Implications of the EU Renewed Sustainable Finance Strategy in the Context of Spatial Planning

D3.3: Implementation of the EU renewed sustainable finance strategy
WP 3, T 3.3

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1. Introduction

The BioValue project aims to safeguard and enhance biodiversity from a transformative change perspective by better articulating 1) spatial planning instruments, 2) environmental assessment instruments, and 3) economic and financial instruments (E&FIs) during the spatial planning process. The project explores how the three instrumental perspectives interact in practice to enable transformative change through three Arenas for Transformation in Portugal (the Municipality of Mafra), Italy (the Municipality of Trento), and Germany (the Federal State of Mecklenburg-Vorpommern). In particular, Work Package 3 (WP3) focuses on understanding the transformative potential of E&FIs impacting biodiversity, individually and in articulation with spatial planning and environmental assessment instruments, across different levels of implementation.

This report belongs to a series of deliverables documenting the research work carried out under the four subtasks of WP3. We started by analysing biodiversity policy at the EU level and exploring E&FIs for biodiversity in a broad sense. In Task 3.1, we reviewed the EU Biodiversity Strategy for 2030 to understand the implications of EU biodiversity policy for spatial planning and analysed 24 generic biodiversity-promoting E&FIs identified by the Ecosystem Opportunity Framework (Rode et al., 2016) with criteria of their relevance to spatial planning along the Mitigation Hierarchy (for more information, see: BioValue Report D3.1: Economic and Financial Instruments to Enhance Biodiversity). Subsequently, we explored current E&FI practice in spatial planning and environmental assessment and investigated the potential impacts on biodiversity of using E&FIs in the context of transformative change ambitions. In Task 3.2, we assessed the current application of E&FIs in spatial planning and analysed the position of E&FIs for enhancing biodiversity in practice with selected spatial planning instruments; we reviewed the E&FI recommendations in the benchmark of environmental assessments, and discussed how the generic E&FIs for enhancing biodiversity can be positioned with examples of impact pathways towards transformative change (for more information, see: BioValue Report D3.2: Impacts of Economic and Financial Instruments on Biodiversity in Spatial Planning). Here, in Task 3.3, we focus on the sustainable finance strategy at the EU level and analyse its implications, in particular for the different actors involved in the spatial planning process.

Global biodiversity assessments (IPBES, 2018) as well as previous BioValue analyses based on surveys and expert interviews conducted in Task 1.2, WP1 (for more information, see: BioValue Report D1.2: Expert Perspectives of Integrating Biodiversity in Spatial Planning: Contributions from Promising Practices) identified spatial planning as one of the drivers of biodiversity loss. This is due to the fact that spatial planning has long been predominately driven by infrastructure and land use development in response to urbanisation, and has focused mainly on economic growth without adequate consideration of biodiversity and ecosystems. Meanwhile, spatial planning can also play a key role in halting biodiversity loss and further enhancing biodiversity outcomes. However, the integration of biodiversity into spatial planning faces various challenges, e.g., gaps between biodiversity objectives and practices on the ground, conflicts between public and private interests, imbalanced distribution of environmental and social costs and benefits, considerable time lags, and variation in planning processes.

In this context, the initiatives and measures to promote sustainable finance proposed by the EU renewed Sustainable Finance Strategy may provide a novel solution. It can help address biodiversity and ecosystem issues in spatial planning indirectly by prioritising sustainable capital

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flows and financing mechanisms, and emphasising the transparency of contributions to sustainable activities through reporting obligations. A typical example in relation to this is large infrastructure projects that require both formalised spatial planning approval and public and/or private investment. In line with the analysis carried out in the previous subtasks, the aim of Task 3.3 is to explore how sustainable finance can contribute to spatial planning leveraging transformative change for biodiversity, and the role of different actors in the context of spatial planning in accordance with the EU renewed Sustainable Finance Strategy.

This report documents the research work conducted in Task 3.3, WP3. The structure of the report is as follows: Section 2 describes the foci, components, and development processes of the EU renewed Sustainable Finance Strategy, including the EU Taxonomy Regulation, the Sustainable Finance Disclosure Regulation, and the Corporate Sustainability Reporting Directive; Section 3 discusses the general interactions of sustainable finance in the spatial planning process; Section 4 illustrates how the EU renewed Sustainable Finance Strategy may motivate changes of different actors related to spatial planning from different perspectives; Section 5 presents examples of recommendations and considerations for using the EU renewed Sustainable Finance Strategy to enhance transformative change in the context of spatial planning; Section 6 summarises the main findings under Task 3.3 and describes the next steps for WP3.

2. Sustainable Finance and the EU Renewed Sustainable Finance Strategy

Definition of Sustainable Finance

Various terms in finance, e.g., climate finance, green finance, transition finance, and sustainable finance, are increasingly being used in government documents, reports, guidelines, and other financial contexts as a result of the growing attention being paid to responsible and ethical financial practices addressing long-term environmental and social impacts (OECD, 2022; UNEP Inquiry, 2016). Green finance often refers to investments that support environmentally friendly projects and technologies, while sustainable finance addresses environmental, social and governance issues and risks in financial decision making, which goes beyond the environmental focus of green finance (UNEP Inquiry, 2016). In the Commission Recommendation on facilitating finance for the transition to a sustainable economy (EC, 2023), **sustainable finance** is defined as the financing of "*both what is already environment-friendly and what is transitioning to such performance levels over time*", and the Commission also clarified transition finance as "*the financing of climate- and environmental performance improvements to transition towards a sustainable economy, at a pace that is compatible with the climate and environmental objectives of the EU*". Figure 1 illustrates the relationship between the different terms for finance in respect to their scope and the issues addressed in decision making and financial flows.

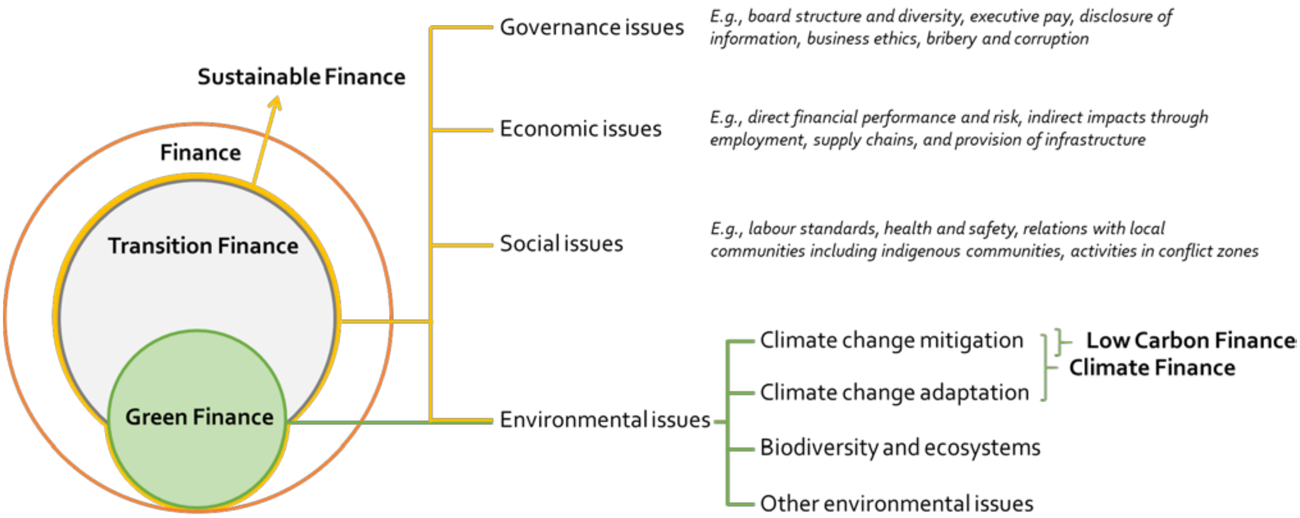

Figure 1: Green, Transition, and Sustainable Finance: Relationships and Areas of Overlap (*Source: adapted from UNEP Inquiry, 2016 and EC, 2023*)

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The EU Renewed Sustainable Finance Strategy

In 2018, the European Commission adopted its first **Action Plan on sustainable finance**[1] to establish a framework for the private sector to promote sustainable investment. Since then, the Commission has launched various initiatives for three building blocks of a sustainable finance system, including 1) a classification system of sustainable activities: e.g., the **EU Taxonomy Regulation**[2]; 2) a disclosure framework for non-financial and financial companies: e.g., the **Sustainable Finance Disclosure Regulation**[3] (SFDR), the **Corporate Sustainability Reporting Directive**[4] (CSRD), and the Sustainability Preferences; and 3) investment tools: e.g., the **EU Climate Transition Benchmarks Regulation**[5] and the **European Green Bond Standard**[6].

Following extensive consultation with experts and stakeholders, in July 2021, the Commission published the **EU renewed Sustainable Finance Strategy**[7]. The Strategy has been developed to help the European Union achieve its sustainability goals and increase its resilience in the context of recovery from the COVID-19 crisis. In line with the **European Green Deal**[8], the aim of this comprehensive agenda is to support businesses and the financial sector in the transition to a climate-neutral and sustainable economy by enabling investors to assess the risks and impacts of investments related to sustainability and by encouraging private funding for sustainable projects and technologies. The Strategy proposes six sets of actions in four key policy areas:

1) *Transition finance*- financing the transition of the real economy towards sustainability:
    Action 1: Extend the existing sustainable finance toolbox to facilitate access to transition finance;
2) *Inclusiveness*- towards a more inclusive sustainable finance framework:
    Action 2: Improve the inclusiveness of small and medium-sized enterprises (SMEs), and consumers, by giving them the right tools and incentives to access transition finance;
3) *Resilience and contribution of the financial system*- improving the financial sector's resilience and contribution to sustainability (the double materiality perspective):
    Action 3: Enhance the resilience of the economic and financial system to sustainability risks;
    Action 4: Increase the contribution of the financial sector to sustainability;

[1] Renewed sustainable finance strategy and implementation of the action plan on financing sustainable growth: https://finance.ec.europa.eu/publications/renewed-sustainable-finance-strategy-and-implementation-action-plan-financing-sustainable-growth_en
[2] EU taxonomy for sustainable activities: https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en
[3] Sustainability-related disclosure in the financial services sector: https://finance.ec.europa.eu/sustainable-finance/disclosures/sustainability-related-disclosure-financial-services-sector_en
[4] Corporate sustainability reporting: https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en
[5] EU Climate Transition Benchmarks Regulation: https://finance.ec.europa.eu/regulation-and-supervision/financial-services-legislation/implementing-and-delegated-acts/eu-climate-transition-benchmarks-regulation_en
[6] The European green bond standard: https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/european-green-bond-standard-supporting-transition_en
[7] Strategy for financing the transition to a sustainable economy: https://finance.ec.europa.eu/publications/strategy-financing-transition-sustainable-economy_en
[8] The European Green Deal: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en

Action 5: Ensure the integrity of the EU financial system and monitor its orderly transition to sustainability;

4) *Global ambition*- fostering global ambition:

Action 6: Develop international sustainable finance initiatives and standards, and support EU partner countries.

The Commission reviewed the implementation of the renewed Sustainable Finance Strategy, and published a package of measures[9] to reinforce the EU sustainable finance framework in June 2023, including new sets of the EU Taxonomy Delegated Acts, and a proposal for a regulation on **Environmental, Social and Governance (ESG) ratings**[10]. The Commission stated[11] that according to early evidence the EU sustainable finance agenda is working at the implementation level towards the transition to the climate-neutral and sustainable economy by 2050. The Commission also continuously develops and finetunes the EU sustainable finance framework to ensure its effectiveness and usability, including strong international cooperation, and providing practical guidance to different types of actors.

In this report, we focus on three regulations that we consider to be the most relevant for the spatial planning context: the EU Taxonomy Regulation, the Sustainable Finance Disclosure Regulation, and the Corporate Sustainability Reporting Directive.

EU Taxonomy Regulation

The EU Taxonomy Regulation was adopted in June 2020 as a science-based transparency tool for businesses and investors to support the implementation of the EU sustainable finance framework. The Regulation aims to establish an EU-wide classification system for sustainable economic activities in order to facilitate sustainable investments and to navigate the transition to a climate-neutral and sustainable economy. It addresses six climate and environmental objectives: 1) climate change mitigation; 2) climate change adaptation; 3) sustainable use and protection of water and marine resources; 4) transition to a circular economy; 5) pollution prevention and control; and 6) protection and restoration of biodiversity and ecosystems.

The Regulation defines sustainable economic activities, i.e., Taxonomy-aligned economic activities, as activities that:

1) Substantially contribute to at least one of the six objectives,
2) Do no significant harm to any of the other five objectives, where relevant,
3) Comply with minimum safeguards, such as the OECD Guidelines on Multinational Enterprises and the UN Guiding Principles on Business and Human Rights, and
4) Comply with the detailed technical screening criteria, i.e., performance levels/thresholds, determined by the delegated acts, which operationalise the conditions 1) and 2) by specifying the respective performance requirements for the activities.

[9] Sustainable finance package: https://finance.ec.europa.eu/publications/sustainable-finance-package-2023_en

[10] Proposal for a Regulation on the transparency and integrity of Environmental, Social and Governance (ESG) rating activities: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023PC0314

[11] Communication from the Commission: A sustainable finance framework that works on the ground: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023DC0317

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The EU Taxonomy Regulation is complemented by the delegated acts that provide technical screening criteria for the classification of environmentally sustainable economic activities for both financial and non-financial companies. In 2021, the Commission published the Climate Delegated Act[12] for the two objectives on climate change adaptation and mitigation, and a supplementary Disclosures Delegated Act[13] that specifies the information to be reported regarding the share of sustainable economic activities from financial and non-financial entities. The Commission approved in 2022 a Complementary Climate Delegated Act[14] to address specific nuclear and gas energy activities with the aim to accelerate energy transition and decarbonisation. In 2023, the Commission published the Environmental Delegated Act[15] that defines technical screening criteria for economic activities substantially contributing to one or more of the four remaining environmental objectives, and adopted amendments to the Climate Delegated Act[16] regarding the expansion of economic activities, in particular in the manufacturing and transport sectors, contributing to the climate objectives and amendments to the Disclosures Delegated Act that clarifies reporting obligations for the additional activities.

The current Environmental Delegated Act covers only a limited range of economic activities, in particular with regard to the objective of "protection and restoration of biodiversity and ecosystems". The development of technical screening criteria under the EU Taxonomy Regulation is still an ongoing process. In addition, to address suggestions and feedback from stakeholders on possible revisions and additions to the EU Taxonomy, the Commission launched a stakeholder request mechanism[17] with the Platform on Sustainable Finance[18] in 2023. The Technical Working Group from the Platform will summarise and assess the stakeholders' requests and make recommendations accordingly in 2024, which will be further assessed by the Commission for potential amendments to the delegated acts.

Sustainable Finance Disclosure Regulation

Launched in March 2021, the Sustainable Finance Disclosure Regulation[19] aims to increase the transparency of investments by requiring financial market participants, e.g. insurance companies, investment firms, and asset managers, to disclose how sustainability risks and impacts are integrated and considered in the investment processes, and to prevent greenwashing as well as promote sustainable investment. The SFDR requires disclosure of information including: 1) sustainability risk policies, 2) adverse sustainability impacts at entity level, 3) remuneration policies in relation to the integration of sustainability risks, 4) the integration of sustainability risks, 5)

[12] EU Taxonomy Climate Delegated Act: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R2139
[13] EU Taxonomy Disclosures Delegated Act: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32021R2178
[14] EU taxonomy: Complementary Climate Delegated Act to accelerate decarbonisation: https://finance.ec.europa.eu/publications/eu-taxonomy-complementary-climate-delegated-act-accelerate-decarbonisation_en
[15] EU Taxonomy Environmental Delegated Act: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32023R2486
[16] Targeted amendments to the EU Taxonomy Climate Delegated Act: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32023R2485
[17] EU taxonomy stakeholder request mechanism: https://finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance/platform-sustainable-finance/stakeholder-request-mechanism_en
[18] The Platform on Sustainable Finance is an advisory body for the Commission. For more information see: https://finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance/platform-sustainable-finance_en
[19] Regulation on sustainability-related disclosures in the financial services sector: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019R2088

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adverse sustainability impacts at financial product level, 6) the promotion of environmental or social characteristics in pre-contractual disclosures, 7) sustainable investments in pre-contractual disclosures, 8) the promotion of environmental or social characteristics and of sustainable investments on websites, and 9) the promotion of environmental or social characteristics and of sustainable investments in periodic reports.

After the application of the SFDR in 2021, the Commission further published two Delegated Regulations[20], in July 2022 and February 2023, respectively, to clarify detailed technical standards for financial market participants when disclosing required information. In September 2023, the Commission launched a public consultation[21] and a targeted consultation[22] on the implementation of the SFDR to comprehensively assess the framework, in particular with regard to issues of legal certainty, usability, and its ability in tackling greenwashing. The assessment is currently in progress.

Corporate Sustainability Reporting Directive

The Corporate Sustainability Reporting Directive[23], published in December 2022 and applicable from January 2023, updates the social and environmental reporting requirements for all large companies and all listed companies in the Directive (including listed SMEs and excluding listed micro-enterprises). It extends reporting requirements to companies of different scales and ensures that stakeholders have access to the necessary information for assessing corporate social and environmental impacts, as well as financial risks related to sustainability. It aims to integrate sustainability reporting more closely with financial reporting, and to harmonise and standardise sustainability reporting requirements across the EU to simplify ESG assessments for companies.

The CSRD mandates reporting in accordance with the **European Sustainability Reporting Standards**[24](ESRS), developed by the European Financial Reporting Advisory Group[25] (EFRAG) and published in December 2023. The ESRS specify the information that a company should disclose about its material impacts, risks, and opportunities related to environmental, social, and governance sustainability issues. It establishes standards in line with EU policies and contributes to international standardisation efforts. In particular, the ESRS E4 on *biodiversity and ecosystems* sets out disclosure requirements to enable users of the sustainability statements to understand:

1) *How the undertaking affects biodiversity and ecosystems, in terms of material positive and negative, actual and potential impacts, including the extent to which it contributes to the drivers of biodiversity and ecosystem loss and degradation;*

[20] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022R1288R(01); https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32023R0363
[21] Public consultation on the implementation of the SFDR: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13961-Report-on-the-Sustainable-Finance-Disclosure-Regulation/public-consultation_en
[22] Targeted consultation on the implementation of the SFDR: https://finance.ec.europa.eu/regulation-and-supervision/consultations/finance-2023-sfdr-implementation_en
[23] Directive as regards on corporate sustainability reporting: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022L2464
[24] Commission Delegated Regulation supplementing Directive as regards sustainability reporting standards: https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:32023R2772
[25] EFRAG is an association funded by the European Commission and the private sector to serve public interest. For more information see: https://efrag.org/

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2) *Any actions taken, and the result of such actions, to prevent or mitigate material negative actual or potential impacts and to protect and restore biodiversity and ecosystems, and to address risks and opportunities; and*
3) *The plans and capacity of the undertaking to adapt its strategy and business model in line with a) respecting planetary boundaries related to biosphere integrity and land-system change, b) the vision of the **Kunming-Montreal Global Biodiversity Framework** and its relevant goals and targets, c) relevant aspects of the **EU Biodiversity Strategy for 2030**, d) the **EU Birds and Habitats Directives**, and e) the **EU Marine Strategy Framework Directive**;*
4) *The nature, type and extent of the undertaking's material risks, dependencies and opportunities related to biodiversity and ecosystems, and how the undertaking manages them; and*
5) *The financial effects on the undertaking over the short-, medium- and long-term of material risks and opportunities arising from the undertaking's impacts and dependencies on biodiversity and ecosystems*.

Companies will start applying the new rules under the CSRD from 2024, with reports published in 2025. In February 2024, a political agreement was reached to postpone the deadline for adopting sector-specific ESRS by two years, from mid-2024 to mid-2026, to allow companies additional time for compliance with the standards.

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3. Interactions of Sustainable Finance with Spatial Planning

The spatial planning process extends beyond the plan-making activities of the planning authorities. It involves interactions with other public authorities and private stakeholders and is closely linked to investment intentions, in particular, in terms of land use management and large-scale construction. The EU renewed Sustainable Finance Strategy can contribute to address biodiversity and ecosystem issues indirectly through capital flows and financial mechanisms, e.g. by increasing the proportion of sustainable investments and by supporting programmes that promote sustainable economic activities in spatial planning processes. Therefore, the EU renewed Sustainable Finance Strategy may have a significant impact along the spatial planning process, and vice versa, spatial planning could contribute in several ways to the transition towards a climate-neutral and sustainable economy.

We highlight the relevance of sustainable finance in spatial planning by identifying potential entry points where sustainable finance objectives and opportunities can be incorporated, based on the representation of the spatial planning process developed in WP1 (see Figure 2), as presented in Table 1.

Figure 2: A Generic Process Representing the Flow of Tasks, Components, and Operations Along the Stages of Spatial Planning (*Source: BioValue Internal Document prepared by IST-ID*)

Table 1: Potential Entry Points to Incorporate Sustainable Finance in Spatial Planning Processes

Spatial Planning Stage	Relevant Task/Component/Operation	Potential Entry Points
Vision	Identification of Problems	Ensure that spatial planning adequately addresses biodiversity and ecosystem issues/potential as well as sustainable finance when identifying problems and potential conflicts
	Projections, Prospective Diagnosis, Scenario Analysis	Incorporate financial risks associated with biodiversity loss and ecosystem degradation as well as (business) opportunities for biodiversity enhancement into projections and scenario analysis
	Policies & Objectives	Specify sustainability aspirations and ambitions in spatial planning objectives and explicitly address and consider sustainable finance in policies
Territorial Model	Plan Strategy, Strategic Options, Strategic Projects	Integrate explicitly sustainable finance opportunities and transparency requirements for sustainable economic activities into the development of spatial planning strategies
Formalization of the Plan	Objectives, Goals, Targets	Incorporate concrete objectives that encourage sustainable development and construction as well as sustainable finance in spatial planning by referring to EU guidelines and regulations such as the EU Taxonomy
	Regulation	Include in the plan's regulation standards and rules that support

		sustainable development and sustainable finance
	Programming, Execution, Financing	Prioritise sustainable finance for the planned actions and projects and promote sustainable development projects in accordance with the EU Taxonomy Regulation
	Monitoring Methodology, Strategic Environmental Assessment	Develop monitoring and impact assessment mechanisms that take into account criteria related to sustainable finance and financial risks caused by biodiversity and ecosystem issues and include the identification of positive examples (Champions); Performance information on sustainable finance should feed into the monitoring and impact assessment system
Validation	Public Consultation	Identify options for sustainable development projects with stakeholders and the public, ensuring the inclusion of SMEs
	Webpages and Publication	Ensure transparency on how sustainable development and sustainable finance are considered in the plan
Implementation, Monitoring, and Evaluation	Implementation, Monitoring, Management	Maintain consistency with objectives, strategies, and concrete rules for sustainable development and sustainable finance established in previous steps; Take into account criteria such as ESG ratings, the ESRS, when implementing projects in partnership

		with private entities, in particular, regarding land use and constructions
	Evaluation	Include criteria for evolution of sustainable development and sustainable finance, as well as impacts on biodiversity and ecosystem services in the evaluation of the plan

The entry points provide a first evaluation on where and how sustainable finance can be considered along different stages of spatial planning processes. However, the integration of sustainable finance in spatial planning requires understanding of the roles of different actors. In the following sections, we discuss how the EU renewed Sustainable Finance Strategy can contribute to biodiversity through spatial planning, and what should be considered when using the Strategy to enhance transformation.

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4. Potential Contributions of the Strategy for Biodiversity in Spatial Planning

In order to understand how sustainable finance could contribute to biodiversity enhancement in spatial planning, we outline how biodiversity and ecosystems can be affected by various economic activities. As shown in Figure 3, without any rules (e.g., legal requirements, governance arrangements, etc.), maximizing private economic returns can lead to the overuse of resources, and thereby to biodiversity loss and ecosystem degradation. As presented in the bottom dark red box in Figure 3, the damage and social and environmental costs of these economic activities are passed on to society and the beneficiaries of ecosystem services (ES).

When legislative requirements are established for biodiversity and ecosystems, economic actors are obliged to implement private solutions to comply with the legal rules and standards (i.e., the red box in the middle in Figure 3). The costs of these measures are borne primarily by the economic actors that cause the damage, known in environmental economics as the "polluter pays" principle. The legal requirements for the rules and standards on biodiversity and ecosystems determine the status quo for biodiversity and ecosystems (i.e., the purple line in Figure 3).

There are also environmental targets, which are practically and politically feasible environmental optimums beyond the status quo; e.g., those defined by international environmental agreements such as the Kunming-Montreal Biodiversity Targets. Ideally, a provider of conservation measures that improve biodiversity beyond the minimum requirements set up by legislation (i.e., the top light red box in Figure 3) should be compensated for his efforts. These costs should be borne by the ES beneficiaries, when direct beneficiaries can be identified, or else by society. A provider of conservation measures or ecosystem services is referred to as ES steward. In such cases, “beneficiary pays” and “steward earns” principles apply; typically, E&FIs that allow redistribution of environmental costs and benefits are designed for this purpose.

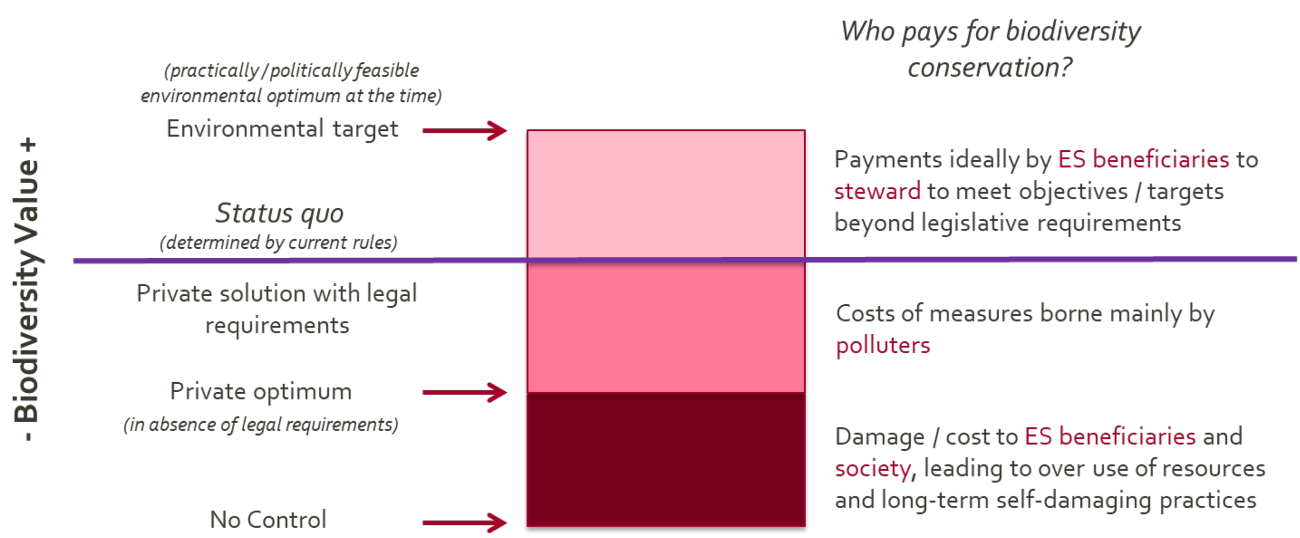

Figure 3: Impact of Economic Activities on Biodiversity Value

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As the EU renewed Sustainable Finance Strategy focuses on the actions and changes needed in the financial sector and system, including the economic actors involved, it has potential to support conservation actions beyond the status quo (i.e., above the purple line in Figure 3). The Strategy is not legally binding in terms of regulation or enforcement for sustainability commitments by the financial markets and actors. However, it ensures consistency of understanding and defines criteria for sustainable investments and environmentally sustainable economic activities. It obliges companies and financial organisations to report on their contributions to environmental sustainability even though these can be zero. For example, some companies may opt not to actively participate in environmental efforts, but as long as they comply with the reporting requirements under the CSRD, such decisions do not pose any risk of legal violation.

In the context of spatial planning, the Strategy has limited interaction at the regulatory level for enhancing biodiversity (i.e., the purple line in Figure 3). However, it may have an impact through the reporting process supported by the disclosure directives and the taxonomy. For example, with the disaggregation of the visions and targets of the Kunming-Montreal Global Biodiversity Framework and relevant aspects of the EU Biodiversity Strategy for 2030 through the ESRS in the CSDR, companies are obliged to report on their contribution to global and EU biodiversity targets. This will make transparent how companies contribute to biodiversity, which can be considered in projects and programmes within the spatial planning process. With regard to further specifications of the EU Taxonomy Regulation, there are ongoing discussions on how to classify activities involving large infrastructures. This will likely have a direct impact on spatial planning and environmental assessment processes regarding biodiversity considerations.

To derive approaches on how spatial planning can benefit from the EU renewed Sustainable Finance Strategy in the spirit of unlocking its transformative change potential for biodiversity, it is important to identify 1) the actors whose behaviour is affected by the Strategy (i.e., the actors affected), e.g., who need to comply with the respective regulations and reporting obligations, and 2) the actors who have the potential to promote changes based on the framework established by the Strategy (i.e., the actors of change).

The individual actors involved in spatial planning vary according to the context, i.e., type of planning system, scale, geographical scope, etc. From the perspective of generic actors, the main actors involved can be categorised as 1) *legislative/regulatory authorities*, who define the binding legislations and regulations for spatial planning; 2) *planning authorities*, who prepare the plans; 3) *financial organisations*, who have interests in making investments during spatial planning processes; 4) *private stakeholders*, who may participate in the process of land development and land use management; and 5) the *general public*, including NGOs.

Therefore, the implications of the Strategy for spatial planning can be divided correspondingly into five perspectives:

1) *Legislative and Regulatory Perspective*: With information on sustainable activities and investments provided by the taxonomy and the disclosure regulations, local/national *legislative/regulatory authorities* can update the binding regulations on biodiversity and ecosystems for spatial planning to legally link concrete biodiversity targets with specific sectors (i.e. move the purple line in Figure 3 to change the status quo).

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2) *Planning Perspective*: The EU Taxonomy specifies the thresholds for sustainable economic activities and the disclosure regulations as well as ESG rating enable the public to assess the sustainability performance of companies and financial actors. On this basis, *planning authority* can:
    a. Develop innovative measures and schemes to support environmentally sustainable activities, e.g. to define a "Taxonomy-aligned" industrial zone that only grants entry to companies with environmentally sustainable practices;
    b. Unlock collaboration potential for sustainable development, e.g. circular economy could benefit from a specific spatial configuration that strengthen the circulation of products and materials among different businesses and customers;
    c. Designate areas that contribute to sustainable use and protection of water and marine resources, as well as pollution prevention and control, e.g. planning for green spaces and nature-based solutions for waste management and remediation.
3) *Investment Perspective*: As *financial organisations* (e.g., trust funds, biodiversity foundations, investment banks) have to transparently report their contributions to sustainability under the SFDR, they may be interested to increase their own targets for sustainable investments, and contribute to specific conservation measures relevant to spatial planning.
4) *Corporate Perspective*:
    a. On the one hand, the proposal of potential economic zones for sustainable activities (similar to the concept of "Taxonomy-aligned" zone that could be designed by planning authorities as illustrated above) can be initiated by *private stakeholders* such as companies, landowners, and land managers;
    b. On the other hand, under the CSRD, companies are mandated to disclose their activities related to ESG sustainability in accordance with the ESRS. This may motivate companies to identify business opportunities in the context of biodiversity and ES, and thus mobilise private financing for biodiversity.
5) *Perspective from the General Public*: The EU Taxonomy, by defining sustainable economic activities, and the Disclosure Regulations, by disclosing contributions to biodiversity and ecosystem services, enable the *general public*, e.g., NGOs and citizen groups, to press for specific lower limits or obligations to increase contributions for biodiversity and ecosystems in both urban and rural areas.

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5. Considerations for Using the Strategy to Enhance Transformative Change

The EU renewed Sustainable Finance Strategy is closely linked to the three transformative change ambitions[26] and impact pathways in the spatial planning context as defined in Task 4.1, WP4. We derive some examples of recommendations to make use of the Strategy and considerations in spatial planning based on the five building blocks (i.e., transformative vision, transformative knowledge, transformative dynamics, emancipation and agency, and transformative governance) of the BioValue Transformative Change Framework (for more information, see: BioValue Report D4.1: Analytical framework detailed and specified for application within BioValue), and link the examples to relevant best practices on biodiversity integration in spatial planning identified in Task 1.2, WP1 (for details on the best practices, see: Page 21-27, BioValue Report D1.2: Expert Perspectives of Integrating Biodiversity in Spatial Planning: Contributions from Promising Practices).

Transformative Vision: What futures do we want?

- **Develop a shared vision and narratives**. To facilitate the effective implementation of sustainable finance measures, it is important to develop a shared vision of a desirable future with all public and private actors across different scales and to have a common of understanding of the pathways towards transformative change for biodiversity. Also, common narratives can contribute to outline how to reach the desirable future, making it more accessible to stakeholders. *Relevant best practices identified in Task 1.2, WP1: Biodivercities project (Portugal).*
- **Set up guiding principles**. To foster sustainability in spatial planning, it is essential to establish a common understanding of sustainability goals and requirements that allow planning authorities to use different tools within different planning systems to integrate sustainability requirements in flexible and innovative ways.

Transformative Knowledge: What needs to be known for changing the system?

Information provided by the Taxonomy classifications and sustainability reporting can help to develop knowledge and guidance, e.g.,:

[26] Ambition 1: Spatial planning safeguards, restores, allows recovery and enhances biodiversity. Spatial planning usually operates in direct ways by reducing or enhancing certain uses in certain areas, e.g., through Nature-based solutions and ecosystem services.

Ambition 2: Spatial planning significantly contributes to balanced and responsible consumption and production without external social and environmental costs. The effects of spatial planning can induce more balanced, sustainable territorial relations between urban, peri-urban and rural communities, e.g., through the reduction (and stop) of land take and land consumption, implementation of urban food production system.

Ambition 3: Spatial planning significantly contributes to reducing socioeconomic inequalities, for example, in the context of urban areas, which is reflected, e.g., in unequal access to transport, housing, among others that primarily affect the integration of marginalised communities, migrants, youth, and disadvantaged groups.

- **Best Practice guidance and case-specific recommendations** for typical cases or scenarios in spatial planning and environmental assessments.
- **Clearly defined indicators for performance tracking**. Information that help establish concrete indicators and targets for monitoring and evaluating sustainability performance may help increase the transparency of the process and mitigate the risk of greenwashing. These criteria and targets can be aligned with the EU Taxonomy for sustainable economic activities, the ESRS, and the ESG rating system. *Relevant best practices identified in Task 1.2, WP1: Biodiversity Monitor: Towards a Biodiversity Monitor for Dairy Farming (the Netherlands), Biodiversity Net Gain project (England).*
- **Understanding of cumulative impacts.** Information provided by sustainability reporting better allows researchers and planning authorities to understand and deal with cumulative impacts and feedback loops between sectors.

Transformative Dynamics: How to navigate, nudge and nurture system change?

- **Acknowledge the complexity of systems**. Spatial planning is not a one-size-fits-all process, and the way in which the plan-making and implementation process is carried out can vary according to various circumstances, e.g., the type of plan, the scale of development and implementation, the geographical scope, the associated legal framework, etc. Therefore, implementation guidelines for effective integration of biodiversity in spatial planning need to be case-specific.
- **Test with pilot cases before scaling up and scaling out**. Before formulating widespread guidelines or recommendations for measures to promote sustainability in spatial planning, these measures should be tested in small-scale pilot projects and preferably in different contexts. *Relevant best practices identified in Task 1.2, WP1: Serious Games project (São Tomé and Príncipe), Corona Verde project (Italy).*
- **Understand how to further accelerate transitions**. Sustainable finance in the context of spatial planning could significantly contribute to the development and implementation of solutions oriented to accelerate sustainable transitions, e.g., energy transition.

Emancipation and Agency: How to open spaces for deliberation, inclusion and emancipation?

- **Multi-actor considerations.** It is important to involve indigenous communities in planning and to consider the impact on all affected actors, e.g., to avoid overburdening SMEs.
- **Build and nurture niches by promoting and strengthening new ideas and practices.** Sustainable finance could have an important role in fostering innovation within the spatial planning especially in the context of SMEs and micro-enterprises.
- **Facilitate and address socioeconomic inequality.** Information provided by sustainability reporting allows the affected population and authorities to understand the positive and negative impacts of economic activities on different population groups.

Transformative Governance: Who (adequate combination of relevant actors)? What (instruments)? How (governance modes)?

Transformative governance requires integration across sectors, information of current states, and inclusion of stakeholders in order to be able to adapt and it needs to ensure accountability. The EU renewed Sustainable Finance Strategy can potentially contribute to all these aspects:

- **Information availability for adapting options**. Firstly and foremost, the Strategy can significantly improve the information available on environmental impacts. This improves the options for adapting instruments and strategies in a timely manner.
- **Clarification of responsibility and governance model**. It is essential to clarify the role and responsibility of each actor involved in the process (accountability). Care should also be taken in the design of sustainable finance regulations to ensure that developers do not take superficial measures that fit in with the regulation but do not fulfil the objective of transition.
- **Improve sector integration and inclusion of different actors.** An example for this is to active apply E&FIs for biodiversity financing. E&FIs provide incentives that address externalities and redistribute environmental and social costs and benefits among the actors involved. The use of appropriate E&FIs, e.g., establishing markets and eco-labelling mechanisms for developments, may help to stimulate biodiversity financing from private sector. In addition, the disclosure requirements initiated under the EU sustainable finance framework, e.g., the SFDR and the CSRD, may assist in raising awareness and reducing resistance among private actors. *Relevant best practices identified in Task 1.2, WP1: The old railway track circuit in New York (US), Environmental Rural Registry project (Brazil), Friends of Portbury Wharf project (England), Strategies for Land Saving and Targets for Reducing Land Use (Germany).*

6. Summary and Next Steps

The EU renewed Sustainable Finance Strategy focuses on the actions and changes needed for the financial sector and economic actors to achieve a transition to the climate-neutral and sustainable economy by 2050. The Strategy is currently not legally binding with enforcement of sustainability commitments and places emphasis on consistent classification and transparency for sustainable investments and environmentally sustainable economic activities. It has limited capacity to intervene directly at the regulatory level for biodiversity and ecosystems, however, the Strategy can motivate different actors related to spatial planning, e.g., administrative authorities, planning authorities, financial organisations, private stakeholders, and the general public, to embrace changes from different perspectives and accelerate the collective knowledge sorting process.

In this sense, the Strategy has significant potential to support spatial planning in addressing biodiversity and ecosystem issues. One potential pathway is by prioritising sustainable capital flows. A second opportunity lies in facilitating the design of different plans and instruments, e.g., sustainable economic zones and E&FIs such as payments for ecosystem services and green bonds. In order to make use of these opportunities, spatial planning needs to specify its visions and objectives in line with global and EU biodiversity targets to operationalise biodiversity and ecosystem objectives in the process.

The Strategy can contribute to enhancing transformative change for biodiversity in spatial planning along all five building blocks of the BioValue Transformative Change framework. Revealing corporate contributions to biodiversity and, more generally, to sustainability can help in the process of building a collective vision of a desirable future. Providing more specific information on impacts, risks, and opportunities linked to biodiversity and ecosystem services, helps actors in spatial planning outline pathways to sustainability transitions and pluralise knowledge from different fields. Information provided by sustainability reporting facilitates understanding impacts on different groups and to address socioeconomic inequality. The outcomes of the Strategy can be used to improve all five dimensions of transformative governance, i.e., making it more informed, adaptive, inclusive, integrated, and accountable. The Strategy can also be combined with other initiatives under the European Green Deal to unlock even greater potential for transformative change in spatial planning, e.g., with the proposal for the Corporate Sustainability Due Diligence Directive[27], which may help ensure the compliance with environmental objectives along the supply chain.

As a next step of WP3, the policy analysis in this report will feed into the research work in Task 3.4. We will develop detailed guidance on the selection of appropriate E&FIs, in alignment with the implications of the EU renewed Sustainable Finance Strategy in the spatial planning context, and explore the transformative potential of E&FIs along the Mitigation Hierarchy in spatial planning.

[27] Corporate sustainability due diligence: https://commission.europa.eu/business-economy-euro/doing-business-eu/corporate-sustainability-due-diligence_en

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