CrossGov

Coherent & Cross-compliant Ocean Governance for Delivering the EU Green Deal for European Seas

D2.1 – EU and international policy landscape

Mapping EU policies and Green Deal objectives: observations for policy coherence in the marine domain

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Abstract	CrossGov *D2.1 EU and international policy landscape - Mapping EU policies and Green Deal objectives: general observations for policy*

	coherence in the marine domain aims to provide a mapping of the European Green Deal policy landscape relevant to the marine domain and the CrossGov project. It also offers a general introduction into how policy coherence, embedded within the design of (selected) EU policies, supports or impedes progress towards the EGD's objectives in the marine domain. A total of 36 policies were selected and mapped against five EGD strategies, namely the 2030 Climate Target Plan, the EU Climate Change Adaptation Strategy, the Biodiversity Strategy for 2030, the Zero Pollution Action Plan, and the Sustainable Blue Economy Strategy. These five strategies lay out a total of 25 specific objectives to implement the vision of the EGD, identified as relevant to the marine domain and the focus of the CrossGov project – i.e. climate change, biodiversity loss, and pollution.
Keywords	EU marine policy, European Green Deal, policy coherence, ocean governance.

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Acronyms

AKIS	Agricultural Knowledge and Innovation Systems
HELCOM	Baltic Marine Environment Protection Commission
BAT	Best Available Techniques
CAP	Common Agricultural Policy
CFP	Common Fisheries Policy
CMO	Common Market Organisation
OSPAR	Convention for the Protection of the Marine Environment of the North-East Atlantic
CBD	Convention on Biological Diversity
CSRD	Corporate Sustainability Reporting Directive
ETD	Energy Taxation Directive
EIA Directive	Environmental Impact Assessment Directive
EQSD	Environmental Quality Standards Directive
EC	European Commission
EEA	European Environment Agency
EFCA	European Fisheries Control Agency
EFSA	European Food Safety Authority
EGD	European Green Deal
EMFAF	European Maritime, Fisheries and Aquaculture Fund
ESABCC	European Scientific Advisory Board on Climate Change
EU	European Union
ENER	European Union Directorate-General for Energy
GBF	Global Biodiversity Framework
GES	Good Environmental Status
GHG	Greenhouse Gasses
IED	Industrial Emissions Directive
ICES	International Council for the Exploration of the Sea
LULUCFR	Land Use, Land-Use Change, and Forestry Regulation
MPAs	Marine Protected Areas
MS	Member State(s)
MSFD	Marine Strategy Framework Directive
MSPD	Maritime Spatial Planning Directive
MSY	Maximum Sustainable Yield
NRL	Nature Restoration Law
POP	Persistent Organic Pollutants
PSF	Platform on Sustainable Finance
RSB	Regulatory Scrutiny Board

SEA Directive	Strategic Environmental Assessment Directive
SDGs	Sustainable Development Goals
STECF	Scientific, Technical and Economic Committee for Fisheries
TOC	Total Organic Carbon
TOD	Total Oxygen Demand
WFD	Water Framework Directive
WP	Work Package

Executive Summary

The European Green Deal (EGD), launched in 2019, sets out a comprehensive suite of policy initiatives to propel Europe to a sustainable economy and make Europe the first climate-neutral continent by 2050 (European Commission, 2019). To achieve this 2050 vision for Europe, the EU has launched numerous strategies targeting key areas for change. These include the 2030 Climate Target Plan, the Climate Change Adaptation Strategy, the Biodiversity Strategy for 2030, the Zero Pollution Action Plan, and the Blue Economy Strategy. The 2019 EGD Communication (European Commission, 2019) and its subsequent strategies and action plans are closely interconnected, as they represent an integrated effort to address climate change, biodiversity loss, and pollution challenges facing the EU.

These strategies and their objectives are not to be considered in isolation since they are interconnected and interdependent and given equal priority by the EGD. Within this complex policy landscape policies must be designed to, not only consider impacts on all EGD objectives, but also to maximise synergies. This relation potentially creates trade-offs between policies or unintended consequences that hinder the progress of policies towards EGD objectives. Within the EU, the development of a complex, multi-level, and multi-sector policy 'landscape' has led to a framework that contains overlaps, gaps, weaknesses, and inconsistencies. The result poses a significant challenge for authorities and actors responsible for policy implementation.

This report offers a general introduction into selected EU policies. As a first step, a policy mapping exercise was conducted and a total of 36 policies were selected and mapped against five EGD strategies. These five selected strategies lay out a total of 25 specific (see Table 3) objectives to implement the vision of the EGD, identified as relevant to the marine domain and the focus of the CrossGov project – i.e., climate change, biodiversity loss, and pollution. The assessment applies the CrossGov Policy Coherence Evaluation Framework, a methodological approach for investigating policy coherence. The first draft of the Framework focused on eight coherence attributes, namely objectives, framing and mainstreaming, instruments, stakeholders, institutions, steering mechanisms, spatial and temporal scales, and science and knowledge. The Framework has currently been revised and will be further developed throughout the CrossGov project.

A total of 36 policies were selected and mapped against five EGD strategies, namely the 2030 Climate Target Plan, the EU Climate Change Adaptation Strategy, the Biodiversity Strategy for 2030, the Zero Pollution Action Plan, and the Sustainable Blue Economy Strategy. These five strategies lay out a total of 25 specific objectives to implement the vision of the EGD, identified as relevant to the marine domain and the focus of the CrossGov project – i.e. climate change, biodiversity loss, and pollution.

The results reveal a diverse degree of alignment of the objectives of the 36 policies with those of the EGD. A total of 203 instances where policy objectives reflect the EGD's objectives in addressing climate change, biodiversity preservation, and pollution were identified when considering what is laid out in the policy documents and what they intend to do. These are covered by 32 policies. In addition, some policies, namely the Environmental Impact Assessment and Strategic Environmental Assessment directives, were not identified to have either positive or negative alignment with any of the EGD objectives. This is most likely due

to their primarily process-oriented nature, where their main function is to provide cross-cutting support across policy domains.

This suggests that there is potential for a vertical policy coherence between the policies and the EGD strategies, at least when considering what is laid out in the policy documents and what they intend to do. Regarding policy framing and mainstreaming, many policies exhibit strong interconnections and mutual reinforcement, which potentially contributes to achieving the overarching goals, while others present clear opportunities for improved alignment. An introductory view into the remaining coherence attributes of the 36 reviewed policies identified numerous examples of how these attributes are reflected within the policy documents. However, no conclusions can yet be drawn, and no relative weight or level of importance is assigned to the different coherence attributes in this review.

This finding suggests that there is a significant need for future assessments into the design of policies and how this affects their capacity to achieve their objectives. Ultimately, while the review provides a first policy mapping exercise an initial screening of considerations into the coherence of policies and the EGD, conclusive results can only be developed through a further and more in-depth study of policy coherence (forthcoming in CrossGov).

1 Introduction

In an era of climate change, biodiversity loss, and pollution, ambitious and comprehensive policies are needed (IPCC, 2021). The European Union (EU) has established the European Green Deal (EGD), a suite of policy initiatives aimed at putting Europe on a sustainable green transition and becoming the first climate-neutral continent by 2050 (European Commission, 2019). Integral to this transition is addressing myriad pressures impacting the marine environment, such as escalating pollution levels, declining biodiversity, and the unsustainable exploitation of marine resources (IPBES, 2019). Realising this ambitious vision requires not just setting high-level objectives but implementing specific, actionable policy measures across a range of sectors, including the marine domain.

The success of the EGD, including in the marine domain, is affected by the policies aligning with its goals and ensuring coherence across various instruments. The current policy landscape comprises long established directives and regulations, as well as newer policies adopted after the launch of the EGD, such as the European Climate Law and the forthcoming Nature Restoration Law.

This report has two overarching objectives:

1. provide an extensive mapping of the EGD policy landscape relevant to the marine domain and the CrossGov project, and

2. offer a general introduction into coherence attributes reflected (or not) within (selected) EU policies relevant to EGD's objectives in the marine domain.

1.1 The European Green Deal

The EGD, launched in 2019, sets out a comprehensive suite of policy initiatives to propel Europe to a sustainable economy and make Europe the first climate-neutral continent by 2050 (European Commission, 2019). It aligns with the European Council's priorities for the 2019-2024 period (European Council, 2019) and the European Parliament's call for a transition to a climate-neutral economy and society (European Parliament and the Council, 2020). Since its launch, more than 20 strategies have been adopted to further concretise its policy goals and create a roadmap for its implementation, such as the 2030 Climate Target Plan, the Climate Change Adaptation Strategy, the Biodiversity Strategy for 2030, the Zero Pollution Action Plan, and the Blue Economy Strategy. The 2019 EGD Communication (European Commission, 2019) and its subsequent strategies and action plans are closely interconnected, as they represent an integrated approach to addressing climate change, biodiversity loss, and pollution challenges facing the EU. These strategies and their objectives are not to be considered in isolation, but they form part of an indivisible, holistic framework and no prioritisation or hierarchy amongst the objectives exist, as they are all given equal priority by the EGD. Moreover, the EGD includes links to policies beyond and prior to the EGD as well as regional and international initiatives. It also elevates the ambition of certain targets and in some instances, this includes the proposal of new legislation, reflecting the EGD's role in advancing the EU's environmental agenda.

The EGD recognises the intrinsic links between the environment, economy, and societal wellbeing. It aims to achieve climate neutrality and decoupling economic growth from natural resource use. Key goals of the EGD include achieving zero net greenhouse gas (GHG) emissions, supplying clean, secure, and affordable energy, promoting sustainable mobility, creating a toxic-free environment, encouraging the transition to a circular economy, preserving Europe's natural capital, and designing a fair, healthy, and sustainable food system. The EGD also includes a Just Transition Mechanism and a Social Climate Fund to support regions and industries most affected by the low-carbon transition and to harness digital technologies for sustainability.

The EGD is rooted in the crucial understanding that the current major challenges faced by the EU require urgent action and transformative change in the way Europeans live, work, produce and consume. Many of its interconnected policy objectives are therefore focusing on tackling the thorny and urgent challenges concerning biodiversity, climate change, and pollution. This offers an opportunity to cluster its policy objectives in terms of the challenges they are targeting under the three streams of biodiversity, climate change and pollution. Each stream focuses on specific goals for a sustainable future and aims to address the challenges and opportunities associated with them. While each of these streams appears to trigger a different bundle of policies and regulatory instruments, in practice, there are myriads of interconnections among them. Most of these policies are indivisible, for instance, climate neutrality cannot be achieved without substantial progress in the zero pollution and biodiversity streams. In that sense, the three streams are used as a heuristic tool for the purposes of this task, promoting sustainability in an integrated and holistic manner.

1.1.1 The European Green Deal's strategic framework for biodiversity, climate, and pollution

The EGD highlights the significance of biodiversity for the well-being of people and the planet. The biodiversity stream of the EGD aims to halt the loss of biodiversity, preserve, and restore degraded ecosystems in Europe and worldwide. This objective is primarily operationalised by the EU Biodiversity Strategy for 2030, which includes initiatives to e.g., establish a network of protected areas, promote sustainable agriculture, fisheries and forestry, as well as address the impacts of invasive species and wildlife trade, and promote green infrastructure. It also aims to mainstream biodiversity considerations across all policy areas and to support international cooperation in addressing global biodiversity loss.

The climate change stream of the EGD strives to achieve climate-neutrality by 2050, in line with the EU and its Member States (MS)' commitments under the Paris Agreement (European Commission, 2019). The focus is on two strands: reducing emissions (decarbonisation) and enhancing the energy transition. In terms of climate adaptation, the vision for 2050 is that the EU will be climate resilient, with adaptation becoming smarter, more systemic and swifter (European Commission, 2021). The climate stream also concentrates on clean, affordable, and secure energy supply and the acceleration of sustainable and smart mobility. It aims to increase the share of renewable energy, improve energy efficiency, promote sustainable transport, and reduce GHG emissions from industry, buildings, and agriculture. The Just Transition Mechanism supports regions and industries most affected by the transition to a low-carbon economy (EGD Investment Plan).

The zero-pollution stream establishes an action plan to achieve a toxic-free environment to protect human health and the environment by reducing pollution from all sources. It mainly aims to reduce air, water, and soil pollution, promote sustainable chemicals, and address the impacts of hazardous substances on human health and the environment.

EU's ambitions concerning biodiversity, climate change, and pollution are supported by coordinated and cross-cutting efforts towards sustainable food systems, circular economy, and smart mobility. There are strong interlinkages and synergies between biodiversity, an environmentally friendly food system, and the development of the circular economy, which can reduce the environmental impact of human activities on ecosystems. Similarly, efforts in circular economy, focusing on reducing waste and plastic pollution, contribute towards the pollution ambition of the EGD.

The indivisibility of the EGD policy objectives can also create trade-offs and lead to goal conflicts, as policies designed to achieve one goal may have unintended consequences or hinder the achievement of other policies. For example, the policy targets relating to the expansion of marine renewable energy generation may have negative impacts on biodiversity, despite the overlapping targets for enlarging the marine dimension of the Natura 2000 network of protected areas. Policies that are aimed at reducing pollution or increasing recycling of marine vessels may require the use of energy and other resources that may have negative impacts on climate change. That necessitates that policymakers carefully consider potential trade-offs alongside synergies to improve cross-compliance. At the EU level, the EGD policies and their implementation must be designed to, not only consider impacts on all three interrelated streams to avoid friction, but also to maximise synergies.

Moreover, the EGD is part of an already crowded policy and regulatory landscape and affects several policy fields and related strategies. Beyond the strategies developed to directly address the primary objectives of the three EGD streams, various strategies dealing with different sectors and issues are clustered around these streams.

1.1.2 Key Strategies of the European Green Deal relevant to the marine domain and CrossGov

The EU has developed several ocean-related strategies and policies building on pre-existing EU initiatives such as the Integrated Maritime Policy and others. Those that directly stem from the EGD include:

The **2030 Climate Target Plan**: An integral component of the EGD focusing on environmental sustainability and climate action. Its main agenda is to significantly reduce GHG emissions and pave the way for the EU to achieve climate neutrality by 2050. This plan is not merely an environmental strategy; it also encompasses economic and societal transformation towards more sustainable practices. This initiative took shape with the proposal of the European Climate Law in March 2020. It gained momentum with the proposal to cut net emissions by at least 55 per cent by 2030, compared to 1990 levels. This ambitious goal led to the formal enactment of the European Climate Law in June 2021 (European Parliament and the Council, 2021).

The **EU Climate Adaptation Strategy**: Focuses on fostering adaptation actions by MS, improving decision-making for climate impact preparedness, bolstering adaptation in sectors such as agriculture, transport, and infrastructure, and expanding the Climate-ADAPT platform (European Commission, 2021a). Additionally, it aims to increase systemic adaptation planning and climate risk assessments, accelerate adaptation measures, and promote global climate resilience through international finance and cooperation, aligning with the Paris Agreement and the European Climate Law. It highlights the ocean's role for climate change resilience. In particular, it stresses the importance of protecting and restoring wetlands, peatlands, coastal and marine ecosystems to improve the adaptive capacity of EU coastal areas to climate change and at the same time contribute to a multitude of other EGD objectives (i.e., biodiversity protection and restoration, creation of new 'blue' jobs). These nature-based solutions are expected to steer innovation for increased climate resilience, increased capacity to address extreme weather effects and sea level rise as well as creating a new sector of the blue economy. The strategy equally emphasises the importance of protecting and restoring marine ecosystems as a way of increasing their resilience to climate change impacts. For instance, measures for the restoration of coastal ecosystems which can operate as natural buffers against extreme weather events. In addition, it includes measures for the development of new technologies and approaches to monitor and predict the impacts of climate change on the marine environment, as well as development of strategies that duly consider the complexity and interconnectedness of marine ecosystems (European Commission, 2021a).

The **EU Biodiversity Strategy for 2030**: Includes more than 100 specific actions that purport to protect and effectively manage at least 30 per cent of the EU's land and seas (putting at least one third of protected areas under strict protection) and promote an ambitious nature restoration agenda, including measures to improve the management of existing Marine Protected Areas (MPAs) and enhance their connectivity to ensure their effectiveness in conserving marine biodiversity (European Commission, 2020). For marine areas particularly, the protection and restoration plans call for sustainable harvesting and zero-tolerance for illegal practices, including the introduction of an action plan with specific actions concerning fishing practices. To that end, the EC has proposed the Nature Restoration Law, which aims at halting biodiversity loss and at the same time tackling the climate crisis. Besides, the Biodiversity Strategy calls for increased financial support for nature-based solutions (for instance, it provides that three per cent of the EU Maritime and Fisheries Fund should be channelled into climate action). It also promotes measures to support sustainable fisheries and aquaculture, calling for the use of an ecosystem-based approach to fisheries management, which duly considers the interactions between species and the wider marine ecosystem. Overall, its application to the marine ecosystem can be a crucial step towards ensuring the long-term health and sustainability of the marine environment. The objective is aligned with global commitments such as the UN 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs) and the Convention on Biological Diversity's (CBD) Kunming-Montreal Global Biodiversity Framework (GBF) (European Commission, 2020).

The **Zero Pollution Action Plan:** Aims to guide the EU towards significantly reducing pollution by 2050. Adopted as a key deliverable of the EGD, the Zero Pollution Action Plan is integral to the EU's ambition to become climate-neutral and is aligned with global commitments such as the UN 2030 Agenda for Sustainable Development and the SDGs (European Commission, 2021b) and the CBD's GBF target seven on reducing pollution

(Convention on Biological Diversity, 2022). The Zero Pollution Action Plan aims to integrate the zero-pollution ambition across all EU policies, helping to ensure a coherent and synergistic approach to reducing pollution and fostering environmental health and sustainability. The plan incorporates targets on air pollution, chemical pesticides, nutrient loss, plastic, and other forms of waste, improving the implementation and enforcement of existing pollution legislation, promoting sustainable and low-emission shipping and renewing commitments for the updating of water and air quality standards in the EU. It calls for the implementation of the EU's Water Framework Directive (WFD) and the Marine Strategy Framework Directive (MSFD), which set targets and contain indicators for the quality and ecological status of EU waters. In addition, the plan includes measures to improve the monitoring and reporting of pollution levels in the marine environment (European Commission, 2021b). The targeted improvements in the collection and analysis of data on marine pollution could improve the understanding of the long-term and cumulative effects of pollution on marine ecosystems and human health. It is complemented by the EU Chemicals Strategy for Sustainability in 2030, which addresses the release of chemicals, which can also have negative impacts on marine ecosystems, by proposing measures to control and restrict the use of certain substances. Alongside these efforts, the EU Plastic Strategy focuses on reducing plastic waste and pollution, further contributing to the protection and sustainability of marine environments (European Commission, 2018).

The **Sustainable Blue Economy Strategy**: Highlights that the marine sector, including the exploitation of marine living and non-living resources, ports, shipbuilding and recycling, maritime transport, tourism, and aquaculture, is fundamental for both ecological and economic restoration within the EU (European Commission, 2021c). Moreover, it emphasises that ecological and economic restorations in European Seas are intrinsically linked. This is why the expansion and strengthening of marine biodiversity protection and restoration are integral parts of the Strategy besides the contribution of the ocean to the expansion of renewable energy generation, the greening of maritime transport (and ports) and sustainable (sea)food production. The main goals of the Strategy are respectively; decarbonisation of the maritime sectors, preservation of natural capital, responsible food production, biodiversity and investing in nature, coastal resilience, zero pollution and circular economy (see Sustainable Blue Economy Strategy 3-10). The priorities set out in the Sustainable Blue Economy Strategy are an integral part of the EU's action plan to achieve a clean and circular economy, mitigate climate change, protect and preserve biodiversity, as well as minimise pollution (European Commission, 2021c).

In conclusion, the EGD, with its comprehensive strategies and interconnected streams, marks a pivotal step toward a sustainable future. However, addressing the complex policy landscape requires continuous assessment of trade-offs, synergies, and a commitment to maximising positive impacts across biodiversity, climate change, and pollution streams. The EGD's success lies in its ability to harmonise diverse policies, ensuring a coherent and cross-compliant effort towards a resilient, sustainable Europe.

1.2 The importance of policy coherence and cross-compliance

Policies are designed to address specific sectors, activities, or challenges but frequently have direct or indirect effects on other sectors and issues. Indeed, a variety of policies may apply simultaneously to specific activities or environmental challenges. Within the EU, the complex,

multi-level, and multi-sector policy 'landscape' has led to a fragmented governance framework which contains overlaps, gaps, weaknesses, and inconsistencies. The result poses a significant challenge for authorities and actors responsible for policy implementation.

The concept of cross-compliance is essential in this context. It requires that achieving certain targets should not adversely affect progress towards other targets. Within the framework of the CrossGov project, cross-compliance is defined as the delivery of multiple EGD strategies, goals, and targets in unison. This approach also involves assessing the role of coherence in both policy design and implementation to achieve these objectives. Evaluating policy coherence is instrumental in identifying excessive burdens, overlaps, gaps, inconsistencies, implementation problems, or obsolete measures. Furthermore, such an evaluation can highlight potential synergies across policies and policy areas that could be enhanced. This process is vital in improving the overall performance of policies.

Low coherence potentially affects the need to make trade-offs and decisions that can adversely affect the achievement of multiple policy objectives. For instance, two policies might be focused on achieving single, but potentially contradictory goals. In such cases, during implementation, a decision needs to be made regarding which goal to prioritise. At the same time, this does not necessarily reflect a systemic incoherence, as these trade-offs can be balanced to support the overall coherence of the policy framework and enhance cross-compliance during the implementation phase of a policy. Low coherence could imply that cross-compliance with multiple policies and their targets is not realised to its full potential. There is a need for an in-depth exploration of how coherence across objectives and instruments in both design and implementation, as well as other factors, impacts cross-compliance. Understanding these dynamics is crucial for amplifying the positive effects and ensuring that policy initiatives work in tandem to effectively address the challenges laid out in the EGD and achieve its vision.

1.3 About this report

This report was developed as part of the CrossGov project, a three-year project funded by the EU and aimed at enhancing knowledge on how coherence and cross-compliance of marine related policies and legislation affect realising the EGD's goals for biodiversity protection, zero pollution and climate change adaptation and mitigation.

After this introductory Chapter, Chapter 2 provides an overview of the approach and methodology applied to develop this work, Chapter 3 summarises the EU policy landscape to support the EGD (i.e., the results of the policy mapping exercise). In Chapter 4 a general discussion on policy coherence and policy design related to the EGD's objectives is included, while Chapter 5 gives a brief conclusion and outlook.

2 Approach and methodology

This assessment maps EU policies against ocean-related objectives established in the EGD relevant to climate change, biodiversity loss and pollution to lay down groundwork for assessing and understanding coherence of EU policies. The task also explores to what extent coherence attributes are reflected (or not) within (selected) EU policies relevant to EGD's objectives in the marine domain.

Deliverable 1.1 of the CrossGov project provided an overview of ocean-related targets and objectives of the EGD, along with findings from stakeholder interviews to understand the complexities of navigating diverse policies (Boteler et al., 2023). The exercise revealed that the EGD encompasses various strategies directly or indirectly linked to the ocean, covering areas such as biodiversity, climate adaptation, pollution, renewable energy, sustainable mobility, and fisheries. However, the assessment also showed that there is a lack of clear alignment and coherence among the objectives and targets of these strategies, highlighting the need for greater integration.

To conduct this assessment, a four-phased approach[1] was followed - structuring the evaluation, data collection, data analysis, and synthesis (Platjouw et al., 2023). The first step involved selecting policies for evaluation.

2.1 The selection of EU policies

CrossGov concentrates on coherence and cross-compliance against the 'marine components' of key EGD strategies for biodiversity, climate change, and pollution. A previously conducted exercise[2] identified several EGD strategies and plans pertinent to these three priority topics from a marine perspective. Based on internal discussions and case study priorities in WP3, five key strategies and plans were chosen for in-depth research within CrossGov: the 2030 Climate Target Plan, the Climate Change Adaptation Strategy, the Biodiversity Strategy for 2030, the Zero Pollution Action Plan, and the Sustainable Blue Economy Strategy. Specific objectives from these strategies were selected for targeted evaluation (see Figure 1).

[1] The approach and methodology applied in this report follows the CrossGov assessment framework as described in Platjouw et al. (2023).
[2] To see the results of that exercise, see Boteler et al. (2023).

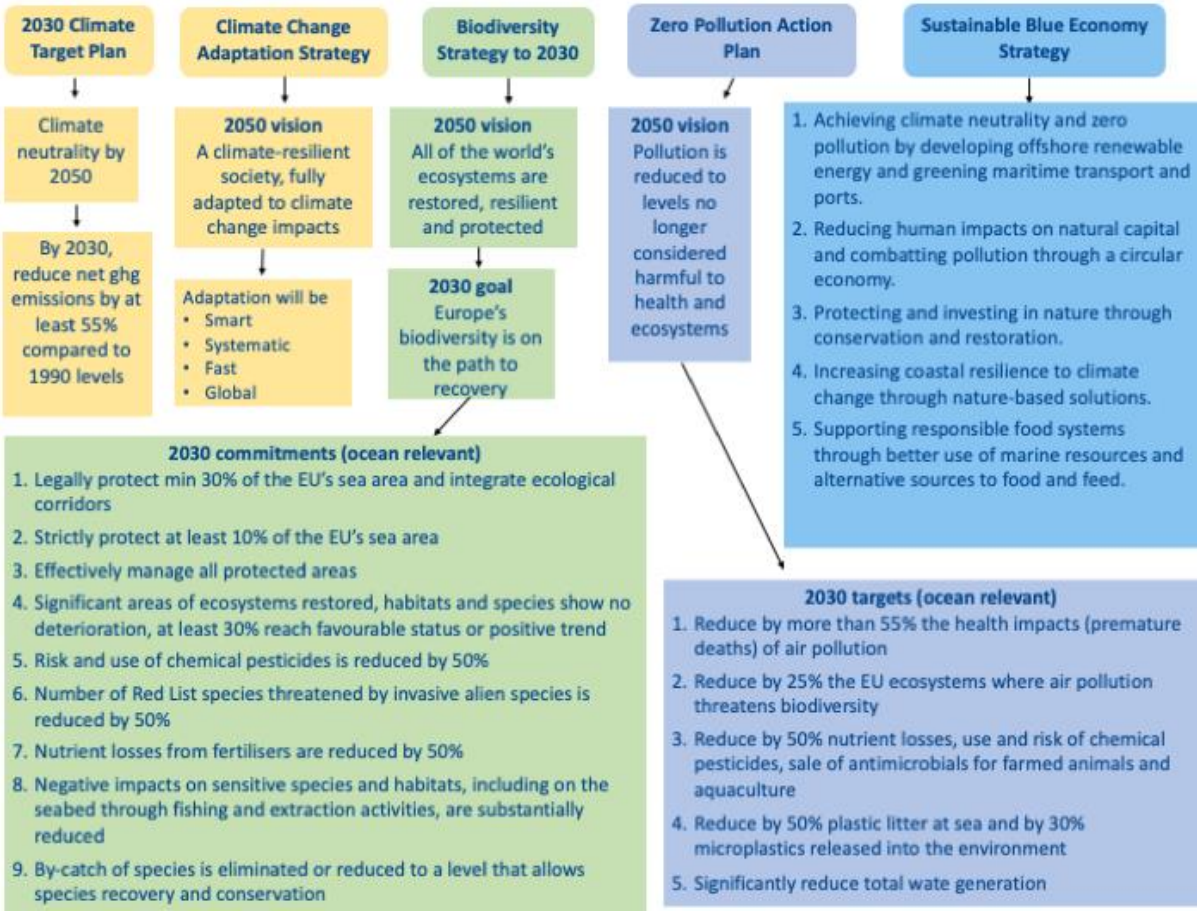

Figure 1: Overview of the different EGD strategies and plans with their related objectives (non-exhaustive).

In terms of EU policies, the selection of core policies was informed by priorities in the CrossGov case study research (WP3). The core set of EU policies to be included in the coherence assessments across WP2 and WP3 are the WFD, the MSFD, the Maritime Spatial Planning Directive (MSPD), the Habitats Directive, the Birds Directive, the Strategic Environmental Assessment Directive (SEA Directive), the Environmental Impact Assessment Directive (EIA Directive), the Renewable Energy Directive, the Common Agricultural Policy (CAP), and the Common Fisheries Policy (CFP). Additionally, 26 policies have been added to this list for assessment, selected based on their relevance to the specific case studies of the CrossGov project, as well as their importance in addressing issues related to biodiversity, pollution, energy, and climate.

In total, 36 EU policies were selected (see Table 2) and their review provides valuable insights into how the design of these policies either supports or impedes progress towards the EGD's objectives in the marine domain. This will lay the foundation for the further development of policy recommendations that promote coherence and cross-compliance, thereby supporting the achievement of the EGD's objectives.

2.2 The CrossGov Policy Coherence Evaluation Framework

The CrossGov Policy Coherence Evaluation Framework provides a methodological approach for assessing policy coherence. This framework is instrumental in understanding where in the policy cycle or at which governance level coherence issues emerge, and where they can be effectively addressed. Adapting this framework for this specific policy assessment, three key

components were in focus: 1) refining the coherence attributes to a set of seven to assess against, 2) employing guiding questions to facilitate the assessment process, and 3) implementing a simplified coherence scoring system (see Annex).

The first draft of the conceptual framework underpinning the CrossGov methodology for coherence assessment is based on eight policy coherence attributes (see Table 1). These attributes are elements or contextual factors of a policy that are relevant for influencing the degree of coherence in policy design and implementation. Importantly, CrossGov does not restrict the assessment of coherence to analysing alignment across objectives. In addition to the objectives, various other aspects of policies that can affect coherent policy making and implementation and cross-compliance with the EGD are explored. The attributes have been selected based on the literature (e.g., Ashoff, 2005; Candel and Biesbroek, 2016; Meijers and Stead, 2004; Tchinda and Talbot, 2023; United Nations Committee of Experts on Public Administration (CEPA), 2021; Oberlack, 2017) introduced by Platjouw et al. (2023). Through learning from the application of the framework in this review and other CrossGov project tasks, the methodological framework has currently been revised and improved.

In this report, seven of the eight attributes of policy coherence were applied to assess the coherence of the 36 selected policies (see Table 1). These attributes act as benchmarks for policy evaluation, ensuring they align with and support the EGD's objectives. The attribute '*Spatial and Temporal Scales*' was not included in the analysis, as initial assessments revealed no significant findings pertinent to this attribute, leading to the decision to leave it out for a more focused and relevant coherence evaluation.

Coherence attributes	Reasoning	Elements
Policy objectives	Policy objectives (including EGD objectives) should be aligned or complementary and not contradict or impede each other	Objectives of the policy
Policy framing and mainstreaming	Policy framing must promote a mutual comprehension of the issues and respect diverse societal values and impacts. Integration of climate, biodiversity, pollution, and related policy considerations is essential.	Mainstreaming of EGD objectives on climate change, biodiversity, and pollution
		Cross-policy integration of objectives/considerations
		Shared understanding of problems and values
Policy instruments	Aligning policy instruments intended to deliver the policy objectives helps to harness synergies, prevent conflicts, and ensure coherent implementation. It also facilitates shared implementation mechanisms like joint licensing systems.	Market-based instruments
		Legal instruments
		Voluntary instruments
Stakeholders	Stakeholder engagement enables integration of different information, knowledge and ideas and fosters agreement and buy in across different interest groups.	Stakeholder engagement (participatory platforms/fora/processes, consultation)
Institutions	Clear institutional mandates for policies intended to deliver against the EGD objectives encourage institutional cooperation and policy alignment with EGD goals.	Institutional mandates
	Inter-institutional coordination fosters information sharing and consistent approaches and joint decisions.	Inter-institutional coordination mechanisms
Steering mechanisms	Coordinated planning, monitoring, and reporting enable adaptability and policy coherence, and support shared resources and knowledge systems.	Planning
		Monitoring and evaluation (outcome and process)
		Reporting
*Spatial and temporal scales**	*Alignment of spatial and temporal scales between different policies supports integrated approaches and coherent implementation.*	*Spatial scope and timeframes*
Science and knowledge	Using evidence-based decision-making that includes diverse policy insights leads to more unified and coherent policies.	Scientific evidence and knowledge (SPS interfaces)

Table 1: The eight policy coherence attributes, their elements, and reasoning.

Each of the attributes is expected to play a role in enhancing or hampering policy coherence. A series of guiding questions related to the attributes supports the identification of policy coherence attributes (see Annex). A simplified scoring exercise (-1 negative / 0 neutral / 1 positive) is done for the policies' stated (i.e., on paper) targets in relation to the relevant EGD strategies and objectives. This simple exercise helps to identify what policies are 'intended' to achieve (i.e., on paper) related to the EGD, while policy 'drift' certainly exists regarding the policy cycle when considering policy implementation. To illustrate, various EU policies may positively reflect the EGD ambitions on paper, while challenges between implementation (i.e., in practice) exist, weakening their cross-compliance with the EGD. Similarly, EU policies may appear to be coherent on paper and positively reflecting other policy objectives, while the national policies and their implementation nevertheless may lead to incoherent outcomes.

2.3 Data analysis

In this assessment, data was gathered from the text contained in policy documents, including preambles and annexes. This data serves to help identify how (or if) the selected EU policies reflect (i.e., on paper) the ocean-related objectives of the EGD concerning climate change, biodiversity loss, and pollution (see Figure 1). Specifically, this included a comparison of the 36 selected policy objectives with those of the five EGD strategies, utilising a screening matrix; and an examination of mainstreaming efforts, questioning whether the policies explicitly aim to address biodiversity, climate change, and pollution, beyond their specific goals. This was done to generate an overview about how (if) the policies in question reflect the chosen EGD objectives, and thus aim to contribute to the realisation of the EGD within European marine and maritime domains.

Additionally, the data from Task 2.1 was employed to ascertain if the further policy coherence attributes could be identified within individual EU policies (i.e., on paper). The coherence attributes were explored for each policy using a set of guiding questions (see Annex) related to each of the seven attributes, which are examined narratively. This will culminate in a preliminary screening of the likelihood that the design of the assessed policies will bolster coherence across policies and provide an initial gauge of potential coherence synergies or obstacles (to be explored in future CrossGov research).

2.4 Limitations of this report

The report's findings are subject to several limitations. First, the current analysis was conducted as a collective desk-based assessment. This implies that all findings are based *solely* on the textual content of the policy documents (policy formulation), rather than their actual application. It is well known that policy ‘drift’ between what policies set out to do ‘on paper’ in comparison to their actual implementation can vary significantly. Despite the limitations of this methodology, it is important to identify how policies intend to reflect EGD goals and potential discrepancies within the policy framework, which will support the CrossGov project to identify and examine policies more comprehensively in subsequent stages.

This exercise is predominantly about mapping the policy landscape to identify references to the GD goals and not an analytical or in-depth assessment of the policies' functionality towards the GD objectives or coherence. The review does not encompass all conceivable EU policies, as they are too numerous for practical analysis with the resources at hand. Consequently, the assessment is limited to 36 principal policies deemed pertinent to the implementation of the EGD concerning the primary research topics of CrossGov: biodiversity loss, climate change, and pollution reduction.

The review has not incorporated all policies that emerged during the lifespan of the project but are still in the proposal stage. The proposal for amendments to the Renewable Energy Directive and the proposed — and subsequently enacted — Nature Restoration Law were included. However, others such as the EU's new Critical Raw Materials Act, which could significantly impact the marine environment, and the Farm to Fork Strategy were left out. Despite such exclusions, key policies absent from this report will be taken into consideration in the project's forthcoming phases.

Finally, as this review explores how the coherence attributes introduced by Platjouw et al. (2023) are reflected in the selected policy documents, no in-depth assessment of these attributes is made as this is intended for future assessments within CrossGov. Moreover, no relative weight or level of importance is assigned to the different coherence attributes in this review.

2.5 Interconnectedness to other CrossGov deliverables

This report builds upon the assessment carried out in deliverable 1.1 (Green Deal objectives and scenarios) and the first draft of the methodology described in deliverable 1.3 (CrossGov Policy Coherence Evaluation Framework). It provides a thorough assessment of the EU policy landscape from a policy formulation perspective, and with a focus on vertical coherence towards the EGD. This report is an important fundament for other (forthcoming) CrossGov deliverables that focus on EU horizontal coherence (Deliverable 2.2) and national – EU transposition policies (Deliverable 2.3), as well as empirical assessments on coherence in integrative planning pursuant to the MSPD, MSFD and WFD (deliverable 3.2) and the mainstreaming of biodiversity, climate change and zero pollution considerations in sectors (Deliverable 3.3).

3 The EU policy landscape to support the European Green Deal

A total of 36 key EU policies were selected as relevant to this assessment and to the biodiversity, pollution, and climate change objectives of the EGD (see Table 2). These are summarised below and presented in alphabetical order.

Policy name	Objective	Focus	Type	Institutions	Year
8th Environmental Action Programme	Accelerate transition to a climate-neutral, sustainable, non-toxic, resource-efficient, renewable circular economy in a just, equitable and inclusive way; protect, restore, and improve the state of the environment.	Cross-cutting	Decision	DG ENV EEA ECHA	2022
Alternative Fuels Infrastructure Regulation	Ensure sufficient alternative fuels infrastructure across the EU.	Transport	Regulation	DG MOVE MS Reg. authorities	2023
Bathing Water Directive	Ensure bathers' health in freshwater and marine waters.	Cross-cutting	Directive	DG ENV MS Reg. authorities	2006
Birds Directive	Conserve all wild bird species in the EU.	Conservation	Directive	DG ENV MS Reg. authorities	1981 (revised in 2009)
Common Agricultural Policy	To support and strengthen environmental protection, including biodiversity, and climate action and to contribute to achieving the environmental and climate-related objectives.	Agriculture	Policy framework	DG AGRI MS Reg. authorities	2023
Common Fisheries Policy	Ensure long-term sustainable fisheries and aquaculture, the availability of food supplies and a	Cross-cutting	Regulation	DG MARE EFCA EFSA	2013

Policy name	Objective	Focus	Type	Institutions	Year
	fair standard of living for fisheries and aquaculture communities.				
Corporate Sustainability Reporting Directive	Enhance sustainability reporting for better financial market decisions.	Cross-cutting	Directive	DG FISMA	2023
Energy Taxation Directive	Promoting energy efficiency by taxing energy products; reducing GHG emissions; streamline the instrument with the current climate and energy targets of the EU.	Cross-cutting	Directive	DG TAXUD	forthcoming
Environmental Impact Assessment Directive	Account for environmental effects in project planning at the earliest stage.	Cross-cutting	Directive	DG ENV MS Reg. authorities	2015
Environmental Quality Standards Directive	Achieve good surface water chemical status.	Cross-cutting	Directive	DG ENV MS Reg. authorities	2010
EU Action Plan on fisheries	Protect and restore marine ecosystems and achieve good environmental status; ensure sustainable fishing resource use.	Fisheries	Communication	DG ENV	2023
European Climate Law	Establish a framework for reducing GHG emissions by sources and enhancement of removals by sinks.	Cross-cutting	Regulation	DG CLIMA	2021
Floods Directive	Establish a framework for the assessment and management of flood risks aiming at the reduction of their adverse consequences.	Cross-cutting	Directive	DG ENV MS Reg. authorities	2007
Fuel EU Maritime Regulation	Promote renewable and low-carbon fuels in maritime transport.	Shipping	Regulation	DG MOVE	2021
Governance of the Energy Union and Climate Action	Establish common rules for planning, reporting, and monitoring among MS.	Energy	Regulation	DG ENER	2018
Habitats Directive	Conserve natural habitats and wild fauna and flora in the EU both on land and sea habitats.	Conservation	Directive	DG ENV MS Reg. authorities	1992
Industrial Emissions Directive	To protect human health and the environment by reducing harmful industrial emissions in the EU.	Cross-cutting	Directive	DG ENV MS Reg. authorities	2010
Marine Strategy Framework Directive	Achieve good environmental status (GES) in the marine environment as well as sustainable use and coherence with other EU law.	Cross-cutting	Directive	DG ENV MS Reg. authorities	2008
Maritime Spatial Planning Directive	Establish a framework for maritime spatial planning aimed at promoting the sustainable maritime economies and resource use.	Cross-cutting	Directive	DG MARE MS Reg. authorities	2014
Nitrate Directive	Reduce and prevent water pollution from nitrates	Agriculture	Directive	DG ENV MS Reg. authorities	1991
Offshore oil and gas safety Directive	Protect marine environment on offshore oil/gas activities as requested by the MSFD.	Energy	Directive	DG ENER MS Reg. authorities EMSA	2015
Packaging and Packaging Waste Directive	To improve the environmental performance of packaging; facilitate the correct functioning of the EU	Cross-cutting	Directive	DG ENV MS Reg. authorities	1994

Policy name	Objective	Focus	Type	Institutions	Year
	Internal Market regarding packaging.				
Sustainable Use Regulation	Halve chemical pesticide use and risks by 2030.	Agriculture, chemical	Proposal	DG SANTE MS Reg. authorities	2022
Proposed Nature Restoration Law	To restore degraded ecosystems; achieve the EU's climate mitigation and adaptation objectives; meet the EU international commitments.	Biodiversity	Proposal	DG ENV MS Reg. authorities EEA	2022 (adapted)
Proposed Revision of the REPowerEU Directive	Achieve climate targets by 2030 and climate neutrality by 2050 through the increase of renewable energy; contribute to the European economy and to achieve climate and environmental objectives.	Energy	Proposal	DG ENER MS Reg. authorities	2023
REACH Regulation	Protect human health and the environment from chemical risks; ensure free circulation of chemicals in the EU market; promote industry innovation.	Cross-cutting	Regulation	DG ENV MS Reg. authorities	2006
Persistent Organic Pollutants Regulation	To protect human health and the environment from persistent organic pollutants (POPs).	Cross-cutting	Regulation	DG ENV MS Reg. authorities	2019
Seveso III Directive	Control major-accident hazards involving dangerous substances.	Chemical	Directive	DG ENV MS Reg. authorities	2015
Ship Recycling Regulation	To prevent and minimise accidents and adverse effects on human health and the environment caused by ship recycling.	Transport	Regulation	DG MOVE	2015
Ship Source Pollution Directive	To improve maritime safety and enhance protection of the marine environment from pollution by ships.	Shipping	Directive	DG MOVE	2007
Single-Use Plastics Directive	To reduce the impact of certain plastic products on the environment, particularly in the context of marine litter.	Cross-cutting	Directive	DG ENV MS Reg. authorities	2021
Strategic Environmental Assessment Directive	To integrate environmental considerations into the preparation and adoption of plans and programmes.	Cross-cutting	Directive	DG ENV MS Reg. authorities	2001
Taxonomy Regulation and Delegated Acts	To establish criteria for determining whether an economic activity qualifies as environmentally sustainable.	Finance	Regulation	DG FISMA	2020
Urban Wastewater Treatment Directive	To protect the environment from the adverse effects of urban waste-water discharge.	Cross-cutting	Directive	DG ENV MS Reg. authorities	1991
Waste Shipment Regulation	Control waste shipment, implement Basel convention.	Waste	Regulation	DG ENV MS Reg. authorities	2007
Water Framework Directive	To establish a framework and substantive environmental obligations for the protection of inland surface waters, transitional	Cross-cutting	Directive	DG ENV MS Reg. authorities	2000

Policy name	Objective	Focus	Type	Institutions	Year
	waters, coastal waters and groundwaters.				

Table 2: Summary of the introductory information about the 36 assessed policies.

The 8th Environmental Action Programme

The Decision (EU) 2022/591 on a General Union Environment Action Programme to 2030, also known as the 8th Environmental Programme, was launched in April 2022 (European Parliament and the Council, 2022). It outlines an action programme with priority objectives and enabling conditions for the environment up to 2030. This policy focuses on environmental and climate change action, aiming to achieve economic and social sustainability and wellbeing. It seeks to expedite the green transition towards a climate-neutral, sustainable, non-toxic, resource-efficient, renewable energy-based, resilient, and competitive circular economy in a just, equitable, and inclusive manner, and strives to protect, restore, and enhance the state of the environment by halting and reversing biodiversity loss.

The policy sets a long-term priority objective that by 2050 at the latest, people will live well within the planetary boundaries in a well-being economy where resources are not wasted, growth is regenerative, climate neutrality in the EU is achieved, and inequalities are significantly reduced. It is specifically designed to support the objectives of the EGD and includes priority objectives on reducing GHG emissions, pursuing zero pollution, and protecting, preserving, and restoring biodiversity, in line with relevant EGD strategies. The policy provides a monitoring mechanism to ensure the EU remains on track to meet its environmental objectives under the EGD. Article 3, under the enabling conditions for achieving these priority objectives, advocates for mainstreaming them in all relevant strategies, legislative and non-legislative initiatives, programmes, investments, and projects at EU, national, regional, and local levels.

Specifically, the policy includes a priority objective to support the GHG emission reduction target under the European Climate Law. The enabling conditions for achieving these priority objectives refer to implementing Directive 2008/99/EC on the protection of the environment through criminal law, as well as the EIA and SEA Directives. Article 3 also promotes the use of environmental taxation, market-based instruments, and green budgeting and financing tools as part of the enabling conditions to achieve these priority objectives. It further advocates for strengthening environmentally positive objectives and phasing out environmentally harmful subsidies.

Article 4 establishes a monitoring framework based on a limited number of headline indicators, including systemic indicators addressing the environmental-social and environmental-economic nexus. This framework will build on existing data and indicators and be coherent with other monitoring frameworks. The European Environment Agency (EEA) and the European Chemicals Agency (ECHA) will enhance the availability, interoperability, and accessibility of data. By March 2024, the EC is scheduled to conduct a mid-term review of progress based on this monitoring and assessment, and by March 2029, the EC will perform an evaluation of the programme.

Alternative Fuels Infrastructure Regulation

Regulation (EU) 2023/1804, known as the Alternative Fuels Infrastructure Regulation, is designed to enhance the transport sector's infrastructure for alternative fuels within the EU (European Parliament and the Council, 2023). Its goal is to ensure adequate infrastructure across the EU for cars, trucks, ships, and planes to charge or refuel with alternative fuels, thereby alleviating range anxiety. Although it does not directly mention the Paris Agreement, this regulation is a component of the 'Fit for 55' package, which aims to align EU policies with the agreement's objectives.

The regulation sets specific targets for the maritime sector, stipulating that by 2023, at least 90 per cent of container and passenger ships in major seaports should have access to shore-side electricity. Additionally, it mandates a sufficient number of refuelling points for liquefied natural gas (LNG) in maritime ports. These targets are detailed in Articles 9 and 11 of the regulation. As an EU regulation, it necessitates implementation by MS, which are required to designate a regulatory authority. The regulation, effective from 2023, replaces the previous Directive 2014/94/EU and outlines several key deadlines: LNG refuelling points must be accessible throughout the Trans-European Transport Network (TEN-T) core network by 31 December 2024; the EC is responsible for establishing a unified access point for recharging and refuelling data by 31 December 2026; MS must submit national progress reports by December 2027 and biennially thereafter; and the regulation sets a deadline of December 2029 to ensure compliance with targets for shore-side electricity supply (European Parliament, 2023).

Bathing Water Directive

Directive 2006/7/EC, known as the Bathing Water Directive, was established in 2006 with the primary aim of ensuring a high level of health protection for bathers in both freshwater and marine waters. This Directive serves as a critical policy instrument within the EU, emphasising the monitoring, classification, and management of bathing water quality and providing information to the public about the quality of bathing waters (European Parliament and the Council, 2006).

The Directive is cross-sectoral, influencing areas such as public health, the environment, and tourism. Its overarching goal is to preserve, protect, and improve environmental quality while safeguarding human health. The Directive sets specific targets for monitoring and classifying bathing water quality, managing it, and disseminating information to the public. A key objective is to ensure that, by the end of the 2015 bathing season, all bathing waters attain at least a 'sufficient' quality standard.

The Directive requires MS and the EC to supervise its implementation and ensure compliance. While the Directive does not explicitly integrate with global instruments related to climate or shipping, it references other European directives and the World Health Organisation (WHO) recommendations. This demonstrates its alignment with broader health and environmental standards and its role in supporting other EU directives that govern environmental and public health issues (European Parliament, 2006).

Birds Directive

Directive 2009/147/EC on the conservation of wild birds, commonly referred to as the Birds Directive, is an important EU legislation aimed at the conservation of all species of naturally

occurring birds in the wild state within the European territory of the MS. This Directive covers a wide range of activities, including the protection, management, and control of bird species and establishing rules for their exploitation. While the Directive does not establish specific ocean-related targets, its objectives and mandates are relevant to both terrestrial and marine environments (European Parliament and the Council, 2009).

The fundamental requirement of the Directive is for MS to implement necessary measures to maintain or adjust the population of bird species in line with ecological, scientific, and cultural requirements, while also considering economic and recreational needs. This includes various actions, such as creating and managing protected areas, restoring destroyed biotopes, and developing new ones. The Directive particularly focuses on species listed in Annex I, requiring special conservation measures for them, including designating the most suitable territories as special protection areas. It also emphasises the importance of paying special attention to regularly migratory species and the protection of wetlands.

The Directive establishes a general system of protection for all bird species, encompassing prohibitions to prevent pollution or deterioration of habitats and disturbances affecting birds, both within and outside protected areas. It details specific regulations for different bird categories as listed in its annexes: species in Annex I require habitat protection, those in Annex II may be hunted subject to national laws, and species in Annex III can be sold, subject to authorisation by MS.

Implemented through legal instruments, the Directive also considers exceptions and derogations, notably in Article 9. While it does not specify the competent institutions at the MS level responsible for its implementation, it mandates consultation with the European Commission (EC), especially during the authorisation process for the sale of specific bird species. Additionally, MS are required to report to the EC every three years on the implementation of the Directive. Originally established in 1981 and revised in 2009, the Birds Directive is conservation-centric, primarily focusing on the sustainable management and protection of wild bird populations across the EU. Its approach is specific rather than cross-sectoral, targeting the conservation of wild birds (European Parliament and the Council, 2009).

Common Agricultural Policy

Regulation (EU) 2021/2115 establishing rules on support for strategic plans to be drawn up by MS under the Common Agricultural Policy (CAP Strategic Plans) and financed by the European Agricultural Guarantee Fund (EAGF) and by the European Agricultural Fund for Rural Development (EAFRD) and repealing Regulations (EU) no 1305/2013 and (EU) no 1307/2013, or the Common Agricultural Policy (CAP), is a policy within the agriculture sector (European Parliament and the Council, 2021a). It is aimed at supporting and enhancing environmental protection, including biodiversity, and climate action, and contributing to the Union's environmental and climate-related objectives, in line with its commitments under the Paris Agreement.

Outlined in Article 6, the policy sets forth nine specific objectives, with corresponding indicators detailed in Article 7 and Annex 1. Pertinent to the EGD and the oceans are objectives aimed at contributing to climate change mitigation and adaptation, including reducing greenhouse gas emissions, enhancing carbon sequestration, and promoting sustainable energy.

The policy also emphasises sustainable development and efficient management of natural resources, such as water, soil, and air, which includes reducing chemical dependency.

Additionally, the policy promotes employment, growth, gender equality, and the participation of women in farming, as well as social inclusion and local development in rural areas. This encompasses support for the circular bio-economy and sustainable forestry. Another critical objective is to contribute to halting and reversing biodiversity loss, enhancing ecosystem services, and preserving habitats and landscapes. Furthermore, the policy aims to align Union agriculture with societal demands on food and health, ensuring the production of high-quality, safe, and nutritious food sustainably, reducing food waste, improving animal welfare, and combating antimicrobial resistance.

The policy is in alignment with the World Trade Organisation (WTO) Agreement on Agriculture and references the SDGs. The current CAP came into force on 1 January 2023 and will be applicable during the period 2023-2027. Each MS is responsible for designating the competent authority for this policy.

Common Fisheries Policy

Regulation (EU) No 1380/2013 on the Common Fisheries Policy, amending Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Decision 2004/585/EC or simply, Common Fisheries Policy (CFP) establishes rules for the sustainable management of fishing fleets, conservation of fish stocks, and aquaculture (European Parliament and the Council, 2013). The CFP's goal is to ensure long-term sustainability for fisheries and aquaculture, secure food supplies, and provide a fair standard of living for fisheries and aquaculture communities.

Originally part of the CAP, the CFP aims to maintain sector profitability through a healthier marine environment. Its objectives, similar to those of the CAP, include increasing productivity, stabilising markets, supplying healthy food, and ensuring reasonable prices for consumers. These objectives are pursued through specific targets detailed in Article 2, such as gradually eliminating discards based on the best scientific advice, reducing unwanted catches, and ensuring sustainable landings. The policy also focuses on making the best use of unwanted catches without creating a market for undersized fish.

Furthermore, the CFP strives to provide conditions for an economically viable and competitive fishing capture and processing industry, as well as related land-based activities. This involves adjusting fishing fleet capacity to sustainable levels, aiming for economically viable fleets that do not overexploit marine resources. Promoting sustainable Union aquaculture activities for food security and employment is another key target.

Additionally, the CFP aims to ensure a fair standard of living for those dependent on fishing activities, with a focus on coastal fisheries and socio-economic aspects. It seeks to establish an efficient and transparent internal market for fisheries and aquaculture products, ensuring a level playing field within the Union, while considering the interests of consumers, producers, and coastal fishing activities.

GES by 2020 as outlined in Article 1(1) of Directive 2008/56/EC and is consistent with other EU policies. Effective since 2013, the CFP is supported by the European Maritime, Fisheries

and Aquaculture Fund (EMFAF) for the 2021-2027 period. The primary responsibility for its implementation and enforcement lies with the MS and their competent authorities, covering compliance monitoring and fund distribution. At the Union level, the European Fisheries Control Agency (EFCA) and the European Food Safety Authority (EFSA) provide inspection services for proper enforcement. While the CFP does not directly implement any specific international legal instruments, it closely aligns with SDG 14.

Corporate Sustainability Reporting Directive

Directive 2022/2464/EU, known as the Corporate Sustainability Reporting Directive (CSRD), is an integral component of the EGD and the Sustainable Finance Agenda. Its primary aim is to address gaps in existing sustainability information rules, which are crucial for financial markets requiring reliable, relevant, and comparable environmental, social, and governance information (European Parliament and the Council, 2022a). While the Directive does not set specific targets related to oceans, it mandates the consideration of various environmental factors, including water and marine resources, in sustainability reporting standards.

The CSRD amends the pre-existing Directive 2013/34/EC, which relates to the annual financial statements, consolidated financial statements, and related reports of certain types of undertakings. It represents a cross-sectoral policy that requires certain categories of undertakings to disclose relevant, comparable, and reliable sustainability information. This disclosure is a vital prerequisite for achieving the objectives of the EGD, including climate neutrality by 2050, and commitments outlined in the 'EU Biodiversity Strategy for 2030' and the 2018 'Action Plan on Financing Sustainable Growth.'

The Directive establishes sustainability reporting requirements, compelling large undertakings, and small and medium-sized enterprises to include in their management reports information that elucidates their impacts on sustainability matters and how these matters influence their development, performance, and position. As a policy instrument, the CSRD involves mandatory reporting by companies, aligned with national legislation developed pursuant to the CSRD and EU delegated acts. It amends three existing directives, notably bringing significant changes to the Financial Reporting Directive. The responsibility for implementing the CSRD rests with the MS, which are required to transpose it into national law. The EC is tasked with submitting a report on the implementation of the CSRD to the European Parliament and the Council. Additionally, the EC is expected to adopt delegated acts for sustainability reporting standards, with a proposal submitted in July 2023 pending publication.

The CSRD came into force on 5 January 2023, with the first companies anticipated to apply the new rules in the 2024 financial year, for reports published in 2025. The Directive aligns with internationally recognised principles and frameworks on responsible business conduct, corporate social responsibility, and sustainable development, such as the Sustainable Development Goals (SDGs), the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, and others.

Energy Taxation Directive (recast)

The Proposal for a Directive restructuring the Union framework for the taxation of energy products and electricity, commonly known as the Energy Taxation Directive (recast), is an initiative under the legal basis of Article 113 of the Treaty on the Functioning of the European

Union (TFEU). This proposal primarily aims to mitigate the harmful effects of energy tax competition and secure revenue for MS through green taxes. Additionally, it seeks to align the taxation of energy projects with the EU's energy and climate policies, promoting clean technologies and eliminating outdated exceptions and reduced rates that may inadvertently encourage the use of fossil fuels (European Commission, 2021d).

The main objective of the Directive is to enhance energy efficiency by taxing energy products in a manner that reflects their environmental impact. This includes reducing GHG emissions by discouraging the use of fossil fuels and promoting cleaner, renewable energy sources. The Directive is designed to streamline with the current climate and energy targets of the EU, supporting the green transition by providing the right price signals and incentives for sustainable consumption and production of energy.

The Directive targets all economic sectors, with a specific focus on the energy and maritime sectors. It aims to establish effective carbon pricing and remove fossil fuel subsidies, thereby limiting health damage from local pollution and avoiding competitive distortions in the EU. The Directive aligns with the EGD, aiming to contribute to the EU's 2030 targets and achieve climate neutrality by 2050, while also preserving and improving the EU internal market and maintaining the capacity to generate revenue for the budgets of MS.

Specific targets of the directive include supporting the ambition of a 55 per cent reduction in GHG emissions by 2030, reflecting the environmental and health impact of fuels in its taxation measures. This is particularly relevant in the maritime sector, where the directive aims to reduce fossil fuel dependency and ensure equal tax treatment across modes of transport, including maritime. By eliminating mandatory exceptions, the directive could encourage the adoption of cleaner and more environmentally friendly options, such as LNG or biofuels for shipping. Additionally, it aims to encourage the use of renewable energy for maritime activities, including wind and solar energy for ports, navigation, and offshore installations, thereby contributing to the reduction of CO2 emissions.

The directive is a legally binding instrument under the competence of the Directorate-General for Taxation and Customs Union (DG TAXUD). While the exact timeline for its entry into force remains unknown, the directive is integrally linked with the Paris Agreement, particularly in meeting climate targets.

Environmental Impact Assessment Directive

Directive 2014/52/EU amending Directive 2011/92/EU on the assessment of the effect of certain public and private projects on the environment, commonly known as the Environmental Impact Assessment (EIA) Directive is an EU directive with the primary objective to ensure that the environmental effects of public or private projects are considered at the earliest possible stage to mitigate their adverse impacts. This directive is particularly focused on safeguarding the marine environment, as highlighted in its preamble, which emphasises the need for a high level of protection for marine species and habitats (European Parliament and the Council, 2014).

The EIA Directive is designed to enable public authorities and other relevant bodies to make informed decisions on projects that could significantly affect the environment, as well as human health and well-being. It mandates the assessment of the environmental impacts of

certain public and private projects, making it a cross-cutting policy instrument. The directive outlines specific categories of projects that require environmental assessment. Annex I of the directive enumerates projects mandatorily subject to assessment, including but not limited to crude-oil refineries, nuclear power stations, chemical installations, waste management facilities, water treatment plants, and dams. Annex II, on the other hand, lists projects for which MS must determine the need for an environmental assessment. These projects span various sectors, including agriculture, silviculture, aquaculture, the extractive and energy industries, metal production and processing, the mineral and chemical industries, the food industry, and sectors involving textiles, leather, wood, paper, and rubber. Additionally, infrastructure projects, other miscellaneous projects, and those related to tourism and leisure are also included in Annex II.

The implementation of the EIA Directive requires MS to adopt appropriate laws, regulations, and administrative provisions. As the primary recipients of the EIA, MS are responsible for ensuring that their existing procedures for adopting plans and programmes are in compliance with the requirements set out in the directive. The directive entered into force on 15 May 2015, following its adoption to amend the earlier Directive 2011/92/EU, which itself was a codification of the Council Directive 85/337/EEC of 27 June 1985. MS were given until 16 May 2017 to transpose the Directive into their national laws, and it remains in effect indefinitely.

In terms of international integration, the EIA Directive acknowledges the United Nations Convention on Biological Diversity (CBD), to which the EU is a party. This convention mandates the assessment of significant adverse effects of projects on biological diversity. Furthermore, the Directive recognises the EU's commitment to respecting and promoting definitions and principles established in various Council of Europe Conventions. These include the European Convention for the Protection of the Archaeological Heritage, the Convention for the Protection of the Architectural Heritage of Europe, the European Landscape Convention, and the Framework Convention on the Value of Cultural Heritage for Society.

Environmental Quality Standards Directive

Directive 2008/105/EC on environmental quality standards in the field of water policy, amending and subsequently repealing Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC, known as the Environmental Quality Standards Directive (EQSD), is primarily focused on establishing environmental quality standards for priority substances and certain other pollutants, as outlined in Article 16 of Directive 2000/60/EC. Its central aim is the achievement of good surface water chemical status, aligning with the objectives and provisions of Article 4 of that Directive (European Parliament and the Council, 2008).

The Directive's objective is the management and protection of water environments, specifically targeting the reduction of chemical pollution in surface waters. It mandates the application of environmental quality standards for priority substances and certain other pollutants, as detailed in its annexes. MS have the option to apply these standards to sediment and/or biota in specific categories of surface water, subject to defined conditions and requirements.

A critical component of the Directive involves conducting long-term trend analysis of concentrations of priority substances prone to accumulation in sediment and/or biota. It emphasises the need for regular review of technical and scientific progress and, if necessary, the proposal of revisions to the environmental quality standards. The Directive also requires the establishment of an inventory of emissions, discharges, and losses of all priority substances and pollutants. It addresses the issue of transboundary pollution, ensuring MS are not held accountable for pollution sources outside their jurisdiction, and reviews the necessity of amending existing acts and the potential for additional specific Community-wide measures.

Implemented by the EC and the environmental agencies of MS, the Directive entered into force in 2018. It forms an integral part of the EU's broader water policy framework, integrating with other EU directives and regulations related to water and environmental quality. The Directive does not explicitly mention integration with global instruments for climate or shipping but does reference other European directives and WHO recommendations.

EU Action Plan: Protecting and restoring marine ecosystems for sustainable and resilient fisheries

The Communication on EU Action Plan: Protecting and Restoring Marine Ecosystems for Sustainable and Resilient Fisheries (referred as “EU Action Plan on fisheries” in this report), adopted by the EU in February 2023, is aimed at fulfilling promises made at COP15 for a new global biodiversity framework. It calls for action from the EC to MS and includes actions to be taken by the Commission itself. These encompass amendments to EU directives, changes in national measures, and adoption of management plans from 2023-2030 (European Commission, 2023).

Mainstreaming biodiversity and addressing climate change, particularly through seabed protection, are among its ecological objectives. The policy also aims to secure long-term socio-economic benefits for the fisheries industry, with sustainable use of resources. It integrates with other policies like the Common Fisheries Policy and mentions the WFD, Habitats Directive, MSFD, and the proposed Nature Restoration Law. The policy emphasises market-based incentives to support a just and fair transition without disincentivising sustainable fishing practices and encourages voluntary adherence by MS.

It includes stakeholder engagement, with actions to improve coordination and support implementation without creating new institutions, while calling for improved inter-institutional coordination. The policy does not introduce new planning or reporting requirements but leverages existing mechanisms and stresses the importance of scientific evidence and knowledge sharing.

European Climate Law

Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999, known as the European Climate Law, was established by the European Parliament and the Council on June 30, 2021. This Regulation amends Regulations (EC) No 401/2009 and (EU) 2018/1999 and is a key legislative instrument directly binding in all MS without the need for transposition into national law (European Parliament and the Council, 2021b).

The primary objective of the European Climate Law is to set a framework for the irreversible and gradual reduction of anthropogenic GHG emissions by sources and enhancement of removals by sinks as regulated in Union law, as stated in Article 1. While the Regulation does not have a specific objective related to the ocean, its overarching goal encompasses a broad range of environmental concerns, including marine environments. The European Climate Law is cross-cutting in nature, impacting various sectors across the Union and it applies to all sources and sinks of GHG regulated under EU law. This inclusive approach is evident in paragraphs 7 and 10 of the preambles, emphasising the role of diverse sectors – from energy and industry to agriculture and waste management – in contributing to the Union's climate neutrality by 2050.

The regulation sets specific targets that include achieving climate neutrality within the EU by 2050, as outlined in Article 2. This ambitious goal requires balancing Union-wide GHG emissions and removals as regulated in Union law by this date, with the aim of reaching net zero emissions and then moving towards negative emissions. Additionally, there is an intermediate target of reducing net GHG emissions by at least 55 per cent compared to 1990 levels by 2030, as specified in Article 4. The Regulation also emphasises continuous progress in enhancing adaptive capacity, strengthening resilience, and reducing vulnerability to climate change, in line with Article 7 of the Paris Agreement, as stated in Article 5 of the Regulation.

The European Climate Law outlines key mechanisms for achieving its goals. It requires EU Institutions and MS to implement necessary measures for reaching the 2050 climate neutrality objective, with a focus on fairness, solidarity, and cost-effectiveness (Article 2, Paragraph 2). Additionally, the EC is responsible for reviewing EU legislation to facilitate meeting the intermediate and final targets (Article 4, Paragraph 2). The law also mandates continuous progress in adapting to climate change (Article 5), ensuring a comprehensive approach to climate action across the EU.

The European Climate law sets significant milestones for 2030 (e.g., 55 per cent reduction in net GHG emissions) and 2050 (climate neutrality). The ambitious nature of these objectives, coupled with the relatively short timeframe and the need to balance fairness, solidarity, and cost-effectiveness, underscores the Regulation's comprehensive and challenging nature. The European Climate Law aligns with and supports global environmental commitments, notably the Paris agreement and the UN 2030 Agenda for Sustainable Development, as referenced in the preamble paragraphs 8 and 9. This alignment demonstrates the EU's commitment to global climate action and sustainable development goals.

Floods Directive

The Directive 2007/60/EC on the assessment and management of flood risks, known as the Floods Directive, establishes a comprehensive framework for assessing and managing flood risks across the EU. Its primary objective is to reduce the risks and adverse consequences of floods on human health, the environment, cultural heritage, and economic activity. Recognising the varying nature of flood risks across different regions, the directive allows MS to set their objectives based on local and regional circumstances (European Parliament and the Council, 2007).

The directive mandates MS to conduct preliminary flood risk assessments, prepare flood hazard maps and flood risk maps, and establish flood risk management plans. These plans are crucial for prevention, protection, and preparedness against floods and are expected to consider various factors such as costs and benefits, objectives of the WFD, soil and water management, spatial planning, land use, nature conservation, navigation, and port infrastructure. The directive is comprehensive in its scope, applying to all kinds of floods, including those from the sea in coastal areas.

While the directive does not set specific tangible targets, it imposes specific measures and requirements on MS. Regulation is the primary policy instrument used, focusing on detailed management plans, which include necessary coordination with authorities and other countries. MS are responsible for implementing the directive and may use the arrangements established under the WFD. However, they have the flexibility to appoint different authorities for this purpose. The directive entered into force in November 2007, with MS required to bring into force the necessary laws, regulations, and administrative provisions to comply with the directive by November 2009. Key timelines include completing the preliminary flood risk assessment by December 2011, with reviews and updates every six years; ensuring that flood hazard maps and flood risk maps are completed by December 2013, with similar six-year review cycles; and ensuring that flood risk management plans are completed and published by December 2015, also subject to review and updates every six years.

The Floods Directive aligns with international instruments such as the United Nations Convention on the Protection and Use of Transboundary Watercourses and International Lakes. It also respects the Charter of the Fundamental Rights of the EU, ensuring that its implementation adheres to these broader commitments and principles.

Fuel EU Maritime Regulation

Regulation (EU) 2023/1805 on the use of renewable and low-carbon fuels in maritime transport and amending Directive 2009/16/EC is a Regulation concerning shipping, or specifically for shipping where all ships above a gross tonnage of 5000 that serve the purpose of transporting passengers or cargo for commercial purposes, adopted in the summer of 2023. The Regulation aims to enhance EU's commitment under the Paris Agreement by providing legal certainty for ship operators and fuel producers and help kick-start the large-scale production of sustainable maritime fuels. The Regulation is to be applied from 1 January 2025, but with the monitoring plans (Article 8 and 9) put into effect already on 31 August 2024 (European Parliament and the Council, 2023a).

The policy's main objective is to increase consistent use of renewable and low-carbon fuels and substitute sources of energy in maritime transport by putting a limit on the GHG intensity of energy used on board by a ship arriving at, staying within or departing from ports under the jurisdiction of a MS and introducing an obligation to use on-shore power supply (OPS) or zero-emission technology in ports under the jurisdiction of a MS.

In addition to setting a cap on the GHG intensity of maritime energy, the Regulation includes measures ensuring a gradual decrease in fuel emissions, like the use of renewable fuels of non-biological origin (RFNBO) and excludes the use of fossil fuels. The policy, part of the 'Fit for 55' package aiming for climate neutrality, contains provisions to combat air pollution, such as

mandating onshore power supply in major EU ports. It supports the uptake of RFNBO through incentive regimes, acknowledging their higher production costs compared to conventional fuels, and includes a voluntary pooling mechanism for ships to collectively meet GHG intensity targets.

Governance of the Energy Union and Climate Action

Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU, and 2013/30/EU, Council Directives 2009/119/EC and (EU) 2015/652, and repealing Regulation (EU) No 525/2013, known as the Governance of the Energy Union and Climate Action, plays a crucial role in shaping the EU's approach to energy and climate policy (European Parliament and the Council, 2018). Although it does not specifically target ocean-related issues, its implications extend to offshore energy production, reflecting its broad scope. The Regulation's primary aim is to establish a reliable, inclusive, cost-efficient, transparent, and predictable governance mechanism. This mechanism is designed to ensure the achievement of the 2030 and long-term objectives and targets of the Energy Union, aligning with the commitments made under the 2015 Paris Agreement. The energy sector, being the main focus, is expected to adhere to the Regulation's comprehensive framework.

The Regulation sets forth specific targets and requirements for each MS. These include the adoption of integrated national energy and climate plans that align with the objectives, targets, and contributions outlined in the Regulation's annex. These plans must address the five key dimensions of the Energy Union: energy security, the internal energy market, energy efficiency, decarbonisation, and research, innovation, and competitiveness. The Regulation emphasises the importance of public consultation, as stated in Article 10, and fosters a multilevel climate energy dialogue and regional cooperation to facilitate its implementation.

The delivery mechanism of the Regulation is multifaceted. It includes long-term strategies with a 30-year perspective, subject to updates every five years, as outlined in Article 15. An integrated reporting system is also in place, requiring biennial reports on different Energy Union dimensions and annual reports for GHG inventories and 2020 targets. A reporting platform supports these processes, ensuring transparency and accountability.

The EC, assisted by a Climate Change Committee and an Energy Union Committee, is the primary institution responsible for administering the Regulation. The European Parliament, the Council, the EEA, and the UNFCCC Secretariat also play significant roles in its implementation and oversight. The Regulation came into force on 1 January 2021 and is designed with a 30-year perspective, reflecting its long-term commitment to transforming the EU's energy and climate landscape. Additionally, it aligns with international instruments like the UNFCCC and the Aarhus Convention, proving its commitment to global climate and environmental goals.

Habitats Directive

The Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, formally known as the Habitats Directive, was established in 1992, with the overarching goal of preserving biodiversity in the EU. This directive is comprehensive in its scope,

encompassing both terrestrial and marine environments, and focuses on maintaining or restoring favourable conservation statuses for natural habitats and species of community interest. It obliges MS to designate special areas of conservation, for which they must propose a list of sites and subsequently establish necessary conservation measures. These measures are geared towards preventing the deterioration of natural habitats and the habitats of species, as well as minimising disturbances to the species for which the sites have been designated.

The directive emphasises the importance of surveillance in maintaining the conservation status of natural habitats and species, particularly those classified as priority. It establishes stringent protection systems for certain animal and plant species listed in Annex IV, which include prohibitions on activities such as capture, killing, and the destruction of breeding sites. While the directive does not set quantitative targets, it specifies habitats and species that require protection measures through its annexes.

The implementation of the Habitats Directive is primarily through legal instruments, with each MS responsible for contributing to the conservation of natural habitats and species. This includes legal requirements on measures and prohibitions, as well as the possibility of derogations. The directive does not specify the competent institutions at the MS level but establishes a committee, chaired by a representative of the EC and consisting of representatives from the MS, to deliver opinions on draft measures.

The directive's timeline for implementation includes several key milestones. MS were required to transmit their list of proposed sites within three years of the directive's notification and to establish a list of sites of community importance within six years. These sites must be designated as soon as possible but no later than six years following their adoption. Additionally, MS are required to report every two years on the derogations applied under Article 16.1 and every six years on the implementation of the measures taken under the directive. The EC is tasked with periodically reviewing the contribution of the Natura 2000 network towards achieving the directive's objectives. Notably, the Habitats Directive does not reference international instruments, focusing its conservation efforts within the EU.

Industrial Emissions Directive

The Industrial Emissions Directive (IED), formally known as Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control) (Recast), is an EU Directive that focuses on integrated pollution prevention and control. This directive primarily aims to protect human health and the environment by reducing harmful industrial emissions throughout the EU. It is a cross-cutting policy that affects various sectors, particularly targeting specific industries and activities. These include the combustion of fuels, waste incineration, and the use of organic solvents, with the directive outlining specific requirements for these activities (European Parliament and the Council, 2010).

A key aspect of the IED is its emphasis on the use of the best available techniques (BAT) to determine emission limits and control measures. This approach is central to achieving the directive's objectives. Additionally, the directive upholds the "polluter pays" principle and stresses the importance of preventing soil and groundwater quality deterioration. As a directive, this policy instrument is binding upon the EU MS, who are responsible for its implementation and enforcement. The EC also plays a crucial role in overseeing its application across the

Union. The directive came into force in 2010 and does not explicitly integrate international instruments into its framework.

The objectives of the IED are closely aligned with those of the EGD, particularly in the areas of pollution prevention and control. There are notable synergies between the directive and the EGD, especially in the context of protecting water bodies and contributing to the sustainable blue economy strategy. The directive also acknowledges its interrelation with other EU directives, including Directive 2003/87/EC on GHG emission allowance trading, Directive 85/337/EEC on the assessment of environmental effects, and Directive 96/82/EC on major-accident hazards involving dangerous substances.

Marine Strategy Framework Directive

The Marine Strategy Framework Directive (MSFD), formally known as Directive 2008/56/EC on establishing a framework for community action in the field of marine environmental policy, was adopted in 2008, with the primary objective of achieving GES in the marine environment by 2020. This directive not only focuses on ecological goals but also emphasises sustainable use and coherence with other EU laws. It establishes a comprehensive framework within which MS are required to take the necessary measures to either achieve or maintain GES in their marine environments (European Parliament and the Council, 2008a).

The MSFD mandates the development and implementation of marine strategies with specific targets. These strategies are designed to protect and preserve the marine environment, prevent its deterioration, and, where feasible, restore marine ecosystems that have been adversely affected. A key aspect of these strategies is the prevention and reduction of inputs into the marine environment to phase out pollution, ensuring that there are no significant impacts on marine biodiversity, ecosystems, human health, or legitimate uses of the sea. MS are responsible for making an initial assessment of their marine waters, determining the criteria for GES, establishing environmental targets, setting up monitoring programs, and developing programs of measures. These measures are integral to the directive's approach to marine conservation and management.

The policy instrument central to the MSFD is the implementation of marine strategies and programs of measures. Each MS is required to designate a competent authority or authorities to oversee these strategies and measures. The timeline for the MSFD includes several key milestones. Competent authorities had to be named by July 15, 2010. The initial assessment of the current environmental status of marine waters and the determination of GES were to be completed by July 15, 2012. Additionally, by this date, MS were expected to have established environmental targets and associated indicators. The establishment of a monitoring program for ongoing assessment and regular updating of targets was scheduled for completion by July 15, 2014. The development of programmes of measures was to be completed by 2015, with these programs entering into operation by 2016 at the latest. The substantive implementation of the directive, aimed at achieving or maintaining GES, was set for 2020.

The MSFD also integrates international instruments into its framework. It takes into account obligations under the United Nations Convention on the Law of the Sea (UNCLOS), particularly ensuring that activities within a Party's jurisdiction or control do not cause damage beyond its marine waters. The Directive supports the goals of the Convention on Biological

Diversity (CBD) to halt biodiversity loss, ensure the conservation and sustainable use of marine biodiversity, and create a global network of marine protected areas. Additionally, in relation to the protection of the marine environment from pollution, the MSFD contributes to the implementation of regional agreements such as HELCOM, OSPAR, and others.

Maritime Spatial Planning Directive

Directive 2014/89/EU on establishing a framework for maritime spatial planning, also knowns as Maritime Spatial Planning Directive (MSPD) came into force in 2014 to create a comprehensive framework for maritime spatial planning. Its primary objective is to promote the sustainable growth of maritime economies, the sustainable development of marine areas, and the sustainable use of marine resources. This directive is instrumental in guiding MS to establish and implement maritime spatial planning, which is essential for balancing economic, social, and environmental aspects in maritime sectors. The directive encompasses a wide range of maritime activities, including energy sectors (oil, gas, renewable energy sources), maritime transport, fisheries, aquaculture, and environmental protection. Additionally, it allows MS the flexibility to include sustainable tourism and the extraction of raw materials in their planning (European Parliament and the Council, 2014a).

The directive outlines specific requirements for MS, such as the establishment of Maritime Spatial Plans. These plans must consider various factors, including land-sea interactions, environmental, economic, social, and safety aspects. The directive emphasises the importance of aligning maritime spatial planning with other processes, like integrated coastal management, ensuring stakeholder involvement, utilising the best available data, and fostering cooperation with third countries. Spatial planning, as the primary policy instrument, is expected to build upon existing national, regional, and local rules and mechanisms.

In terms of its legal and operational timeline, MS were required to transpose it into national law by 2016. The directive does not specify an end date for its validity, and it mandates that Maritime Spatial Plans be reviewed by MS at least every ten years. Internationally, the directive aligns with obligations under UNCLOS and encourages MS to cooperate with third countries in their maritime spatial planning efforts. This approach ensures that the geographical scope for maritime spatial planning is consistent with existing EU instruments and international maritime law.

Nitrate Directive

Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources, known as the Nitrates Directive, focuses on reducing and preventing water pollution from nitrates, primarily originating from agricultural sources. This directive entered into force in 1991 and aims to protect waters against nitrate pollution, thereby safeguarding human health, aquatic ecosystems, and other legitimate uses of water (European Parliament and the Council, 1991).

The policy specifically targets the agricultural sector, addressing the issue of water pollution caused by nitrates. It sets out specific targets, requiring MS to identify waters affected by nitrate pollution and to designate vulnerable zones that contribute to this pollution. In these designated zones, MS must establish action programmes. These programmes include measures to limit the

land application of all nitrogen-containing fertilisers and set specific limits for the application of livestock manure.

As a policy instrument, the Nitrates Directive functions as a directive within the EU legislative framework. It also encourages MS to develop codes of good agricultural practice, which farmers are advised to implement voluntarily. These codes aim to promote sustainable agricultural practices that help reduce nitrate pollution. The directive is jointly administered by the MS and the EC and does not explicitly integrate international instruments, focusing instead on the EU's internal framework for addressing nitrate pollution from agricultural sources.

Offshore oil and gas safety Directive

Directive 2013/30/EU on the safety of offshore oil and gas operations and amending Directive 2004/35/EC, known as the Offshore Oil and Gas Safety Directive, is primarily focused on the protection of the marine environment, particularly in achieving or maintaining GES as outlined in the MSFD. Its main aim is to ensure that operators of offshore oil and gas operations in the EU take all necessary measures to prevent major accidents and have adequate resources to limit the consequences of such accidents. This Directive is applicable to both existing and future installations in the offshore oil and gas sector (European Parliament and the Council, 2013a).

The Directive sets specific targets in three main areas: licensing and regulation, emergency response plans, and public information. For licensing and regulation, operators must obtain a licence from an independent authority and provide a major accident prevention policy, safety and environmental management system details, and a report on major hazards. In terms of emergency response, operators must prepare internal emergency response plans, including oil spill analysis, while national authorities develop comprehensive emergency response plans for all offshore installations. Regarding public information, the Directive mandates full public disclosure and consultation before drilling exploration wells, along with regular knowledge and information exchange among national authorities, industry stakeholders, and the EC.

The Directive is administered by the EC, competent authorities at the domestic level, and the European Maritime Safety Agency (EMSA) for specific tasks. It was transposed by 19 July 2015, with no other specified deadlines for objectives or targets. In terms of international integration, the Directive aligns with several conventions, including the Aarhus Convention, Espoo Convention, Barcelona Convention, and UNCLOS.

Packaging and Packaging Waste Directive

Directive 94/62/EC on packaging and packaging waste, in place since 1994, was a landmark in the EU's environmental legislation, unifying national measures concerning packaging and packaging waste management (European Parliament and the Council, 1994). The Directive focuses on the management of packaging and packaging waste, one of the main types of plastic litter at sea (European Environment Agency, 2023). Its primary objectives are to prevent environmental impacts from packaging waste and to ensure a high level of environmental protection while maintaining the functioning of the internal EU market. This Directive is legally binding, compelling MS to adhere to its provisions and aiming to ensure a high level of commitment and uniformity in its implementation across the EU.

By reducing the amount of packaging waste produced and ensuring its effective management, the Directive addresses the issue of plastic litter and microplastics at sea. The measures outlined

in the Directive, such as targets for recovery and recycling of packaging waste (Article 6), return, collection, and recovery systems (Article 7), and public education on waste management (Article 13), collectively contribute to reducing the likelihood of plastic waste entering marine environments and breaking down into microplastics. However, it should be noted that the Directive does not explicitly mention the terms "plastic litter" or "microplastics" and it does not provide specific temporal targets except those related to the percentage of recovery and recycling within five and ten years since its entry into force.

The Directive's objectives, while primarily cantered on waste management, indirectly support multiple EGD objectives, most notably those falling under the Zero Pollution Action Plan. While it focuses on the impact of packaging and packaging waste on the environment, mentions of biodiversity, climate change and pollution are limited. However, the policy's focus on reducing the environmental impact of packaging waste can contribute to addressing pollution and promoting sustainable resource management as captured under the Sustainable Blue Economy Strategy.

The Directive also mentions economic instruments (Article 15), stating that the Council can adopt such instruments to promote the achievement of the objectives set by the Directive. In the absence of such measures, MS can adopt measures in line with the principles of the Community environmental policy, including the polluter-pays principle. Notification procedures (Article 16) are outlined for MS before adopting certain measures, emphasising the technical specifications linked to fiscal measures. It also mentions efforts to reduce the legal burden across policies and the requirement for integrated permits. The Directive contains cross-references to legal instruments of other policies (e.g., Directive 75/442/EEC & Directive 83/189/EEC) and has mechanisms that support compliance and enforcement, such as non-compliance procedures and judicial procedures. In terms of linking to the private sector, the Directive includes a "voluntary agreement" in the context of packaging between competent MS authorities and the economic sectors concerned. However, details about consultation processes or inclusiveness are not provided.

The Directive promotes integrated planning, emphasising the importance of management plans that address packaging and packaging waste and offers provisions for monitoring through the establishment of databases to ensure that the progress and effectiveness of the policy are regularly assessed. The Directive emphasises the importance of reporting, ensuring that data on packaging and packaging waste is regularly updated and made available. But while the Directive promotes a data-driven approach, which can be inferred from the emphasis on databases and monitoring, no specific details on the integration of scientific evidence and knowledge are explicitly mentioned.

The responsibility for its enforcement is shared between the Directorate-General (DG) Environment (DG ENV) and the MS. However, specific details about inter-institutional coordination mechanisms or coordination across policies is not explicitly mentioned.

Sustainable Use Regulation

The Proposal for a Regulation on the sustainable use of plant protection products and amending Regulation (EU) 2021/2115 is a significant EU policy initiative, aimed at aligning pesticide use with overarching environmental and health goals. This Regulation is primarily focused on

ensuring the safe use of pesticides due to their potential impact on the environment and human health (European Commission, 2022).

Central to this policy is its consistency with the objectives of the EGD, the Farm to Fork strategy, and the Biodiversity Strategy. By aiming to reduce the use of chemical plant protection products, the policy seeks to safeguard public health, preserve biodiversity, and protect the environment. This reduction is not only about minimising the use of hazardous pesticides but also about addressing broader societal concerns regarding pesticide use and harmonising national policies across the EU. The policy explicitly contributes to addressing key environmental challenges such as biodiversity loss, climate change, and pollution. It is designed to reduce risks to human health and the environment from pesticide use, which, in turn, helps protect biodiversity and reduce CO2 emissions. These objectives are in line with the EU's broader environmental and climate goals, including the commitment to have at least 25 per cent of the EU's agricultural land under organic farming by 2030.

The proposal is a Regulation that places the responsibility for implementation on MS. Introduced in 2022, it does not directly integrate international instruments but is part of the EU's comprehensive approach to sustainable agricultural practices and environmental protection. The policy's alignment with the EGD, the Farm to Fork strategy, the Biodiversity Strategy, the Zero Pollution Action Plan, the Soil Strategy, the EU Pollinators Initiative, the EU Chemicals Strategy for Sustainability, and the EU Strategic Framework on Health and Safety at Work 2021-2027, underscores its comprehensive approach to addressing the complex challenges of sustainable agriculture and environmental stewardship.

Nature Restoration Law (forthcoming)

The Proposal for a Regulation on nature restoration (NRL) was launched by the EC in 2022 as part of the EGD and its 2030 Biodiversity Strategy with the aim to facilitate the recovery of biodiverse and resilient ecosystems across the EU's terrestrial and marine areas. It sets an ambitious goal for MS to implement effective restoration measures, aiming to cover at least 20 per cent of the Union's land and sea areas by 2030, and expanding to encompass all ecosystems in need of restoration by 2050 (European Commission, 2022a).

Articles 4 and 5 of the proposal are particularly significant as they specifically include species and habitats listed in the Annexes of the Habitats and Birds Directives within the objectives of the Regulation. These articles mandate an increase in the habitat area in good condition for habitat types listed in Annex II to at least 90 per cent, and a positive trend in the quality and quantity of marine habitats for species listed in Annex III and those covered by the Habitats and Birds Directives. The Regulation outlines detailed measures for improving, re-establishing, and enhancing the connectivity of these habitats.

Article 11 of the proposal further integrates the Regulation with existing EU policies and international commitments. It requires MS to consider their integrated national energy and climate plans and long-term strategies under Regulation (EU) 2018/1999 on climate action, as well as their binding targets for 2030 under Directive 2018/2001/EU on renewable energy. Additionally, the plans must take into account the Habitats Directive, WFD, MSFD, and the Air Pollution Directive. The proposal also aligns with the EU's obligations under several international agreements, including the UN Convention on Biological Diversity and the post-

2020 Global Biodiversity Framework, the UN Convention to Combat Desertification, the 2030 Agenda for Sustainable Development, the UN Framework Convention on Climate Change, and the Paris Agreement.

While the proposal does not specify the competent institution within the MS for its implementation, the EEA is tasked with assisting MS in reporting and the EC in assessing the national restoration plans and in adopting implementation acts. The timeline for the Regulation's entry into force, including its amended version passed by the European Parliament in July 2023, remains to be determined.

Proposed Revision of the REPowerEU Directive

The Proposed Revision of the REPowerEU Directive, formally known as the Directive amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999, and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652, is a policy in the EU's strategy to enhance its energy profile and meet climate goals. This Directive, rooted in Article 194(2) of the TFEU, is dedicated to the development of new and renewable forms of energy, with a specific focus on ensuring energy security and promoting energy efficiency and savings (European Commission, 2021e).

The primary aim of this Directive is to support the EU's ambition to achieve climate neutrality by 2050 and meet its climate targets by 2030, primarily through an increased reliance on renewable energy sources. It is designed to bolster the European economy, particularly in the renewable energy sector, including offshore energy production. The Directive also seeks to contribute to climate and environmental objectives, including biodiversity protection, thereby addressing concerns associated with global warming and biodiversity loss.

One of the specific targets of the Directive is to achieve a minimum of 40 per cent energy from renewable sources by 2030. While it does not explicitly state the percentage of renewable energy to be produced offshore, Article 9 requires MS bordering sea basins to collaborate in setting collective targets for offshore renewable energy production for 2050, with interim goals for 2030 and 2040. These targets are to be reported in their National Energy and Climate Plans under the EU Energy Governance Regulation. Additionally, the Directive aims to expedite the permitting processes for new renewable energy installations and sets a goal to reach a 13 per cent reduction in GHG emissions intensity in the transport sector by 2030. This reduction is to be achieved through the promotion of advanced biofuels, biogas, and renewable fuels of non-biological origin.

The Directive is legally binding, amending existing legislation, and may include voluntary schemes for the production of renewable fuels and recycled carbon fuels. The responsibility for its implementation lies with the Directorate-General for Energy (DG ENER). The timeline for its entry into force is pending agreement with the EC. This Directive aligns with international commitments, particularly the Paris Agreement, by contributing to the achievement of the EU's climate targets.

REACH Regulation

Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and Regulation (EEC) 793/93 and Regulation (EC) 1488/94 as well a

Directive 76/769/EEC and Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, also known as REACH Regulation is an instrument of the EC focusing on the Registration, Evaluation, Authorisation, and Restriction of Chemicals. The REACH Regulation, which also led to the establishment of the ECHA, amends a range of existing directives and regulations, including Directive 1999/45/EC and Regulation (EEC) 793/93, among others (European Parliament and the Council, 2006a).

The primary aim of this instrument is to safeguard human health and the environment from the risks posed by chemicals. It emphasises the importance of free circulation of substances within the EU's internal market, while concurrently promoting competitiveness and innovation. This regulation is applicable to a wide array of sectors, impacting manufacturers, importers, and downstream users involved in handling substances, whether individually, in mixtures, or in articles, as well as in the marketing of mixtures.

The REACH Regulation imposes a clear mandate on manufacturers, Importers, and downstream users to ensure that the substances they manage do not adversely affect human health or the environment. It encompasses detailed provisions on substances and mixtures, covering their manufacture, market placement, and usage. As a regulatory instrument, the REACH Regulation is legally binding across the EU. The EC and MS are responsible for its implementation and enforcement. Since its inception in 2006, the Regulation has not explicitly incorporated international instruments into its framework.

The objectives of the REACH Regulation are in line with the broader goals of the EGD, particularly in terms of environmental protection and safeguarding human health. The Regulation's focus on alternative methods for hazard assessment is a significant step towards achieving a safer environment and better health outcomes. The REACH Regulation also emphasises the importance of stakeholder engagement, including consultations on reducing animal testing and the role of the ECHA in disseminating public information. Additionally, the establishment of a forum ensures the inclusion of diverse expertise and stakeholder observation.

Regulation on Persistent Organic Pollutants

The Regulation (EU) 2019/1021 on persistent organic pollutants (Recast) was launched in 2019 and its primary objective is to safeguard human health and the environment from the harmful effects of persistent organic pollutants (POPs). These pollutants are known for their long-lasting presence in the environment and their potential to cause significant harm (European Parliament and the Council, 2019).

This Regulation is specifically designed to address the challenges posed by POPs in various sectors, particularly those involved in the manufacturing, marketing, and disposal of these substances. It sets forth stringent measures to prohibit, phase out, or restrict the manufacturing, placing on the market, and use of substances that are listed under the Stockholm Convention or the Protocol. The overarching goal of these measures is to minimise, and ultimately eliminate, the release of POPs into the environment.

A key aspect of this Regulation is its focus on waste management, particularly concerning waste that contains or is contaminated by POPs. This includes establishing specific provisions to handle such waste safely and effectively, thereby reducing the risk of environmental

contamination. The Regulation is not only a standalone legal instrument within the EU but also integrates international environmental agreements. It aligns with the Stockholm Convention on Persistent Organic Pollutants and the Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Persistent Organic Pollutants. These international instruments play a crucial role in guiding the Regulation's implementation and ensuring its effectiveness in combating the global challenge posed by POPs.

In terms of its broader impact, the Regulation's objectives are in harmony with the EGD goals, particularly those related to pollution prevention and biodiversity protection. By focusing on minimising and eliminating the release of harmful pollutants, the Regulation contributes significantly to the EGD's overarching aim of protecting the environment and promoting human health. As a binding and directly applicable legal instrument, it mandates compliance from all MS, ensuring a unified approach to managing the risks associated with persistent organic pollutants.

Seveso III Directive

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Directive 96/82/EC, commonly known as the Seveso III Directive, focuses on the control of major-accident hazards involving dangerous substances. Its primary objective is to ensure a high level of protection for citizens, communities, and the environment throughout the EU, particularly in light of past major accidents involving hazardous substances (European Parliament and the Council, 2012).

Targeted primarily at the industrial sector, especially those dealing with dangerous substances, the Seveso III Directive sets forth a series of requirements for operators of establishments. These include notifying concerned establishments, issuing major accident prevention policies, producing safety reports for upper-tier establishments, creating internal emergency plans, and providing information in the event of accidents.

Effective since 2015, the Directive integrates with several international conventions and aligns with various EU directives and regulations, supporting the broader goals of the EGD, particularly regarding pollution control and environmental protection. While the Directive does not directly address biodiversity and climate change, its objectives indirectly contribute to these areas by preventing major accidents involving dangerous substances.

An important aspect of the Seveso III Directive is its focus on land-use planning as outlined in Article 13. It integrates objectives to prevent major accidents and limit their consequences into MS land-use policies. This includes controls on the siting of new establishments, modifications to existing ones, and new developments that might increase the risk of major accidents. Furthermore, the Directive aligns with other EU directives and regulations, enhancing its comprehensive approach. It is in harmony with Directive 2011/92/EU, which focuses on assessing the environmental effects of public and private projects, and Directive 2001/42/EC, which assesses the effects of plans and programmes on the environment. Additionally, the Seveso III Directive aligns its implementation powers with Regulation (EU) No 182/2011. This Regulation defines the mechanisms through which MS oversee and regulate how the EC exercises its implementation powers.

Finally, the Directive also adheres to the principles of subsidiarity and proportionality as outlined in Article 5 of the Treaty on the EU, ensuring that its measures are appropriately scaled and delegated.

Ship Recycling Regulation

Regulation (EU) No 1257/2013 on ship recycling and amending Regulation (EC) No 1013/2006 and Directive 2009/16/EC, known as the Ship Recycling Regulation, is a policy within the shipping sector. This policy is an implementation of the international Hong Kong Convention, even though the convention has yet to enter into force. It aims to ensure safe practices for both labour and the environment concerning the recycling of ships. The policy was set to enter into force regarding reporting, monitoring, and evaluating on 31 December 2015 at the earliest, or 31 December 2018 at the latest (see Article 32(1)) (European Parliament and the Council, 2006b).

The main objectives of the policy are to prevent, reduce, minimise and, to the extent practicable, eliminate accidents, injuries, and other adverse effects on human health and the environment caused by ship recycling. Additionally, it aims to enhance safety, the protection of human health, and of the EU's marine environment throughout a ship's life cycle, particularly ensuring that hazardous waste from such ship recycling is subject to environmentally sound management.

The objectives are mainly to be achieved by introducing mandates for every ship to have an inventory of hazardous materials and for every ship to have a ship recycling plan with a pre-approved ship recycling facility. The facilities that have been approved thus far are mainly located in Europe, leading to a stark contrast with existing practices where ships would mainly be sent to South Asia for recycling.

Ship Source Pollution Directive

Directive 2005/35/EC on ship-source pollution and the introduction of penalties, including criminal penalties, for pollution offences, commonly known as the Ship Source Pollution Directive, is a policy within the maritime sector that MS were required to implement by April 2007. It harmonises MARPOL 73/78 and introduces detailed rules on criminal offences and penalties related to the convention. The policy aims to improve maritime safety and enhance the protection of the marine environment from pollution by ships. This is achieved by incorporating international standards for ship-source pollution and ensuring that individuals responsible for discharges of polluting substances are subject to adequate penalties. Enforcement is primarily conducted through port-state control, making offences subject to criminal penalties (European Parliament and the Council, 2005).

Competent authorities are designated by the MS, and the EMSA collaborates with the MS in developing technical solutions. It also provides technical assistance in implementing the Directive and assists the EC in its implementation (Article 10.2). The Ship Source Pollution Directive not only harmonises international standards but also ensures the enforcement of these standards through adequate penalties. This supports the objectives of international law in the maritime sector and although it does not directly refer to the EGD's objectives, the Directive aligns with international efforts to prevent ship-source pollution. Additionally, it connects to the action programme for marine pollution response under Decision No 2850/2000/EC and

Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues. This further integrates the Directive with broader policy goals on water protection.

Single-Use Plastics Directive

Directive (EU) 2019/904 on the reduction of the impact of certain plastic products on the environment, adopted and entered into force in 2021, underscores the EU's intensified efforts to curb environmental degradation due to plastics entering the environment. It specifically focuses on single-use plastic products, which are a major contributor to marine litter (European Parliament and the Council, 2019a).

It mandates MS to achieve various targets and sets precise measures such as mandating a reduction in the consumption of single-use plastics (by 2026 compared to 2022 levels), prohibiting the marketing of certain single-use plastics (e.g., products made from oxo-degradable plastics) and setting standards for product designs to minimise waste (e.g., it requires that caps and lids of single-use plastic containers remain attached during their use to reduce the likelihood that these smaller components become litter). It also establishes ambitious recycling targets for plastic products, such as recycling 77 per cent of waste single-use plastic products by 2025, and 90 per cent by 2029. Moreover, the Directive states that MS shall implement extended producer responsibility (Article 8) schemes for specific single-use products, and their producers are held responsible for the end-of-life impact of those products. This includes covering the costs of waste collection, treatment, and awareness-raising measures about recycling and proper disposal. Responsibility for achieving these objectives primarily falls under national environmental or sustainability institutions within each MS.

The Single-Use Plastics Directive, through its extensive and proactive measures, indirectly yet significantly supports the EGD's objective of reducing plastic litter at sea and microplastics in the environment. The objectives of the policy are closely aligned with the EGD's objectives, particularly those set forth in the Zero Pollution Action Plan and Sustainable Blue Economy Strategy. The Directive refers to several other directives and regulations, such as Directive 2008/98/EC on waste and Directive 94/62/EC on packaging and packaging waste.

While the Directive does not introduce market-based instruments like taxes or subsidies, it implicitly creates disincentives for single-use plastics by setting reduction targets and promoting alternatives. The Directive also emphasises the importance of involving stakeholders in the process of reducing the impact of single-use plastics but does not provide explicit details on consultations or overlapping stakeholder groups. The Directive emphasises the importance of data collection and reporting, implying the need for coordination between different institutions within MS but does not provide explicit provisions for data sharing or inter-institutional consultations. The Directive does not specify the establishment or use of existing inter-institutional coordination mechanisms.

The Directive emphasises the importance of MS establishing measures to achieve the set reduction targets for single-use plastics. While it does not provide explicit details on integrated planning, the Directive's nature implies that considerations regarding pollution, especially marine pollution, should be integrated into planning processes.

The Directive mandates MS to monitor and report on the measures they implement to achieve the reduction targets, but it does not specify a joint cross-policy monitoring program. MS are

required to report their progress in implementing measures to reduce the impact of single-use plastics. This reporting mechanism can support the cross-fertilisation of information between policies. The Directive does not explicitly mention the role of a Science-Policy-Society interface or the cross-fertilisation of knowledge from other policy areas.

Strategic Environmental Assessment Directive

Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment, commonly known as the Strategic Environmental Assessment (SEA) Directive, was established with the primary objective of integrating environmental considerations into the preparation and adoption of plans and programmes. It emphasises the importance of environmental protection. The Directive aligns with the principles outlined in Article 191 (ex-174) of the TFEU, which focuses on the preservation, protection, and improvement of environmental quality, human health protection, and the prudent use of natural resources. Additionally, it resonates with Article 11 (ex-6) TFEU, advocating for the integration of environmental aspects into EU policies (European Parliament and the Council, 2001).

The SEA Directive is broad in scope, targeting plans and programmes likely to have significant environmental impacts. While it does not provide an exhaustive list of applicable plans and programmes, it references other directives, such as Directive 2011/92/EU (on the assessment of environmental effects of certain public and private projects) and the Habitats Directive, which offer guidance on the types of initiatives covered. These include a wide range of installations and industries, from agriculture, energy, and chemical industries to infrastructure projects and tourism.

The Directive mandates MS to adopt necessary legal, regulatory, and administrative measures to ensure compliance. It places the responsibility on MS to align their existing procedures with the SEA's requirements or to establish new procedures to meet its standards. The Directive came into force on 21 July 2001, with a transposition deadline set for 21 July 2004, and does not have a specified end date. In terms of international integration, the SEA Directive fulfils obligations from the CBD, particularly in integrating biodiversity conservation and sustainable use into sectoral or cross-sectoral plans and programmes. It also relates to the United Nations/Economic Commission for Europe Convention on Environmental Impact Assessment in a Transboundary Context and acknowledges discussions leading to the UN Protocol on Strategic Environmental Assessment.

The SEA Directive is a standalone legal instrument requiring environmental assessments for a broad array of plans and programmes. It allows for the integration of its requirements into existing procedures or the development of new procedures to comply with the directive. Furthermore, it provides for coordinated or joint procedures to fulfil similar assessment requirements under other EU laws, such as Council Directive 79/409/EEC, Directive 92/43/EEC, or Directive 2000/60/EC, to avoid duplicative assessments. This approach highlights the Directive's role in fostering a comprehensive and integrated environmental assessment framework within the EU.

Taxonomy Regulation and Delegation Acts

Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088, commonly known as the Taxonomy

Regulation and Delegated Acts, is a comprehensive framework established to facilitate sustainable investment within the EU. This Regulation defines criteria for determining the environmental sustainability of economic activities, particularly in the context of investment decisions (European Parliament and the Council, 2020a).

At its core, the Taxonomy Regulation aims to align investments with the broad range of SDGs. While it does not specify objectives directly related to ocean sustainability, its scope is far-reaching, encompassing all sectors and types of investments. This harmonisation is intended to remove barriers within the internal market related to funding sustainable projects and to prevent the emergence of future obstacles in this area.

Grounded in Article 114 of the TFEU, the Regulation reflects its alignment with the internal market's objectives. It outlines six key environmental objectives: climate change mitigation and adaptation; sustainable use and protection of water and marine resources; transition to a circular economy; pollution prevention and control; and the protection and restoration of biodiversity and ecosystems. Under Article 3, an economic activity is deemed environmentally sustainable if it substantially contributes to one or more of these environmental objectives without significantly harming any of them. The Regulation sets out clear criteria for environmentally sustainable economic activities, which both MS and the EC are required to apply.

The responsibility for implementing and monitoring compliance with this Regulation lies primarily with the MS. They are tasked with ensuring that financial market participants adhere to the requirements set forth in the Regulation. MS' competent authorities, as referred to in Article 14(1) of Regulation (EU) 2019/2088 (the Disclosure Regulation), are equipped with the necessary supervisory and investigatory powers to enforce these provisions. Additionally, MS are required to establish rules, measures, and penalties for any infringements of the Regulation.

The Taxonomy Regulation came into force in July 2020, marking a significant step in the EU's efforts to steer investments towards more sustainable and environmentally friendly practices. Its comprehensive approach and direct applicability across MS underscore its importance in shaping a sustainable future, not just for the EU but potentially as a model for other regions globally.

Urban Wastewater Treatment Directive

Directive 91/271/EEC concerning urban waste-water treatment, known as Urban Wastewater Treatment Directive, was established in 1991 to mitigate the adverse effects of urban wastewater discharges. This Directive plays a crucial role in safeguarding various water bodies, including rivers, lakes, and oceans from pollution caused by urban wastewater. Its primary objective is to ensure that urban wastewater is appropriately treated before being discharged, thereby protecting aquatic ecosystems and human health from potential harm (European Parliament and the Council, 1991a).

The Directive sets specific targets for the treatment of urban wastewater. These targets are detailed in terms of concentrations and/or percentage reductions as outlined in Table 1 and Article 2(7) of the Directive. For parameters expressed in concentrations, the Directive allows a deviation of no more than 100 per cent for failing samples, except for total suspended solids,

where a deviation of up to 150 per cent is permissible. Additionally, the annual mean of samples for parameters listed in Table 2 must conform to the stipulated parametric values. The Directive also accounts for extreme water quality values resulting from unusual situations, such as heavy rainfall, which are not considered in the assessment of compliance.

In terms of analytical methods, the Directive provides flexibility, allowing for the replacement of certain parameters with alternatives like total organic carbon (TOC) or total oxygen demand (TOD). For discharges from lagooning systems, the Directive specifies that analyses should be conducted on filtered samples, with a maximum limit of 150 mg/l for total suspended solids in unfiltered samples.

As a policy instrument, it binds the EC and MS to its provisions. Since its inception in 1991, the Directive has been a cornerstone in the EU's efforts to reduce environmental pollution from urban sources, ensuring that wastewater treatment processes across MS meet stringent environmental standards. This Directive not only addresses immediate environmental concerns but also contributes to the long-term sustainability of Europe's water resources, aligning with broader EU environmental goals and policies.

Waste Shipment Regulation

Regulation (EC) No 1013/2006 on shipments of waste, also known as the Waste Shipment Regulation, is a key policy within the transport and waste management sectors of the EU. The policy's main objective is to establish procedures and control regimes for the shipment of waste, both within the EU and internationally. This Regulation is instrumental in implementing the Basel Convention, primarily aiming to protect third countries from the negative effects of imported waste. It also regulates waste shipments within the community, ensuring an environmentally sound management of waste.

A critical aspect of the Waste Shipment Regulation is its amendment to the community's system for the supervision and control of waste shipments. To comply with the Basel Convention's requirements, the Regulation introduces stringent rules on prior written notification and consent for shipping waste, especially hazardous waste. These procedures are designed to prevent illegal waste trafficking and to ensure that waste is treated in an environmentally friendly manner, regardless of its destination.

The policy has been in force since 12 July 2007 and each MS is required to designate a competent authority in accordance with Article 53 to oversee and enforce the Regulation's provisions. These authorities play a crucial role in monitoring waste shipments, granting permissions, and ensuring compliance with the Regulation's criteria.

Moreover, the Waste Shipment Regulation is closely aligned with the broader objectives of the EU's environmental policies. It contributes to the Circular Economy Action Plan by promoting the sustainable management of waste and encouraging the recovery and recycling of materials. By regulating the movement of waste, the Regulation helps to prevent environmental pollution and supports the EU's efforts in achieving a more sustainable and resource-efficient economy.

Water Framework Directive

Directive 2000/60/EC, known as the Water Framework Directive (WFD), was established to create a comprehensive framework for water protection in the EU. It sets out significant

environmental obligations to protect inland surface, transitional, coastal, and groundwater bodies, emphasising the ecological quality of waters and prioritising it alongside sustainable water use. The WFD mandates that MS prevent further water deterioration, promote sustainable use, reduce pollutants, and mitigate the effects of floods and droughts. It requires MS to develop management plans and comply with legal requirements concerning licensing and non-deterioration clauses to ensure the achievement of good water status (European Parliament and the Council, 2000).

Furthermore, the Directive requires MS to devise and implement management plans, adhere to strict licensing and permitting rules, and fulfil environmental objectives without compromising water status. MS are charged with the Directive's implementation and designate competent authorities for its enforcement (which can be both national and international (inter alia regional committees).

Enacted in 2000, the WFD stipulated a transposition deadline by 2003 and the establishment of river basin management plans by 2009. MS are expected to meet compliance by a tiered timeline of 2015, 2021, or 2027. The Directive is subject to reviews every six years and is designed without a specified end date, underscoring its ongoing relevance. Additionally, the WFD references international treaties, integrating European water policy with global commitments such as the Helsinki, OSPAR, Barcelona, and UN Water Conventions, outlined in the preamble.

3.1 EU policies to support the achievement of the European Green Deal

The 36 policies have been individually assessed to determine their contribution towards the 25 objectives of the EGD identified (see Table 3). The following table illustrates the number of policies that positively reflect the EGD's objectives (green column), and while no policies appear to negatively impact the EGD's objectives (red column), various policies result to have a neutral contribution (no colour column).

EGD strategies	**Green Deal Objectives**			
2030 Climate Target Plan	Climate neutrality by 2050	12	24	0
	Reduce net GHG emissions by at least 55% compared to 1990 levels by 2030	11	25	0
Climate Change Adaptation Strategy	A climate resilient society, fully adapted to climate change impacts by 2050	8	28	0
Biodiversity Strategy for 2030	All the world's ecosystems are restored, resilient and protected by 2050	20	16	0
	Europe's biodiversity is on the path to recovery by 2030	20	16	0
	Legally protect min. 30% of the EU's Sea area and integrate ecological corridors by 2030	6	30	0
	Strictly protect at least 10% the EU's Sea area by 2030	4	32	0
	Effectively manage all protected areas by 2030	7	29	0
	Restoration objectives: Significant areas of ecosystems restored, habitats and species show no deterioration, at least 30% reach favourable status or positive trend by 2030	13	23	0

EGD strategies	Green Deal Objectives			
	Risk and use of chemical pesticides is reduced by 50% by 2030	3	33	0
	Number of Red List species threatened by invasive alien species is reduced by 50% by 2030	2	34	0
	Nutrient losses from fertilisers are reduced by 50% by 2030	4	32	0
	Negative impacts on sensitive species and habitats, incl. on the seabed through fishing and extraction activities, are substantially reduced by 2030	11	25	0
	By-catch of species is eliminated or reduced to a level that allows species recovery and conservation by 2030	2	34	0
Zero Pollution Action Plan	Pollution is reduced to levels no longer considered harmful to health and ecosystems – a toxic free environment by 2050	20	16	0
	Reduce health impacts (premature deaths) of air pollution by more than 55% by 2030	2	34	0
	Reduce by 25% EU ecosystems where air pollution threatens biodiversity by 2030	4	32	0
	Reduce by 50% nutrient losses, use and risk of chemical pesticides, sale of antimicrobials for farmed animals and aquaculture by 2030	4	32	0
	Reduce by 50% plastic litter at sea and by 30% microplastics released into the environment by 2030	2	34	0
	Significantly reduce total waste generation by 2030	2	34	0
Sustainable Blue Economy Strategy	Achieving climate neutrality and zero pollution by developing offshore renewable energy and greening maritime transport and ports	11	25	0
	Reducing human impacts on natural capital and combatting pollution through a circular economy	13	23	0
	Protecting and investing in nature through conservation and restoration	11	25	0
	Increasing coastal resilience to climate change through nature-based solutions	4	32	0
	Supporting responsible food systems through better use of marine resources and alternative sources for food and feed	5	31	0

Table 3: Reviewed policies that positively (green), neutral (no colour), or negatively (red) reflect the EGD objectives.

In the following sub-sections of Chapter 3, the review of the 36 policies in support of the EGD is structured to examine three aspects: objectives, policy framing, and instruments. As these aspects are interlinked, we discuss how these facets of the policies relate to the EGD's objectives in a narrative manner, considering them together. Each subsequent section from 3.2 to 3.6 focuses on one of the EGD's strategy, detailing the most evident supportive policies identified though our assessment exercise.

3.2 The 2030 Climate Target Plan

The 2030 Climate Target Plan, integral to the EU's environmental strategy, focuses on two primary objectives:

1. Achieving climate neutrality by 2050.
2. Reducing net GHG emissions by at least 55 per cent by 2030 compared to 1990 levels.

Table 4 below presents a combined result of the reviewed policies, showing their link to the two overarching objectives of the 2030 Climate Target Plan.

Policy name	2030 Climate Target Plan	
	1	2
8th Environmental Action Programme		
Alternative Fuels Infrastructure Regulation		
Bathing Water Directive		
Birds Directive		
Common Agricultural Policy		
Common Fisheries Policy		
Corporate Sustainability Reporting Directive		
Energy Taxation Directive		
Environmental Impact Assessment Directive		
Environmental Quality Standards Directive		
EU Action Plan on fisheries		
European Climate Law		
Floods Directive		
Fuel EU Maritime Regulation		
Governance of the Energy Union and Climate Action		
Habitats Directive		
Industrial Emissions Directive		
Marine Strategy Framework Directive		
Maritime Spatial Planning Directive		
Nitrate Directive		
Offshore oil and gas safety Directive		
Packaging and Packaging Waste Directive		
Persistent Organic Pollutants Regulation		
Proposed Nature Restoration Law		
Proposed Revision of the REPowerEU		
REACH Regulation		
Seveso III Directive		
Ship Recycling Regulation		
Ship Source Pollution Directive		
Single-Use Plastics Directive		
Strategic Environmental Assessment Directive		
Sustainable Use Regulation		
Taxonomy Regulation and Delegated Acts		
Urban Wastewater Treatment Directive		
Waste Shipment Regulation		
Water Framework Directive		
Number of positive policies	12	11
Number of neutral policies	24	25
Number of negative policies	0	0

Table 4: Policy assessment – The 2030 Climate Target Plan showing policies positive (in green), neutral (no colour) or negative (in red) for the two targets.

In the evaluation of the 36 policies, a distinct pattern emerges concerning their link to the objectives of the 2030 Climate Target Plan. Eleven of these policies are found to have direct positive effects on the Plan's objectives, with the majority linked to initiatives within the energy and transport sectors. These sectors are principally managed by the Directorate-General for Energy (DG ENER) and the Directorate-General for Mobility and Transport (DG MOVE), indicating a policy framing that supports the transition to climate neutrality. The remaining 24/25 policies appear to have no direct link to the objectives specified in the strategy.

The majority of policies contributing positively to the Climate Action Plan's objectives are related to the energy and transport sectors. The EU's climate targets are legally embedded through the EU Climate Law. The proposed revision of the REPowerEU Directive sets targets for an increased use of renewable energy resources, and the Alternative Fuel Infrastructure Regulation is designed to support the green transition in the transport sector through infrastructure requirements. The proposal for the Energy Taxation Directive aims to make fossil-free energy sources more competitive in the market. Decarbonisation in the shipping sector is supported through the Maritime Fuel Regulation, while emission reductions in the industrial sector are promoted through the Industrial Emissions Directive.

In addition to policies designed to meet the EU Climate Target Plan's emission reduction objectives through mitigation measures within the energy and transport sectors, other policies contribute to these objectives by enhancing natural carbon sinks or through indirect mechanisms. The CAP directly references the climate objectives, aiming to achieve them by minimising synthetic inputs, increasing soil carbon sequestration, and promoting renewable energy production.

The upcoming NRL emphasises the role of restored ecosystems in addressing climate change through the restoration of natural carbon sinks. Another pathway to achieving climate mitigation targets is through redirecting financial streams towards green investments. The CSRD ensures that financial markets have access to sustainability information, allowing financial institutions to redirect investments and reduce the carbon footprint.

3.3 The Climate Change Adaptation Strategy

The Climate Change Adaptation Strategy, adopted by the EC on 24 February 2021 aims to create:

1. A climate resilient society, fully adapted to climate change impacts by 2050.

This strategy is directly linked to key international agreements and EU directives, including the European Climate Law which mandates national adaptation strategies and plans. Table 5 below shows an overview of the reviewed policies, showing how they reflect the main objective of the strategy investigated in this report.

Policy name	Climate Change Adaptation Strategy objective
	1
8th Environmental Action Programme	
Alternative Fuels Infrastructure Regulation	

Policy name	Climate Change Adaptation Strategy objective
	1
Bathing Water Directive	
Birds Directive	
Common Agricultural Policy (CAP)	
Common Fisheries Policy	
Corporate Sustainability Reporting Directive	
Energy Taxation Directive	
Environmental Impact Assessment Directive	
Environmental Quality Standards Directive	
EU Action Plan on fisheries	
European Climate Law	
Floods Directive	
Fuel EU Maritime Regulation	
Governance of the Energy Union and Climate Action	
Habitats Directive	
Industrial Emissions Directive	
Marine Strategy Framework Directive	
Maritime Spatial Planning Directive	
Nitrate Directive	
Offshore oil and gas safety Directive	
Packaging and Packaging Waste Directive	
Persistent Organic Pollutants Regulation	
Proposed Nature Restoration Law	
Proposed Revision of the REPowerEU	
REACH Regulation	
Seveso III Directive	
Ship Recycling Regulation	
Ship Source Pollution Directive	
Single-Use Plastics Directive	
Strategic Environmental Assessment Directive	
Sustainable Use Regulation	
Taxonomy Regulation and Delegated Acts	
Urban Wastewater Treatment Directive	
Waste Shipment Regulation	
Water Framework Directive	
Number of positive policies	8
Number of neutral policies	28
Number of negative policies	0

Table 5: Policy assessment – The Climate Change Adaptation Strategy showing policies positive (in green), neutral (no colour) or negative (in red) for the target.

Among the 36 policies reviewed, nine have been identified as pertinent to the objectives of the Climate Change Adaptation Strategy. Of these, eight policies are recognised for their positive

contribution towards realising a climate-resilient society by 2050. The remaining 28 policies, included in this assessment, are deemed not to have a direct correlation with the strategy's outlined objectives.

The nine contributory policies are varied, covering sectors from agriculture and fuel – as exemplified by the Alternative Fuels Infrastructure Regulation and the Fuel EU Maritime Regulation – to more protection-focused directives such as the Floods Directive and the proposed NRL. This is in addition to broader, cross-cutting measures like the Taxonomy Regulation.

3.4 The Biodiversity Strategy for 2030

The EU Biodiversity Strategy for 2030 has the following ambitious vision and goal:

1. To ensure that by 2050, all of the world's ecosystems are restored, resilient, and adequately protected (vision).
2. Europe's biodiversity is on the path to recovery by 2030 (goal).

Additionally, the strategy encompasses nine sub-objectives relevant to the marine environment:

3. At least 30 per cent of the EU's Sea area is legally protected, with the integration of ecological corridors, by 2030.
4. Strict protection for a minimum of 10 per cent of the EU's Sea area by 2030.
5. Effective management of all protected areas by 2030.
6. Restoration objectives: Significant areas of ecosystems are restored, habitats and species show no deterioration, and at least 30 per cent reach favourable status or exhibit a positive trend by 2030.
7. The risk and use of chemical pesticides are reduced by 50 per cent by 2030.
8. The number of Red List species threatened by invasive alien species is reduced by 50 per cent by 2030.
9. Nutrient losses from fertilisers are reduced by 50 per cent by 2030.
10. Negative impacts on sensitive species and habitats, including on the seabed through fishing and extraction activities, are substantially reduced by 2030.
11. By-catch of species is eliminated or reduced to a level that allows for species recovery and conservation by 2030.

Table 6 below presents an overview of the reviewed policies, highlighting their relation to objectives of the strategy as investigated in this report.

Policy name	**Biodiversity Strategy for 2030 objectives**										
	1	2	3	4	5	6	7	8	9	10	11
8th Environmental Action Programme	■	■									
Alternative Fuels Infrastructure Regulation											
Bathing Water Directive	■	■				■					
Birds Directive	■	■	■		■	■				■	
Common Agricultural Policy (CAP)		■					■		■		
Common Fisheries Policy	■	■	■	■	■	■		■		■	■

Policy name	Biodiversity Strategy for 2030 objectives										
	1	2	3	4	5	6	7	8	9	10	11
Corporate Sustainability Reporting Directive											
Energy Taxation Directive											
Environmental Impact Assessment Directive											
Environmental Quality Standards Directive											
EU Action Plan on fisheries											
European Climate Law											
Floods Directive											
Fuel EU Maritime Regulation											
Governance of the Energy Union and Climate Action											
Habitats Directive											
Industrial Emissions Directive											
Marine Strategy Framework Directive											
Maritime Spatial Planning Directive											
Nitrate Directive											
Offshore oil and gas safety Directive											
Packaging and Packaging Waste Directive											
Persistent Organic Pollutants Regulation											
Proposed Nature Restoration Law											
Proposed Revision of the REPowerEU											
REACH Regulation											
Seveso III Directive											
Ship Recycling Regulation											
Ship Source Pollution Directive											
Single-Use Plastics Directive											
Strategic Environmental Assessment Directive											
Sustainable Use Regulation											
Taxonomy Regulation and Delegated Acts											
Urban Wastewater Treatment Directive											
Waste Shipment Regulation											
Water Framework Directive											
Number of positive policies	20	20	6	4	7	13	3	2	4	11	2
Number of neutral policies	16	16	30	32	29	23	33	31	32	25	34
Number of negative policies	0	0	0	0	0	0	0	0	0	0	0

Table 6: Policy assessment – The Biodiversity Strategy for 2030 showing policies positive (in green), neutral (no colour) or negative (in red) for the eleven targets.

In the scoring, 23 policies out of the 36 policies have been identified as reflecting the main goal or specific objectives of the Biodiversity Strategy for 2030. These policies predominantly exhibit a positive (green) rating, indicating alignment and potential to facilitate the Strategy's goals. The remaining 14 assessed policies do not appear to directly reflect any of the Biodiversity Strategy for 2030's goal and objectives.

All the objectives of the strategy have been covered by the policies, thus no obvious gaps between objectives and policies can be identified at an initial glance. Certain objectives have a

large number of policies with a strong connection to them, notably 'Significant areas of ecosystems restored, habitats and species show no deterioration, at least 30 per cent reach favourable status or positive trend by 2030' (13 policies) and 'Negative impacts on sensitive species and habitats, including on the seabed through fishing and extraction activities, are substantially reduced by 2030' (11 policies), with a majority of the policies strongly connected to the Biodiversity Strategy having a link to one or both of these objectives. Notably though, some of the objectives are supported by a comparatively limited number of policies, this may have implications for the delivery of these objectives and should be further assessed. However, it should also be considered that the quality and coherent implementation of fewer well-targeted policies could potentially be more effective than a greater number of less focused, poorly coordinated policies.

Among the assessed policies, the CFP and the EU Action Plan on fisheries stand out as having a strong connection to a wide array of objectives – when considering policy documents. They are also the only policies connected to two of the objectives: 'Number of Red List species threatened by invasive alien species is reduced by 50 per cent by 2030" (eight policies) and "By-catch of species is eliminated or reduced to a level that allows species recovery and conservation by 2030" (11 policies). On the other hand, the 8th Environmental Programme, while strongly aligned with the overall goal of the strategy and the objective of 'Europe's biodiversity is on the path to recovery by 2030', it appears neutral towards the other objectives (three to eleven). Meanwhile, four of the policies – the Bathing Water Directive, Governance of the Energy Union and Climate Action, REACH Regulation, and Taxonomy Regulation and Delegated Acts – only reflect a single objective.

In examining the policy framing and instruments of these policies impacting the Biodiversity Strategy for 2030, a wide range of sectors involved. The policies mainly focus on environmental protection, sustainable resource management, and climate action, indicating a broad approach to biodiversity conservation. This approach is coordinated by several Directorates-General, with the Directorate-General for Environment (DG ENV) and the Directorate-General for Maritime Affairs and Fisheries (DG MARE) playing key roles. The policies use a mix of regulatory measures, conservation initiatives, and sustainable management practices.

3.5 The Zero Pollution Action Plan

The Zero Pollution Action Plan aims to guide the EU towards significantly reducing pollution by 2050. The vision of the Plan for 2050 is:

1. Pollution is reduced to levels that are no longer considered harmful to human health and ecosystems.

The vision is supported by six objectives of which the following five are applicable to CrossGov and have been used in this assessment:

2. Reduce health impacts (premature deaths) of air pollution by more than 55 per cent by 2030.
3. Reduce by 25 per cent EU ecosystems where air pollution threatens biodiversity by 2030.

4. Reduce by 50 per cent nutrient losses, use and risk of chemical pesticides, sale of antimicrobials for farmed animals and aquaculture by 2030.
5. Reduce by 50 per cent plastic litter at sea and by 30 per cent microplastics released into the environment by 2030.
6. Significantly reduce total waste generation by 2030.

Table 7 below shows an overview of the reviewed policies, highlighting their relation to the main objective of the strategy investigated in this report.

Policy name	**Zero Pollution Action Plan's objectives**					
	1	2	3	4	5	6
8th Environmental Action Programme	■					
Alternative Fuels Infrastructure Regulation						
Bathing Water Directive	■					
Birds Directive	■					
Common Agricultural Policy (CAP)	■			■		
Common Fisheries Policy	■					
Corporate Sustainability Reporting Directive						
Energy Taxation Directive			■			
Environmental Impact Assessment Directive						
Environmental Quality Standards Directive	■					
EU Action Plan on fisheries						
European Climate Law						
Floods Directive						
Fuel EU Maritime Regulation						
Governance of the Energy Union and Climate Action		■	■			
Habitats Directive						
Industrial Emissions Directive	■	■	■			
Marine Strategy Framework Directive	■					
Maritime Spatial Planning Directive						
Nitrate Directive	■			■		
Offshore oil and gas safety Directive	■					
Packaging and Packaging Waste Directive	■				■	■
Persistent Organic Pollutants Regulation	■					
Proposed Nature Restoration Law						
Proposed Revision of the REPowerEU			■			
REACH Regulation	■			■		
Seveso III Directive	■					
Ship Recycling Regulation						
Ship Source Pollution Directive	■					
Single-Use Plastics Directive	■				■	■
Strategic Environmental Assessment Directive						
Sustainable Use Regulation	■			■		
Taxonomy Regulation and Delegated Acts	■					

Urban Wastewater Treatment Directive						
Waste Shipment Regulation						
Water Framework Directive						
Number of positive policies	20	2	4	4	2	2
Number of neutral policies	16	34	32	32	34	34
Number of negative policies	0	0	0	0	0	0

Table 7: Policy assessment – The Zero Pollution Action Plan showing policies positive (in green), neutral (no colour) or negative (in red) for the six targets.

In total, 22 of the 36 assessed policies were identified as relevant to the objectives of the Zero Pollution Action Plan. The remaining 14 policies included in the assessment are considered to not reflect the objectives outlined in the plan.

The 22 policies contributing to the aims of the Zero Pollution Action Plan span a range of environmental, agricultural, and industrial sectors, each playing a part in the multifaceted approach required to tackle pollution comprehensively. They collectively form a framework aimed at mitigating pollution through various means, such as stricter emissions standards, enhanced waste management practices, and the promotion of sustainable agricultural techniques. Although most of these policies positively contribute to only one of the Zero Pollution Action Plan's objectives, the Industrial Emissions Directive, the Packaging and Packaging Waste Directive, and the Single-Use Plastics Directive all contribute to three objectives, hence they are important policies for the achievement of the Plan.

3.6 The Sustainable Blue Economy Strategy

The main objectives of the Sustainable Blue Economy Strategy are respectively:

1. Achieving climate neutrality and zero pollution by developing offshore renewable energy and greening maritime transport and ports.
2. Reducing human impacts on natural capital and combatting pollution through a circular economy.
3. Protecting and investing in nature through conservation and restoration.
4. Increasing coastal resilience to climate change through nature-based solutions.
5. Supporting responsible food systems through better use of marine resources and alternative sources for food and feed.

The priorities set out in the Sustainable Blue Economy Strategy are an integral part of the EU's action plan to achieve a clean and circular economy, mitigate climate change, protect, and preserve biodiversity, as well as minimise pollution. Table 8 below shows an overview of the policies, identifying those that reflect the five objectives of the Sustainable Blue Economy Strategy.

Policy name	**Sustainable blue Economy objectives**				
	1	2	3	4	5
8th Environmental Action Programme					
Alternative Fuels Infrastructure Regulation					
Bathing Water Directive					
Birds Directive					

Policy name	Sustainable blue Economy objectives				
	1	2	3	4	5
Common Agricultural Policy (CAP)					
Common Fisheries Policy					
Corporate Sustainability Reporting Directive					
Energy Taxation Directive					
Environmental Impact Assessment Directive					
Environmental Quality Standards Directive					
EU Action Plan on fisheries					
European Climate Law					
Floods Directive					
Fuel EU Maritime Regulation					
Governance of the Energy Union and Climate Action					
Habitats Directive					
Industrial Emissions Directive					
Marine Strategy Framework Directive					
Maritime Spatial Planning Directive					
Nitrate Directive					
Offshore oil and gas safety Directive					
Packaging and Packaging Waste Directive					
Persistent Organic Pollutants Regulation					
Proposed Nature Restoration Law					
Proposed Revision of the REPowerEU					
REACH Regulation					
Seveso III Directive					
Ship Recycling Regulation					
Ship Source Pollution Directive					
Single-Use Plastics Directive					
Strategic Environmental Assessment Directive					
Sustainable Use Regulation					
Taxonomy Regulation and Delegated Acts					
Urban Wastewater Treatment Directive					
Waste Shipment Regulation					
Water Framework Directive					
Number of positive policies	12	13	12	4	5
Number of neutral policies	24	23	24	32	31
Number of negative policies	0	0	0	0	0

Table 8: Policy assessment – The Sustainable Blue Economy Strategy showing policies positive (in green), neutral (no colour) or negative (in red) for the five targets.

Among the assessed 36 policies, 30 were identified as relevant to the objectives of the EU Sustainable Blue Economy Strategy. This includes 12 policies supporting the first objective of achieving climate neutrality and zero pollution by developing offshore renewable energy, greening maritime transport, and ports. A further 13 policies align with the second objective, aiming to reduce human impacts on natural capital and combat pollution through a circular

economy. Additionally, 12 policies are in line with the third objective, focusing on protecting and investing in nature through conservation and restoration efforts. Only four policies support the fourth objective, which is to increase coastal resilience to climate change through nature-based solutions. Similarly, only five policies support the fifth objective of supporting responsible food systems through better use of marine resources and alternative sources for food and feed.

Notably, certain policies such as the CSRP, the EIA Directive, the Seveso III Directive, the Shipping Recycling Regulation, the SEA Directive, and the Waste Shipment Regulation do not appear to reflect the EU Sustainable Blue Economy Strategy's targets. The 8th Environmental Programme stands out for its support across all five objectives, demonstrating a comprehensive approach.

Interestingly, policies like the Alternative Fuels Infrastructure Regulation, the CFP, the Energy Taxation Directive, the European Climate Law, the Fuel EU Maritime Regulation, the Governance of the Energy Union and Climate Action, the Offshore Oil and Gas Safety Directive, and the Ship Source Pollution Directive, collectively address essential elements such as reducing emissions, promoting alternative fuels, and ensuring sustainable fishing practices in the maritime sector. However, when considering the broader spectrum of the Strategy's objectives, particularly those related to reducing human impacts on natural capital through a circular economy, protecting and investing in nature, and increasing coastal resilience through nature-based solutions, these goals appear to be less reflected in the policies. In other words, while they clearly reflect goals related to addressing climate and pollution concerns in maritime activities, their roles in directly supporting circular economy initiatives, conservation, and restoration of marine ecosystems, and enhancing coastal resilience are less pronounced.

3.7 Synthesis of policies assessed against the European Green Deal

Table 9 below presents an overview of the 36 policies reviewed, showing that specific policy targets reflect EGD goals in a total of 203 instances, whereby neutral links were identified a total of 697 times, and no negative instances were identified. The overall landscape reveals general alignment between the assessed EU policies and the environmental objectives of the strategic plans. Most (33) of the policies assessed appear (i.e., on paper) to reflect at least one or more of the environmental objectives of the EGD according to the objectives set out in policy documents.

A closer look into the assessments above and the synthesizing table allows us to provide several more specific tentative observations, which may be worthy of further investigation. Certain policies emerge reflecting multiple strategic objectives, thus potentially contributing to numerous EGD goals. The 8th Environmental Programme demonstrates extensive alignment of objectives across various strategies. In this case, it is perhaps unsurprising as the policy was explicitly designed to be a cross-cutting and expansive programme to underpin the EU's efforts towards the EGD. Other policies stand out in their reflection of multitude of EGD objectives, these include the CAP, the MSFD, CFP, NRL, IED, and the ND. These policies reflect (i.e., on paper) nine or more EGD objectives simultaneously. However, it should be clearly noted, that while these policies may reflect objectives of the EGD on paper, no conclusion is made as to how this impacts the EGD objectives in practice. A clear example is the CAP, which is predominantly underpinning the agricultural sector through various means (e.g., subsidies)

with well-known impacts on the marine environment. Policies such as the SEA and EIA Directives, as well as MSPD, perhaps unsurprisingly do not demonstrate a positive reflection of any EGD targets, but this may be explained by them being more process-oriented in nature. In addition, the Ship Recycling Regulation and Waste Shipment Regulation, were also not identified as being reflective of any specific EGD targets according to the policy documents. Although it should be mentioned that the geographical scope of the Ship Recycling Regulation is not limited to Europe but instead to flag state control or port state control in the EU.

Another observation is that very few of the policies reflect objectives within all five selected EGD themes. Interestingly, only the CAP, IED, and the Taxonomy Regulation reflect one or more objectives within all five EGD strategies. In addition, certain EGD objectives are only reflected in the goals of a very limited number of EU policies. Three out of five important objectives of the Zero Pollution Action Plan are reflected by two policies. Similarly, three out of eleven objectives of the Biodiversity Strategy are reflected by two or three policies. In sum, the overall policy landscape appears to reflect either positively or neutrally to the goals set forth by the EGD.

Policy name	2030 Climate Target Plan		Climate Change Adaptation	Biodiversity Strategy for 2030											Zero Pollution Action Plan						Sustainable Blue Economy Strategy					Total number reflecting objectives
Respective objectives	1	2	1	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	1	2	3	4	5	
8th Environmental Programme	■	■	■	■	■										■						■	■	■	■	■	11
Alternative Fuels Infrastructure Regulation	■	■	■																		■					4
Bathing Water Directive				■	■				■						■							■	■			6
Birds Directive				■	■	■		■	■				■		■								■			8
CAP	■	■	■		■					■		■			■			■				■			■	10
CFP				■	■	■	■	■	■		■		■	■	■						■				■	12
CSRD	■	■																								2
Energy Taxation Directive	■	■															■				■					4
EIA Directive																										0
Environmental Quality Standards Directive				■								■	■		■							■				5
EU Action Plan on fisheries				■	■	■	■	■	■		■		■	■									■		■	11
European Climate Law	■	■																			■					3
Floods Directive			■																					■		2
Fuel EU Maritime Regulation	■	■	■																		■					4
Governance of the Energy Union and Climate Action	■	■	■		■								■			■	■				■					8
Habitats Directive				■	■	■	■	■	■				■										■			8
IED	■	■		■	■				■						■	■	■					■				9
MSFD				■	■	■		■	■						■								■	■		8
MSPD				■	■																■		■		■	5
Nitrate Directive				■	■				■			■	■		■			■				■	■			9

Policy name	2030 Climate Target Plan		Climate Change Adaptation	Biodiversity Strategy for 2030											Zero Pollution Action Plan						Sustainable Blue Economy Strategy					Total number reflecting objectives
Respective objectives	1	2	1	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	1	2	3	4	5	
Offshore oil and gas safety Directive				■	■			■					■		■						■					6
Packaging and Packaging Waste Directive															■				■	■		■				4
Persistent Organic Pollutants Regulation				■	■								■		■							■				5
Proposed Nature Restoration Law	■	■	■	■	■	■	■		■												■		■	■		11
Proposed Revision of the REPowerEU	■	■															■				■					4
REACH Regulation				■	■					■					■			■				■				6
Seveso III Directive															■											1
Ship Recycling Regulation																										0
Ship Source Pollution Directive															■						■					2
Single-Use Plastics Directive				■	■				■				■		■				■	■		■				8
Strategic Environmental Assessment Directive																										0
Sustainable Use Regulation				■	■				■	■					■			■				■				7
Taxonomy Regulation and Delegated Acts	■		■	■	■				■						■							■	■			8
Urban Wastewater Treatment Directive				■	■				■			■			■							■	■			7
Waste Shipment Regulation																										0
WFD				■				■					■		■								■			5
Total positive policies	12	11	8	20	20	6	4	7	13	3	2	4	11	2	20	2	4	4	2	2	12	13	12	4	5	203
Total neutral policies	24	25	28	16	16	30	32	29	23	33	34	32	25	34	16	34	32	32	34	34	24	23	24	32	31	697
Total negative	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 9: Overview of the assessed policies and how they reflect the EGD objectives related to the five strategies and plans.

4 Policy coherence in support of the European Green Deal

While the previous Chapter explored how the EU policy landscape reflects the EGD strategies and their objectives, this Chapter provides a brief insight into the remaining coherence attributes reflected in the selected policies. This Chapter aims to provide a general and introductory discussion on policy instruments and mechanisms, stakeholders, institutions, and science and knowledge to explore how (or if) they are captured in policy documents. As many of the policies are relevant to multiple EGD strategies, they are discussed here in relation to these specific coherence attributes while highlighting EGD strategies where possible. The focus in this section is on providing a few selected examples based on the review, but no in-depth assessment has been made, as this will be explored in future CrossGov research.

4.1 Policy instruments and mechanisms

Policy instruments are market-based instruments (for example quotas, emission trading, subsidies), legal instruments (including prohibitions, reporting and monitoring, enforcement mechanisms, compliance committees), voluntary instruments (including awareness-raising campaigns, education, trainings, public campaigns, and a range of other instruments important for the implementation of policies including plans, programs, strategies, standards, assessments, and more.

The 8th Environmental Programme sets up a monitoring framework and governance mechanisms enabling the Commission to track progress, assisted by the EEA and ECHA as outlined in Article 4. The programme streamlines annual monitoring, assessment, and reporting processes with existing frameworks to reduce administrative burdens. Not only this Programme, but also the forthcoming Nature Restoration Law stands out for its robust monitoring framework. These frameworks are structured to enhance coherence with existing indicators and regulations, such thereby supporting alignment of policy implementation.

The forthcoming NRL explicitly requires MS to identify synergies with climate change mitigation, adaptation, and disaster prevention, and coordinate with the designation of renewable energy go-to areas (under Directive 2018/2001). In the context of preparing national restoration plans, MS must consider measures under directives related to biodiversity, environmental status, and air pollution, and national restoration plan must include a section on how the plan considers climate change adaptation. Regarding monitoring, MS must ensure that indicators for agricultural and forest ecosystems are monitored consistently with the monitoring requirements under Regulations (EU) 2018/841 and (EU) 2018/1999. Reporting under the NRL is intended to connect to reporting under the Habitats and Birds Directives, the WFD, and the MSFD.

The Floods Directive also mandates MS to perform assessments, establish flood maps, and formulate risk management plans, ensuring thorough coordination with other authorities, including transnational collaboration. Article 9 requires MS to synchronise the application of this Directive with that of the WFD, to optimise efficiency and create synergistic outcomes. The Floods Directive thus suggests a means to facilitate collaboration between authorities responsible for the WFD and the Floods Directive. This coordination also extends to international river basins, where MS must produce single international flood risk management

plans or alternatives, focusing on reducing potential consequences of flooding across various sectors.

The MSPD advocates for cross-sectoral planning and requires MS to report on the implementation of maritime spatial plans. While it promotes cross-sectoral planning and emphasises land-sea interactions and the coexistence of relevant activities, it is noteworthy that beyond the reporting on the maritime spatial plans, the MSPD does not set further reporting obligations on MS, with the EC being the only body required to monitor the implementation of the Directive.

Plans and strategies, in a broad understanding, are instruments broadly incorporated in the policies and can, in addition to the policies mentioned above, also be found in transport and energy related policies. The Alternative Fuel Infrastructure Regulation requires infrastructure planning to be integrated into broader transport sector transitions, while the IED adopts an integrated pollution prevention approach aligned with related policies. Similarly, the Proposed REPowerEU Directive is designed (i.e., on paper) to be 'in sync' with national energy strategies, in an effort to ensure consistency in the energy transition process. It encourages joint monitoring where feasible, acknowledging regulatory burdens and suggesting future evaluations of policy interactions. Its reporting mechanism aims to be a structured, transparent, and iterative process between the EC and MS, underlining the importance of coherent policy deployment.

From a mere policy formulation perspective (i.e., on paper) however, some policies do not appear to aim for any coherence through their instruments. The Maritime Fuel Regulation and the Governance of the Energy Union and Climate Action Regulation are possible examples. The former lacks references to other policies in its instruments, while the latter does not consider other sectors in its planning and is devoid of monitoring or reporting provisions. Interestingly, policy instruments in the context of climate change tend to focus more narrowly on climate related objectives. To illustrate, the proposed revision of the REPowerEU, the Alternative Fuel Infrastructure Regulation, the Maritime Fuel Regulation, and the Industrial Emissions Directive, alongside the EU Climate Law, all rely on instruments such as quantitative emission targets, BAT requirements, and energy efficiency standards to drive climate mitigation efforts. Although these instruments may be important to achieve climate related EGD objectives, they do not explicitly support ancillary policy objectives.

Similarly, the CAP's payment schemes that appear (i.e., on paper) to be purposefully crafted to reinforce the implementation of EU-wide directives, fall short in terms of integrated instruments. While it requires strategic national plans and reporting to the Commission, these mechanisms are not interconnected with other policy areas. The Nitrate Directive though, aims to integrate voluntary agricultural practices.

In the area of fisheries, the CFP notably adopts a market-based method, bolstered by regulatory safeguards and voluntary initiatives. The management of fish stocks is planned through multi-annual plans that form the basis for conservation efforts. The MSFD and the WFD also require MS to manage water resources in multi-annual cycles. However, a joint monitoring programme between fishery policies and water quality policies is not evident, and reporting mechanisms are established individually for the different policies.

Ultimately, while some EU policies exhibit means to facilitate cross-policy considerations, others show limited or unclear connections. Planning is an important reoccurring instrument, as well as reporting. The potential variability in the extent to which policy instruments support or hinder coherence across policies and policy areas underscores the need to further explore this to achieve the objectives of the 2030 Climate Target Plan, EU Climate Change Adaptation Strategy, the Biodiversity Strategy for 2030, the Zero Pollution Action Plan, and the Blue Economy Strategy.

4.2 Stakeholders

The inclusion of stakeholders, including participatory mechanisms, in policy making and implementation processes is considered to support the integration of different information, knowledge, values, and ideas and fosters agreement and buy-in across different interest groups.

The policies related to the five strategies exhibit varied approaches to stakeholder involvement when reviewing the policy documents. While the majority require some degree of participation, the extent and nature of stakeholder involvement differ. For instance, the EU Climate Law and the Governance of the Energy Union and Climate Action Regulation provide detailed stakeholder engagement processes. The EU Maritime Fuel Directive mandates the involvement of port managers, public authorities, and relevant stakeholders in its decision-making processes. Similarly, the NRL specifies early stakeholder involvement, requiring national plans for nature restoration to incorporate public participation and consider local community needs. However, while it advocates for early public participation in developing national restoration plans, it lacks specific requirements for the extent of their involvement.

Along these lines, some policies like the IED and the MSPD generally emphasise stakeholder engagement but lack specific guidelines for implementation. The MSPD, for example, includes an article on public participation but does not provide detailed instructions for the consultation process. The Floods Directive is notable for integrating stakeholder engagement, mandating MS to involve the public in creating and updating flood risk management plans. The Taxonomy Regulation's establishment of a Platform on Sustainable Finance also suggests potential for stakeholder involvement across various sectors, although the specifics are yet to be defined.

In policies focusing on water quality, such as the MSFD and the WFD, stakeholder engagement is recognised as important, but detailed methods of involvement are not specified beyond ensuring public access to information. The EU Action Plan on fisheries highlights the role of stakeholder involvement in effective fisheries governance, exemplified by the advisory councils and the proposal of a joint working group on fisheries and nature conservation. Policies like the Nitrate Directive, Birds Directive, and Bathing Water Directive take a minimal approach to stakeholder engagement, primarily focusing on information access. In contrast, the Sustainable Use Regulation and the REACH Regulation adopt a more inclusive approach, with the former undergoing extensive consultation and the latter mandating public consultations and information dissemination.

In summary, most of the assessed policies acknowledge the importance of stakeholder engagement, but there is variability in the depth and methods of this involvement. Some policies set strong precedents for inclusive participation, while others offer less detail,

indicating potential areas for enhancing stakeholder involvement to foster coherence across policy implementation and between governance levels.

4.3 Institutions

Institutional structures and coordination mechanisms also play an important role in supporting policy coherence. Clearly designated institutional mandates help overcome barriers caused by blurred accountability or perceived loss of control and influence. Clear responsibilities also support institutional actors to collaborate, as institutional responsibilities are more easily known and understood amongst actors involved in the implementation of policies. In this regard, mechanisms and tools that support collaboration between institutions such as inter-ministerial committees, joint task forces, or other types of collaborative tools can underpin policy coherence through consistent cross-sectoral collaboration, underpinning joint decisions towards broader EGD objectives.

The institutional attributes of the 36 assessed policies demonstrate varying levels of specificity regarding mandates and coordination mechanisms. Responsibilities are typically shared between the EU level and the MS, but the degree of central EU control and MS discretion in implementation varies.

For the 2030 Climate Target Plan, the proposed revision of the REPowerEU Directive is directed by the EU's Energy Platform, an initiative of the EC, to coordinate EU actions in global energy markets. This platform aids in diversifying energy sources and aims to prevent competitive bidding among EU countries. Policies like the Alternative Fuel Infrastructure Regulation and the MSPD primarily delegate implementation to the MS, with minimal direction for inter-institutional cooperation. However, these policies, along with the Maritime Fuel Regulation, implicitly call for inter- or intra-institutional cooperation through alignment with other legislative instruments in renewable energy and infrastructure sectors.

The NRL, pivotal in both the Biodiversity Strategy for 2030 and the EU Climate Change Adaptation Strategy, while not explicitly designating institutional responsibilities, encourages synergies with climate change mitigation and adaptation, as well as renewable energy projects, hinting at an inherent need for cooperative processes at the national level. The MSPD and NRL both emphasise the importance of cross-border collaboration, advocating for cooperation on plans under Regional Sea Conventions and for joint efforts in ecosystem restoration across national borders.

In the context of the EU Climate Change Adaptation Strategy, the Floods Directive mandates strong coordination between authorities responsible for the WFD and the Floods Directive, exemplifying structured inter-institutional coordination within the EU and fostering coherence. The Taxonomy Regulation, related to the Zero Pollution Action Plan, advances this approach by establishing the Platform on Sustainable Finance. This platform advises the Commission on sustainable finance policies, helping to foster policy coherence across various domains.

In the context of the Biodiversity Strategy for 2030, the responsibility for successful biodiversity protection and restoration primarily lies with the MS, though supported by the EC. The EFCA and the EFSA assure compliance with the CFP, while the REACH Regulation's establishment of the ECHA and the Directorate-General for Energy's (ENER) administration

of the proposed revision of the REPowerEU Directive underscore the EU-level institutional involvement.

In the context of the Zero Pollution Action Plan, a wide range of EU institutions, MS, and national agencies are involved. While the Bathing Water Directive and the MSFD assign significant responsibilities to MS, other policies like the Nitrate Directive and the Single-Use Plastics Directive acknowledge different institutional roles but often lack detailed coordination provisions.

In summary, the EU environmental policy landscape features a blend of EU coordination and MS-led implementation, with varying degrees of inter-institutional collaboration. While some policies demonstrate structured collaboration mechanisms, others allow for greater national-level discretion, reflecting the multifaceted nature of environmental governance within the EU.

4.4 Science and knowledge

Science and knowledge are fundamental components in the execution and effectiveness of EU policies, particularly those aimed at environmental and climate change strategies. Building a shared information and knowledge base between policies, supports coherent decision making across the policy cycle. While the approaches vary, there is a common thread of seeking to bridge the gap between scientific research, policy-making, and societal impact.

The 8th Environmental Programme is significant in its commitment to using BAT and improving the relevance of data and indicators within its monitoring framework. It highlights the need to build knowledge on systemic change, ecological tipping points, and the intersections between environmental, health, social, and economic impacts. However, its approach to integrating science and knowledge into policy implementation, particularly in terms of interaction with other policies, is not explicitly detailed.

In contrast, the IED and the CAP demonstrate more concrete approaches. The IED mandates the application of BAT and the continuous review of knowledge, thereby promoting the role of science-policy-society interfaces. The CAP's Agricultural Knowledge and Innovation Systems (AKIS) link various stakeholders to share knowledge and best practices, showing the importance of science in sustainable agricultural management.

The EU Climate Law stands out for promoting science-based policies at both the national and EU levels. It encourages MS to establish national climate advisory bodies, complementing the European Scientific Advisory Board on Climate Change, which provides expert guidance at the EU level.

The MSPD and the forthcoming NRL emphasise incorporating scientific knowledge into decision-making processes. However, it does not specify how data should be shared or used, leaving significant discretion to MS.

The CSRD, while not directly addressing the science-policy-society interface, necessitates the reliance on or generation of scientific evidence in sustainability reporting. This indirect engagement with scientific knowledge underlines its importance in corporate accountability.

Policies like the Alternative Fuels Infrastructure Regulation, though setting specific infrastructure targets, lack explicit requirements for knowledge building at the national level, which could be a missed opportunity for enhancing the science-policy interface in energy transition strategies.

In fisheries management, the CFP exemplifies the crucial role of science in determining the Maximum Sustainable Yield (MSY), central to sustainable fishing practices. The process of determining MSY includes consultations with scientific bodies like the International Council for the Exploration of the Sea (ICES) and the Scientific, Technical and Economic Committee for Fisheries (STECF) for data, which is also supported by the EU Action Plan on fisheries. While the CFP mentions the use of the best scientific data, the connection and sharing of such data with other policy processes are not explicitly clear. For water quality policies, the MSFD and the WFD reference the use of scientific data and knowledge. The proposed NRL also states that MS shall consider the latest scientific evidence in identifying necessary restoration measures. However, these policies are less conclusive regarding the source, integration, and usage of scientific data.

Overall, while the importance of science and knowledge is recognised across EU policies, the extent to which this recognition translates into effective science-policy-society interfaces varies. Some policies demonstrate well-established platforms for integrating science and knowledge, while others exhibit a more indirect or less detailed approach. This variance highlights both the challenges and opportunities in enhancing the role of scientific understanding in policy development and implementation, and not least, policy coherence.

5 Conclusion

This report aimed to provide a mapping of the EGD policy landscape relevant to the marine domain and the CrossGov project as well as offer a general discussion on policy coherence based on the CrossGov Assessment Framework. A total of 36 policies were selected and mapped against five EGD strategies, namely the 2030 Climate Target Plan, the EU Climate Change Adaptation Strategy, the Biodiversity Strategy for 2030, the Zero Pollution Action Plan, and the Sustainable Blue Economy Strategy. These five strategies lay out a total of 25 specific objectives to implement the vision of the EGD, identified as relevant to the marine domain and the focus of the CrossGov project – i.e. climate change, biodiversity loss, and pollution.

The results reveal that some of the 36 policies reflect more with the EGD objectives than others. A total of 203 instances where policy objectives reflect the EGD's objectives in addressing climate change, biodiversity preservation, and pollution were identified when considering what is laid out in the policy documents and what they intend to do. This is covered by 32 policies. In addition, some policies, namely the EIA and SEA Directives, were not identified to have either positive or negative alignment with any of the EGD objectives. This is most likely due to their primarily process-oriented nature, where their main function is to provide cross-cutting support across policy domains. Regarding policy framing and mainstreaming, some policies exhibit strong interconnections and mutual reinforcement, which could contribute to achieving the overarching goals, while others present clear opportunities for improved alignment. Ultimately, while the assessment provides an initial screening of considerations into the

coherence of policies and the EGD, conclusive results can only be developed through a further and more in-depth study of policy coherence (forthcoming in CrossGov).

An introductory view into additional coherence attributes of the 36 reviewed policies identified both positive examples as well as areas which must be explored further in regard to policy design and coherence. Looking into policy instruments, the EU applies a broad scope of regulatory, market-based, and voluntary instruments offering a mix of instruments to take action towards EGD objectives. Of particular importance is the role of the MS in implementing several EU policies and will be explored in future assessments of the CrossGov project.

Regarding institutional roles and mechanisms, as well as stakeholder engagement, some policies outline clear institutional mandates and detailed strategies for stakeholder participation, possibly fostering an approach to policy execution which helps to ensure the cross-fertilisation of actors, knowledge, and considerations across diverse policy domains. However, other policies lack specificity in these areas, indicating potential gaps in ensuring coherent policy implementation. Increasing clarity and ensuring well-understood actions for institutional roles and strong mechanisms for exchange, as well as stakeholder inclusion off the potential to enhance policy coherence during implementation and will be explored in more detail in upcoming CrossGov assessments.

An additional observation is the importance of integrated planning, monitoring, and reporting mechanisms in enhancing policy coherence. For instance, the Floods Directive and the MSPD seem to suggest effective cross-sectoral planning and coordination, which are important elements that other policy areas could emulate to ensure considerations for policy coherence are embedded in their design and ultimately their implementation.

Furthermore, the integration of scientific knowledge and data into policy development and implementation is evident across various policies, albeit to differing extents. The effective incorporation of science-policy-society interfaces is highlighted as a key factor in enhancing the efficacy and relevance of the policies. The review shows the need for further emphasis on these aspects to be explored in design across all policy domains to ensure that EU policies are not only environmentally sound but also socially inclusive and scientifically robust.

In conclusion, the EGD presents an ambitious and forward-looking vision for Europe. However, its success largely depends on the alignment of policy objectives and their coherent implementation. This report suggests that there is a significant need for future assessments into the design of policies and how this affects their capacity to achieve their objectives. At the same time, policy coherence, while embedded in the design of policies has the potential to be both reduced and amplified through policy implementation, requiring more study into specific cases of policy application in real-world examples.

References

Ashoff, G. (2005). Enhancing Policy Coherence for Development: Justification, Recognition and Approaches to Achievement. German Institute of Development and Sustainability GGmbH, DIE studies, 11.

Boteler, B., Giannopoulos, N., Passarello, C., Trevisanut, S. (2023). Deliverable 1.1: Scoping: Concretising the policy targets and developing key scenarios. Retrieved from: https://crossgov.eu/wp-content/uploads/2023/08/CrossGov_D1.1.-Green-Deal-Objectives-and-Scenarios192855226f323a3f738b788cd50d8fb95d4d8f1f801da614a9a7943f653785ed.pdf.

Candel, J. J. L., Biesbroek, R. (2016). Toward a Processual Understanding of Policy Integration. Policy Sciences 49 (3): 211–31. Retrieved from: https://doi.org/10.1007/s11077-016-9248-y.

Convention on Biological Diversity. (2022). COP15: Nations adopt four goals, 23 targets for 2030 in landmark UN biodiversity agreement. Retrieved from: https://www.cbd.int/article/cop15-cbd-press-release-final-19dec2022.

European Commission. (2018). A European Strategy for Plastics in a Circular Economy. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1516265440535&uri=COM:2018:28:FIN.

European Commission. (2019). The European Green Deal. COM (2019) 640 final. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2019%3A640%3AFIN.

European Commission. (2020). EU Biodiversity Strategy for 2030 - Bringing nature back into our lives. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52020DC0380.

European Commission. (2021). Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2021:82:FIN.

European Commission. (2021a). Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2021:82:FIN.

European Commission. (2021b). EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil'. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0400&qid=1623311742827.

European Commission. (2021c). On a new approach for a sustainable blue economy in the EU Transforming the EU's Blue Economy for a Sustainable Future. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2021:240:FIN.

European Commission. (2021d). Proposal for a Council Directive restructuring the Union framework for the taxation of energy products and electricity (recast). Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0563.

European Commission. (2021e). Proposal for a Directive amending Directive (EU) 2018/2001 of the European Parliament and of the Council, Regulation (EU) 2018/1999 of the European Parliament and of the Council and Directive 98/70/EC of the European Parliament and of the

Council as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0557.

European Commission. (2022). Proposal for a Regulation on the sustainable use of plant protection products and amending Regulation (EU) 2021/2115. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022PC0305.

European Commission. (2022a). Proposal for a Regulation on nature restoration (Text with EEA relevance). Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022PC0304.

European Commission. (2023). Communication on EU Action Plan: Protecting and restoring marine ecosystems for sustainable and resilient fisheries. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023DC0102.

European Council. (2019). A new strategic agenda for the EU 2019 – 2024. Retrieved from: https://www.consilium.europa.eu/en/eu-strategic-agenda-2019-2024/.

European Environment Agency. (2023). Human needs – the drivers of marine litter. Retrieved from: https://www.eea.europa.eu/publications/european-marine-litter-assessment/human-needs-the-drivers-of#:~:text=Plastic%20packaging%20and%20small%20plastic,These%20macroplastics%20pollute%20the%20water.

European Parliament and the Council. (1991). Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A31991L0676.

European Parliament and the Council. (1991a). Directive 91/271/EEC concerning urban waste-water treatment. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31991L0271.

European Parliament and the Council. (1992). Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31992L0043.

European Parliament and the Council. (1994). Directive 94/62/EC of 20 December 1994 on packaging and packaging waste. Retrieved from:https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31994L0062.

European Parliament and the Council. (2000). Directive 2000/60/EC establishing a framework for Community action in the field of water policy. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32000L0060.

European Parliament and the Council. (2001). Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32001L0042.

European Parliament and the Council. (2005). Directive 2005/35/EC on ship-source pollution and on the introduction of penalties for infringements. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32005L0035.

European Parliament and the Council. (2006). Directive 2006/7/EC concerning the management of bathing water quality and repealing Directive 76/160/EEC. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32006L0007.

European Parliament and the Council. (2006a). Regulation 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Text with EEA relevance). Retrieved from: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:136:0003:0280:en:PDF.

European Parliament and the Council. (2006b). Regulation (EC) No 1013/2006 on shipments of waste. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32006R1013.

European Parliament and the Council. (2007). Directive 2007/60/EC on the assessment and management of flood risks (Text with EEA relevance). Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32007L0060.

European Parliament and the Council. (2008). Directive 2008/105/EC on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council. Retrieved from: https://eur-lex.europa.eu/eli/dir/2008/105/oj.

European Parliament and the Council. (2008a). Directive 2008/56/EC establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive) (Text with EEA relevance). Retrieved from: https://eur-lex.europa.eu/legal-content/EN/NIM/?uri=CELEX:32008L0056.

European Parliament and the Council. (2009). Directive 2009/147/EC on the conservation of wild birds (codified version). Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32009L0147.

European Parliament and the Council. (2010). Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control) (Recast) (Text with EEA relevance). Retrieved from: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:334:0017:0119:en:PDF.

European Parliament and the Council. (2012). Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC (Text with EEA relevance) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32012L0018.

European Parliament and the Council. (2013). Regulation (EU) 1380/2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council

Decision 2004/585/EC. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013R1380.

European Parliament and the Council. (2013a). Directive 2013/30/EU on safety of offshore oil and gas operations and amending Directive 2004/35/EC (Text with EEA relevance). Retrieved from: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:178:0066:0106:en:PDF#:~:text=The%20objective%20of%20this%20Directive,establishing%20minimum%20conditions%20for%20safe.

European Parliament and the Council. (2013b). Regulation (EU) 1257/2013 on ship recycling and amending Regulation (EC) No 1013/2006 and Directive 2009/16/EC (Text with EEA relevance). Retrieved from: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:330:0001:0020:EN:PDF.

European Parliament and the Council. (2014). Directive 2014/52/EU amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (Text with EEA relevance). Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0052&rid=1.

European Parliament and the Council. (2014a). Directive 2014/89/EU establishing a framework for maritime spatial planning. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0089.

European Parliament and the Council. (2018). Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (Text with EEA relevance.). Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2018.328.01.0001.01.ENG.

European Parliament and the Council. (2019). Regulation (EU) 2019/1021 on persistent organic pollutants (recast) (Text with EEA relevance). Retrieved from: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32019R1021.

European Parliament and the Council. (2019a). Directive (EU) 2019/904 on the reduction of the impact of certain plastic products on the environment (Text with EEA relevance). Retrieved from: https://eur-lex.europa.eu/eli/dir/2019/904/oj.

European Parliament and the Council. (2020). The European Green Deal. Retrieved from: https://www.europarl.europa.eu/doceo/document/TA-9-2020-0005_EN.html.

European Parliament and the Council. (2020a). Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Text with EEA relevance). Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020R0852&from=EN.

European Parliament and the Council. (2021). Regulation (EU) 2021/1119 of the European Parliament and of the Council 0f 30 June 2021 Establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999

('European Climate Law'). Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32021R1119.

European Parliament and the Council. (2021a). Regulation (EU) 2021/2115 establishing rules on support for strategic plans to be drawn up by Member States under the common agricultural policy (CAP Strategic Plans) and financed by the European Agricultural Guarantee Fund (EAGF) and by the European Agricultural Fund for Rural Development (EAFRD) and repealing Regulations (EU) No 1305/2013 and (EU) No 1307/2013. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32021R2115.

European Parliament and the Council. (2021b). Regulation 2021/1119 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law'). Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R1119&from=EN#:~:text=This%20Regulation%20sets%20out%20a,Article%207%20of%20the%20Paris.

European Parliament and the Council. (2022). Decision (EU) 2022/591 on a General Union Environment Action Programme to 2030. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022D0591.

European Parliament and the Council. (2022a). Directive (EU) 2022/2464 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (Text with EEA relevance). Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022L2464.

European Parliament and the Council. (2023). Regulation (EU) 2023/1804 on the deployment of alternative fuels infrastructure, and repealing Directive 2014/94/EU. Retrieved from: https://eur-lex.europa.eu/eli/reg/2023/1804/oj.

European Parliament and the Council. (2023a). Regulation (EU) 2023/1805 on the use of renewable and low-carbon fuels in maritime transport, and amending Directive 2009/16/EC (Text with EEA relevance). Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023R1805.

IPBES. (2019). Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors). IPBES secretariat, Bonn, Germany. 1148 pages. Retrieved from: https://doi.org/10.5281/zenodo.3831673.

IPCC, 2021: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change[Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, In press. Retrieved from: https://doi.org/10.1017/9781009157896.

Meijers, E., & Stead, D. (2004). Policy Integration: What Does It Mean and How Can It Be Achieved? A Multi-Disciplinary Review. 2004 Berlin Conference on the Human Dimensions of Global Environmental Change: Greening of Policies – Interlinkages and Policy.

Oberlack, C. (2017). Diagnosing institutional barriers and opportunities for adaptation to climate change. Mitigation and Adaptation Strategies for Global Change. Retrieved from: https://doi.org/10.1007/s11027-015-9699-z.

Platjouw, F. M., Friedrich, L., Trubbach, S., Sander, G., Boteler, B., Passarello, C. C., Soininen, N., de Oliveira, C. S., Kyrönviita, J., Belinskij, A., Puharinen, S. T., Albrecht, E. (2023) Deliverable 1.3: The CrossGov Policy Coherence Evaluation Framework - A methodological framework to assess policy coherence and cross-compliance with the European Green Deal. Retrieved from: https://crossgov.eu/wp-content/uploads/2023/11/Deliverable-1.3-Coherence-Cross-compliance-methodology-for-distribution-purposes.pdf.

Tchinda, A., & Talbot, D. (2023). Barriers and Enablers of Environmental Policy Coherence: A Systematic Review. Environmental Policy and Governance. Retrieved from: https://doi.org/10.1002/eet.2057.

United Nations Committee of Experts on Public Administration (CEPA). (2021). CEPA Strategy Guidance Note on Promotion of Coherent Policymaking. United Nations Department of Economic and Social Affairs.

Annex

Policy Coherence Assessment – Example template

Coherent & Cross-compliant Ocean Governance for Delivering the EU Green Deal for European Seas
D2.1 – EU and international policy landscape
Mapping and analysing EU and international policy landscape and design – TEMPLATE FOR DATA COLLECTION

Step 1: Contact Details

Please provide the following details about the individual conducting the assessment:

Name:	[Enter your first and last name]
Institute:	[Specify the name of your organization or institution]
E-mail:	[Provide your official email address]
Date:	[Enter the date of the assessment]
Note:	[Enter any comment you might have]

Step 2: Policy

Fill in the details about the policy you are evaluating.

Policy name	*[The name of the policy]*
Link to the policy document	*[The link to the main policy]*
Main policy objective and key target(s) related to the ocean	*[Main objective and key target(s) of the policy related to the ocean]*
Aim of the policy	*[Whether the policy is targeted towards a specific sector or if it is cross-cutting, impacting different sectors]*
Specific targets	*[The specific and tangible requirement/limits of the policy]*
Policy instrument	*[The method by which the policy is implemented (e.g., market instrument, voluntary, regulation, etc.]*
Competent institution	*[The institution(s) mandated for its administration]*
Entry into force and timeline	*[Year of the policy entering into force and instrument implementation timeline]*
Integration of international instruments	*[Is the policy aiming to implement global instruments (e.g., for climate or shipping]*

Step 3: Coherence Assessment of Policy Design and Implementation

To ensure a comprehensive assessment of the selected policy, please address the guiding questions below and provide a score for each of the objectives, operational measures and contextual factors of the policies. These questions are designed to evaluate the policy's design and implementation against the eight policy coherence attributes. The methodology uses a **simplified coherence score** based on the SDGs coherence scale from Nilsson et al. (2016). Before proceeding, it's crucial to understand the scoring mechanisms for each policy element and contextual factor. You can read the methodology and the scoring guidelines in more details here.

Scoring		
-1/negative	**0/neutral**	**1/positive**
The policy limits options to comply with other policies/EGD objectives, clashes with other policies/EGD objectives or makes it impossible to comply with other policies/EGD objectives	No significant positive or negative interactions between policies	The policy creates conditions that advance other policies/EGD objectives, aids the achievement of other policies/EGD objectives, or is inextricably linked to the achievement of other policies/EGD

Coherence attribute: 1 Policy objectives	
Objectives of the policy	How aligned are the EU policy objectives with the objectives of the EGD climate change, biodiversity, pollution and sustainable blue economy strategies? [vertical coherence with EGD]. Please consider the work of D.1.1. Look for/think about: Are objectives similar, overlapping, mutually reinforcing or contradictory and impeding each other? Do objectives of one policy refer to one or multiple EGD objectives? Are there synergies or trade-offs between objectives?
Response:	Please fill out the table at the end.
Scoring:	Please fill out the table at the end.

Coherence attribute: 2 Policy framing and mainstreaming	
Mainstreaming of EGD objectives	To what extent does the assessed policy address biodiversity, climate change and pollution (beyond its specific objectives)? [vertical coherence with EGD] Look for/think about: Does the policy explicitly state that/how it will contribute to addressing biodiversity, climate change and pollution? Are there synergies of trade-offs in the intended contributions across the assessed policies?
Response:	[Answer the questions here]
Scoring:	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
Cross-policy integration of objectives/ considerations	To what extent does the assessed policy explicitly aim to support the objectives of other policies? Look for/think about: Does the policy refer to other policies and their objectives? Do the assessed policies refer to each other?
Response:	[Answer the questions here]
Scoring:	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
Shared understanding of	N.A. to 2.1

problem and values	

Coherence attribute: 3. Policy instruments	
Market based instruments	**How could the incentives or disincentives created by the market based instruments of the assessed policy affect the delivery of EGD objectives on climate change, biodiversity and pollution?** **How do/could the incentives or disincentives created by the market based instruments of the assessed policy affect the delivery of objectives from other policies?** Look for/think about: Could the incentives created by the instruments support or hinder the achievement of objectives from other policies that are delivering the EGD? Are synergies enabled? Are trade-offs being mitigated?
Response:	[Answer the questions here]
Scoring:	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
Legal instruments	**Is the policy in itself a legal instrument or does the policy make use of legal instruments that create incentives or disincentives to steer behaviour towards achieving the objectives of the policies? If yes, what type of legal instruments does the policy include? If no, move to the next measure/factor.** **How could the legal instruments of the assessed policy affect the delivery of EGD objectives on climate change, biodiversity and pollution?** **To what extent are the legal instruments of the assessed policy aligned with legal requirements from other policies?** **How do the legal instruments of the assessed policy affect the delivery of objectives across different policies?** **What are the key enforcement mechanisms of the policy?** **How strong is the enforcement mechanism of the assessed policy?** **How do the enforcement mechanisms of the assessed policies compare?** **How could/do differences in enforcement mechanisms impact coherent implementation and delivery of objectives across policies?** Look for/think about: Does the policy mention efforts to reduce the legal burden across policies? Does the policy require integrated licenses/permits or single purpose licenses/permits? Does the policy contain cross-references to legal instruments of other policies? Do the legal instruments refer to other instruments addressing climate change, biodiversity and pollution? Does the policy have mechanisms that supports compliance and enforcement, such as non-compliance procedures, judicial procedures, penalties, etc.?
Response:	[Answer the questions here]
Scoring:	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
Voluntary instruments	**How could the incentives or disincentives created by the voluntary instruments of the assessed policy affect the delivery of EGD objectives on climate change, biodiversity and pollution?** **How do/could the incentives or disincentives created by the voluntary instruments of the assessed policy affect the delivery of objectives from other policies?**

	Look for/think about: Could the incentives created by the instruments support or hinder the achievement of objectives from other policies that are delivering the EGD? Are synergies enabled? Are trade-offs being mitigated?
Response:	[Answer the questions here]
Scoring:	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].

Coherence attribute: 4 Stakeholders	
Stakeholder engagement (participatory platforms, consultations)	**To what extent do consultation processes support the cross-fertilisation of knowledge and information between policy processes (e.g. through joint consultations, overlapping stakeholder groups, etc.)?** **To what extent do participatory processes (e.g. stakeholder platforms) support the involvement of stakeholders across different policy areas/sectors?** **To what extent do consultation/participatory processes enable inclusive, fair and equitable contributions of all relevant stakeholders?** Look for/think about: Does the policy specify who should be consulted/involved? How are relevant stakeholders identified? Does the policy specify that stakeholders with knowledge/responsibility related to biodiversity, climate change and/or pollution, or other related policy areas, should be consulted/involved? Are key stakeholders from one policy represented in the consultation/participatory processes of other policies? Are power dynamics between different interest groups considered and imbalances mitigated? Are provisions in place to include women, indigenous communities and relevant minority groups? At what stage of the policy cycle are stakeholders expected to be engaged?
Response:	[Answer the questions here]
Scoring:	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].

Coherence attribute: 5 Institutions	
Institutional mandates	**How do the institutional mandates for the assessed policy affect their coherent implementation?** Look for/think about: Does responsibility to achieve the objectives of the assessed policy fall under one or more institutions? Is there a new institution created just for the integrated implementation of the policy. Is responsibility shared between different institutions/sectoral authorities? What is the relationship/power dynamic between the institutions responsible for the assessed policies?
Response:	[Answer the questions here]
Scoring:	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
Inter-institutional coordination mechanisms	**How do inter-institutional coordination mechanisms support coordination and collaboration across policies?** Look for/think about: How joined up are the institutional structures of the policy with other policies?

	Does the assessed policy have provisions for e.g. data sharing, inter-institutional consultations, joint stakeholder groups, inter-institutional committees or joint decision making processes/bodies with other policies? Does the policy include requirements/provisions for establishing or using existing inter-institutional coordination/collaboration mechanisms? Are inter-institutional mechanisms in place between different policy areas?
Response:	[Answer the questions here]
Scoring:	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].

Coherence attribute: 6 Steering mechanisms	
Planning (management plans, spatial plans)	**To what extent do plans support the integration of information/considerations regarding climate change, biodiversity and pollution?** **To what extent do plans support the integration of information/considerations from other policies/sectors?** **To what extent is an adaptive approach reflected within the considerations of the plans?** Look for/think about: Do plans address multiple purposes/policy issues? Do plans include provisions for climate change, biodiversity and/or pollution (e.g. mitigating impacts, integrating nature based solutions, etc.)? Are multiple authorities or sectors involved in the drafting of the plan? Does the policy require integrated planning, or is planning conducted on the basis of sectoral interests and conditions?
Response:	[Answer the questions here]
Scoring:	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
Monitoring and evaluation	**To what extent are monitoring and evaluation joined up with other policies?** **To what extent do monitoring and evaluation support integration of information/considerations from other policies?** Look for/think about: Is monitoring done as part of joint cross-policy programmes? Does the policy refer to shared indicators? Is there a feedback loop from the monitoring and evaluation back to re-designing the policy?
Response:	[Answer the questions here]
Scoring:	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
Reporting	**To what extent does reporting support the cross-fertilisation of information/considerations between policies?** Look for/think about: Is reporting done as part of shared structures/mechanism across policies? Does reporting ensure dissemination of information into other policy areas?
Response:	[Answer the questions here]
Scoring:	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].

Coherence attribute: 7 Spatial and temporal scales	
Spatial scope and timeframes (e.g. of plans, reporting, objectives)	N.A. to 2.1

Response:	N.A. to 2.1
Scoring:	N.A. to 2.1

Coherence attribute: 8 Science and knowledge	
Scientific evidence and knowledge (SPS interfaces)	**How does the assessed policy make use of scientific evidence and knowledge to ensure achievement of policy and EGD objectives?** **To what extent do the SPS interfaces of the assessed policy enable cross-fertilisation of knowledge from other policy areas/sectors?** Look for/think about: What kind of science/knowledge is required for effective implementation of the policy? At what stages of the policy cycle can/does science/knowledge feed into decision-making processes? Does the SPS interface established by the policy enable interdisciplinary knowledge exchange? Does the policy include provisions to make use of existing SPS interfaces (e.g. established under other policies)? Does the scientific evidence and knowledge base integrate considerations on climate change, biodiversity and pollution?
Response:	[Answer the questions here]
Scoring:	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].

Green Deal objectives	**General objectives (aspirational goals and visions set out for 2050 and overarching objectives)**	**2030 Climate Target Plan**	Climate neutrality by 2050	[Insert scoring (-1/negative, 0/neutral, +1/positive) here]. [If the policy has multiple objectives, please provide multiple scores.]
		Climate Change Adaptation Strategy	A climate resilient society, fully adapted to climate change impacts by 2050	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
			All the world's ecosystems are restored, resilient and protected by 2050	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
		Biodiversity Strategy to 2030	Europe's biodiversity is on the path to recovery by 2030	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
		Zero Pollution Action Plan	Pollution is reduced to levels no longer considered harmful to health and ecosystems – a toxic free environment by 2050	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
			Achieving climate neutrality and zero pollution by developing offshore renewable energy and greening maritime transport and ports	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
			Reducing human impacts on natural capital and combatting pollution through a circular economy	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
			Protecting and investing in nature through conservation and restoration	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
			Increasing coastal resilience to climate change through nature-based solutions	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
		Sustainable Blue Economy Strategy	Supporting responsible food systems through better use of marine resources and alternative sources for food and feed	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
	Specific objectives (commitments and targets for 2030)	**2030 Climate Target Plan**	Reduce net ghg emissions by at least 55% compared to 1990 levels by 2030	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
			Legally protect min. 30% of the EU's Sea area and integrate ecological corridors by 2030	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
			Strictly protect at least 10% the EU's Sea area by 2030	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
		Biodiversity Strategy to 2030	Effectively manage all protected areas by 2030	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].

	Restoration objectives: Significant areas of ecosystems restored, habitats and species show no deterioration, at least 30% reach favourable status or positive trend by 2030	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
	Risk and use of chemical pesticides is reduced by 50% by 2030	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
	Number of Red List species threatened by invasive alien species is reduced by 50% by 2030	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
	Nutrient losses from fertilisers are reduced by 50% by 2030	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
	Negative impacts on sensitive species and habitats, incl. on the seabed through fishing and extraction activities, are substantially reduced by 2030	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
	By-catch of species is eliminated or reduced to a level that allows species recovery and conservation by 2030	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
	Reduce health impacts (premature deaths) of air pollution by more than 55% by 2030	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
	Reduce by 25% EU ecosystems where air pollution threatens biodiversity by 2030	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
	Reduce by 50% nutrient losses, use and risk of chemical pesticides, sale of antimicrobials for farmed animals and aquaculture by 2030	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
	Reduce by 50% plastic litter at sea and by 30% microplastics released into the environment by 2030	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].
Zero Pollution Action Plan	Significantly reduce total waste generation by 2030	[Insert scoring (-1/negative, 0/neutral, +1/positive) here].