency in capital markets, and strengthen financial literacy.

When it comes to ecosystem restoration innovation, however, the resources available are more restricted. Stakeholder consultations confirmed that **funding is primarily linked to governmental grants and public EU programmes** such as Horizon Europe, Interreg and LIFE.

In contrast, private sector contributions remain very limited, playing only a minor complementary role compared to public sources. This limited engagement is also linked to regulatory uncertainty, notably related to the ongoing development of National Nature Restoration Plans, and evolving EU sustainability and disclosure frameworks, which can reduce clarity for private investors. Overall, while the Danube Region has a broad mix of mechanisms to foster innovation in general, ecosystem restoration continues to rely heavily on public and EU funding.

7 Rouillard et al., 2025.

8 Rouillard et al., 2025.

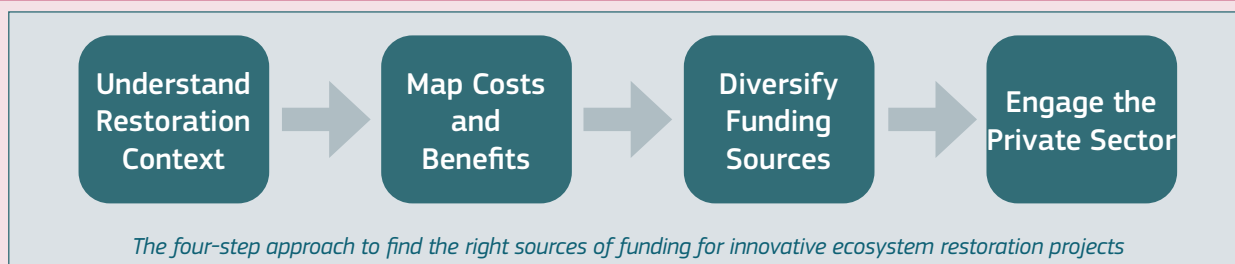
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## FINDING THE RIGHT FUNDING SOURCES FOR INNOVATION IN ECOSYSTEM RESTORATION: A FOUR-STEP APPROACH

When innovators need to find the right sources of funding to implement and upscale their innovative ecosystem restoration projects, we recommend following the four-step approach outlined below, which is based on the work carried out in the MERLIN project<sup>9</sup> and the Nature4Cities initiative<sup>10</sup>.

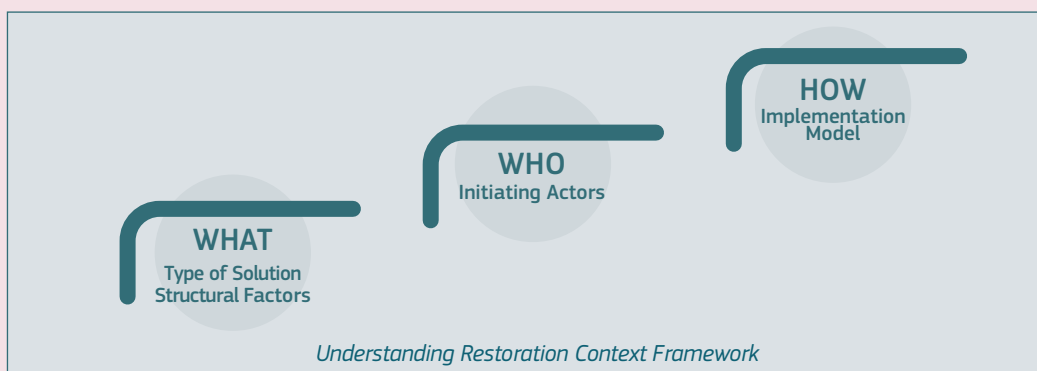


The following sections provide practical elements on how to apply this four-step approach.

### 1. Understand the restoration context

**In the early phases of an innovation project, it is essential for organisations and innovators to gain clear visibility on the activities they are undertaking.** This clarity helps to refine their vision, set strategic priorities, and develop actionable plans that support growth and upscaling potential. This initial step lays the foundation for all subsequent decisions related to governance, financing, and implementation.

To support this process, the Nature4Cities initiative proposes a practical framework known as **WHAT-WHO-HOW**, which has been used to analyse governance strategies in sustainable innovation<sup>11</sup>.



More in detail:

- **WHAT** refers to the specific NBS project. It includes the type of solution being implemented—such as wetland restoration, floodplain reconnection, or riverbank reforestation—and the structural factors that define it, such as land ownership and spatial scale. These elements determine the ecological and social scope of the intervention.
- **WHO** identifies the initiating actors. These can be public authorities, private companies, community organisations, or hybrid partnerships. Understanding who is driving the project is crucial, as it influences the governance structure and the potential sources of funding.
- **HOW** describes the implementation model. It is shaped by contextual factors and user requirements, including regulatory frameworks, stakeholder engagement, and available resources. This dimension determines how the project will be executed, financed, and sustained over time.

By applying this framework, **innovators can systematically assess the feasibility and strategic alignment of their restoration initiative.** It also helps in identifying potential barriers and opportunities for scaling up, especially in complex regions like the Danube Basin where ecological, administrative, and socio-economic conditions vary widely.

<sup>9</sup> Rouillard et al., 2025.

<sup>10</sup> Egusquiza, A.; Arana-Bollar, M.; Sopolana, A.; Babí Almenar, J. Conceptual and Operational Integration of Governance, Financing, and Business Models for Urban Nature-Based Solutions. *Sustainability* 2021, 13, 11931. <https://doi.org/10.3390/su132111931>

<sup>11</sup> Egusquiza, et al., 2021,

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## 2. Map costs and benefits

Once the restoration context is clear, the next step is to ask **whether the proposed NBS truly creates value for society**. This means weighing its costs against the benefits it can deliver, not just to the environment but also to people and communities. Doing so helps justify the intervention, shape its design, and build a sound funding strategy. As highlighted in the MERLIN Financing Workflow<sup>12</sup>, this step is a **cornerstone for strong financial planning** and effective stakeholder engagement, as it brings together several interconnected assessments that reveal the broader value of a project.

Four steps are recommended:

- 1. Look at how restoration measures are likely to affect natural capital and the ecosystem services it provides.** Natural Capital Accounting offers a structured way to measure these changes, both in biophysical terms and in monetary value. It helps translate impacts on assets like soil, water, and biodiversity into tangible benefits such as flood protection, carbon storage, or recreation opportunities. This also makes it easier to identify who stands to benefit—or who may be affected—ensuring the project is designed in an inclusive and fair way<sup>13</sup>.
- 2. Conduct a social Cost-Benefit Analysis (CBA),** which compares the project's costs with its impacts on human well-being. This analysis looks across scales and social groups, contrasting the outcomes of restoration with a baseline 'do nothing' scenario. The CBA highlights trade-offs and synergies, helps fine-tune the restoration measures, and provides an initial estimate of budgetary needs. It also points to stakeholders who may be willing to contribute, financially or otherwise, based on the benefits they gain<sup>14</sup>.
- 3. Identify potential business opportunities.** While the main focus is on societal value, mapping private benefits—such as carbon credits, eco-tourism, or sustainable agriculture—can help flag services that might be monetised and attract private partners or investors. These opportunities will be explored more deeply in the next stage, when building the business case.
- 4. A realistic estimate of both capital and operational costs is crucial.** This includes upfront expenses, like infrastructure and permits, as well as long-term commitments, such as maintenance and monitoring. Clear and accurate budgeting ensures that the project can align its financial needs with the right funding sources.

Together, **these assessments paint a full picture of the project's societal value and financial requirements**. They also create the conditions for meaningful stakeholder engagement and diversified funding, while providing a baseline against which project performance can be monitored and assumptions revisited over time, acknowledging the adaptive and context specific nature of NBS.

By integrating Natural Capital Accounting and CBA into the planning process, innovators can more effectively communicate the public value of their projects, reduce perceived risks, and secure broader support. In turn, this strengthens decision-making and increases the chances that restoration efforts will succeed and remain sustainable over the long term.

## 3. Diversify funding sources

Once the societal benefits and financial needs of a restoration project are clear, the next step is to **identify and diversify funding sources that can support both its implementation and long-term sustainability**.

In the Danube Basin and across Europe, many innovators struggle to secure stable financing, especially when relying only on public grants or subsidies. To address this, the MERLIN project promotes a **comprehensive approach to funding diversification**, encouraging innovators to combine different financial instruments and partnerships<sup>15</sup>.

12 Rouillard et al., 2025I

13 Rouillard et al., 2025I

14 Rouillard et al., 2025I

15 Rouillard et al., 2025I

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Section 3.1.1 showed that **public funding remains a central pillar**, with instruments such as EU grants (e.g. LIFE<sup>16</sup>, Horizon Europe), national subsidies, and local government support (see above section). These are typically non-repayable and can cover a large share of costs. However, they often come with **strict eligibility rules, demanding reporting requirements, and limited renewal prospects**.

**Private funding is playing a growing role in scaling up restoration.** Several options are available, and in particular:

- This can take the form of **donations** from philanthropic foundations, corporate social responsibility (CSR) programmes, or crowdfunding campaigns. These sources tend to be more flexible and can align closely with branding or reputational goals.
- Beyond donations, **projects can be designed to generate their own revenue streams**. Payments for ecosystem services (PES) are one option—for example, water utilities paying upstream landowners for natural water purification, or municipalities funding wetland restoration to reduce flood risks. Environmental markets also provide opportunities: projects that sequester carbon or restore habitats can generate tradable credits through carbon or biodiversity markets, creating ongoing income streams.
- **Some restoration projects can also support commercial activities**, such as ecotourism, sustainable farming, or the sale of natural materials like gravel from restored floodplains. These activities can generate direct revenues or attract private investors, particularly when embedded in larger value chains.

To make the most of these opportunities, innovators should **craft a funding strategy that matches the project's timeline, risk profile, and stakeholders**. This means identifying which sources are best suited for upfront capital needs (e.g. grants, loans), which can sustain ongoing operations (e.g. PES, service revenues), and which can be mobilised through partnerships or co-governance arrangements.

**By diversifying funding sources, restoration projects become more resilient, less dependent on any single stream, and better positioned to innovate and collaborate.** It also sets the stage for deeper engagement with private sector partners and for building a strong business case—covered in the next step.

#### 4. Engage the private sector

NBS offer an effective way to tackle environmental, social, and economic challenges, yet their uptake is often limited by concerns around financial viability and the lack of scalable investment models. To move beyond these barriers, **innovators and project developers need to build strong business cases that clearly show how NBS can create both ecological and financial value**. Practical guidance is available in the section on business model training, which introduces tools such as the Business Model Canvas (BMC) to help structure and communicate a project's value proposition, customer segments, cost structure, and revenue streams.

The European Investment Bank (EIB)<sup>17</sup> has identified several **approaches to unlock private sector investment in NBS and help projects move toward financial independence**. These approaches focus on mobilising diverse sources of revenue and embedding them into viable business models. A key precondition for accessing these mechanisms is the ability to clearly identify and, where possible, quantify the multiple co-benefits delivered by NBS – such as avoided costs, risk reduction, and environmental and social gains – which strengthens the overall value proposition for private investors. Some of the most promising mechanisms include:

- **Credits:** Generating income through the sale of carbon, biodiversity, or wetland mitigation credits, as well as emerging instruments like blue credits—especially relevant for forestry, agriculture, and coastal restoration.
- **Insurance-linked models:** Using NBS to reduce risks such as flooding or drought, which can lower insurance premiums. Parametric and community insurance schemes are already being piloted to monetise these benefits.
- **Cost reduction:** Cutting operational and maintenance costs for utilities and companies—for instance, through natural water filtration that reduces reliance on expensive treatment infrastructure.

<sup>16</sup> To be noted that this grant requires a high contribution rate from beneficiaries, which might limit its use.

<sup>17</sup> European Investment Bank, 2023. Investing in nature-based solutions. State-of-play and way forward for public and private financial measures in Europe. 10.2867/031133

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- **Product and commodity sales:** Creating revenues from sustainable forestry, regenerative agriculture, ecotourism, or other markets that combine ecological integrity with economic opportunity.
- **Ecosystem service taxes:** Leveraging tax incentives, direct payments, or cap-and-trade systems that reward ecosystem stewardship.
- **Innovative financial instruments:** Applying tools such as concessional loans, guarantees, sustainability-linked bonds, or blended finance, particularly useful in the early phases when projects often struggle to access traditional financing.

Revenue mechanism	Illustrative example
<b>Credits</b>	Carbon credits generated through afforestation, reforestation, and sustainable forest management; biodiversity and wetland mitigation credits linked to development compensation schemes; emerging blue credits associated with coastal and marine ecosystem restoration.
<b>Insurance-linked models</b>	Parametric insurance schemes supporting coral reef protection (e.g. insurer payouts triggered by extreme events); community insurance models where restored floodplains or green infrastructure reduce flood risk and insurance premiums (e.g. river flood barriers, green roofs).
<b>Cost reduction</b>	Floodplain restoration and natural water retention measures reducing flood damage and recovery costs; nature-based risk reduction lowering operational and maintenance costs for utilities and insurers.
<b>Product and commodity sales</b>	Revenue from sustainable forestry (timber production); regenerative agriculture producing food and fibre; nature-based tourism linked to restored landscapes.
<b>Ecosystem service taxes</b>	Municipal water and pollution levies financing ecosystem restoration measures, such as embankments and ponds, with revenues reinvested in water management and flood protection.
<b>Innovative financial instruments</b>	Blended finance under the Natural Capital Financing Facility (NCFF); sustainability-linked bonds financing restoration and forestry projects; portfolio aggregation funds pooling small-scale NBS projects; loans collateralised by future carbon credit revenues.

Beyond the financial mechanisms themselves, the way projects are framed and communicated plays a critical role in attracting private sector engagement. Tailoring project narratives to different stakeholders – such as investors, insurers, public authorities, or corporate partners – helps clarify how each actor benefits from the project. This includes highlighting indirect revenue streams, avoided costs, and risk reduction and supporting proposals with clear data, indicators and visualisations that strengthen credibility and reduce perceived investment risk.

By embedding these revenue streams into their business models, innovators can demonstrate that NBS are not only environmentally effective but also financially viable. This strengthens their ability to attract funding from both public and private sources. The EIB's approach emphasises the need to tailor financial structures to each project's context, ensuring that ecological impact goes hand in hand with long-term economic sustainability.



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## #2 - Market Intelligence

### PERFORMING RESEARCH TO GAIN INSIGHTS FOR STRATEGIC DECISION MAKING

**Market intelligence (MI) is commonly described as the gathering, analysing, and disseminating of information regarding a company's external environment** for the purposes of supporting strategic decision-making, and in particular on the following components:

- Customers;
- Competitors;
- Supply sources; and
- General trends in the market.

MI involves a looking-forward practice by which organisations gain further insight into their environment by gathering internal and external information for the purposes of solving strategic problem<sup>1</sup>. MI also strongly corresponds with market research but with a special emphasis on actionable intelligence supporting market entry, development, and competitive advantage<sup>2</sup>.

**For ecosystem restoration and NBS, market intelligence is important for innovators to understand the requirements of stakeholders, investment opportunities, trends for the regulatory environment, and competing initiatives.** Market intelligence makes it possible for project developers to identify opportunities for investment, predict risk, and match their business models with evolving market dynamics.

Application of market intelligence for NBS innovators involves more than technology viability and environmental impact. This involves the understanding of the beneficiary, value enjoyed, position of competitors for other such solutions, and trends shaping the green investment destiny. This also supports the development of tailored business models and financial plans required for scaling impact as well as private sector engagement.

#### What you will find in this section:



Market intelligence information can be gathered by an extensive array of means each used as a reference against many goals, resources, and project development phases. The practice and the literature characterise five broad classes for performing market intelligence, which are described in this section:

- ✓ Primary research;
- ✓ Secondary research;
- ✓ Competitor intelligence;
- ✓ Customer-focused studies; and
- ✓ Knowledge management systems.

To be noted that the classes often supplement one another and ideally must be combined for a rounded view.

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## #2 - Market Intelligence

### PERFORMING RESEARCH TO GAIN INSIGHTS FOR STRATEGIC DECISION MAKING

Insights gathered through MI research can then feed into the strategic analysis conducted by using business models, such as for example the Business Model Canvas (BMC). These tools help structure the notes from market intelligence into actionable strategies, which enable the innovators to define their value proposition, identify revenue streams, and develop investor-ready pitches: these will be described in section 3.3 of this guidebook.

### PRIMARY RESEARCH (DIRECT DATA COLLECTION)

Primary research compiles first-hand data directly from stakeholders through interviews, surveys, workshops, or focus groups<sup>3</sup>. This serves for collecting specific requirements, experiences and opinions.

The approaches for primary research include:

- **Buyer and customer interviews** – to understand demand for new products or services.
- **Supplier and competitor interviews** – to capture insights into production models, pricing, and strategies.
- **Expert interviews** – journalists, consultants, or NGOs provide a broader interpretation of market dynamics.
- **Participatory workshops** – bring diverse stakeholders together to identify opportunities and challenges.

### SECONDARY RESEARCH AND ENVIRONMENTAL SCANNING

Desk research, or the secondary research, relies on the review of **existing data and information sources**. They include statistical databases, the reports from the industries, research publications, patents, policy and reports of legislations, company reports, and trade media.

**Environmental scanning** takes this further by monitoring external factors such as the emergence of regulations, technological innovations, the potential for funds, and societal trends. Analytical tools such as PESTEL analysis (Political, Economic, Social, Technological, Environmental, Legal – see section 3.3)<sup>4</sup> or Porter's Five Forces tend to structure the outcomes<sup>5</sup>.

### COMPETITOR INTELLIGENCE

Competitor intelligence focuses on **understanding how other actors in the ecosystem – companies, NGOs, or institutions – operate, compete, and innovate**. This does not only mean analysing direct competitors, but also substitute solutions and alternative approaches.

Methods include<sup>6</sup>:

- **Press and media analysis** to track partnerships, financial performance, and sustainability commitments.
- **Pricing research** (benchmarking product and service costs or using advanced methods such as conjoint analysis to understand willingness to pay).
- **Customer feedback** on competitors to evaluate performance, trust, and reputation.
- **Company websites and online content** as a source of data on innovation pipelines, sustainability reporting, and technical specifications.

### CUSTOMER-FOCUSED STUDIES

Customer-focused studies **help organisations align with the needs and values of the market**<sup>7</sup>. They include:

- **Needs assessment studies** to identify unmet or emerging demands.
- **Segmentation studies** to divide actors into groups based on shared characteristics (e.g., attitudes, willingness to pay, innovation readiness).
- **Corporate positioning and branding studies** to analyse how organisations or initiatives are perceived relative to competitors.

3 Harrison, et al., 2013

4 Inha, et al., 2016

5 Harrison, et al., 2013

6 Harrison, et al., 2013

7 Harrison, et al., 2013

# THE GUIDEBOOK TO SUPPORT INNOVATION IN ECOSYSTEM RESTORATION IN THE DANUBE REGION

## #2 - Market Intelligence

### PERFORMING RESEARCH TO GAIN INSIGHTS FOR STRATEGIC DECISION MAKING

## KNOWLEDGE MANAGEMENT AND IT SYSTEMS

Once information is collected, effective systems are needed to **store, analyse, and share intelligence**. Knowledge management tools include databases, dashboards, data-mining tools, and collaborative platforms. These enable continuous monitoring and institutional learning.

## PUTTING MARKET INTELLIGENCE INTO PRACTICE

For innovation practitioners who work in the ecosystem restoration and NBS area, market intelligence is not just about information collection—it involves **taking action based on insights that were gathered through research**. The real value lies in the use of intelligence for the formulation of superior business models, communication with stakeholders, and the anticipation of risk and opportunities in a changing market.

The following points give ideas for **the application of MI**:

- **Translate insights into strategy:** once the information is gathered, the innovators must systematically relate the information to their business model, which can be developed through the Business Model Canvas (section 3.3).
- **Use intelligence to build investor-ready cases:** MI is also a useful tool for commanding attention from funders and partners. Offering evidence of demand (through surveys, or interview), benchmarking against competitors' costs, and demonstrating evidence of policy trends awareness, makes the innovator well-prepared and believable. This reduces the risk of investment and increases the likelihood of obtaining finance.
- **Engage and comprehend stakeholders:** The customer studies and primary research help the innovator identify whom the restorers benefit and what value they attach. This helps communication strategies for involving stakeholders—municipalities, water utilities, companies, or communities. Needs and expectations mapping also helps frame restoration as a value-based solution with economic and social payback, not merely as an environmental intervention.
- **Anticipate risks and adapt:** MI anticipates, it lets the innovator see the early signals for change. As a case in point, monitoring increasing policies for biodiversity credits or new players into the voluntary carbon market gives the innovator a chance to change positioning before these trends alter the playing field. Innovators combine competitor intelligence with environmental scanning and build scenario-based strategies with the flexibility to remain agile.
- **Build up networks and share knowledge:** MI functions best as a component of a network of exchange. Innovators are encouraged to access industry associations, EU funding platforms, and local stakeholder groups so as to gain and share intelligence. Knowledge management systems could help projects prevent duplication, identify synergies, and generate mutual understanding of the market for ecosystem services.



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# THE GUIDEBOOK TO SUPPORT INNOVATION IN ECOSYSTEM RESTORATION IN THE DANUBE REGION

## #3 - Business models

### DEVELOPING A SOLID BUSINESS MODEL AS A KEY TO SUPPORT AND PROMOTE INNOVATION IN ECOSYSTEM RESTORATION

**Developing a solid business model is critical for innovators in ecosystem services.** Evidence from the EcoDaLLi survey shows that 64% of respondents identified **training on business models and commercialisation as a priority need.**

Without clear strategies to capture value, secure revenue, and ensure long-term viability, many innovations risk remaining pilot projects rather than being scaled or mainstreamed. A structured business model also helps businesses in building credibility with funders, policymakers, and partners.

#### What you will find in this section:

This section is aimed to provide practical techniques for innovators to help them define and refine their business models. Four complementary tools are presented:

- ✓ Business Model Canvas (BMC), adapted to NBS.
- ✓ PESTEL analysis.
- ✓ SWOT analysis.

These techniques provide innovators with a structured pathway to design, test, and adapt their commercialisation strategies.

## BUSINESS MODEL CANVAS (BMC)

### *The business model canvas adapted to NBS projects: an overview*

**The Business Model Canvas (BMC) is a widely used framework for describing how an initiative creates, delivers, and captures value<sup>1</sup>.** In the context of innovation for ecosystem restoration, the traditional BMC has been adapted to form the **NBS-BMC** developed under the Connecting Nature project<sup>2</sup>. This adaptation increases its relevance by **integrating environmental, social, and economic value, as well as governance and cost reduction considerations specific to NBS** (see Figure 6).

**The NBS-BMC provides a shared language for innovators, public authorities, businesses, and communities to articulate how their solution works and how it can scale.** It enables structured discussion, supports co-creation among stakeholders, and improves the strategic understanding of an innovations' long-term sustainability.

The NBS-BMC retains **nine building blocks**—Key Activities, Key Resources, Value Proposition, Key Partners, Key Beneficiaries, Governance, Cost Structure, Cost Reduction, and Capturing Value—removing the traditional 'Revenue Streams' block and instead adopting a broader focus on the different ways value can be generated and captured. The model is illustrated in the following page.

1 Zaiter Y, Lago M, Maund J, van Duinen R, Chouchane H, van den Burg SWK and Araujo A (2025) Investigating levies and barriers for the development of offshore multi-use platforms in European regional seas. *Front. Ocean Sustain.* 3:1542309. doi: 10.3389/focsu.2025.1542309

2 McQuaid, S. (2019). Nature-Based Solutions Business Model Canvas Guidebook. Trinity College Dublin & Horizon Nua. Connecting Nature, Horizon 2020 Programme, Grant Agreement No. 730222. <https://connectingnature.eu/sites/default/files/downloads/NBS-BMC-Booklet-Final-%28for-circulation%29.pdf>

# THE GUIDEBOOK TO SUPPORT INNOVATION IN ECOSYSTEM RESTORATION IN THE DANUBE REGION

## #3 - Business models

### DEVELOPING A SOLID BUSINESS MODEL AS A KEY TO SUPPORT AND PROMOTE INNOVATION IN ECOSYSTEM RESTORATION



Business model canvas matrix and building blocks

Key Activities	Value Propositions	Key Partners	Key Beneficiaries
<ul style="list-style-type: none"> <li>Which essential activities must be undertaken (e.g. restoration work, monitoring, stakeholder engagement, capacity-building, governance tasks)?</li> </ul> <p><i>Output: list of activities linked to value propositions.</i></p>	<ul style="list-style-type: none"> <li>What environmental, social, economic, or direct user benefits does the innovation provide (e.g. improved biodiversity, reduced pollution, climate resilience, cost savings)?</li> <li>Why would beneficiaries value this solution?</li> </ul> <p><i>Output: list of value propositions linked to beneficiaries</i></p>	<ul style="list-style-type: none"> <li>Which actors are essential for delivering or supporting the innovation (public authorities, research institutions, NGOs, communities, private partners)?</li> </ul> <p><i>Output: defined list of strategic partners and roles.</i></p>	<ul style="list-style-type: none"> <li>Who benefits from the innovation (e.g. municipalities, NGOs, SMEs, citizens, communities)?</li> <li>What needs, challenges, or societal issues does the innovation address?</li> </ul> <p><i>Output: list of key beneficiaries and their needs.</i></p>
<ul style="list-style-type: none"> <li>What critical resources are required to deliver the value (e.g. data, equipment, natural assets, expertise, partnerships, monitoring systems)?</li> </ul> <p><i>Output: list of resources linked to key activities.</i></p>	<ul style="list-style-type: none"> <li>How is value captured to support the innovation over time? This includes financial (e.g. grants, contracts, partnerships) and non-financial value (e.g. environmental indicators, social benefits, health improvements, avoided costs).</li> </ul> <p><i>Output: description of how value is measured and leveraged.</i></p>	<ul style="list-style-type: none"> <li>How will the innovation be managed and operated over time (e.g. municipal management, co-governance with communities, public-private collaboration)?</li> <li>What governance arrangements enable effective implementation and long-term sustainability?</li> </ul> <p><i>Output: description of governance model.</i></p>	
<p><b>Cost Structure</b></p> <ul style="list-style-type: none"> <li>What are the main categories of ongoing and operational costs (e.g. staff, maintenance, monitoring, equipment)?</li> <li>Which costs are fixed and which are variable?</li> </ul> <p><i>Output: breakdown of cost categories.</i></p>		<p><b>Cost Reduction</b></p> <ul style="list-style-type: none"> <li>What strategies can reduce operational or maintenance costs (e.g. volunteer engagement, community co-management, efficient planting or monitoring techniques)?</li> </ul> <p><i>Output: list of cost-optimisation opportunities.</i></p>	

The NBS-BMC provides significant added value: **it helps innovators understand the full logic of their solution, identify missing elements, and adapt to the diverse contexts and challenges they face.** The building blocks offer a clear and shared framework to summarise the essence of an innovation, highlight connections between its key components, and support the refinement of implementation and upscaling strategies. This insight allows them to develop tailored strategies based on their upscaling potential, such as market growth, market entry, or commercialisation approaches.

Completing the NBS-BMC helps in identifying gaps in the business plan of the innovation and bring additional clarity to the innovators on how to upscale the innovation. The type of information that needs to be collected in this exercise is mainly qualitative information on the different nine building blocks and should be resumed in the matrix of the BMC (see table above).

# THE GUIDEBOOK TO SUPPORT INNOVATION IN ECOSYSTEM RESTORATION IN THE DANUBE REGION

## #3 - Business models

### DEVELOPING A SOLID BUSINESS MODEL AS A KEY TO SUPPORT AND PROMOTE INNOVATION IN ECOSYSTEM RESTORATION



#### How to proceed, in practice

The application of the NBS- BMC could be done following a three-step approach (see the figure below):

- **Step 1: Preparation:** Collect relevant information on the innovation such as project documents, funding applications, or technical studies, and decide on the scope of the BMC to be developed.
- **Step 2: Application:** Fill in the nine building blocks of the canvas, using available information to describe customer segments, value propositions, resources, activities, partners, costs, and revenues in a clear and structured way. In this step, the innovator might need to brainstorm with external stakeholders (e.g. project team, municipalities, NGOs, funding organisations) to gather their views on the different nine building blocks and enrich the analysis in later steps.
- **Step 3: Analysis:** Review the completed canvas to identify gaps, inconsistencies, or opportunities, and summarise the results into a clean template that can guide further development and commercialisation.

Additionally, **a deeper understanding of the innovation's scaling potential enhances the innovator's ability to negotiate with funding organisations.** In this way, the BMC not only clarifies the business model but also strengthens credibility, increasing the likelihood that funders and investors will support the innovation.

#### Steps to apply the BMC



Applying the NBS-BMC is most effective when carried **out as a collaborative exercise rather than an individual task.** Innovators are encouraged to work with a diverse group of stakeholders who hold complementary knowledge about the innovation and its context. This typically includes the core project team, local or regional authorities, technical experts, NGOs, community representatives, and potential beneficiaries. Engaging these actors helps ensure that all dimensions of the canvas—particularly governance, cost structure, cost reduction, and value capture—are accurately understood and realistically described. Workshops, co-creation sessions, and facilitated discussions can be used to jointly populate the canvas, validate assumptions, and identify blind spots. This collaborative approach also strengthens stakeholder ownership, supports alignment across institutions, and increases the credibility of the resulting business model when presented to funders, policymakers, or potential partners.

Some additional practical applications of the BMC-NBS are the followings:

- **Workshop tool:** The NBS-BMC is often used in multi-stakeholder workshops (city planners, NGOs, funders, community reps) to co-create and visualise who benefits, what value is delivered (ecosystem services), who pays, and implementation roles — helping convert pilots into replicable models<sup>3</sup>.
- **Linking to finance:** BMC outputs are used to identify feasible revenue streams for NBS (service contracts, PES, carbon credits, blended finance, public procurement) and to align cost structure with funding windows (EU funds, municipalities, private investors)<sup>4</sup>.
- **Research & classification:** Academic studies have applied BMC-style templates to classify and cluster NBS business models across cases, showing repeatable archetypes and constraints (governance, scale, revenue)<sup>5</sup>. [MDPI+1](https://www.mdpi.com/2071-1050/15/19/14091)

<sup>3</sup> <https://connectingnature.eu/sites/default/files/downloads/NBC-BMC-Booklet-Final-%28for-circulation%29.pdf> and <https://progireg.eu/resources/nbs-business-models/>

<sup>4</sup> [https://gogreenroutes.eu/fileadmin/user\\_upload/Del\\_4.3\\_Concept\\_to\\_Innovation\\_Guidebook\\_Final.pdf](https://gogreenroutes.eu/fileadmin/user_upload/Del_4.3_Concept_to_Innovation_Guidebook_Final.pdf) and <https://unepccc.org/wp-content/uploads/2025/02/24442-uneppcc-business-models-v09-au-pages-hq.pdf>

<sup>5</sup> Stork, S., Polling, B., Lorleberg, W., Morgenstern, R., 2023. Clustering Business Models of Heterogeneous Nature-Based Solutions Implementing Innovative Governance and Financing Concepts. *Land* 2023, 12(12). <https://www.mdpi.com/2073-445X/12/12/2116> - and Stork, S., Morgenstern, R., Polling, B., Feil, J., 2023. Holistic Business Model Conceptualisation—Capturing Sustainability Contributions Illustrated by Nature-Based Solutions. *Sustainability* 2023, 15(19). <https://www.mdpi.com/2071-1050/15/19/14091>

# THE GUIDEBOOK TO SUPPORT INNOVATION IN ECOSYSTEM RESTORATION IN THE DANUBE REGION

## #3 - Business models

### DEVELOPING A SOLID BUSINESS MODEL AS A KEY TO SUPPORT AND PROMOTE INNOVATION IN ECOSYSTEM RESTORATION

#### Applying the BMC to NBS: some practical examples



#### 1. Connecting Nature: Genk, Glasgow, Poznań and others<sup>6</sup>

**What happened:** Connecting Nature (Horizon 2020) developed an *NBS Business Model Canvas* and a guidebook, piloted the canvas with front-runner cities (Genk, Glasgow, Poznań) and used it in facilitated workshops to co-design city NBS business models. The canvas was used to: (a) make the NBS 'story' accessible to non-technical stakeholders, (b) map partners and governance, and (c) identify revenue/funding pathways and service beneficiaries.

**How it helped:** cities used the canvas to surface new partners (e.g., tourism, utilities), test possible revenue mixes (contracts + grants + pilot PES), and create communication materials for municipal decision-makers. The project published a downloadable BMC guidebook and templates that can be reused.

#### 2. UNaLab – Front-runner city case studies: Genoa, Eindhoven, Tampere<sup>7</sup>

**What happened:** UNaLab documented business models for specific urban NBS (e.g., permeable pavements in Genoa; river restoration in Eindhoven; green roofs in Tampere). They explicitly mapped cost drivers, partners, and funding pathways using BMC-style templates to show how an NBS moves from demonstration to procurement or maintenance contracts.

**How it helped:** the canvas clarified who pays for installation vs. long-term maintenance, revealed where municipal procurement could absorb costs, and helped structure pilot data (performance evidence) required to secure recurring payments / service contracts.

#### 3. Natural Assurance Schemes: Lower Danube (floodplain restoration)<sup>8</sup>

**What happened:** For large river basin NBS (Lower Danube floodplain restoration), researchers and projects have applied NAS/NBS canvases (Natural Assurance Schemes / NAS Canvas) to map who captures value from restored floodplains, which actors should fund (public agencies, insurers, land-owners) and how mixed public-private funding can work across borders. The NAS canvas has been applied in demo cases including the Lower Danube to explore feasible business/assurance models for large-scale restoration. In this case, the proposed BMC includes 14 building blocks (as compared to the 9 building blocks proposed as part of this Guidebook): this is illustrated in the table below.

**How it helped:** the canvas made explicit the differing roles of national water agencies, local communities and EU programmes in implementing and financing river restoration — a crucial step for scaling cross-border interventions in the Danube basin.



NAS/BMC canvas developed for floodplain restoration in the Lower Danube. (Source: Mayor et al, 2023)

Section	Guiding Questions (Danube context)	Example Content for a Floodplain Restoration Nbs
<b>1. Problem / Need</b>	What environmental or social problem are you solving? Who is affected by it?	Frequent flooding, biodiversity loss, degraded wetlands, reduced water retention, and loss of ecosystem services for downstream communities.
<b>2. Ecosystem Services / Core Value</b>	What ecosystem services or natural benefits does your Nbs provide?	Flood mitigation, water purification, carbon sequestration, recreation, biodiversity enhancement.
<b>3. Beneficiaries / Customer Segments</b>	Who benefits directly or indirectly from your Nbs?	Local residents, municipalities, farmers, insurers, water agencies, tourists, conservation NGOs.
<b>4. Value Proposition (Impact Promise)</b>	What value or impact do you deliver to these groups?	Reduced flood risk, new recreational areas, increased tourism, improved habitats, enhanced climate resilience.
<b>5. Co-Benefits &amp; Social Value</b>	Beyond your main goal, what secondary social or cultural values emerge?	Education, community identity, eco-tourism jobs, improved well-being.
<b>6. Key Activities</b>	What must be done to create and sustain these values?	Wetland restoration, levee reconnection, vegetation planting, monitoring, stakeholder engagement, communication.

<sup>6</sup> <https://connectingnature.eu/sites/default/files/downloads/NBC-BMC-Booklet-Final-%28for-circulation%29.pdf>

<sup>7</sup> <https://connectingnature.eu/sites/default/files/downloads/NBC-BMC-Booklet-Final-%28for-circulation%29.pdf>

<sup>8</sup> Mayor, B., Lopez Gunn, E., Zorrilla-Miras, P., Dartée, K., Biffin, T., Pena, K., 2023. NAS Canvases: Identifying Business Models to Support Implementation of Natural Assurance Schemes. Part of the book series: Water Security in a New World (WSEC), [https://link.springer.com/chapter/10.1007/978-3-031-25308-9\\_8](https://link.springer.com/chapter/10.1007/978-3-031-25308-9_8) and <https://connectingnature.eu/sites/default/files/downloads/NBC-BMC-Booklet-Final-%28for-circulation%29.pdf>

# THE GUIDEBOOK TO SUPPORT INNOVATION IN ECOSYSTEM RESTORATION IN THE DANUBE REGION

## #3 - Business models

### DEVELOPING A SOLID BUSINESS MODEL AS A KEY TO SUPPORT AND PROMOTE INNOVATION IN ECOSYSTEM RESTORATION



Section	Guiding Questions (Danube context)	Example Content for a Floodplain Restoration NbS
<b>7. Key Resources</b>	Which physical, human, financial, and knowledge assets are essential?	Land area, hydrological data, ecological expertise, restoration machinery, funding, partnerships.
<b>8. Key Partners &amp; Governance</b>	Who are your implementation and governance partners? What's their role?	Ministries (environment, water), local governments, research institutes, NGOs (WWF, ICPDR), EU projects, communities.
<b>9. Delivery Channels</b>	How do you reach, engage, and communicate with beneficiaries and funders?	Project platforms, stakeholder workshops, EU reporting tools, local meetings, communication campaigns, eco-tourism info boards.
<b>10. Cost Structure</b>	What are your main cost categories? Which are one-off vs. ongoing?	Land acquisition, construction, monitoring, staff, communication, maintenance.
<b>11. Revenue Streams / Funding Sources</b>	How is your NbS financed or sustained over time?	EU LIFE/Interreg funding, municipal budgets, corporate social responsibility (CSR), payments for ecosystem services, carbon credits, tourism fees.
<b>12. Enabling Conditions / Policies</b>	What legal, regulatory, or policy conditions support or hinder you?	EU Water Framework Directive, Floods Directive, national restoration strategies, spatial planning laws, cross-border agreements.
<b>13. Risk &amp; Barriers</b>	What are the key risks, and how can they be mitigated?	Policy changes, lack of long-term financing, stakeholder conflicts, maintenance gaps, climate uncertainty.
<b>14. Monitoring &amp; Value Evidence</b>	How will you measure performance and communicate success?	Indicators: area restored (ha), flood reduction data, biodiversity indices, visitor numbers, community satisfaction surveys.

## PESTEL ANALYSIS

The PESTEL framework is a tool that **helps innovators understand the external environment in which their innovation will operate**. It structures the analysis into six dimensions, as also shown in the table below:

- **Political** factors (e.g. public policies, governance structures, political stability);
- **Economic** factors (such as market trends, investment flows, and economic incentives);
- **Social** factors (including demographic trends, public awareness, and societal expectations);
- **Technological** factors (like innovation dynamics, digital infrastructure, and R&D capacity);
- **Environmental** factors (such as climate policies, resource availability, and ecological constraints); and **Legal** factors (including regulatory standards, compliance requirements, and intellectual property frameworks).

By systematically reviewing these factors, **innovators can anticipate risks, identify opportunities, and adapt their strategies accordingly**.

Traditionally, PESTEL is widely used in strategic planning to map market and regulatory contexts. In the context of **ecosystem services innovations**, it is especially useful for highlighting policy drivers (e.g. the EU Biodiversity Strategy), funding opportunities, societal acceptance, and legal barriers such as permitting or liability. Studies on innovation in marine and freshwater systems<sup>9</sup> have shown that external political and regulatory conditions are often decisive in determining whether an innovation can move from pilot to commercialisation.

# THE GUIDEBOOK TO SUPPORT INNOVATION IN ECOSYSTEM RESTORATION IN THE DANUBE REGION

## #3 - Business models

### DEVELOPING A SOLID BUSINESS MODEL AS A KEY TO SUPPORT AND PROMOTE INNOVATION IN ECOSYSTEM RESTORATION



#### How to proceed, in practice

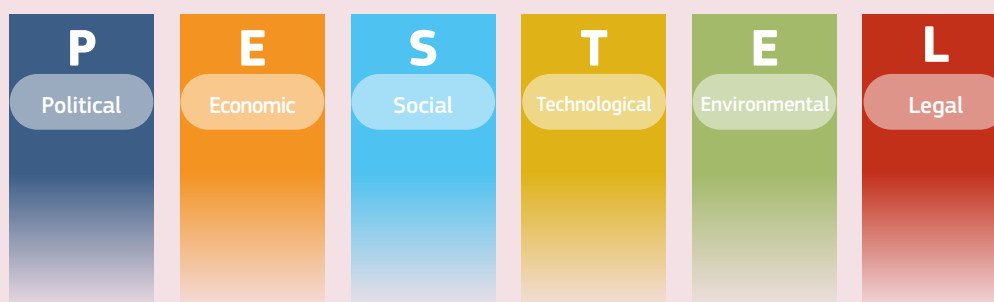
The PESTEL analysis could be implemented by following three different steps (see the figure below):

In particular:



*Steps to apply PESTEL analysis*

- 1. Mapping existing information to build a comprehensive understanding of the broader context** in which the innovation is being developed. This involves collecting and reviewing relevant policy documents, funding programmes, market studies, and regulatory frameworks at the local, national, and European levels. The objective is to identify the external factors that may influence the innovation, whether directly or indirectly. Useful sources include EU legislation and strategies (e.g., the EU Green Deal, Water Framework Directive), national policy documents, regional development plans, databases of funding programmes (e.g., LIFE, Inter-reg, Horizon Europe), market studies from research institutes, and regulatory guidance from competent authorities.
- 2. Analysing and interpreting the collected data.** At this stage, innovators are encouraged to identify the key drivers and barriers under each of the six PESTEL categories. Each factor should be assessed in terms of its potential impact on the innovation's development and implementation, and whether it represents an opportunity or a risk. This step helps prioritise the most influential external elements and provides a structured view of the external environment. Data for this analysis can be gathered from statistical portals (Eurostat, national statistical offices), sector reports (OECD, EEA, ICPDR), scientific publications, stakeholder interviews, and consultation feedback, which provide detailed insights into economic trends, social perceptions, technological maturity, and environmental pressures.
- 3. Drawing conclusions and integrating the insights into the innovation strategy.** This includes reviewing the completed PESTEL overview to identify the most critical external factors, understanding how they interact, and summarising the findings in a concise and actionable format. The information can be then organised into a PESTEL matrix (see Figure 10), which provides a clear visual representation of the opportunities and risks across the six dimensions. This matrix serves as a practical tool to support strategic decision-making, guide stakeholder engagement, and ensure alignment with broader policy and market dynamics.



*PESTEL matrix*

# THE GUIDEBOOK TO SUPPORT INNOVATION IN ECOSYSTEM RESTORATION IN THE DANUBE REGION

## #3 - Business models

### DEVELOPING A SOLID BUSINESS MODEL AS A KEY TO SUPPORT AND PROMOTE INNOVATION IN ECOSYSTEM RESTORATION

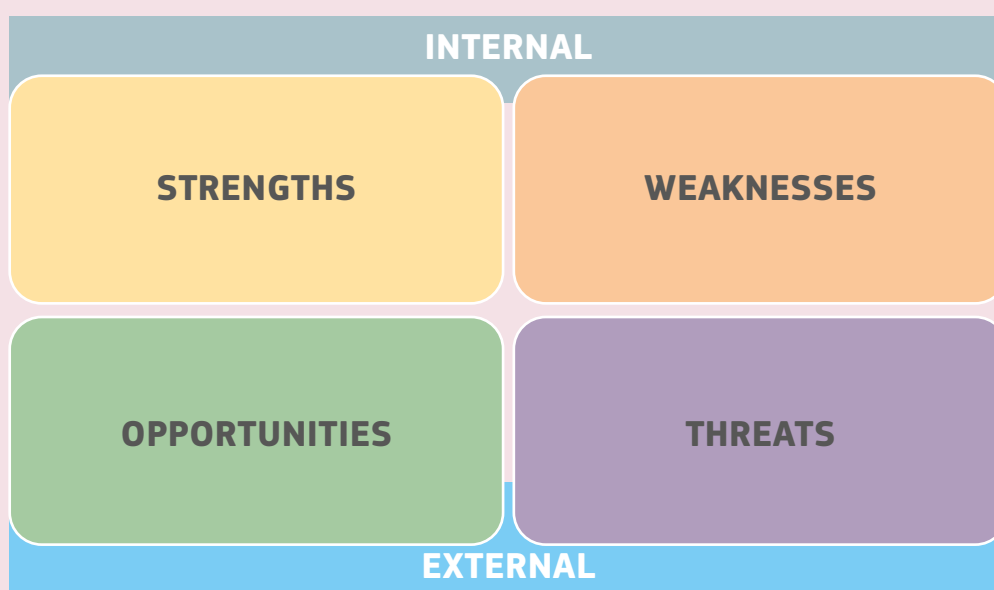
## SWOT ANALYSIS

In complement to the PESTEL analysis, a SWOT analysis offers a **strategic framework to assess internal and external factors that may influence the development and deployment of innovation for ecosystem restoration**. While PESTEL focuses on the external environment, SWOT helps innovators reflect on their own capacities and positioning within that environment.

The SWOT analysis is structured around four dimensions (see Figure 11):

- **Strengths:** internal assets, capabilities, or resources that give the innovation a competitive advantage. These may include technical expertise, stakeholder support, access to funding, or alignment with policy priorities.
- **Weaknesses:** internal limitations or gaps that may hinder progress, such as lack of visibility, limited scalability, or insufficient market knowledge.
- **Opportunities:** external conditions that could be leveraged to accelerate innovation, including emerging market needs, supportive regulations, or synergies with other initiatives.
- **Threats:** external risks or challenges that could negatively impact the innovation, such as regulatory uncertainty, competing solutions, or resistance from key actors.

By systematically identifying and evaluating these four dimensions, innovators can better understand their strategic position, anticipate challenges, and align their development efforts with both internal strengths and external opportunities. The SWOT analysis can also serve as a basis for refining business models, stakeholder engagement strategies, and investment planning.



SWOT matrix

As for the BMC, most of the information needed for the SWOT analysis – particularly regarding internal factors – cannot be found in the literature. Therefore, to carry out the analysis, the innovators should complete the information during internal meetings or workshops on the innovation activity. The same strategy as for BMC applies to the SWOT analysis.

# THE GUIDEBOOK TO SUPPORT INNOVATION IN ECOSYSTEM RESTORATION IN THE DANUBE REGION

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#### How to proceed, in practice

The SWOT analysis can be applied through a structured three-phase approach that supports strategic reflection and planning, and namely:

- 1. Preparation: gathering relevant information about the innovation and its context.** This includes reviewing project documentation, technical studies, stakeholder feedback, and market or policy insights. The goal is to build a solid foundation of knowledge that will inform the SWOT analysis. During this phase, innovators should also define the scope of the analysis—whether it focuses on the innovation as a whole, a specific component, or a particular stage of development. This ensures that the exercise remains targeted and relevant.
- 2. Application: populating the SWOT matrix with insights across the four dimensions:** strengths, weaknesses, opportunities, and threats. Strengths and weaknesses refer to internal factors—such as technical expertise, partnerships, funding, or operational limitations—while opportunities and threats relate to external conditions, including policy developments, market trends, environmental risks, or competitive pressures. This phase may involve engaging with external stakeholders to gather diverse perspectives and enrich the analysis. Their input can help validate assumptions and ensure that the matrix reflects a realistic and comprehensive view of the innovation's strategic environment.
- 3. Analysis: review of the completed SWOT matrix to identify strategic priorities and inform decision-making.** Innovators should assess how internal strengths can be leveraged to seize external opportunities, and how weaknesses might expose the innovation to threats. This phase also involves identifying gaps, inconsistencies, or areas for improvement, and summarising the results into a clear and actionable format. The insights gained from this analysis can guide future development, scaling strategies, and stakeholder engagement, ultimately strengthening the innovation's resilience and impact.



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# THE GUIDEBOOK TO SUPPORT INNOVATION IN ECOSYSTEM RESTORATION IN THE DANUBE REGION

## #4 - Regulatory Procedures

### HOW TO DEAL WITH THEM

Simplified regulatory procedures are a key enabler for innovation in the Danube region. According to the EcoDaLLi stakeholder survey, nearly 50% of respondents identified the need for simplified regulatory procedures as a critical condition for advancing their future work in innovation related to NBS and ecosystem restoration. This finding highlights that **administrative complexity and uncertainty remain major barriers for innovators** seeking to develop and implement new approaches in the region.

Simplified regulatory procedures refer to **clear, efficient, and proportional administrative processes** that facilitate the approval, testing, and scaling of innovative solutions while maintaining compliance with environmental and safety standards. In the context of NBS and ecosystem restoration, such procedures can include streamlined permitting processes, easy access to funding mechanisms, and harmonised requirements across sectors.

The importance of simplified regulatory procedures also lies in its **ability to shorten innovative project timelines** (from implementation to scaling-up innovation) for innovators. Lengthy and complicated regulatory procedures can discourage innovation development (due to increased times in allocating budget to the project, increased time to getting the right permits, etc.). This would result in the delay of innovation deployment that may deliver significant environmental and social benefits. By contrast, a transparent and innovation-friendly regulatory environment can accelerate the procedure, foster cross-border cooperation and strengthen the regional capacity to respond to climate and biodiversity challenges.

#### What you will find in this section:



- ✔ An overview of current regulatory frameworks for NBS and ecosystem restoration innovation.
- ✔ An overview of regulatory challenges for innovation in ecosystem restoration.
- ✔ Recommendations to overcome current regulatory challenges.

## REGULATORY FRAMEWORK FOR NBS AND ECOSYSTEM RESTORATION INNOVATION

### EU-Level Framework

At the European level, several legislative instruments shape the regulatory environment for NBS and ecosystem restoration. These frameworks are designed to safeguard environmental integrity and ensure coherent action across MS. However, these legislative instruments could introduce administrative complexity for innovators.

A cornerstone of the EU policy landscape is the **Nature Restoration Law** which sets legally binding targets to restore at least 20% of the EU's degraded ecosystems by 2030 and all ecosystems in need of restoration by 2050<sup>1</sup>. The law calls for integrated planning and multi-level governance, but its implementation will require clear guidance on permitting and compliance mechanisms to ensure that innovation in restoration is not hindered by procedural uncertainty<sup>2</sup>.

Complementary regulations such as the **Water Framework Directive (WFD)**<sup>3</sup> and the **Floods Directive (FD)**<sup>4</sup> also play a major role in defining regulatory pathways for restoration projects, particularly in river basins like the Danube. These directives require MS to achieve good ecological status of water bodies and to manage flood risks through integrated plans. However, innovators often face challenges in aligning restoration projects with multiple planning instruments, which can lead to delays or conflicting administrative requirements.

1 [https://environment.ec.europa.eu/topics/nature-and-biodiversity/nature-restoration-regulation\\_en](https://environment.ec.europa.eu/topics/nature-and-biodiversity/nature-restoration-regulation_en)

2 European Commission (2024). Regulation (EU) 2024/1991 of the European Parliament and of the Council on nature restoration. Official Journal of the European Union (<http://data.europa.eu/eli/reg/2024/1991/oj>)

3 European Commission (2000). Directive 2000/60/EC establishing a framework for Community action in the field of water policy (Water Framework Directive) (<http://data.europa.eu/eli/dir/2000/60/oj>)

4 European Commission (2007). Directive 2007/60/EC on the assessment and management of flood risks (Floods Directive) (<http://data.europa.eu/eli/dir/2007/60/oj>)

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Moreover, other EU directives exist. The **Habitats Directive**<sup>5</sup> and **Birds Directive**<sup>6</sup> set the legal basis for biodiversity conservation in the EU. While these directives ensure environmental safeguards, they can also make the approval of pilot projects complex.

Beyond environmental legislation, **EU innovation and research policies**—such as the EU Research and Innovation Policy on NBS<sup>7</sup>—encourage the testing and scaling of NBS through funding programmes like *Horizon Europe*. However, project coordinators often report that national-level authorisation processes lag behind the flexibility promoted by EU innovation instruments. Thus, there remains a gap between the EU's policy ambition to promote NBS and the administrative reality experienced by innovators on the ground<sup>8</sup>.

In the Danube macro-region, the **EU Strategy for the Danube Region (EUSDR)**<sup>9</sup> provides an important coordination framework. Priority Area 5 (Environmental Risks) and Priority Area 6 (Biodiversity, Landscapes, Quality of Air and Soils) promote transnational cooperation on ecosystem restoration, water management, and the application of NBS.

### National frameworks

At the national and subnational levels, **Danube countries translate EU directives into domestic legislation governing land use, water management, and environmental protection**. Although the overall policy objectives are aligned, the complexity and fragmentation of administrative structures vary widely across countries, affecting how quickly innovative projects can move from concept to implementation.

In the **Slovak Republic**, for instance, restoration, nature conservation and landscape protection are regulated under Act No. 543/2002 on Nature and Landscape Protection (Slovak Republic)<sup>10</sup>. The Act establishes five levels of territorial protection and sets the basis for the protected-areas network, species protection, and ecosystem management. The law has undergone amendments aimed at streamlining certain processes (e.g., sanitary logging, forest interventions) in 2021<sup>11</sup>. Nevertheless, the procedural requirements for restoration or innovative NBS pilots remain aligned with general conservation and infrastructure laws rather than tailored to innovation pathways, which can lead to delays.

In **Hungary**, the European Commission's *Environmental Implementation Review 2022: Country Report*<sup>12</sup> – Hungary flagged that despite comprehensive legislation, further efforts are needed to comply with EU laws, notably the WFD. In particular, the MS is encouraged to reduce unnecessary administrative burdens and accelerate decision-making. For innovators, this means that even though national frameworks exist, administrative complexity and unclear innovation-specific mechanisms can hamper the deployment of new NBS solutions.

Although the regulatory frameworks in EU MS of the Danube region provide the environmental safeguards and strategic direction needed, they often impose **complex, fragmented, and time-consuming procedures**. This might act as a barrier to innovation in NBS and ecosystem restoration.

5 European Commission (1992). Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) (<http://data.europa.eu/eli/dir/1992/43/oj>)

6 European Commission (2009). Directive 2009/147/EC on the conservation of wild birds (Birds Directive) (<http://data.europa.eu/eli/dir/2009/147/oj>)

7 [https://research-and-innovation.ec.europa.eu/research-area/environment/nature-based-solutions/research-policy\\_en](https://research-and-innovation.ec.europa.eu/research-area/environment/nature-based-solutions/research-policy_en)

8 ESG frameworks are increasingly relevant for corporate sustainability reporting and investment decisions related to NBS. However, these frameworks do not directly regulate permitting, planning or authorisation procedures for restoration projects, which are primarily governed by environmental legislation such as the Nature Restoration Law, the WFD, and the HBD.

9 <https://danube-region.eu/implementation-funding-and-initiatives/danube-strategy-flagships/>

10 <https://www.enviroportal.sk/uploads/report/04-nature.pdf>

11 <https://rm.coe.int/49-slovak-republic-poloniny-national-park/1680a52b75?>

12 <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022SC0259>

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## REGULATORY CHALLENGES FOR INNOVATION IN ECOSYSTEM RESTORATION

Innovators working on ecosystem restoration and NBS face a number of regulatory and governance-related obstacles that impede timely development, testing and scaling of innovations. The following points present key challenges that are relevant for EU-wide and Danube context.

- **Complexity, overlap and fragmentation of permitting frameworks.** Many restoration and NBS projects require multiple approvals across environmental, water, biodiversity, and spatial-planning authorities, which are often distributed across different ministries with no single lead body responsible for coordinating a comprehensive NBS strategy. This leads to lengthy timelines. For instance, the EEA notes that scaling up NBS is held back in Europe by governance and coordination challenges including fragmented institutional responsibilities<sup>13</sup>. Another study found that even where EU policy supports NBS, the actual regulatory environment remains complex and inconsistent<sup>14</sup>. In the context of the Danube region, this means innovators may have to navigate separate national, regional and local authorities, each with its own procedural steps, which slows the pace of innovation.
- **Lack of tailored regulatory pathways for innovation and pilot interventions.** Standard environmental and restoration frameworks are often designed for established infrastructure or conventional restoration projects, not experimental or novel NBS pilots. As such, innovators find no clear expedited or flexible permitting route for testing new methods. A policy brief highlights that current policies and regulations still favour grey-measures or traditional approaches, and that many regulations are not adapted to the adaptive, iterative nature of NBS innovation<sup>15</sup>.
- **Inconsistent implementation and cross-border divergence.** Even within EU MS, translation of EU-level directives into national law leads to variation in regulatory detail, interpretation and enforcement. The consequence is that innovators in cross-border basins like the Danube Basin face different regulatory regimes depending on the country, complicating multinational innovation projects. Research on EU policies for ponds found that many ecosystems fall outside established policies and thus face greater regulatory uncertainty<sup>16</sup>. Harmonising regulatory procedures across Danube region remains a challenge and a barrier to seamless innovation.
- **Regulatory uncertainty and investment risk.** Uncertainty about how regulatory frameworks will apply to innovative restoration or NBS projects increases perceived risk for innovators and investors. For example, the European Investment Bank pointed out that regulatory hurdles are among the barriers to greater uptake of NBS in Europe<sup>17</sup>. Another study also discusses how private investment in biodiversity and restoration is hindered by political, ecological and reputational risks in regulatory environments<sup>18</sup>. In the Danube region such regulatory ambiguity may deter innovators with limited capital from entering the field.

13 <https://www.eea.europa.eu/en/analysis/publications/scaling-nature-based-solutions>

14 Ryfisch, S., Seeger, I., McDonald, H., Lago, M., & Blicharska, M. (2023). Opportunities and limitations for Nature-Based Solutions in EU policies — assessed with a focus on ponds and pondscapes. *Land Use Policy*, 139, 106957. <https://doi.org/10.1016/j.landusepol.2023.106957>

15 IIASA (2023). Policy and finance innovation for nature-based solutions (IIASA Policy Brief #38). International Institute for Applied Systems Analysis. [https://iiasa.ac.at/sites/default/files/2023-10/PB38\\_web.pdf](https://iiasa.ac.at/sites/default/files/2023-10/PB38_web.pdf)

16 Ryfisch, S., Seeger, I., McDonald, H., Lago, M., & Blicharska, M. (2023). Opportunities and limitations for Nature-Based Solutions in EU policies — assessed with a focus on ponds and pondscapes. *Land Use Policy*, 139, 106957. <https://doi.org/10.1016/j.landusepol.2023.106957>

17 <https://www.eib.org/en/press/all/2023-217-nature-based-solutions-eib-report-finds-scope-for-regulatory-and-subsidy-reforms-as-well-as-a-more-flexible-spectrum-of-financial-instruments>

18 Zu Ermgassen, S. O. S. E., Hawkins, I., Lundhede, T., Liu, Q., Thorsen, B. J., & Bull, J. W. (2025). The current state, opportunities and challenges for upscaling private investment in biodiversity in Europe. *Nature Ecology & Evolution*, 9, 515-524. <https://doi.org/10.1038/s41559-024-02632-0>

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## OVERCOMING REGULATORY CHALLENGES: SOME RECOMMENDATIONS TO SUPPORT INNOVATORS



To overcome the regulatory challenges and foster innovation in ecosystem restoration across the Danube region, innovators can consider the following recommendations:

- **Engage early with permitting authorities.** Establish contact with relevant agencies at the project design stage to clarify procedural requirements and timelines.
- **Map and anticipate regulatory requirements.** Innovators should consider developing a clear overview of applicable permits and compliance obligations before project implementation.
- **Design adaptive and evidence-based projects.** Incorporate monitoring and evaluation mechanisms that demonstrate the environmental benefits and safety of innovative approaches.
- **Build partnerships with public and private stakeholders.** Collaborate with ministries, basin authorities, municipalities, and research institutions to co-develop solutions aligned with regulatory goals.
- **Advocate for simplified and flexible procedures.** Share lessons learned from pilot projects with policymakers and regulatory bodies to promote the establishment of innovation-friendly pathways.
- **Participate in regional policy and knowledge platforms.** Use networks such as the EUSDR and the ICPDR to exchange experiences, support harmonisation, and foster a collective push for regulatory simplification.



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# THE GUIDEBOOK TO SUPPORT INNOVATION IN ECOSYSTEM RESTORATION IN THE DANUBE REGION

## #5 - Expert Mentoring and Coaching

### BRIDGING THE GAP BETWEEN SCIENCE, PRACTICE AND ENTREPRENEURSHIP

Expert mentoring and coaching provide **tailored guidance to innovators**, helping them strengthen technical, business, and collaborative aspects of their projects<sup>1</sup>. They create opportunities for personalised learning and knowledge transfer through direct interaction with experienced professionals. **In the context of ecosystem restoration and NBS, mentoring and coaching are essential to bridge gaps between science, practice and entrepreneurship.**

Across the Danube region, several initiatives demonstrated the value of such support. Programmes like FORESDA (Interreg Danube)<sup>2</sup> and Restore4Life<sup>3</sup> have shown that mentoring plays a key role in accelerating innovation by fostering collaboration between innovators, SMEs and research institutions.

Building on previous experiences, mentoring and coaching emerge as strategic enablers within the innovation ecosystem of the Danube region. They not only support individual innovators but also strengthen connections across sectors and countries, contributing to a more integrated and collaborative environment for nature-based and restoration-driven innovation.

#### What you will find in this section:



- ✓ An overview of the existing mentoring and coaching programmes in the Danube region for innovation and ecosystem restoration
- ✓ A step-by-step guidance to help innovators in the region access and benefit from expert mentoring and coaching opportunities

## MENTORING AND COACHING OPPORTUNITIES IN THE DANUBE REGION

**Mentoring and coaching play a strategic role in strengthening innovation capacity and supporting the translation of ideas into practical, scalable solutions.** They complement other forms of support such as training or funding by providing personalised, experience-based guidance that helps innovators navigate technical, managerial, and organisational challenges. Beyond individual skill development, mentoring and coaching contribute to building stronger networks, enhancing collaboration, and promoting knowledge transfer across the innovation ecosystem.

The examples presented further down in this section, along with the lessons drawn from the KnowING Intellectual Property Right (IPR) mentoring pilot<sup>4</sup>, highlight **several dimensions of added value** that mentoring and coaching bring to the Danube innovation ecosystem:

- **Capacity building:** Strengthens the skills of researchers and entrepreneurs in areas such as IPR management, technology transfer, and business modelling, supported by EU advisory and technical assistance services (e.g. JASPERS<sup>5</sup>, ELENA<sup>6</sup>, InvestEU Advisory Hub<sup>7</sup>) for project preparation and capacity building.
- **Knowledge transfer:** Facilitates the exchange of expertise and good practices between more and less advanced institutions across the region. Sharing lessons learned and concrete case studies also builds capacity, demonstrates the viability of NBS, and encourages the replication of effective investment models across cities and regions, including through existing EU repositories such as the European Investment fund case studies.

1 Interreg Danube (2019). FORESDA Project – Mutual Learning and Mentoring Workshops. [https://interreg-danube.eu/uploads/media/approved\\_project\\_output/0001/52/9bd4cd8ce39041c0617061f313897ed0ae61e756.pdf](https://interreg-danube.eu/uploads/media/approved_project_output/0001/52/9bd4cd8ce39041c0617061f313897ed0ae61e756.pdf)

2 Interreg Danube (2019). FORESDA Project – Mutual Learning and Mentoring Workshops. [https://interreg-danube.eu/uploads/media/approved\\_project\\_output/0001/52/9bd4cd8ce39041c0617061f313897ed0ae61e756.pdf](https://interreg-danube.eu/uploads/media/approved_project_output/0001/52/9bd4cd8ce39041c0617061f313897ed0ae61e756.pdf)

3 [https://www.ceeweb.org/documents/news/9\\_Mihai\\_Adamescu\\_Ecosystem\\_services\\_Restore4Life.pdf](https://www.ceeweb.org/documents/news/9_Mihai_Adamescu_Ecosystem_services_Restore4Life.pdf)

4 Interreg Danube (2022) Fostering innovation in the Danube Region through knowledge engineering and IPR management. <http://www.interreg-danube.eu/approved-projects/knowingipr>

5 <https://www.eib.org/fr/products/advisory-services/jaspers/index>

6 <https://www.eib.org/fr/products/advisory-services/elena/index>

7 [https://investeu.europa.eu/investeu-programme/investeu-advisory-hub\\_en](https://investeu.europa.eu/investeu-programme/investeu-advisory-hub_en)

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- **Collaboration and networking:** Encourages cross-sector and cross-border partnerships, linking academia, SMEs, and public institutions.
- **Innovation readiness:** Enhances the ability of innovators to move from idea to market by providing targeted, practical advice.
- **Institutional development:** Supports the establishment of technology transfer offices (TTOs) and reinforces internal mechanisms for innovation management.
- **Regional cohesion:** Contributes to reducing disparities in innovation capacity and creating a more integrated and balanced regional ecosystem.

## FIVE STEPS TO ACCOMPANY INNOVATORS THROUGH THEIR MENTORING JOURNEY



This step-by-step guidance is intended to help innovators in the Danube region access and benefit from expert mentoring and coaching opportunities that can strengthen their innovation capacity, accelerate project implementation, and enhance the impact of their work in ecosystem restoration and NBS. It builds on lessons from successful regional initiatives such as KnowING IPR and Danube Life Lines (DLL), which have demonstrated the effectiveness of structured and tailored mentoring schemes for innovators across different sectors.

The guidance is built around **five key steps that accompany innovators throughout their mentoring journey** – from identifying their needs to applying the lessons learned and sharing outcomes within the regional innovation community.



*Step-by-step guidance for expert mentoring and coaching*

### 1. Identify needs and objectives

The initial step involves **clarifying the purpose and expected outcomes** of mentoring or coaching. Three complementary areas typically emerge:

- **Technical mentoring**, oriented towards the design, implementation, and monitoring of NBS or restoration actions.
- **Business mentoring**, aimed at strengthening business models, financial planning, or market positioning.
- **Strategic or policy coaching**, supporting governance alignment, stakeholder engagement, and regulatory navigation.

Evidence from the KnowING IPR mentoring pilot shows that requiring participants to formulate their innovation challenges prior to mentor matching significantly improved the relevance and effectiveness of subsequent sessions<sup>8</sup>. This highlights the importance of a well-defined entry point and structured objective-setting at the onset of the mentoring process.

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### 2. Identify existing mentoring and coaching opportunities

Mapping available opportunities within the region allows innovators to engage with established structures rather than operate in isolation. Notable **examples in the Danube region** include:

- The **FORESDA project** (Interreg Danube) implemented a series of mutual learning and mentoring workshops that connected research institutions, SMEs, and innovation support organisations in the wood-based bioeconomy sector. These exchanges facilitated cross-border transfer of good practices and improved the innovation capacities of less developed regions, highlighting the importance of mentoring for institutional learning and regional cohesion<sup>9</sup>.
- The **KnowING IPR** project designed a structured mentoring programme to help SMEs and higher education institutions strengthen their skills in intellectual property management and technology transfer. Through tailored mentoring sessions and online learning tools, participating innovators improved their business-model readiness and competitiveness, illustrating how coaching can directly enhance innovation uptake<sup>10</sup>.
- The **Rising Competencies** project further extended this approach by establishing a transnational mentor scheme for rural entrepreneurs and SMEs in less developed parts of the Danube basin. Its e-platform and peer-learning components enabled participants to gain practical knowledge and connect with experts beyond national boundaries, reducing regional disparities in innovation support<sup>11</sup>.
- More recently, the **Danube Life Lines Business Club** has introduced one-on-one mentoring and coaching for green entrepreneurs and innovators developing NBS and ecosystem-restoration projects. This initiative demonstrates how mentoring can directly align environmental and business objectives, guiding innovators from concept to market while fostering sustainable economic opportunities in the region<sup>12</sup>.

These initiatives underline that mentoring frameworks in the Danube region are most effective when **embedded within broader innovation ecosystems, linking research, business, and public-sector actors across borders**.

Beyond these transnational programmes, innovators can also turn to **regional or national organisations participating in the EU Strategy for the Danube Region (EUSDR)**<sup>13</sup>. The EUSDR supports a range of thematic Priority Areas—such as innovation, environmental protection, and sustainable development—under which countries and institutions collaborate through National Contact Points, Priority Area Coordinators, and regional innovation agencies. These structures can provide access to mentoring, technical support, and networking opportunities.

Similarly, EU-funded initiatives like EcoDaLLi<sup>14</sup> contribute to this ecosystem by connecting innovators with experts and living labs that facilitate peer learning and knowledge exchange across the Danube basin.

9 Interreg Danube (2019). FORESDA Project – Mutual Learning and Mentoring Workshops.

[https://interreg-danube.eu/uploads/media/approved\\_project\\_output/0001/52/9bd4cd8ce39041c0617061f313897ed0ae61e756.pdf](https://interreg-danube.eu/uploads/media/approved_project_output/0001/52/9bd4cd8ce39041c0617061f313897ed0ae61e756.pdf)

10 AGEPI (2021). KnowING IPR Project – Partner Progress Report. [https://agepi.gov.md/sites/default/files/2022/02/Partner\\_Progress\\_Report\\_6\\_KnowING\\_IPR\\_20210527\\_090503.pdf](https://agepi.gov.md/sites/default/files/2022/02/Partner_Progress_Report_6_KnowING_IPR_20210527_090503.pdf)

11 <https://keep.eu/projects/29479/Rising-competences-skills-i-EN/>

12 <https://danubelifelines.eu/businessclub>

13 <https://danube-region.eu/>

14 <https://ecodalli.eu/>

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### 3. Prepare for engagement

A critical determinant of success lies in **adequate preparation prior to entering the mentoring process**. Innovators that systematically assess their innovation maturity, internal resources, and knowledge gaps are better positioned to benefit from mentoring. Clear articulation of project objectives and constraints enables mentors to tailor advice to the specific context.

The FORESDA mentoring workshops demonstrated that **targeted preparation**—through short presentations and diagnostic sessions—**allowed participants to receive more relevant and technically grounded feedback**<sup>15</sup>. This finding points to the value of integrating diagnostic tools or self-assessment questionnaires as part of future mentoring schemes.

**Preparation materials and templates for innovation maturity assessment or business readiness** can often be accessed through regional or EU-funded platforms, including:

- Danube Transnational Programme (DTP) mentoring and training resources<sup>16</sup>.
- EUSDR Priority Area 8 (Competitiveness of Enterprises), which provides tools for SMEs and innovation actors to evaluate business potential<sup>17</sup>.

Enterprise Europe Network (EEN) in the Danube countries, offering pre-mentoring business diagnostics and innovation audits<sup>18</sup>.

### 4. Establish and manage the mentoring relationship

Effective mentoring depends on the establishment of a **structured relationship between mentors and mentees**, characterised by clear objectives, defined timeframes, and transparent communication channels.

Good practice emerging from the KnowING IPR pilot shows that continuous interaction—through regular online meetings and iterative feedback—was instrumental in **achieving measurable progress and maintaining engagement**<sup>19</sup>. The evaluation also pointed to common challenges such as limited mentor availability and varying levels of commitment among participants, suggesting the need for stronger institutional anchoring and resource planning.

Sustaining such structured relationships requires access to **platforms that facilitate communication, scheduling, and documentation**. Innovators can use or adapt **systems already operating in the Danube region**, such as:

- The Danube Life Lines Business Club, which provides a mentoring interface and community of practice for green entrepreneurship<sup>20</sup>.
- The European Institute of Innovation and Technology (EIT) Climate-KIC Accelerator, which includes structured mentoring as part of its support packages for climate-related innovations<sup>21</sup>.

15 Interreg Danube (2019). FORESDA Project – Mutual Learning and Mentoring Workshops. [https://interreg-danube.eu/uploads/media/approved\\_project\\_output/0001/52/9bd4cd8ce39041c0617061f313897ed0ae61e756.pdf](https://interreg-danube.eu/uploads/media/approved_project_output/0001/52/9bd4cd8ce39041c0617061f313897ed0ae61e756.pdf)

16 <https://www.interreg-danube.eu>

17 <https://danube-region.eu>

18 <https://een.ec.europa.eu/about-enterprise-europe-network>

19 Interreg Danube (2022) Fostering innovation in the Danube Region through knowledge engineering and IPR management. <http://www.interreg-danube.eu/approved-projects/knowningipr> <https://danubelifelines.eu/businessclub>

20 <https://danubelifelines.eu/businessclub>

21 <https://www.climate-kic.org/programmes/accelerator>

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### 5. Consolidate, apply and disseminate outcomes

The final step involves **evaluating the mentoring process, consolidating key insights, and translating them into practical improvements in project design or business operations**. The dissemination of lessons learned—through peer-learning events, innovation hubs, or living labs—ensures that mentoring benefits extend beyond individual participants.

Evidence from the Rising Competences project indicates that **peer-exchange mechanisms helped sustain collaboration among mentees and contributed to broader community capacity-building**<sup>22</sup>. Embedding mentoring outcomes into organisational routines and regional innovation platforms, such as the EcoDaLLi Living Labs<sup>23</sup>, can further enhance knowledge circulation and institutional learning across the Danube basin.

Several **regional and EU-wide initiatives** provide frameworks and platforms intended to support reflection, dissemination, and community exchange with varying levels of activity and effectiveness across initiatives:

- **EcoDaLLi Living Labs:** designed to promote co-creation and mentoring among innovators, researchers, and policymakers in the Danube region.
- **EUSDR Priority Area 7 (Knowledge Society):** supports transitional cooperation in education, research, and innovation and provides a strategic coordination framework at macro-regional level<sup>24</sup>.

**Interreg Danube Transnational Programme – Capitalisation Platform:** which aims to facilitate sharing of lessons learned from projects such as FORESDA or Rising Competences to support the uptake of good practices<sup>25</sup>.

22 <https://keep.eu/projects/29479/Rising-competences-skills-i-EN/>

23 <https://ecodalli.eu/>

24 <https://danube-region.eu>

25 <https://dtp.interreg-danube.eu/>



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