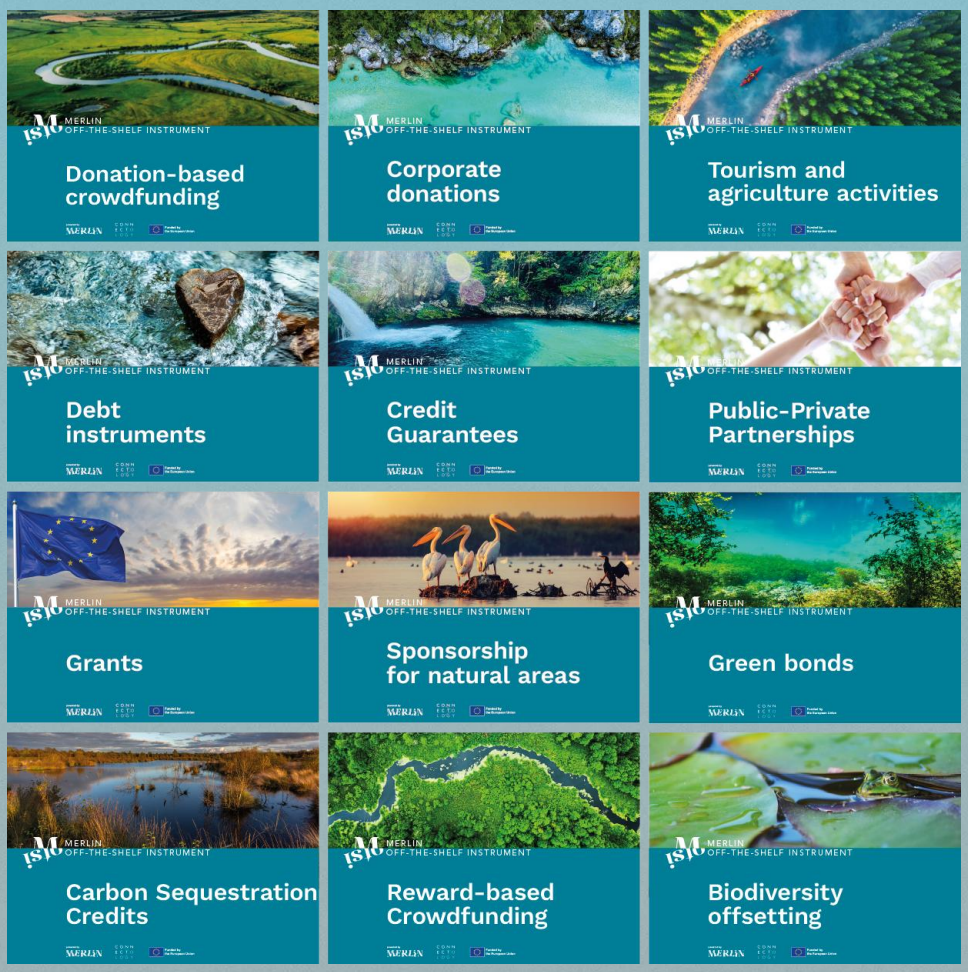
MERLIN



Deliverable D3.6

Funding Freshwater Restoration: an Off-the-Shelf Instruments (OTSIs) Portfolio

MERLIN

Imprint

The MERLIN project (https://project-merlin.eu) has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101036337.

Lead contractor: Connectology (CONN)

Contributors: Ecologic Institute (ECO), Deltares, the James Hutton Institute (JHI), Wageningen University & Research (WU), University of Natural Resources and Life Sciences, Vienna (BOKU), University of Duisburg-Essen (UDE), Schnee auf Moss (SAM)

To be cited as:

Barjasic, A., Andrez, P., Demus, Y., Saviak, V., Vírseda de Lucas, T., Hering D., Birk, S., 2025. Funding Freshwater Restoration: An Off-the-Shelf Instruments (OTSIs) Portfolio. MERLIN Deliverable 3.6. EU H2020 research and innovation project MERLIN deliverable 3.6. 26 pp. https://project-merlin.eu/outcomes/deliverables.html

Due date of deliverable: 31/07/2025

Actual submission date: 30/09/2025

MERLIN Key messages

1. The MERLIN project has created a portfolio of Off-the-Shelf Instruments (OTSIs), providing flexible and scalable solutions to the funding challenges faced by restoration teams. Each OTSI is presented in an accessible way so that even those without a financial or business background can easily understand and apply the guidance.
2. Each of the instruments was developed in collaboration with experts to create a portfolio of cutting-edge approaches for funding freshwater restoration. The Off-the-Shelf Instruments are: Donation-Based Crowdfunding, Reward-Based Crowdfunding, Corporate Donations, Sponsorship for Natural Areas, Tourism and Agriculture Activities, Carbon Sequestration Credits, Biodiversity Offsetting, Grants, Debt Instruments, Credit Guarantees, Public–Private Partnerships (PPPs), and Green Bonds.
3. Each OTSI provides practical guidance, step-by-step methodologies, and real-life successful case studies, ensuring the financial instruments are accessible and actionable for practitioners from diverse professional backgrounds.
4. MERLIN's approach provides replicable models of these financial mechanisms for nature-positive finance, supporting not only restoration managers but also policymakers, municipalities, NGOs, and private sector actors

MERLIN Executive Summary

The MERLIN project has developed a comprehensive portfolio of twelve Off-the-Shelf Instruments (OTSIs) (https://project-merlin.eu/outcomes/off-the-shelf-instruments.html) that present practical, flexible, and scalable financial tools to address the persistent funding challenges faced by restoration teams. These instruments were designed through a structured process of research, expert consultation, and validation, ensuring that they respond both to current market realities and to the evolving regulatory environment. Each OTSI offers detailed guidance, combining practical methodologies, best practices, and real-life examples, making innovative finance more accessible to practitioners, municipalities, NGOs, and private actors working in the field of ecosystem restoration.

To ensure clarity and usability, the OTSIs were organised into three main groups. (1) Community-based mechanisms include Donation-based Crowdfunding, Reward-based Crowdfunding, Corporate Donations, Sponsorship for Natural Areas, and Tourism and Agriculture Activities. These mechanisms provide immediate entry points that can be rapidly deployed by restoration managers with limited resources. (2) Market-based mechanisms include Carbon Sequestration Credits and Biodiversity Offsetting, which draw on ecosystem services and link restoration directly to emerging environmental markets. (3) Institutional mechanisms such as Grants, Debt Instruments, Credit Guarantees, Public–Private Partnerships (PPPs), and Green Bonds provide longer-term, large-scale financing options. This taxonomy was deliberately chosen to reflect the main pathways available to restoration managers - community, market, and institutional - ensuring that the portfolio addresses both short-term needs and long-term investment opportunities.

The MERLIN Off-the-Shelf Instruments (OTSIs) draw on diverse sources, including academic and practitioner literature, institutional guidance, market data, and real-world case studies. They provide structured overviews of financing options, outlining benefits, limitations, and examples of use. Designed to be adaptable across contexts, the OTSIs offer a practical toolbox that helps project developers, policymakers, and investors mobilise finance for ecosystem restoration and Nature-based Solutions.

To maximise impact, the OTSIs were accompanied by a set of supporting activities that strengthened their practical application and uptake. The Zero Risk Nature Acceleration Programme (ZRNAP) provided restoration managers with a safe environment to test innovative financial approaches, strengthen entrepreneurial skills, and build confidence in applying OTSIs. This programme was particularly relevant because it allowed practitioners to experiment without financial risk, bridging the gap between theoretical design and real-world application. To further inspire and diversify financing options, MERLIN compiled a list of 75 potential revenue-generating activities for nature areas, providing a broad menu of practical opportunities that can complement the OTSIs. Access to investors was also strengthened through a curated Impact Investors List, which mapped almost 100 organisations with a proven interest in nature-positive finance.

Knowledge sharing and capacity building were integral to this process. The MERLIN Academy delivered expert webinars, while ZRNAP provided practical online sessions, both of which were complemented by one-on-one mentoring. These activities connected practitioners with specialists, encouraged peer-to-peer learning, and helped refine project-level strategies. Together, they contributed to building a stronger community of practice around innovative finance for restoration.

The combined result is a replicable and scalable framework for innovative finance in ecosystem restoration. By demonstrating how restoration can move beyond reliance on grants and become an investment-ready field, MERLIN directly supports the implementation of the EU Biodiversity Strategy for 2030, the Nature Restoration Regulation, and wider international biodiversity and climate commitments. The portfolio of OTSIs and the supporting activities represent not only practical tools for immediate use but also a long-term contribution to reshaping the financial landscape for nature restoration.

Content

The MERLIN project (https://project-merlin.eu) has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101036337.

Overview of Deliverable 3.6 Briefs and guidelines on investment planning and financing solutions

Deliverable description:

From DoA: Briefs and guidelines on investment planning and financing solutions that will consist of short instructions on how to prepare access and implement private finance solutions and blended finance strategies. In particular, off-the-shelf instruments to guide restoration managers in accessing necessary funding will be developed and tested in selected basins of the MERLIN project. Guidance about upscaling funding and generating multiple revenue streams for each restoration project will be developed.

Task number: Task 3.7 Facilitating and leveraging private finance (CONN; ECO, WU, JHI) (Month 1-42)

Task 3.7 will develop investment planning guidelines and design and pilot financing solutions for upscaling restoration in the selected basins.

• Roundtables will be organised bringing together stakeholder boards and investors/lenders/donors to feed the design of financing solutions in the selected basins, and supporting the design of the long-term financing strategies of the WP2 upscaling plans. In particular, roundtables will help stakeholder boards gauge the relevance and suitability of available financing options, considering their strategic fit with existing basin-level investment planning and procurement processes. They will also help to elucidate the need to develop new financing solutions that reduce transaction costs and de-risk private investments. Three mechanisms will be explored in depth: off-the-shelf instruments, blended finance strategies and bankable project mechanisms.

• Off-the-shelf instruments to guide restoration managers in accessing the necessary funding will be developed and tested in the selected basins: 1) how to identify and quantify the economic benefit of potential activities in future nature restored areas; 2) how to attract and select companies to exploit activities inside the future nature restored areas; 3) how to attract and negotiate with individual or corporate donors; 4) how to benefit from mutual guarantee instruments, including guarantees; 5) how to get debt financing in restoration projects; 6) how to attract and negotiate with angel or venture capitalists.

• Blended finance strategies for market creation and blueprints for bankable project mechanisms will be co-designed and piloted with public and private investors to drive a paradigm shift towards the creation of a conservation economy that internalises the productivity and resilience dividends of biodiversity and nature restoration. Upscaling approaches will be explored, such as bundling heterogeneous projects into single EU-level investment products with tailored risks and return-sharing mechanisms, and strategies to stack up multiple revenue streams from ecosystem-generated goods and services.

• This material will feed into WP4 to inform policy reform options, and WP5 for training and capacity-building on financing dimensions (MERLIN Academy).

Work Package: WP3 - Upscaling

Work Package lead: AU

Coordinating and contributing partners: CONN; UDE, BOKU, ECO, Deltares, WU, JHI, SAM.

Task timeframe: Months 1-48 | October 2021 - September 2025

1 Introduction to Off-the-Shelf Instruments (OTSIs)

The development of Off-the-Shelf Instruments (OTSIs) within the MERLIN Project responds to a central challenge in ecosystem restoration: securing financial mechanisms that are flexible, scalable, and aligned with long-term ecological objectives. Traditional funding models often provide only partial solutions and may not fully match the evolving needs of restoration projects, as they are almost exclusively funded by public money. OTSIs address this gap by equipping restoration managers with a diverse set of practical financial tools capable of mobilising both public and private resources. They are designed to establish sustainable funding pathways that support project continuity, enable scaling, and give restoration teams the opportunity to explore a wider range of financing opportunities beyond conventional approaches.

Target Audience

Although OTSIs are primarily aimed at restoration managers working with rivers, wetlands, peatlands, and other freshwater ecosystems, their relevance extends far beyond this group. Protected area authorities and municipalities can integrate them into regional development strategies, NGOs and community organisations can adopt them to strengthen grassroots initiatives, and private sector partners and investors can use them to contribute credibly to biodiversity and climate goals. In addition, policymakers and financial institutions can view OTSIs as replicable models that illustrate how nature-positive finance can be effectively applied.

The instruments were developed through a process of consultation and co-creation, involving Connectology's internal experts, restoration teams, field-leading experts, project partners and associated experts, MERLIN communication team, financial institutions, impact investors, civil society groups supporting Nature-based Solutions, national innovation agencies, industry networks, and sectoral alliances working on restoration and carbon markets. This participatory approach ensured that the instruments are not only grounded in sound financial practice but also tested and adapted to the practical realities of ecosystem restoration. The result is a set of instruments that are both evidence-based and practice-oriented, capable of functioning across a range of ecological and institutional contexts.

Timeline of OTSI's Development

Work on the Off-the-Shelf Instruments (OTSIs) began at the very start of the MERLIN Project. From the outset, the development process required extensive research and validation against both current market realities and the evolving regulatory environment. Each instrument was carefully structured to ensure not only technical soundness but also practical applicability for restoration managers and stakeholders across Europe.

The development unfolded in phases. At the beginning of the research phase, the Connectology team mapped existing financing mechanisms and identified gaps where innovative solutions were needed. Each OTSI then went through a process of deep research, drawing on the knowledge of in-house specialists as well as insights from external experts to ensure that the instruments were both innovative and grounded in practical realities. This was followed by a validation phase, during which draft versions of the OTSIs were reviewed and refined through targeted expert input. This iterative process ensured that the instruments balanced innovation with usability and credibility.

The publication phase began in summer 2023 with the release of the first community-based OTSIs, including donation-based crowdfunding and corporate donations, and tourism and agricultural activities. These were prioritised because they could be implemented quickly and offered accessible entry points for restoration managers. Eventually, the MERLIN Project completed the full set of 12 OTSIs, representing more than 300 pages of structured guidance.

The OTSIs gradually expanded into a coherent portfolio that covers a broad spectrum of financing mechanisms. Community-based finance includes donation- and reward-based crowdfunding, corporate donations, and sponsorship for natural areas. Market-based finance draws on revenue streams linked to tourism and agriculture activities, carbon sequestration credits, and biodiversity offsetting. Finally, institutional finance encompasses mechanisms such as grants, debt instruments, credit guarantees, public–private partnerships, and green bonds. This taxonomy was deliberately chosen to reflect the main pathways available to restoration managers, such as community, market, and institutional, allowing them to identify both immediate entry points and long-term investment opportunities.

This comprehensive portfolio is designed to help restoration managers diversify their funding, build resilience, and ultimately reduce dependence on grants.

Table 1 - Timeline of Off-the-Shelf Instruments (OTSI) Publishing

Year of Publication	Off-the-Shelf Instruments (OTSIs)
2023	Donation-Based Crowdfunding, Corporate Donations
2024	Tourism and Agriculture Activities, Debt Instruments, Credit Guarantees
2025	Public–Private Partnerships (PPPs), Sponsorship for Natural Areas, Grants, Green Bonds, Carbon Sequestration Credits, Biodiversity Offsetting, Reward-Based Crowdfunding

Common Structure of OTSIs

All OTSI reports follow a consistent structure, which is central to their usability and comparability. Each instrument is introduced with an executive summary and a clear statement of its aim, followed by sections on potential beneficiaries, how the instrument works, and its pros and cons. Guidance on implementation is provided, including time requirements, setup and operational costs, and necessary prerequisites. The documents also describe the wider market context, highlight best practices, and propose key performance indicators (KPIs) for measuring success. To ground the theory in practice, each OTSI includes one or more successful case studies, along with a glossary and references for further reading.

Including successful case studies is particularly important, as they demonstrate how financial instruments have been applied in real-world contexts. These examples move beyond theory, showing restoration managers what works in practice, under what conditions, and with what outcomes. By illustrating both challenges and achievements, the examples provide inspiration and offer concrete lessons that can be replicated or adapted in other settings. For instance, Credit Guarantees OTSI examples show potential direct application to MERLIN Case Studies, demonstrating its practical relevance for restoration teams, such as the Erdivel floodplain (CS18) and Kvorning (CS1).

This common format was intentionally designed to help readers navigate the portfolio with ease. By ensuring that all instruments are presented in the same way, readers can quickly identify the most relevant aspects, compare different options, and apply insights directly to their own restoration context.

Restoration managers and stakeholders in the MERLIN community come from diverse professional backgrounds, ranging from environmental sciences and biology to public administration, community engagement, and local governance. For many, financial concepts can appear abstract or even intimidating. The OTSIs therefore adopt a methodology that translates finance into clear, practical guidance, ensuring that the tools are approachable, inspiring, and easy to apply in real-world contexts.

Technical terms are explained in plain language, and the inclusion of case studies demonstrates how these instruments work in practice. This approach reduces barriers to understanding and encourages restoration teams to experiment with new models of finance rather than resisting them.

By presenting financial instruments as easy-to-read, step-by-step guides, the OTSIs aim to empower practitioners to see beyond traditional sources of funding and to gain confidence in exploring innovative opportunities. The approach is therefore not only about financial accuracy but also about building trust and engagement among a broad audience, ensuring that ecosystem restoration is seen as both ecologically sound and financially feasible.

Methodology of OTSIs

The MERLIN Off-the-Shelf Instruments (OTSIs) are developed based on a broad set of information sources rather than primary data collection. Each instrument document synthesises insights from academic literature, technical and research reports, policy and institutional guidance, and established practices in the field of environmental finance. These foundations are enriched with real-world case studies that demonstrate how instruments have been deployed in practice, highlighting lessons learned, risks encountered, and measurable

outcomes. In addition, market data and expert assessments provide an evidence base for estimating costs, structuring implementation timelines, and defining key performance indicators that are realistic for different project types and scales. In addition, we provided restoration teams with tailored lists of companies and organisations offering expertise relevant to each OTSI.

In selecting case studies, we prioritised success stories from activities directly linked to nature restoration, as these provide the most relevant insights for MERLIN's objectives. However, in cases where a particular financial instrument has demonstrated especially strong outcomes in other sectors, we included these examples as well. We also benefited from strong support by our WP3F colleagues, who provided valuable input in shaping the selection and framing of successful case studies.

Table 2. Summary of Off-the-Shelf Instruments (OTSIs).
**Links to the OTSIs: https://project-merlin.eu/outcomes/off-the-shelf-instruments.html*

OTSI Category	Name	Short description
Community-Based	Donation-Based Crowdfunding	A fast and flexible way to raise small-to-medium funds while engaging communities and raising awareness, though campaigns require careful preparation and strong storytelling.
	Reward-Based Crowdfunding	By offering symbolic or tangible rewards, this model deepens supporter engagement and can mobilise larger contributions, though it requires more planning and logistics than simple donations.
	Corporate Donations	A pathway to build durable partnerships and attract more substantial funding through CSR programmes, provided values are aligned and transparency is ensured.
	Sponsorship for Natural Areas	A mutually beneficial model where companies gain visibility while restoration projects secure long-term support, best suited for well-structured agreements with clear ecological outcomes.
Market-Based	Tourism & Agriculture Activities	Harness visitor fees, ecotourism, and sustainable agriculture to generate ongoing income for restoration.
	Carbon Sequestration Credits	Monetise carbon storage in wetlands, peatlands, and forests by selling certified credits on voluntary or compliance markets.
	Biodiversity Offsetting	Compensate for unavoidable biodiversity loss from development projects by funding measurable conservation gains elsewhere.
Institutional	Grants	Provide substantial, upfront resources to launch and scale projects, especially for pilots and innovation. Competitive and administratively heavy, but highly credible and often essential as a foundation for blended finance.
	Debt Instruments	Offer long-term capital for larger projects, repayable over time. When blended with grants or guarantees, they reduce risks and enable restoration managers to scale efforts and access mainstream finance.
	Credit Guarantees	Reduce lenders' risks and improve access to loans for restoration actors. A valuable tool to unlock private finance, provided strong governance and credible financial partners are in place.
	Public-Private Partnerships (PPPs)	Leverage public and private strengths through shared risks, resources, and responsibilities. Effective when trust, clear contracts, and long-term governance are secured, creating value for both people and planet.
	Green Bonds	Mobilise large-scale capital dedicated to environmental outcomes with strong transparency and reporting. High upfront costs but significant potential for scaling freshwater and NbS projects under EU and global standards.

2 Community-Based OTSIs

Community-based finance mechanisms are often the most accessible entry points for restoration managers. They rely on direct engagement with local communities, citizens, and private organisations that are motivated by environmental responsibility and social value. These instruments are characterised by relatively low barriers to implementation, high visibility, and strong potential for awareness-raising alongside financial contributions. Within MERLIN, four instruments are highlighted: donation-based crowdfunding, reward-based crowdfunding, corporate donations, and sponsorship for natural areas.

2.1 Donation-Based Crowdfunding

Donation-based crowdfunding is one of the most effective and accessible instruments for restoration managers. It allows projects to raise funds from a broad community of supporters, typically through online platforms, without the expectation of financial return. Beyond generating resources, this approach helps build awareness, engage citizens directly in restoration work, and creates a sense of ownership among backers.

While campaigns can be set up relatively quickly and are well-suited for small to medium-scale projects, they also require careful preparation. Success depends on effective communication, compelling storytelling, and sustained outreach to potential donors. The Rothley Weir campaign in the UK, highlighted in this OTSI, demonstrates how even modest contributions can combine to achieve concrete ecological results, such as removing barriers to river flow and improving habitats.

Overall, donation-based crowdfunding offers a flexible entry point into innovative finance. It is not designed to replace larger or recurring funding streams, but it can complement them by raising visibility, testing new ideas, and mobilising community support.

2.2 Reward-Based Crowdfunding

Reward-based crowdfunding builds on the principles of donation-based campaigns but adds an important layer of engagement: contributors receive a tangible or symbolic reward in exchange for their support. This could be anything from merchandise and guided tours to symbolic gestures such as naming a tree or a public acknowledgement. By linking contributions with rewards, projects can generate stronger emotional connections with supporters and incentivise higher levels of giving.

For restoration teams, this model offers not only a source of funding but also an opportunity to expand visibility and create lasting bonds with communities and backers. Rewards double as marketing tools, spreading awareness through social media and word of mouth, while reinforcing a sense of ownership among contributors.

Compared to donation-based crowdfunding, reward-based campaigns are often more complex to design and deliver, as they require careful planning of reward packages, logistics, and compliance with consumer protection laws. However, the effort can pay off by attracting a wider and more diverse pool of supporters, boosting credibility, and creating networks of long-term advocates for nature restoration.

Successful examples, such as Langholm Moor Initiative in Scotland, demonstrate how reward-based crowdfunding can mobilise substantial resources, connect with international audiences, and deliver visible impact for restoration projects.

2.3 Corporate Donations

Corporate donations provide restoration teams with a structured way to engage businesses in supporting ecosystem restoration. Contributions can be financial, in-kind, or linked to employee programmes, and are often framed within companies' corporate social responsibility (CSR) strategies. For restoration teams, this model offers the potential for more substantial and recurring support than crowdfunding, along with added visibility through corporate networks.

The strength of this instrument lies in building long-term partnerships where ecological goals align with corporate values. Companies may also contribute expertise, materials, or volunteer time, reducing project costs and strengthening community ties. However, success depends on clear communication, transparency, and credibility, as corporate priorities can shift and partnerships require ongoing management.

Examples of corporate donations demonstrate how businesses can take an active role in advancing restoration efforts. More broadly, such contributions represent an important pathway to diversify funding, increase project visibility, and foster lasting collaboration between conservation initiatives and the private sector.

2.4 Sponsorship for natural areas

Sponsorship for natural areas offers restoration managers a way to secure long-term financial support by partnering with companies or organisations that provide funds, materials, expertise, or media visibility in exchange for brand recognition. Unlike corporate donations, sponsorships are transactional: they provide mutual benefits, with businesses gaining positive brand associations and visibility while restoration projects receive stable resources for maintenance, restoration, or education.

This instrument can take several forms, including financial, material, human, media, or naming sponsorships, ranging from sponsoring a trail or gate to branding entire programmes. Successful cases, such as the UK's National Trust collaboration with Sky or the Pembrokeshire Coast gate sponsorship scheme, demonstrate how carefully structured agreements can deliver measurable ecological benefits while enhancing sponsor reputation.

For restoration managers, sponsorships provide a valuable complement to traditional funding. They align ecological outcomes with business visibility goals, making them an attractive option for both local initiatives and larger landscape-scale projects. When designed transparently and with strong community engagement, sponsorship agreements can become a reliable tool to sustain restoration efforts while building long-term partnerships between nature managers and the private sector.

2.5 Crowdfunding in Practice: Insights from the Zero Risk Nature Acceleration Programme

As part of the Connectology Zero Risk Nature Acceleration Programme, a dedicated focus was placed on crowdfunding as one of the most accessible OTSIs. To explore this in depth, the programme hosted a study session titled Crowdfunding: Navigating Funding Challenges and Opportunities, complemented by two expert contributions:

The Art of Crowdfunding: Strategies for Successful Campaigns with Cameron Price, sustainability trainer in Australia and former community manager at the StartSomeGood crowdfunding platform, with a passion for Nature-based Solutions, ecosystem restoration, and biodiversity.

Crafting a Compelling Campaign: The Story Behind Levante with Sara Plaga, Co-founder and CEO of Levante, a start-up that successfully raised funds through a Kickstarter crowdfunding campaign.

Together, these sessions combined strategic guidance with real-world examples, giving participants practical insights into how to design, communicate, and implement effective crowdfunding campaigns. For restoration managers, the study session provided hands-on knowledge that could be directly applied in their own contexts, while reinforcing the role of OTSIs and the Zero Risk Academy in building capacity and entrepreneurial thinking.

Community-based finance instruments are not designed to replace institutional funding, but they provide valuable complementary resources. They build community ownership, strengthen public awareness, and create opportunities for private sector engagement at different scales. For restoration managers, they serve as entry points into innovative finance, offering both immediate support for projects and pathways to develop more ambitious strategies over time.

3 Market-Based OTSIs

Market-based instruments directly link ecosystem restoration to economic activities, creating revenue streams that support long-term sustainability while engaging diverse stakeholders. Unlike community-based approaches, which primarily rely on voluntary contributions, market-based mechanisms connect restoration outcomes with tangible economic value - whether through tourism and agriculture, the generation of carbon credits, or biodiversity offsetting schemes. These instruments are particularly important because they not only diversify funding but also integrate restoration into broader economic systems, making it part of everyday decision-making in land use, business operations, and investment planning. By doing so, they open opportunities to scale projects, attract private capital, and demonstrate that ecological health can go hand in hand with financial viability.

3.1 Tourism and Agriculture Activities

This OTSI presents revenue-generating mechanisms for protected areas and restoration managers by leveraging ecotourism and sustainable agricultural practices. These include visitor fees, licenses and permits, lease and concession agreements, royalties, brand labels for local agricultural products, eco-lodging, guided tours, and partnerships with community enterprises. The instrument is designed to help protected area authorities generate income aligned with conservation goals while creating socio-economic benefits for local communities.

Key strengths of this model include the ability to capture value from natural assets, increase public awareness, and link restoration work directly with tourism markets and agricultural supply chains. It also supports diversification of income and local employment. However, it comes with challenges: ensuring compatibility with conservation objectives, managing legal/regulatory frameworks, securing appropriate partnerships, and handling the capacity, infrastructure, and governance requirements needed to operate sustainably.

In the MERLIN case study of the Emscher catchment, tourism- and agriculture-based leases and facility rentals were used to support ongoing operating and maintenance costs, such as meadow restoration. International examples such as the concession for Iguaçu National Park in Brazil and the “Quality Label” scheme in Italy’s Gran Paradiso National Park demonstrate how well-designed tourism and agriculture initiatives can both generate substantial funds and deliver ecological and cultural value.

3.2 Carbon Sequestration Credits

This instrument is one of the most prominent market-based instruments for financing ecosystem restoration, offering both climate and biodiversity benefits. For freshwater restoration, carbon credits can be generated by measures such as rewetting peatlands, restoring riparian zones, or reforesting catchments, which enhance both carbon storage and ecological integrity.

The instrument allows restoration managers to tap into the rapidly growing voluntary carbon markets, where companies and institutions seek credible offsets to meet their net-zero commitments. Although projects require significant upfront investment, expertise, and time for validation, successful schemes such as MoorFutures in Germany or peatland restoration projects in Scotland show that freshwater-based credits can achieve above-market prices, particularly when linked to strong biodiversity and community co-benefits.

Because of the high level of interest generated by the Carbon Sequestration Credits OTSI, Connectology, with relevant project partners, organised a dedicated webinar: Unlocking the Potential of Carbon Credits in Freshwater and Nature Restoration: Practical Insights, led by Dr. Malte Schneider (Co-Founder and Managing Director, AECO). The session provided restoration teams with expert guidance on the opportunities and challenges of applying carbon credits in freshwater ecosystems, reinforcing the OTSI with practical knowledge and real-world perspectives.

While challenges remain, such as fluctuating market prices, complex certification, and long monitoring requirements, carbon credits provide restoration teams with a scalable financing pathway. They connect ecosystem services directly to global climate objectives, creating new opportunities to fund large-scale restoration while demonstrating measurable contributions to emission reductions.

3.3 Biodiversity Offsetting

Biodiversity offsetting is a market-based instrument that allows developers or land users to compensate for unavoidable ecological impacts by funding equivalent or greater restoration elsewhere. The principle is “no net

loss" or, ideally, "net gain" of biodiversity. For freshwater ecosystems, this could include restoring wetlands, rehabilitating rivers, or creating new habitats to replace those lost to infrastructure or development projects.

This mechanism is rooted in regulation in some countries, such as France and Germany, and is increasingly being considered at the EU level as part of the Nature Restoration Regulation. It provides a structured way to channel private-sector resources into conservation, turning legal obligations into opportunities for restoration funding.

While biodiversity offsets can mobilise significant finance, their success depends on robust governance, ecological credibility, and long-term monitoring. Poorly designed schemes risk undermining trust by failing to deliver real environmental gains. In Finland, the Dasos Habitat Foundation and Eurowind Energy closed one of the first biodiversity offset contracts under the 2023 Nature Conservation Act, linking wind farm impacts with local habitat restoration. In France, the Cossure site pioneered large-scale offsetting and inspired the national SNCRR framework, showing how strong legal bases and transparent monitoring can make offsets effective tools for financing restoration.

For restoration teams, biodiversity offsetting presents both opportunities and challenges: it offers access to private capital and integration with planning processes, but also requires close alignment with policy, scientific standards, and stakeholder expectations.

4 Institutional OTSIs

Institutional finance instruments provide some of the most powerful and scalable pathways for funding ecosystem restoration. Unlike community- or market-based approaches, which often operate at the local or project levels, institutional instruments connect restoration to broader financial systems, public budgets, and capital markets. Grants continue to play a central role in supporting innovation and pilot activities, while debt instruments and credit guarantees help projects expand and attract new partners. Public-private partnerships (PPPs) demonstrate how restoration can deliver both societal and financial value when risks and responsibilities are shared. Finally, green bonds are emerging as a fast-growing mechanism for mobilising institutional and private capital at scale, offering significant potential for freshwater restoration. Together, these tools illustrate how restoration can transition from small-scale initiatives to investment-ready programmes embedded within mainstream financial systems.

4.1 Debt Instruments

Debt instruments, such as loans, bonds, and sustainability-linked financing, enable restoration teams to access capital for larger and longer-term projects. They are particularly suited for initiatives like wetland or river restoration that require significant upfront investment but deliver ecological benefits over time.

While more complex than grants or community-based tools, debt instruments can attract institutional investors and create sustainable financial structures. When blended with grants or other OTSIs, they help reduce risks, improve feasibility, and unlock larger-scale outcomes. Examples such as wetland restoration loans in Finland and river rehabilitation in Luxembourg demonstrate how debt can be effectively applied to conservation. For restoration managers, these instruments represent a pathway to scale projects and integrate ecosystem restoration into mainstream finance.

4.2 Credit Guarantees

Credit guarantees reduce the financial risk for lenders by covering part of potential losses, making it easier for restoration teams, NGOs, and small enterprises to access loans for their projects. By sharing risk, they open pathways to private finance that might otherwise remain inaccessible, particularly for initiatives like wetland rewetting or riparian restoration.

The instrument highlights both benefits, such as improved loan eligibility, better terms, and increased credibility with lenders, and challenges, including guarantee fees, administrative requirements, and the need for robust governance.

To support understanding of this tool, in collaboration with MERLIN Academy, Connectology hosted a webinar, "Mutual Guarantee & Environmental Sustainability: Collaborative Efforts for a Green Future," with José Fernando Figueiredo (Global Network of Guarantee Institutions). The webinar provided practical insights and sparked discussion on how guarantee schemes can support green projects.

4.3 Public-Private Partnerships (PPPs)

Public-private partnerships (PPPs) establish frameworks in which public authorities and private actors share responsibilities, risks, and rewards to deliver projects that provide both social and environmental benefits. For restoration, PPPs can mobilise significant resources, align private innovation with public priorities, and ensure long-term management of projects such as wetland rehabilitation, river basin planning, or green infrastructure.

The OTSI highlights that PPPs can strengthen governance, provide stable funding, and foster collaboration across sectors. However, they require clear contractual arrangements, strong institutional capacity, and mutual trust to succeed.

To deepen understanding of this mechanism, Connectology and the MERLIN Academy organised the webinar How Public-Private Partnerships Can Enhance Value for Planet and Value for People with Prof. Dr. Pedro M. das Neves (Founder and CEO, Global Solutions 4U). The session underlined how PPPs can be tailored to environmental projects, offering restoration teams valuable insights into structuring collaborations that deliver both ecological and economic outcomes.

4.4 Green Bonds

Green bonds are fixed-income instruments dedicated to financing projects with measurable environmental benefits, such as biodiversity restoration, sustainable water management, and renewable energy. Unlike

conventional bonds, their proceeds are earmarked exclusively for green initiatives and require clear reporting and transparency, which makes them especially attractive to investors seeking both stability and impact.

For restoration managers, green bonds offer a way to mobilise large-scale funding while enhancing the visibility and credibility of their projects. Although issuing a green bond involves preparation, external verification, and higher upfront costs, the benefits include improved access to capital, stronger partnerships with institutional investors, and reputational gains.

Real-world examples from Gothenburg, Sweden and Île-de-France, France, demonstrate how municipalities have used green bonds to fund climate-smart infrastructure, nature conservation, and public services, while attracting diverse investors. For freshwater restoration, green bonds hold significant potential to scale investments and align local projects with the EU Green Bond Standard and global sustainability frameworks.

4.5 Grants

Grants remain one of the most widely used funding mechanisms for ecosystem restoration in Europe. They provide direct financial contributions from the European Commission, national governments, or regional authorities to support projects that align with policy objectives, such as biodiversity protection, climate adaptation, and sustainable land and water management. Unlike loans, grants do not require repayment, but they typically involve competitive application processes, strict eligibility rules, and detailed reporting obligations.

For restoration managers, grants are especially valuable when initiating large-scale projects or piloting innovative approaches, as they can provide substantial funding to cover start-up and operational costs. At the EU level, major programmes such as LIFE, Horizon Europe, and Cohesion Policy funds play a key role, complemented by national and regional schemes that are often more accessible and tailored to local needs.

The main advantage of grants lies in their ability to provide significant, upfront resources that enhance credibility and foster cross-border cooperation. However, they also come with limitations such as co-financing requirements, administrative complexity, and delayed disbursements.

As part of the MERLIN OTSIs, grants are positioned as a vital tool within a broader financial toolkit. They can be blended with other instruments such as debt, guarantees, or market-based revenues to create more resilient, long-term financing strategies for restoration initiatives.

Together, these institutional finance instruments demonstrate how restoration can move beyond project-level funding into the realm of structured, long-term investment. Grants provide the essential foundation for innovation and start-up activities, while debt instruments and credit guarantees open pathways to larger capital flows. Public-private partnerships demonstrate the potential of collaboration across sectors, and green bonds underscore how nature restoration can be integrated into global capital markets. When used strategically - and often in combination - these tools can transform restoration from isolated initiatives into investment-ready programmes capable of delivering lasting ecological and societal benefits.

Viewed as a whole, the OTSIs offer more than a set of financial tools: they form a continuum of opportunities. Restoration teams can begin with community-based approaches, gradually expand into market-based models, and ultimately integrate institutional mechanisms that secure large-scale and long-term impact. This layered approach empowers managers to explore new opportunities, build resilience, and design financing strategies suited to their unique contexts.

By combining innovation, inclusivity, and financial rigour, the MERLIN OTSIs contribute to a future where restoration is not an isolated activity but an integral part of sustainable economic development. They help bridge the gap between local action and global capital, turning ecological challenges into opportunities for investment, collaboration, and systemic change.

5 Supporting Activities

In addition to the development of the OTSIs themselves, a range of supporting activities was implemented to strengthen their relevance, usability, and uptake by restoration teams. These activities provided practical insights, capacity building, and direct opportunities for engagement with experts and investors, ensuring that the OTSIs were not only theoretical tools but also connected to real-world practice.

5.1 Zero Risk Nature Acceleration Programme (ZRNAP)

At the heart of these efforts was the bespoke Zero Risk Nature Acceleration Programme (ZRNAP), based on the bestselling Zero Risk Startup methodology[1], exclusively designed and implemented by the Connectology Team for the MERLIN project. ZRNAP created a safe environment for restoration managers to test new financial approaches, strengthen entrepreneurial skills, and build confidence in applying innovative instruments. By enabling practitioners to experiment without financial risk, ZRNAP bridged the gap between theoretical design and real-world application. It also served as the main umbrella for several complementary tools and activities, including the Impact Investors List, one-on-one mentoring, and practical online sessions.

5.2 List of 75 Activities that Can be Implemented in the Nature Protected Areas

As part of the Tourism and Agriculture OTSI, Connectology has compiled a list of 75 potential revenue-generating activities that restoration managers can adapt to their own contexts. This catalogue covers a broad spectrum, including ecotourism, sustainable agriculture, wellness and health services, cultural and educational initiatives, merchandising, and innovative uses of natural assets.

The strength of this list lies in its diversity and flexibility. It provides options that range from low-investment, small-scale actions, such as guided tours, local product sales, or community events, to larger ventures like eco-lodges, concession agreements, or branded agricultural products. This variety ensures that teams working in very different ecological, cultural, and economic contexts can identify activities suited to their resources and ambitions.

For restoration managers, the list is not only a menu of possible income streams but also a tool for creativity and strategic thinking. Reviewing the full set of 75 activities can spark new ideas, inspire adaptations of existing practices, and encourage teams to look beyond traditional funding sources. It also supports the process of brainstorming and prioritisation, helping managers identify which opportunities best match their capacities, market conditions, and restoration goals.

By offering such a comprehensive overview, the 75 Activities list serves as a practical guide and inspiration source for teams seeking to diversify income, strengthen financial resilience, and connect restoration with broader community and economic benefits. In this way, it becomes a starting point for innovation and long-term sustainability.

Taken together, these supporting activities enriched the OTSIs by embedding them in a wider process of knowledge exchange, capacity-building, and direct engagement with practitioners and investors. They also reinforced Connectology's ambition of equipping restoration teams not only with tools but also with the skills, networks, and confidence needed to apply them effectively.

5.3 Impact Investors List

To further connect innovative financing concepts with capital, a dedicated Impact Investors List of almost 100 relevant organisations was created within the Zero Risk Nature Acceleration Programme, which we will discuss in more detail later in this document. The list identifies individuals and organisations committed to generating both financial returns and positive environmental outcomes, providing restoration teams with opportunities for long-term partnerships, targeted engagement, and access to specialised expertise.

5.4 Expert-led webinars

OTSIs, such as public-private partnerships, credit guarantees, and carbon sequestration credits, were introduced alongside a series of expert-led webinars within the MERLIN Academy. These featured:

- How Public-Private Partnerships Can Enhance Value for Planet and Value for People with Prof. Dr. Pedro M. das Neves (Founder and CEO, Global Solutions 4U),

[1] Andrez, P., 2024. Zero Risk Startup. Forbes Books, retrieved from https://www.amazon.com/Zero-Risk-Startup-Entrepreneurs-Mitigating/dp/B0CSJR2XQD

- Mutual Guarantee & Environmental Sustainability: Collaborative Efforts for a Green Future with José Fernando Figueiredo (Founding President, GNGI - Global Network of Guarantee Institutions), and
- Unlocking the Potential of Carbon Credits in Freshwater and Nature Restoration: Practical Insights with Dr. Malte Schneider (Co-Founder and Managing Director, AECO).
- To complement these OTSI-focused sessions, the Academy also hosted Corporate and Private Funding - Its Value for Conservation with Luis Costa (MAVA Foundation), which provided broader insights into how private finance can play a catalytic role in conservation.

These sessions proved highly valuable, not only by deepening understanding of financial instruments but also by sparking new ideas, stimulating discussion, and opening opportunities for future collaboration and knowledge exchange.

5.5 Video learning resources

To complement the written instruments, the MERLIN Academy produced a set of five short videos designed to introduce key OTSIs in an accessible format:

- Video 1: Introduction to OTSIs
- Video 2: Introduction to Grants
- Video 3: Donation-based and Reward-based Crowdfunding
- Video 4: Corporate Donations and Sponsorships Overview
- Video 5: Tourism and Agriculture Activities

These videos provide restoration managers with an engaging entry point to the concepts, ensuring that the knowledge is widely accessible and easy to share across diverse teams. They can be found in the MERLIN Academy, Learning Module 3: https://project-merlin.eu/academy.html

5.6 1-1 expert sessions

Restoration teams also benefited from tailored guidance through 1-1 expert sessions with Paulo Andrez, Connectology Strategic Advisor, Serial Entrepreneur, Angel Investor, President Emeritus of the European Business Angel Network, and Forbes Books and Amazon best-selling author. These conversations offered participants the opportunity to refine their ideas, receive direct feedback from an experienced investor, and gain inspiration on how to think entrepreneurially about restoration challenges.

6 Zero Risk Nature Acceleration Programme (ZRNAP)

To strengthen understanding of private finance mechanisms, identify key risks hindering successful fundraising, and develop clear risk mitigation strategies, Connectology designed and delivered a dedicated online support initiative - the Zero Risk Nature Acceleration Programme (ZRNAP). This exclusive programme was developed within the framework of the MERLIN project and tailored specifically to support the participating case studies.

The preparation of the programme commenced in September 2023, approximately two months prior to its official kick-off. In order to align the content with participants' needs, Connectology conducted targeted research and held consultations to identify the themes and features of greatest relevance. Particular attention was paid to scheduling, ensuring that participants could engage fully in ZRNAP without conflicting with other MERLIN activities.

Once the programme's structure and scope were finalised, an open call was launched to all MERLIN case studies. This call outlined the objectives, benefits, and expected outcomes of ZRNAP, together with guidance on the application process and deadlines. To further support dissemination, a dedicated flyer was produced (see below):

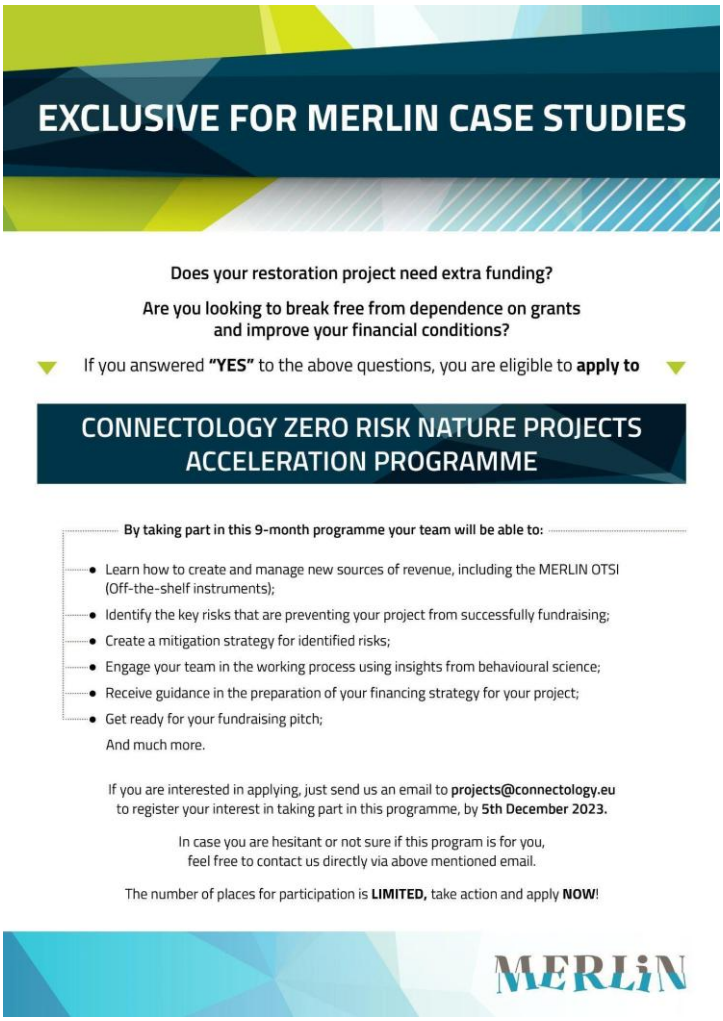


Figure 1. Official flyer for the ZRNAP Call for Applications

Connectology also took steps to ensure that information about the programme was effectively communicated and not overlooked among other project correspondence. Regular reminders were circulated to case study teams through their preferred communication channels. In addition, the programme representatives held

telephone calls and Zoom meetings with interested case studies to introduce the programme in greater detail, addressing any questions or concerns and encouraging participation.

6.1 Case Studies – Participants in the Programme

As a result of the implemented efforts, a cohort of five Case Studies submitted applications and confirmed their participation in the programme.

1. Kampinos Wetlands (Poland)
2. Peatlands of Bosnia and Herzegovina
3. Danube floodplain (Romania)
4. Emscher catchment (Germany)
5. Komppasuo peat extraction area (Finland)

All case studies were subsequently invited to introductory online meetings, designed to provide full clarification of the programme and to address any remaining questions or concerns.

During these meetings, participants were also given detailed information on the structure and implementation of the Zero Risk Nature Acceleration Programme. Specifically, they were informed that the programme was divided into two principal phases: a comprehensive theoretical foundation and a personalised, hands-on component tailored to the needs of each case study.

6.2 Online Sessions

The theoretical component comprised five online sessions delivered by sector experts, each carefully designed to provide participants with the necessary knowledge base. The list of sessions is provided below:

1. **Kick Off + Introduction to Financials**

Speaker of the event: Modwenna Rees-Mogg (the Editor-in-Chief of Angel News UK and the Great Britain Venture Forum Chair, with 20 years of experience in corporate finance, business angel investment, and venture capital).

2. **Managing the Team for the Best Results**

Speaker of the event: Cristina Riesen (a seasoned entrepreneur who has been active for 15+ years in the fields of innovation, education and strategic communications).

3. **Crowdfunding Upsides for Nature Project + Creating a Successful Crowdfunding Campaign;**

Speakers of the event

1. Cameron Price (Sustainability Trainer at the Australian College of Business Intelligence and the former Community Manager at the StartSomeGood crowdfunding platform).

2. Sara Plaga (Co-founder and CEO of Levante, a start-up that raised funds through a Kickstarter crowdfunding campaign).

4. **Zero Risk Nature Project**

Speaker of the event: Paulo Andrez, Connectology Strategic Advisor (Serial Entrepreneur, Angel Investor, President Emeritus of the European Business Angel Network, Forbes Books, and an Amazon Best-Selling Author).

5. **Tips and Tricks on How to Craft Your Presentation**

Speaker of the event: Kambis Kohansal-Vajargah (Entrepreneur, Company Builder, and Startup Mentor currently serving as Head of Startup-Services and Deputy Head of Founder-Services at the Austrian Federal Economic Chamber (WKÖ) in Vienna).

All sessions were recorded, ensuring that participants who, due to personal or professional commitments, were unable to attend live were able to review the material at a time convenient to them. In addition, speakers provided their presentations for distribution among participants and confirmed their willingness to respond to follow-up questions. Where necessary, they also offered to arrange individual meetings to address specific issues raised by ZRNAP participants.

In parallel with the workshops, Connectology supplied each ZRNAP participant with a set of supplementary materials, such as a list of 75 business activities that can be implemented in a nature area and a list of impact

investors who are interested in projects with social and environmental impact, designed to enhance their capacity to develop private financing schemes. Importantly, participants also had the opportunity to discuss the materials during the sessions, reflect on their relevance to their own contexts, and exchange ideas on how they might be applied in practice.

It is important to note that not all participants were equally engaged in the Zero Risk Nature Acceleration Programme (ZRNAP). This was largely due to competing commitments or limited staff capacity to attend the workshops.

Following the completion of the theoretical phase, participants progressed to one-to-one meetings with the Connectology team, entering the personalised support phase. The primary objective of this stage was to work closely with each case study to design a tailored financial strategy that would strengthen the long-term sustainability of the nature areas. These bilateral consultations enabled a deeper exploration of the principal challenges and threats faced, and facilitated the identification of viable pathways towards sustainable financing.

As part of this phase, participants were also encouraged to initiate a Call for Ideas - an important element of the ZRNAP methodology. The Call for Ideas was designed to identify innovative, practical solutions that address the pressing threats and funding gaps faced by nature areas. Its primary purpose is to generate fresh approaches that go beyond traditional, cost-intensive conservation methods by either reducing existing threats or creating new revenue streams to support long-term sustainability.

Equally important, the call aimed to actively engage communities and stakeholders, including local residents, NGOs, businesses, and policymakers, to ensure that a diverse range of voices and perspectives contribute to shaping future solutions. By inviting both priority ideas (directly tackling main threats) and global ideas (ranging from revenue generation to biodiversity enhancement), the Call for Ideas provides a structured platform for collaboration, creativity, and practical innovation.

The most proactive participant in this process was the Emscher catchment case study, which maintained continuous engagement with the ZRNAP team over several months. The case study successfully launched its Call for Ideas and received seven tailored business ideas. Connectology representatives provided active support throughout the process, assisting with the design of the Call, the development of a communication strategy, the evaluation of submissions, and subsequent engagement with selected entrepreneurs.

Participation in initiatives like the Zero Risk Nature Acceleration Programme creates safe spaces where teams can explore new approaches, strengthen their financial knowledge, and develop an entrepreneurial mindset. The ZRNAP sessions, which combined theoretical knowledge with hands-on discussions, proved highly beneficial by addressing knowledge gaps frequently noted in feedback-particularly around finance and communication with impact investors. The Call for Ideas further demonstrated the importance of stakeholder engagement: the Emscher case study not only received a great number of ideas but also selected and pursued one, showcasing how structured support can lead to tangible project outcomes. By combining financial training, peer exchange, and opportunities for practical application, the Zero Risk Programme empowers restoration practitioners to think differently, collaborate more effectively, and bring innovative projects to life.

Case Snapshot: Emscher Call for Ideas

Challenge: Managing large amounts of grassland biomass in the Emscher catchment (Germany).

Ideas Generated: Proposals included biochar production, composting solutions, grass-based paper, and insulation materials.

Outcome: One idea was selected and is now under development, demonstrating how calls for ideas can move from brainstorming to concrete implementation.

Why it matters: This case illustrates how the Call for Ideas fosters creativity, encourages entrepreneurial thinking, and helps restoration teams explore new revenue-generating pathways while strengthening stakeholder engagement.

All materials developed under the Zero Risk Nature Acceleration Programme have been made available to MERLIN case studies through the MERLIN project's shared cloud. This includes the video recordings of study sessions, presentations from invited speakers, the suggested template for the Call for Ideas, and the curated Impact Investors List. By ensuring open access to these resources, MERLIN provides restoration teams with continued opportunities for learning, reference, and practical application, even beyond the live programme activities.

Overall, the Zero Risk Nature Acceleration Programme (ZRNAP) has delivered significant and distinctive results for the participating nature area representatives. The programme demonstrated that it is possible to address key challenges without relying exclusively on grant funding.

Through their participation, case studies gained practical knowledge on how to access private sources of finance while ensuring that the pristine natural environments in which they operate remain protected. They also strengthened relationships with stakeholders from the private sector, receiving valuable guidance on potential partners, approaches, and opportunities.

Finally, the programme provided nature area representatives with a clear understanding of the benefits offered by the OTSIs and of how these instruments can be effectively applied to support ongoing and future nature restoration activities.

7 Discussion: Entrepreneurial Mindset. Unlocking the Power of Eco-Entrepreneurs

Eco-entrepreneurship (also known as ecopreneurship) refers to the practice of creating and running businesses with a focus on environmental sustainability, such as reducing pollution or conserving natural resources, all while building profitable business ventures.

Scientists and entrepreneurs share a common drive to tackle pressing environmental challenges, yet collaboration between these two groups remains limited. Connectology's work in the MERLIN project has highlighted that one of the most significant barriers to scaling restoration and conservation is the gap in private finance. This gap holds considerable potential for bridging if scientific teams adopt entrepreneurial mindsets and explore innovative financing solutions.

While universities now offer degrees in entrepreneurship with a focus on sustainability, acceleration programmes and communities to help young scientists navigate the business world, we can't afford to simply wait for the next generation of specialists to enter the job market. Nor can we guarantee they won't drift away, choosing more flexible career paths like digital nomadism. Universities need to demystify the idea that entrepreneurship is a very risky path.

On the other hand, national parks, NGOs, and other conservation organisations manage huge parcels or territories where sustainable business ideas arise but can't justify the cost of hiring a full-time business developer. However, thinking long-term and having an entrepreneurial mindset within scientific teams could change how problems are approached and solutions implemented, reducing conservation costs. Sometimes, the answer isn't hiring an external business leader but nurturing entrepreneurial thinking from within (intrapreneurship). This, however, requires buy-in from top management and decision-makers. All too often, teams are eager to explore new business opportunities but face roadblocks from leadership, who are unwilling to embrace change and are trying to keep the status quo at all costs.

Another critical aspect is the value of acceleration programmes and specialised training for scientific teams. These programmes offer short, intense bursts of expert knowledge, equipping scientists with the skills to understand market dynamics, business development, and investment strategies. By gaining practical insights from seasoned entrepreneurs and business experts, scientific teams can rapidly acquire the tools they need to turn their innovations into viable businesses or sustainable solutions to increase nature conservation.

For organisations where a dedicated business developer is too costly, bringing advisory support to address specific issues might be a practical alternative. External input can clarify business strategies, allowing scientific teams to move forward confidently.

Another challenge is that scientists and entrepreneurs often stay within their own circles, limiting idea sharing. It's crucial that we create more opportunities for these two groups to mingle - through conferences, seminars, and summits where an exchange of ideas can spark innovations. This is not just a good idea; it's a necessity for the future of sustainable innovation.

Both groups have unique strengths and creating a collaborative environment to maximise these strengths while addressing potential gaps is essential.

For example, by establishing a shared mission that combines scientific goals with market-driven objectives, the organisation ensure both parties are working toward the same end. A unified vision helps reduce friction by making clear how scientific breakthroughs can lead to sustainable business opportunities. You can achieve this by setting clear and mutually agreed-upon objectives. In this case, you ensure that both short-term milestones (favoured by entrepreneurs) and long-term research goals (important to scientists) are valued and heard.

Another vital approach to tackle the differences is developing an adaptive risk management framework that incorporates both the cautious approach of scientists and the risk-taking attitude of entrepreneurs. This allows teams to move forward with innovation while mitigating potential risks. This approach will establish a culture that values experimentation and rapid prototyping so that scientists can adopt a more iterative, entrepreneurial mindset while still upholding the importance of accuracy.

Adaptive project management methods will enable the organisation to balance the research timelines of scientists with the fast-paced execution required by entrepreneurs. Methods like agile development, where tasks are broken into smaller, manageable steps, will make room for both mindsets. It is fundamental for the

organisation working with both mindsets to foster a culture that embraces both short-term wins (as favoured by entrepreneurs) and long-term breakthroughs (valued by scientists), ensuring that both perspectives are appreciated and rewarded.

The future of eco-entrepreneurship depends on fostering collaboration, supporting entrepreneurial thinking within scientific teams, and breaking down the barriers that separate these two vital communities.

8 Conclusion

Connectology, through its Off-the-Shelf Instruments and the Zero Risk Nature Acceleration Programme, has taken important steps to make financing for restoration more accessible, practical, and adaptable. By combining financial tools with supporting activities such as expert webinars, case study engagement, and study sessions, it has created resources that restoration teams and their partners can use to explore innovative ways of sustaining their work.

The OTSIs were deliberately designed to be clear, comparable, and user-friendly, allowing practitioners from diverse backgrounds, including environmental science and local governance, to engage with them. The Zero Risk Programme added another dimension by creating safe spaces to test new approaches, practise entrepreneurial thinking, and connect with field-leading experts. Taken together, these initiatives show how financial innovation and capacity-building can complement each other.

This work was made possible through the expertise and collaboration of multiple MERLIN partners. Experts from the University of Natural Resources and Life Sciences, Vienna (BOKU), the University of Duisburg-Essen, Ecologic Institute, Deltares, the James Hutton Institute, Wageningen University & Research, the German Federal Institute of Hydrology (BfG), and the Emschergenossenschaft and Lippeverband (EGLV) provided valuable knowledge and critical input throughout the process. In addition, SAM contributed design services that ensured the professional quality and usability of the outputs. Their combined efforts helped ensure that the instruments are both technically robust and practically relevant.

Rather than providing definitive solutions, the OTSIs and Zero Risk Programme offer a framework and a set of opportunities that others can adapt and build upon. Their value lies in providing options, opening discussions, and making financial concepts approachable to a wide range of stakeholders. This flexibility is particularly important in a field as diverse as restoration, where local contexts and needs vary widely.

As restoration efforts continue across Europe, these resources can inform decision-making, encourage collaboration, and support the gradual shift towards more diversified and resilient funding models. In this way, MERLIN contributes to building a more informed and better prepared restoration community - one equipped with practical tools, knowledge, and the confidence to engage with diverse partners to secure the long-term sustainability of freshwater ecosystems and the communities that depend on them.