CrossGov

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

Deliverable 1.3

The CrossGov Policy Coherence Evaluation Framework -

A methodological framework to assess policy coherence and cross-compliance with the European Green Deal

GRANT AGREEMENT NUMBER	101060958
PROJECT TITLE	CrossGov - Coherent and Cross-compliant Ocean Governance for Delivering the EU Green Deal for European Seas
DELIVERABLE TITLE	The CrossGov Policy Coherence Evaluation Framework - A methodological framework to assess policy coherence and cross-compliance with the European Green Deal
DELIVERABLE NUMBER	D1.3
DELIVERABLE VERSION	2 (Revised version)
CONTRACTUAL DATE OF DE-LIVERY	31 August 2023
ACTUAL DATE OF DELIVERY	11 October 2023
REVISED AND UPDATED	01 February 2024
DOCUMENT STATUS	Submitted
DOCUMENT VERSION	1
ONLINE ACCESS	No
DIFFUSION	Sensitive
NATURE OF DELIVERABLE	Report
WORK PACKAGE	1
PARTNER RESPONSIBLE	Norwegian Institute for Water Research (NIVA)
CONTRIBUTING PARTNERS	RIFS, UEF, ACTeon
AUTHOR(S)	Froukje Maria Platjouw, Laura Friedrich, Saskia Trubbach, Gunnar Sander (NIVA), Ben Boteler, Cristian Cristian Passarello (RIFS), Niko Soininen, César Soares de Oliveira, Jonas Kyrönviita, Antti Belinskij, Suvi-Tuuli Puharinen, Eerika Albrecht (UEF)
REVIEWED BY	Måns Nilsson
APPROVED BY	Paulina Ramirez-Monsalve
PROJECT OFFICER	Gonzalo Garcia de Arboleya
ABSTRACT	Achieving the European Green Deal objectives for biodiversity, climate change and pollution requires that progress in one policy area does not adversely affect progress in other areas. This deliverable

	provides the CrossGov project partners with a methodological framework for the evaluation of policy coherence and cross-compliance. The CrossGov Policy Coherence Evaluation Framework offers a comprehensive methodological approach to the assessment of policy coherence to better understand where in the policy cycle or at which governance level problems or challenges of coherence emerge and where such challenges can be resolved. To enable this, the evaluation framework has been developed based on three components: 1) coherence attributes and variables to assess, 2) guiding questions to support the assessment and 3) a simplified coherence scoring.
KEYWORDS	Policy coherence, cross-compliance, evaluation framework, methodology, European Green Deal, EU policies, implementation, policy cycle

Table of Contents

List of Figures

List of Tables

Acronyms and abbreviations

BRGT	Better Regulation Guidelines and Toolbox
CAP	Common Agricultural Policy
CFP	Common Fisheries Policy
DG	Directorates-General
DPSIR	Driver Pressure State Impact Response
EC	European Commission
EEA	European Environment Agency
EGD	European Green Deal
EIA	Environmental Impact Assessment
EU	European Union
JRC	Joint Research Centre
MLG	Multilevel governance
MSFD	Marine Strategy Framework Directive
MSPD	Maritime Spatial Planning Directive
OECD	Organisation for Economic Co-operation and Development
PCSD	Policy Coherence for Sustainable Development
SDGs	Sustainable Development Goals
SEA	Strategic Environmental Assessment
SPSI	Science-Policy-Society Interface
WFD	Water Framework Directive
WP	Work Package

Description of authorship

- ☑ Froukje Maria Platjouw, Laura Friedrich, Saskia Trubbach and Gunnar Sander have been responsible for the acquisition, analysis, or interpretation of data behind this deliverable and the writing of this report.
- ☑ Ben Boteler, Cristian Passarello and Niko Soininen have contributed significantly to the design of the policy coherence evaluation framework through revisions and deliberations on various aspects of the framework.
- ☑ César Soares de Oliveira, Jonas Kyrönviita, Antti Belinskij, Suvi-Tuuli Puharinen, Eerika Albrecht have contributed to the data acquisition and analysis for the deliverable.

Executive Summary

The **European Green Deal** (EGD) is a comprehensive set of policy initiatives and strategies launched by the European Commission to make Europe the first climate-neutral continent by 2050. Delivering the EGD requires that progress towards one strategy does not negatively affect progress towards the objectives of other strategies, or even better, that actions support several strategies simultaneously. Thus, delivering the EGD requires compliance with multiple strategies and objectives in concert, referred to as **cross-compliance** in CrossGov. The focus is especially on a subset of EGD objectives related to biodiversity, pollution and climate change. The CrossGov project assesses **to what extent and in which manner policy coherence facilitates cross-compliance**.

The **purpose of this deliverable** is to provide the CrossGov project partners with a **methodological framework for the evaluation of policy coherence and cross-compliance with the EGD. Policy coherence** refers to how well different policies work together. Coherence can be defined as the extent to which policies reinforce each other by promoting synergies or reducing conflicts between their objectives and instruments both in design and implementation.

The **CrossGov Policy Coherence Evaluation Framework** offers a comprehensive methodological approach to the assessment of policy coherence and cross-compliance to better understand **where in the policy cycle** or at **which governance level** problems or challenges of coherence emerge. To enable this, the evaluation framework has been developed based on three components: 1) **Attributes and variables** to measure and explain coherence and contribution to EGD 2) **guiding questions** to support the assessment and 3) a simplified coherence **scoring**.

The coherence attributes are elements 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 analyzing alignment across objectives; the project also explores the effectiveness and interplay of policy instruments towards the objectives. In CrossGov, several research questions explore why there is (in-) coherence or why EGD objectives have (not) been met. **The explanatory variables** are factors that help to explain the extent of coherence or goal achievement. These variables describe aspects related to governmental organizational structures, science-policy-society interfaces, and stakeholder involvement. These may often contribute to explain, but there may also be other explanations. In the different tasks in WP2 and WP3, **these attributes and variables will be considered from different perspectives**:

1) *Directions*: Vertical coherence between EU policies and EGD objectives, horizontal coherence between EU policies, vertical coherence between the examined EU policies and corresponding national implementation policies in selected Member States, and horizontal coherence between policies and plans at lower levels of governance.

2) *Governance levels*: EU, national, subnational.

3) *Policy cycle*: design or implementation.

A series of **guiding questions** related to the attributes and variables supports the assessment of coherence and cross-compliance from policy design to policy implementation. A **simplified scoring** exercise is done for the two coherence attributes. Scoring coherence across the different evaluations in WP2 and WP3 facilitates the detection of **changes along the policy**

cycle. To illustrate, various EU policies may contribute positively to the EGD ambitions, while there might be several horizontal coherence challenges between the EU policies, weakening their cross-compliance with the EGD. Also, EU policies may appear to be coherent in design and positively reinforcing one another, while the national policies and their implementation nevertheless lead to incoherent and negative outcomes. At subnational and local levels, authorities might struggle with complying with all policies equally well and might have to make trade-off decisions. When evaluating a large number of policies, visualizations, scorings or color codes help identifying where problems of coherence may exist and/or emerge, and if changes can be identified along the policies' life cycles.

The theoretical and methodological background to the CrossGov Policy Coherence Evaluation Framework encompasses a broad set of material and methodologies including the 1) European Commission's Better Regulation Guidelines and Toolbox (evaluations, fitness checks and impact assessments); 2) the OECD's recommendations on Policy Coherence for Sustainable Development; 3) the SDG Synergies approach (Stockholm Environment Institute); 4) the Joint Research Centre's support material for Policy Coherence; 5) the EEA guidance document on policy evaluation; 6) the Taxonomy Regulation; and 7) implementation research. Also, key scientific papers have been taken carefully into consideration.

The CrossGov Policy Coherence Evaluation Framework builds upon the existing literature, concepts, and frameworks, though **advances this further to make it fit-for-purpose. The main aim is to explore to what extent and in which manner policy coherence affects cross-compliance with the EGD objectives for biodiversity, climate change and pollution.** The methodological framework has been designed to fit that purpose.

1. Introduction – CrossGov and the European Green Deal

The European Green Deal (EGD) is a comprehensive set of policy initiatives launched by the European Commission (EC) in December 2019 to make Europe the first climate-neutral continent by 2050 (European Commission 2019). The EGD **aims to transform the EU economy into a sustainable one** by, *inter alia*, reducing greenhouse gas emissions, tackling biodiversity loss, mitigating pollution, increasing the use of renewable energy, driving a shift to sustainable mobility and food systems, and promoting a circular economy. Since 2019, more than 20 strategies have been adopted to concretise the policy goals of the EGD and create a roadmap for its implementation.

The 2019 EGD Communication and its subsequent strategies and action plans are closely interconnected. Together, they represent an integrated approach to addressing the climate, biodiversity and pollution challenges facing the European Union (EU). It is important that progress towards one strategy does not adversely affect progress towards the objectives of other strategies. Thus, delivering the EGD requires compliance with multiple strategies and objectives. The CrossGov project defines **cross-compliance as the delivery of multiple EGD strategies, goals and targets in concert**. The project assesses **to what extent and in which manner policy coherence in policy design and implementation facilitates cross-compliance**, concretized in the project as the contribution to achieve EGD objectives primarily on biodiversity, climate change and pollution.

Deliverable 1.1 of the CrossGov project provided a **mapping of the ocean-related targets and objectives of the EGD**, along with findings from stakeholder interviews to understand the complexities of navigating diverse policies. The mapping 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 deliverable 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**.

The next step of the CrossGov project is **to assess policy coherence and cross-compliance** from different perspectives (design and implementation), at different levels (EU, national, case studies) and in different directions (vertical and horizontal). Task 1.2 of the project is dedicated to designing the methodological framework for that assessment.

1.1. Purpose and structure of the report

The **purpose of this report** is to provide the CrossGov project partners with a **methodological framework for the evaluation of policy coherence with the EGD.** Policy coherence (i.e. how well different policies work together) has been subject to assessments both in EU legal and policy documents and in the academic literature. This report builds upon the existing body of knowledge on concepts and methodologies (described in Annex I and II) and provides a methodology that can be adapted and applied across the different assessments in CrossGov WP2 and WP3.

Chapter 2 presents the CrossGov Policy Coherence Evaluation Framework and provides a common structure to ensure that the separate tasks contribute to answering the shared overarching research question of how policy coherence affects cross-compliance with the

EGD. **Chapter 3 provides practical guidance** for the application of the methodology in the different tasks of WP2 and WP3. **Chapter 4 briefly describes the next steps** for the further development of the draft methodology in Task 1.2 and Task 4.2.

The Annexes present the background information and literature based on which the CrossGov methodological framework was developed. **Annex I provides a brief introduction to policy coherence** and related concepts. **Annex II gives an overview of selected policy coherence methodologies** developed by scientific researchers and/or EU institutions.

1.2. Timeline

As a **deliverable of Task 1.2**, this report provides a draft of the Policy Coherence Evaluation Framework to the CrossGov partners. The method will be applied and tested in WP2 and WP3 and further refined throughout the project's duration. In Task 4.2, the method will be upscaled and disseminated for the use of others outside of the CrossGov consortium. At the same time, the method's application in WP2 and WP3 will already provide important findings on policy coherence and cross-compliance with the EGD. These findings will flow into Task 4.1 as recommendations for the forthcoming roadmaps towards better coherence and cross-compliance in the North Sea, Baltic Sea and Mediterranean Sea.
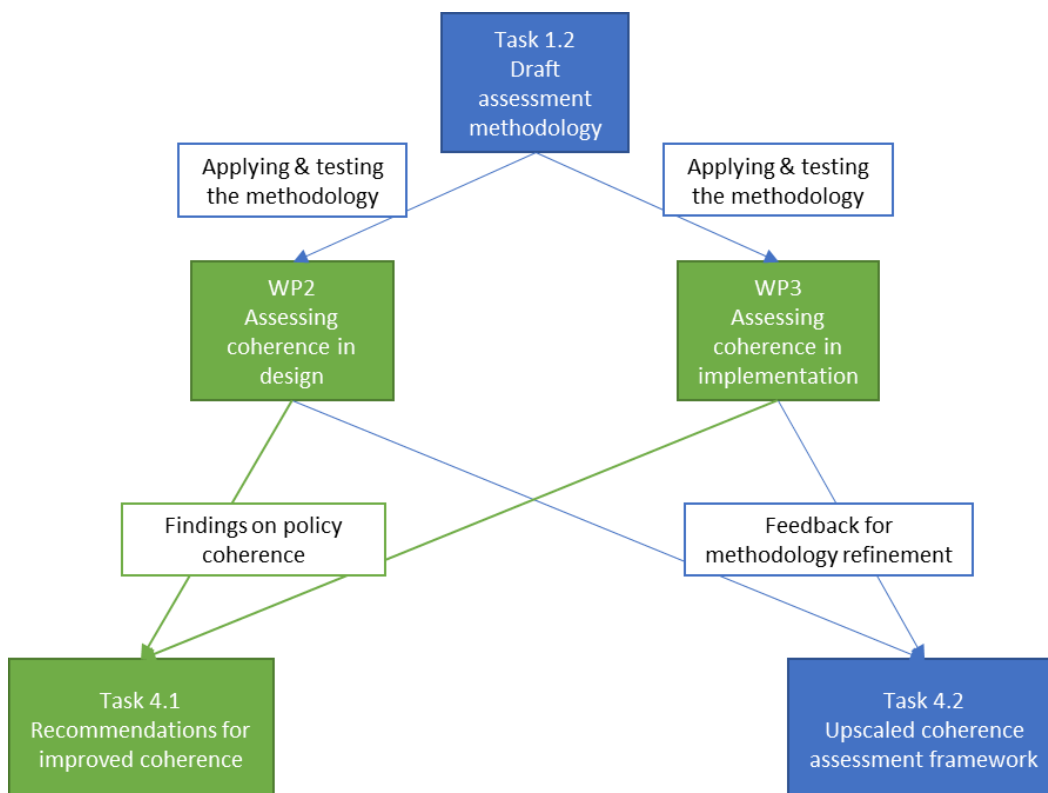
Figure 1 Workflow between Task 1.2 and other CrossGov tasks.

More specifically, this deliverable describing the first draft of the methodological framework was due in August 2023. WP2 and WP3 started applying the methodology, and the WP leads and task leads have provided feedback to the Task 1.2 leads with needs for finetuning or adjusting the coherence attributes, guiding questions, and scoring approach. In December 2023, a joint meeting between Task 1.2 and WP2 and WP3 was organized to further improve the

deliverable and the policy coherence methodology. This report describes the revised methodology as of February 2024.

At the start of WP4 (April 2024), the methodology will be further developed by Task 4.2. The aim of Task 4.2 is to upscale the methodological framework, digitalize it and disseminate it beyond the CrossGov consortium.

1.3. Interconnectedness to other CrossGov deliverables

It is important to note that certain elements are more comprehensively described in other deliverables, and CrossGov participants are therefore encouraged to consult these reports for more concrete guidance on certain aspects. This concerns in particular:

- The **Policy Brief** that introduces the **concepts of policy coherence and cross-compliance**. Please consult Deliverable 1.2, produced by NIVA.
- The methodological approach to assess **Science-Policy-Society Interfaces**. Please consult Deliverable 1.4, produced by CNR-ISMAR.
- **Stakeholder involvement processes** and the co-creation processes. Please consult Deliverable 5.4, produced by ACTeon.
- **Comprehensive assessment of EGD**. Please consult Deliverable 1.1, produced by UU and RIFS.

These deliverables are available on the CrossGov webpage: Deliverables – Crossgov Project

1.4. Overall methodological approach

The CrossGov project zooms in on the concepts of policy coherence and cross-compliance with the EGD. The project explores how **policy coherence affects cross-compliance**.

While policy coherence is relevant for analysing policy design and implementation, cross-compliance broadens the perspective by specifically exploring the cross-sectoral outcomes and impacts towards the EGD. This requires the effective design and implementation of policy instruments to deliver not only the individual policies' specified goals and targets, but also to support the achievement of other objectives under the EGD.

In the design phase, this requires assessing to what extent the instruments and their specified deliverables (outputs such as taxation, regulation, information etc) may contribute to achieving behavioural changes (outcomes), and to what extent such changes may affect the achievement of the policy's own objectives as well as EGD relevant objectives (impacts). This should be based on prior experience with the effectiveness of similar instruments, as far as possible, in similar contexts. After implementation, formal evaluations may also be available, making it possible to empirically evaluate to what extent outputs were delivered, to what extent behaviour changes (outcomes) occurred, and to what extent objectives were reached (impacts).

The structure of the CrossGov project's work packages allows us to assess and compare policies' intentions (WP2) and outputs from the implementation of policies (task 2.3 and WP3). It allows us to look into policy coherence from different angles, but also allows us to assess **policy effectiveness** through the assessment of policy intentions vs what may be achieved after implementation. CrossGov goes beyond ordinary effectiveness evaluations though in looking at cross-compliance. Cross-compliance requires assessing how the implementation of one

policy affects the implementation of other policies and achievement of objectives across policies**. If these objectives, and, not least, the instruments in the policies, are not in line with EGD, effectiveness of such policies may lead in a different direction than the EGD ambitions.**

In CrossGov, coherence and cross-compliance are assessed across multilevel governance (MLG) landscapes spanning from the (EU) to national and local policies. In MLG, decision-making processes occur at different governance levels. As outlined by Fanning et al. (2007), these can be described by subsequent policy cycles, which are vertically and horizontally interlinked. To understand the trajectories of EU policies, Figure 2 illustrates the connection of policy cycles across different governance levels. CrossGov focuses on achieving the EU Green Deal policy objectives which are formulated and designed at the EU level. During the transposition process, the EU policies are not merely translated into national legislation. They enter into distinct national policy cycles where the national policies are formulated and designed. While being strongly influenced by the EU level, the national policy cycles are embedded into and influenced by the national context, which can explain their national differences. This is particularly relevant for EU Directives, as their transposition largely relies on member states' discretion. In the CrossGov project, policy coherence is assessed within policy cycles from EU to sub-national level. To assess cross-compliance with the Green Deal, the vertical coherence of subsequent policy cycles across the various governance levels will be considered.
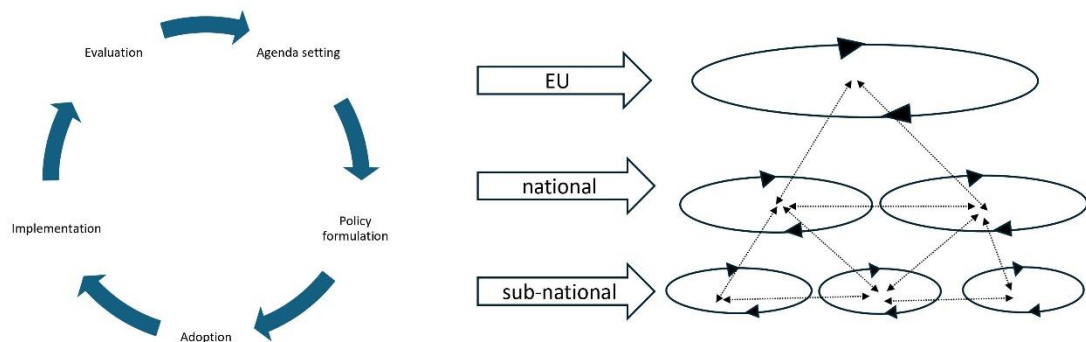
Figure 2 Multilevel policy cycles, adapted from Fanning et al, 2007.

In relation to evaluating policy effectiveness, the European Environment Agency states that "for environment policy to deliver effective results, the institutional setup can be as important as the design of the policy itself" (European Environment Agency 2005). Policy design and policy outputs are both important subjects of research in the CrossGov project. To what extent policy outcomes and impacts can be measured is however subject to three constraining considerations. First of all, the project's limited lifetime does not align well with the timeframe of the EGD strategies and their intended accomplishment of objectives (goals set for 2030, 2050). It will therefore be difficult to assess to what extent the policies contribute to the accomplishment of the EGD goals. Second, outcomes and impacts of policies are often the result of a multitude of factors, partly related to the policies' design but also affected by many other factors. Third, many of the EGD strategies (and EU policies) have objectives that are too general and abstract to be suitable for a proper effectiveness assessment. For these reasons, **CrossGov focuses first and foremost on the assessment of policy design and policy outputs**

to better understand the effectiveness of policies towards the potential realization of the EGD ambitions, and supplements this with assessments of policy outcomes and impacts when appropriate and feasible. In alignment with the intervention logic of the EU Better Regulation Toolbox, a focus on policy outputs offers an indication on possible future impacts and outcomes of the relevant policies, avoiding the methodological barriers mentioned above. (See further Annex II)
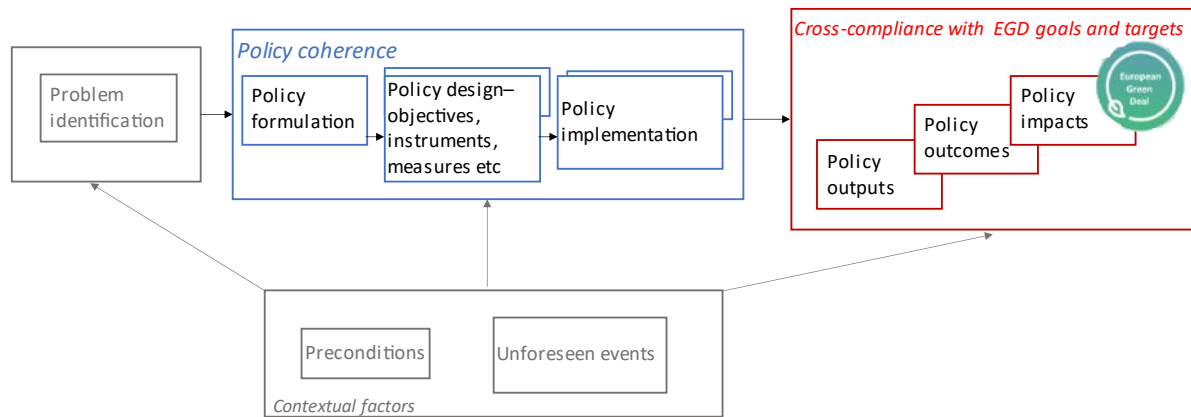
Figure 3 Illustration of the assessable elements within policy coherence and cross-compliance.

1.5. The background for the CrossGov evaluation framework

The CrossGov Policy Coherence Evaluation Framework, as presented in chapter 2 and 3 of this deliverable, is partly based upon already existing frameworks for policy evaluation. These existing frameworks are described in Annex I and II. **Annex I provides a conceptual introduction to policy coherence**, giving an overview of interrelated concepts to policy coherence and the core aspects that could potentially enable or hinder coherence. **Annex II presents existing methodologies for the assessment of coherence**. The focus lies on the European Commission's Better Regulation Guidelines and Toolbox that provides the current assessment system for coherence in the EU. The EU methodology is further supplemented by a review of related methods, such as those from the Organization for Economic Co-operation and Development (OECD), the Sustainable Development Goals (SDG) synergies approach, and the nexus approach.

Evaluating policy coherence and cross-compliance is challenging though not entirely new. **The CrossGov Policy Coherence Evaluation Framework as presented in chapter 3 builds upon existing literature, concepts and frameworks and advances these further to make them fit-for-purpose for comprehensive policy coherence evaluations and evaluations against the EGD.**

The idea that societal problems require holistic approaches with interaction across different policy areas is not novel. Thus, several conceptual frameworks and terminologies that are related to policy coherence have evolved over the years, such as policy integration, whole-of-government approaches, and mainstreaming. Research on these issues provides important insights into why coherence is necessary, how it can be measured, and which elements influence the occurrence of coherence. The CrossGov projects aims to study where in the policy cycle coherence challenges emerge and at which governance levels, they are most prominent. The marine policy system that has evolved in Europe is highly fragmented, both across policy

areas but also across governance levels. Studying marine policy through the lenses of a multi-level governance perspective is therefore necessary to capture these dimensions and calls for including a large set of stakeholders in the analysis (Tortola 2017).

Policy integration can be regarded as the umbrella concept of inter-sectoral policymaking. Policy integration aims at holistic policy making through a high level of coordination between sectoral compartments towards an alignment of policies that are coherent and mutually support each other. The understanding of elements that enable or hinder the achievement of integrated and coherent policies is a prominent research field and several scholars have attempted to classify them. Coordination across organisational boundaries is enabled through structural elements such as information exchange, but behavioural and process related elements such as common understandings of the policy problem and resource allocation are considered equally important. The inclusion of a broad stakeholder network throughout the policy cycle is another important dimension that enables coherence. This will also ensure that policy objectives and instruments are understood and adopted in the same perspective throughout the policy cycle, from formulation to implementation (Meijers and Stead 2004; Tchinda and Talbot 2023). These elements are highly relevant to evaluate policy coherence and the **CrossGov methodology therefore builds upon them and develops them into more operational elements with specific guidance questions**. CrossGov uses a simplified scale to assess the contribution of the coherence elements, that has been adapted from a seven-point scale from Nilsson et al. for policy coherence assessment (Nilsson, Griggs, and Visbeck 2016).

The **four-tiered methodological approach** of the CrossGov methodology (structuring; data collection; data analysis; synthesis) is adapted from the EEA guidance for policy evaluation. The EEA guidance is designed for ex-post evaluations of policy interventions that is described in the **Better Regulation Guidelines and Toolbox** (hereafter BRGT) (European Environment Agency 2017). The BRGT are providing internal guidance for the Commission staff to ensure coherence across interventions as one of its elements. The BRGT has mainly been elaborated before the launch of the EGD and contains thus no specific reference to the latter. Instead, the Sustainable Development Goals that the EU has adopted under 2030 Agenda provide a major framework for the BRGT. Despite not specifically mentioning the term of cross-compliance, the BRGT shall ensure coherence across interventions in a way that multiple SDGs are improved in concert without negatively impacting other SDGs. The BRGT contain specific assessment criteria for ensuring such a "cross-compliance" towards the SDGs, in addition to a set of online mapping tools that can show to what extent the SDGs have been mainstreamed into policy interventions. It should however be noted that the SDG component of the BRGT is mainly an analytical tool to understand where interconnections between interventions are or could occur but provide no specific guidance on how they are assessed (European Commission 2021a). A closer look into fitness checks and evaluations that are used by the Commission to make ex-post assessments of policy interventions supports this argument. While coherence is used as one of the evaluation criteria, the guiding questions for coherence assessments appears to remain rather unspecific. **The CrossGov methodology will therefore build further on the BRGT, but through dismantling coherence into different attributes, the assessment framework offers more concrete methodological guidance.** In addition, the CrossGov methodology is specifically designed to ensure cross-compliance with the EGD objectives, that despite some similarities with the SDGs require a differentiated approach.

2. The CrossGov Policy Coherence Evaluation Framework

2.1. Introducing the framework

This chapter introduces the **conceptual framework for the evaluation of policy coherence** in CrossGov. CrossGov applies a comprehensive approach to the evaluation of policy coherence. The project aims to understand **where in the policy cycle** or at **which governance level** problems or challenges of coherence and cross-compliance emerge, why the results are achieved and how better performance towards the EGD can be achieved. To enable this, an evaluation framework has been developed based on three components: 1) attributes and variables to assess and explain coherence 2) guiding questions to support the assessment and 3) a simplified coherence scoring.

The evaluation framework aims to analyze policy coherence throughout the policy cycle and to identify factors that help us understand the reasons behind low or high coherence and cross-compliance **(see chapter 2.2)**. To achieve this, the evaluation focuses on two key attributes that can be used to measure policy coherence, objectives and policy instruments, and a set of variables that help explain the results. In the different tasks in WP2 and WP3, these attributes and variables will be considered from different perspectives:

1) Directions: Vertical coherence between EU policies and EGD objectives, horizontal coherence between EU policies, vertical coherence between the examined EU policies and corresponding national implementation policies in selected Member States, and horizontal coherence between policies at lower levels of governance.
2) Governance levels: EU, national, subnational.
3) Policy cycle: design or implementation.

Not all attributes and variables will be equally relevant in all tasks. The assessment of the attributes and variables is supported by a series of **guiding questions** that can be adapted to the priorities of the different tasks **(see chapter 2.3)**.

The last component of the evaluation framework is the **coherence scoring**. The methodology uses a simplified coherence score based on the coherence scale for the Sustainable Development Goals (SDGs) from Nilsson et al. (Nilsson, Griggs, and Visbeck 2016). For each coherence attribute, predefined criteria guide the scoring of the contribution to coherence.

2.2. Attributes and variables of policy coherence

The conceptual framework underpinning the CrossGov methodology for coherence assessment is based on **a set of policy coherence attributes and explanatory variables**. The attributes and explanatory variables have been selected based on the literature introduced in Annex I and II (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) and expert discussions within the project. The attributes and variables are described below, including definitions and examples to illustrate how they are understood within the CrossGov Policy Coherence Evaluation Framework (in the blue boxes).

Coherence attributes: To understand the level of coherence, the framework explores coherence between the objectives across policies and between levels of governance. CrossGov does not restrict the evaluation to analyzing alignment across objectives though. The project also addresses the set of policy instruments set out in the policies (instrumentation) and how these have been designed to meet the policy's objectives (internal coherence), as well as their contribution towards the EGD objectives (cross-compliance). The anticipated impacts of the instruments can be assessed in the design phase, and evaluated after implementation (ref. intervention logic, impact assessment and evaluation in Appendix 2, section 1).
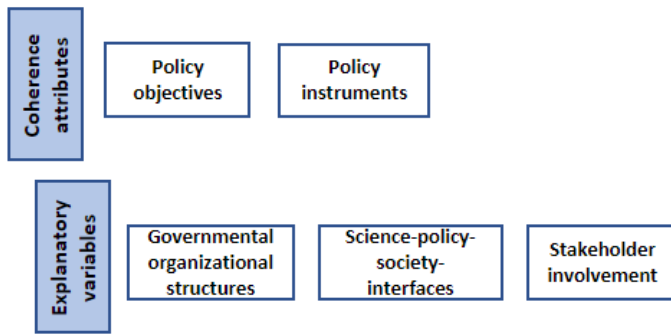
Figure 4 The policy coherence attributes and variables of the CrossGov evaluation framework. We distinguish between coherence attributes such as policy objectives and policy instruments, and variables that help explain the level of coherence between objectives and instruments across policies, both in design and/or implementation.

Explanatory variables: In addition to assessing coherence and contribution to EGD, CrossGov also raises the question *why* results are achieved. This has motivated the introduction of explanatory variables. Evaluations of reasons for success or failures, in turn, can be used to provide recommendations from the project (WP 4).

To address the why questions, we investigate elements that have been emphasized in policy coherence literature and identified through research in CrossGov. These are factors such as data fragmentation, actor involvement or power dynamics, unclear roles and responsibilities and many more. These factors have been grouped into three overarching categories of explanatory variables: governmental organizational structures, science-policy-society interfaces, and stakeholder involvement (figure 5). These variables can affect all phases of the policy cycle. The extent to which they are relevant must be explored in the projects' individual tasks, as may the occurrence of other explanatory variables than those highlighted here.
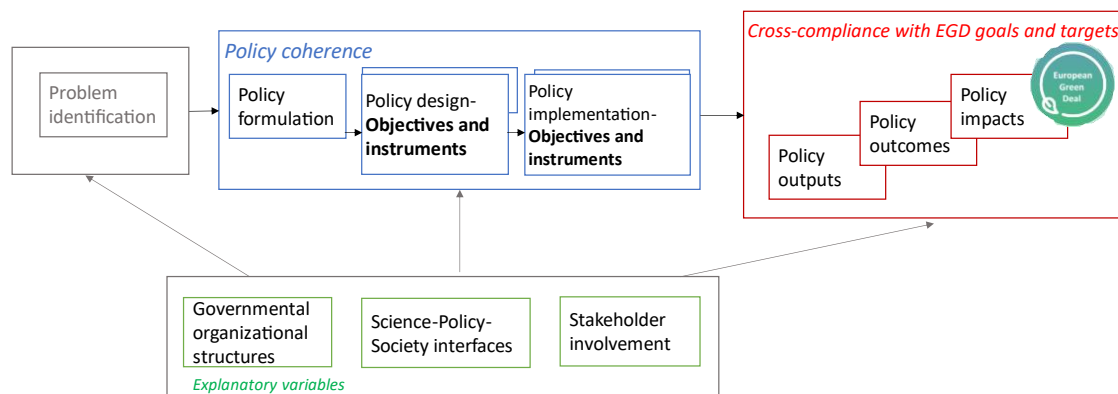
Figure 5 Policy coherence attributes and three categories of variables.

2.2.1. Attributes to assess the level of coherence across policies

For policies to be coherent, the **policy objectives** should be aligned or complementary and not contradict or impede each other. In this framework, policy objectives are defined as the outcomes the policy sets out to achieve, as specified in the articles of the policy document. Policy objectives may be referred to in policy documents as goals, objectives, targets, commitments, or in other ways. They can be overarching/general/not quantified goals and/or specific quantified targets. When assessing policy objectives in the context of the CrossGov project, mainstreaming is also important. Mainstreaming is understood as the integration of key policy and societal goals and considerations across policies from different sectors. In CrossGov, the focus is primarily on mainstreaming of the EGD marine relevant objectives for biodiversity, climate change and pollution. If such objectives have been mainstreamed into policies, it may support coherence in objectives between several instruments and enable better alignment towards the EGD (see also Deliverable 2.1). However, the instrumentation in the policies also need to be taken into account. Even though broad environmental objectives can be found, the instrumentation affects to what a policy will contribute.

Policy objectives in this framework: The outcomes or the results that the policy sets out to achieve. This includes the outcomes specified in the articles of the policy document as well as broader objectives referred to in the preamble.

The second core coherence attribute is **policy instruments**. The term 'policy instruments' refers to all mechanisms and instruments that are put in place by the policy to achieve its objectives. It can also be explained as the set of techniques that governments use, aiming at influencing the behavior of organizations or individuals in support of public objectives. Some of these may be enshrined in laws and be binding, others may be soft, flexible and non-binding.

Attempts have been made to create typologies of policy instruments (Bemelmans-Videc, Rist & Vedung 2011; Lacoumes and LeGales 2007). One minimalist approach is the differentiation between affirmative/negative and promoting/encouraging instruments ("sticks vs carrots"). Another minimalist approach is regulations, economic means and information. However, each of these contains a multitude of instruments. Regulations, or legal instruments, could include licenses, permits, prescriptions, prohibitions, bans, as well as procedures such as establishing committees/bodies, compliance procedures (including monitoring and reporting schemes) and enforcement procedures (including litigation and access to justice). Economic instruments can include taxes, charges, fees, fines, penalties, liability and compensation schemes, subsidies and incentives, deposit-refund systems, and tradable permit schemes. Information can include state-of-the-environment reporting, impact assessments, labelling schemes, technical standards, education and information campaigns. Attempts to reduce all instrumentation into a very few types have met problems. Not all instruments fit into such schemes. Examples of these are processes such as reorganization or planning. Moreover, there may be a need to be much more specific. In CrossGov, we therefore suggest a pragmatic approach by which the use of instruments is specified as much as needed for understanding the policy.

Alignment of policy instruments is considered beneficial for policy coherence. To illustrate, alignment of policy instruments by strategic planning (marine strategies, river-basin management plans, marine spatial plans), monitoring and evaluation (of outcome and process), and reporting, enables the use of coherent indicator frameworks and shared institutional structures and mechanisms for tracking effectiveness towards different policy goals.

Policy instruments in this framework: All mechanisms and instruments that are put in place by the policy to achieve its objectives.

2.2.2. Explanatory variables of the level of coherence across policies

The methodological framework contains three overarching categories of explanatory variables that may explain the level of policy coherence and contribution to EGD. Such explanations can cover many different issues such as political will, commitment and leadership, societal and political interests, standards and norms, budgetary imperatives and financial resources, clear roles and responsibilities, development and use of data and knowledge, involvement of knowledge providers, and more.

We have chosen to highlight three types of explanations under the headings: governmental organizational structures, science-policy interfaces and stakeholder involvement. However, this list should be considered as non-exhaustive. Additional elements or guiding questions might emerge throughout the research in the different tasks and can be included in their explanations.

The explanatory variables can be explored through the involvement of public authorities, policy makers and other stakeholders, and through scrutinizing policy documents, such as preparatory works and fitness checks.

Governmental organizational structures refer to the governmental structures (within/across local, regional and national authorities, EU and international organizations) that set the framework within which policies are formulated and implemented. These structures include the involved and responsible governmental organizations, their roles and responsibilities as well as their coordination mechanisms.

Governmental organizational structures play an important role in explaining the level of coherence across policies. Organizational behaviour and organizational collaboration to overcome working in silos is crucial. To illustrate, clear mandates help overcome barriers caused by blurred accountability or perceived loss of control and influence. Clear responsibilities to work towards EGD objectives, and clear means to do so, are more likely to foster collaboration and prioritize policies and actions that deliver against the EGD objectives. Coordination and collaboration within and across organizations enables exchange, consistent cross-sectoral approaches and joint decisions. This might happen through formalized processes such as the creation of supra- or lead institutions, inter-ministerial committees, joint task forces and decision-making bodies; or ad-hoc and informal coordination mechanisms.

Governmental organizational structures in this framework: The governmental organizational structures (incl local, regional and national authorities, EU and international organizations) that set the framework within which policies are formulated and implemented. These structures include the involved and responsible governmental organizations, their roles and responsibilities as well as coordination mechanisms.

Science-policy-society interfaces are the social processes that describe the role of knowledge production, transfer, and use in decision-making processes. The interfaces can be studied in specific SPS systems, referring to the actors involved as well as their roles within the different phases of the policy cycle. Effective SPSI can enable and support policy coherence. Policy coherence depends on clear **science and knowledge** that provides a shared evidence base for

coherent decisions. This evidence base should integrate and consider science and knowledge from across different policy areas.

Science-policy-society interfaces in this framework: the social processes that describe the role of knowledge production, transfer, and use in decision-making processes.

Stakeholder involvement processes refer to the manner in which stakeholders influence policy framing, design and implementation through participatory processes and other avenues such as information campaigns and lobbying, and how this affects the policies. While SPSI sheds light on how stakeholders affect the production and transfer of knowledge, this variable explicitly focuses on how stakeholders shape policy alternatives both during the formulation and design of policies as well as their implementation. The variable considers power dynamics across involved actors and other factors relevant for the shaping and implementation of policies.

Involvement of different stakeholders in policy making and implementation processes enables integration of different information, knowledge, values and ideas and fosters agreement and buy in across different interest groups. Inclusive, participatory mechanisms that enable active exchange across a broad set of actors and interests, are more likely to have a stronger contribution to coherence than processes involving few interests that may be typical "clients" for one sector only.

Stakeholder involvement processes in this framework: the manner in which stakeholders influence policy framing, design and implementation through participatory processes and other avenues such as lobbying, and how this affects coherence across policies.

Cross-cutting dimensions across attributes and variables

In addition to these broad categories of explanatory variables, it is also important to consider the **spatial and temporal dimensions** of policy design and implementation. This refers, for example, to the geographic and jurisdictional area to which a policy applies and the timelines and deadlines for the policy objectives and instruments. Alignment of spatial and temporal scales between different policies supports integrated approaches and coherent implementation. This applies to plans, reporting cycles as well as the objectives themselves. The misalignment of temporal or spatial scales between stakeholders, knowledge provision or governmental organizational structures can explain the occurrence of policy incoherence, both within formulation and implementation. Since temporal and spatial dimensions are relevant for multiple policy coherence attributes and variables, they have been incorporated in the methodological framework as a *cross-cutting guiding question* (see Table 2).

Table 1 The conceptual framework for policy coherence assessments in CrossGov.

Attributes and variables	Definition	Examples of elements to assess
Coherence attributes		
Policy objectives	The outcomes the policy sets out to achieve. This includes the outcomes or impacts specified in the articles of the policy document as well as broader objectives referred to in the preamble.	General objectives (broad, non-quantifiable); specific objectives (specific, quantifiable, with time limits), targets, commitments
Policy instruments	The mechanisms and instruments that are put in place by the policy to achieve its objectives.	Plans, Programs, Bodies / Committees, Impact Assessments, Licenses, Standards, Participation, Reporting, Certification, Monitoring, Review, Coordination, Resources and Funding, training, Education, Emission Quotas, Subsidies, etc
Explanatory variables		
Governmental organizational structures	Governmental structures refer to the governmental organizational structure (incl. local, regional, national, EU and international organisations) that sets the framework within which policies are formulated and implemented. These structures include the involved and responsible governmental organizations, their ability to address broader issues than their own "silo" as well as coordination mechanisms.	Mandates, responsibilities, coordination mechanisms, resources, capacity, spatial scales, geopolitical circumstances, elections, societal pressure, etc…
Science-policy-society interfaces	SPSI are the social processes that describe the role of knowledge production, transfer, and use in decision-making processes. The interfaces can be studied in specific SPS systems, referring to the actors involved as well as their roles within the different phases of the policy cycle.	Data fragmentation, assessments, knowledge platforms, production models, policy framing, resources
Stakeholder involvement	Stakeholder involvement processes refer to the manner in which stakeholders influence policy design and implementation through participatory processes and other avenues and how this affects coherence across policies. *[While SPSI sheds light on how stakeholders affect the production and transfer of knowledge, this variable explicitly focuses on how stakeholders shape policy alternatives both during the formulation and design of policies as well as their implementation. The variable considers power dynamics across actor, actor involvement and other factors relevant for the shaping and implementation of policies]*	Civil society networks, lobby associations, NGOs, industrial associations, interest groups, stakeholder groups. Public hearings, public consultation processes, formal and informal meeting arenas and networks. Collaborative planning and decision-making settings. Committees, advisory groups, local councils.

2.3. Guiding questions for coherence evaluations

Each of the attributes and variables may either affect or explain the level of coherence. A series of **guiding questions** related to the attributes and variables supports the evaluation of policy coherence from policy design to policy implementation (Table 2). The guiding questions provide a common structure for the evaluation of policies from different perspectives. The attributes, variables, and guiding questions also help identify core challenges for policy coherence and cross-compliance.

To illustrate, when looking into the design of policies, objectives might seem to be coherent and contributing to the EGD's ocean-related ambitions. However, case study research may demonstrate that implementation of these policies does not contribute to the achievement of the EGD. In order to mitigate low coherence and cross-compliance, we need to understand what the problem is and why it has arisen. Challenges can be related to, for example, misalignment of policy objectives; mismatched or ineffective policy instruments; limited cross-sectoral stakeholder engagement; unclear mandates and lack of coordination; misaligned spatial and temporal scales of policies; or limited cross-fertilization of science and knowledge across policies. Assessing policy coherence comprehensively allows policy coherence evaluations to explore which aspects of policies may create challenges for achieving coherent and cross-compliant outcomes.

Instructions for using the guiding questions: The guiding questions are intended to support the tasks in WP2 and WP3 in applying the policy coherence evaluation framework in their respective assessments. The questions provide examples or relevant perspectives to incorporate in the coherence assessments. A focus on the European Green Deal should be maintained across all assessments to ensure that the CrossGov research questions can be answered. Individual tasks can adjust the guiding questions to make them more fit-for-purpose for their policy context, governance level, or case study focus.

Note on 'Science-policy-society interfaces': The policy coherence evaluation framework includes SPS interfaces as an important factor influencing policy coherence. However, the coherence framework only addresses the overarching research questions from the SPS framework. Where a more detailed assessment of the SPS interfaces is required/relevant, tasks should apply the SPSI assessment methodology described in Deliverable 1.4.

Table 2 Guiding questions to support assessment of policy design and implementation against the coherence attributes and variables.

Coherence attributes and variables	Guiding questions
Coherence attributes	
Policy objectives	1. Is the policy **cross-referencing** the policy objectives of another policy? 2. Are the **policy objectives aligned** between policies? (**substance** as well as **spatial and temporal scales** such as deadlines for achievement, and geographical application) 3. Are the **EGD objectives** mainstreamed into the policy?
Policy instruments	**Main question:** 1. Would/has putting the policy instruments into practice **lead/led to results that are in accordance with** 1) the policy's own objectives, 2) other policies' objectives, 3) the **EGD (CrossGov specific) objectives***? **Supporting questions when several policies are evaluated in concert:** 2. To what extent are **spatial and temporal scales** aligned between instrument of the different policies? 3. Do the instruments support the **cross-fertilization of information and knowledge** across policies with similar instruments? 4. Do policies have **shared implementation mechanisms** (shared licensing, common indicators, shared monitoring frameworks)? 5. Do the policy instruments provide **mechanisms to deal with conflicting objectives, incentives**, etc.?
Explanatory variables	
Governmental organizational structures	1. Are the **mandates and roles** of governmental organizations governing a policy issue clearly defined (overlaps or redundancies)? How does this affect their involvement in policy formulation and implementation, and their collaboration with other organizations? 2. Which intra- and inter-organizational (formal and informal) **coordination mechanisms** are in place and how do they support coordination across policies? 3. Are **spatial and temporal scales** of governmental organizations well aligned and also fit-for-purpose for the relevant policy issues areas? 4. How does **resource allocation** within governmental organizations affect their ability to formulate and implement policies, and to collaborate with other organizations? 5. How do **political processes and power dynamics** within and between governmental organizations affect their influence on policy formulation and implementation?
Science-policy-society interfaces	1. Are **data and knowledge integrated or fragmented** and how does this affect policy coherence? *Example*: Is data available and accessible to all actors of the SPS system? Are data gaps and uncertainty accounted for? Are interlinkages across sectors or governance

	levels well understood? Is data integrated across disciplines and policies? Is data covering relevant spatial and temporal scales to understand a policy problem?
	2**.** How do **assessments** affect policy coherence?
	    Example: Are the assessments transparent? Which actors were involved in developing the assessments, and are some key providers of data and knowledge missing? Were cross-sectoral effects considered, also reflecting on other policy areas or environmental problems?
	3. How do **models of knowledge transfer** affect policy coherence?
	    Example: Is knowledge production separated from policy-making (=linear) or is it based on a collaborative process? How well is society integrated in the co-production of knowledge? What are the transfer mechanisms in place?
	4. What is the **role of Permanent SPSI platforms** on policy coherence?
	    *Example***:** Have formal or informal platforms been established? Are the relevant actors engaged and are the platforms covering cross-sectoral dimensions of policies and facilitating coordination across policy areas and governance arrangements?
	5. How does **competence and understanding of the problem/subject-matter** affect policy coherence?
	    Example: Do actors in the SPS system have a shared understanding of the problem? Are training and capacity activities enhancing systemic understanding?
	6. How does **funding and resources** affect policy coherence?
	    Example: Are funding and resources allocated in a way that supports the production and transfer of relevant knowledge across governance arrangements?

Stakeholder involvement	1. To what extent does s**takeholder involvement affect policy choices** during design and implementation, and how does this impact coherence across policies? 2. In how far are **formal and informal stakeholder involvement mechanisms** at different stages of the policy cycle **aligned** across policies? 3. In how far do participatory processes (e.g. stakeholder platforms) in the process support the **involvement of stakeholders across different policy areas/sectors?** 4. Are the consultation/participatory processes inclusive, fair, and equitable ensuring **contributions of all relevant stakeholders** or do **power imbalances** mean that contributions are biased towards certain stakeholders?

* Comment: Here, it is required to understand and evaluate the causality of applying different types of policy instruments, alone or in concert with other instruments. What are their effects? Such effectiveness evaluations could be broad, focussing on all kinds of intended and unintended effects. In the CrossGov project, the key issue is the contribution to the EGD objectives in focus for CrossGov. Key sources of information would be former effectiveness evaluations of policy instruments, or the ex-ante impact assessment of policies under study (ref Appendix 2, section 1 on the Better Regulation Toolbox and Guidelines).

2.4 Coherence scoring

When evaluating a large number of policies, visualizations, scorings or colour codes help identifying where problems of coherence may exist and/or emerge, and if changes can be identified along different policy cycle stages or governance levels. To explain, the scoring can be applied in evaluations of coherence at different stages in the policy cycle. This can help identify where in the process from policy design to implementation coherence issues arise. Scoring the same policy clusters at different governance levels can also help identify whether coherence issues occur at the EU, national and/or local level. While various individual EU policies may contribute positively to the EGD ambitions, there might be several horizontal coherence challenges between the EU policies that weaken their cross-compliance with the EGD. Moreover, policies at EU level may appear to be coherent in design and positively reinforce each other, while at the national level the transposed policies lead to negative outcomes. At subnational and local levels, authorities might struggle to comply with all policies equally well and might have to make trade-off decisions, risking non-compliance with certain policies and their objectives.

In CrossGov, scoring mainly provides a **visual aid** to convey synthesized information based on more extensive qualitative analyses. The approach to scoring in the CrossGov Policy Coherence Evaluation Framework is based on Nilsson et al.'s policy coherence analysis methodology (Nilsson, Griggs, and Visbeck 2016). It combines elements of coherence scoring with qualitative analysis of data from policy documents, expert input and case studies. In CrossGov, a **simplified coherence score** is recommended (Table 3). For each coherence attribute, predefined criteria guide the scoring of the contribution to coherence (Table 4). In CrossGov, only the policy coherence attributes are scored (policy objectives and policy instruments), not the explanatory variables.

Table 3 Simplified coherence score (based on Nilsson, Griggs, and Visbeck 2016).

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

Incoherence		Coherence

In CrossGov, the different policy cycle stages and governance levels are assessed in different tasks across WP2 and WP3. In each task, scoring can provide a useful tool to summarize and illustrate the findings from the coherence assessment. Ideally, scoring is applied to the 'policy objectives' and 'policy instruments' that are assessed across tasks in WP2 and WP3. To identify where coherence issues occur along the policy cycle or at different governance levels, scoring is particularly relevant for policies that are assessed across several tasks. Coordination across task leaders in WP2 and WP3 is therefore necessary.

In the methodology presented here, the scoring is based on the informed value judgements of the researchers conducting the assessment. As the teams of researchers will vary between the different tasks and case studies in CrossGov, the scores for the same policy clusters may not be directly comparable across tasks. Internal calibration between researchers will strengthen a unified approach to scoring and is therefore recommended.

Instructions for using scoring:

NOTE: These scoring instructions are preliminary and may be subject to change as the methodology is tested and developed further.

Scoring is a way to visualize complex information and will be an end-step in the CrossGov tasks. Table 4 provides criteria to guide the coherence scoring for the coherence attributes. The scoring should be based on the qualitative answers to the guiding questions addressed in the respective assessments.

In order to ensure robust scoring results, internal calibration of scoring approaches between the involved researchers is necessary. This requires an open discussion before the scoring exercise to agree on the approach to be used to decide on the scores. Scoring could be based on a literal reading of the policy documents, interpretations of the text (by oneself or as provided by jurisprudence), the viewpoints of key responsible governmental authorities, or affected stakeholders, and so forth. Divergent scoring approaches can affect the robustness of the results. For that reason, calibration ex ante and throughout the process is important.

In CrossGov, scoring is applied across policy objectives (horizontally and/or vertically), across policy instruments, and between policy instruments and objectives of other policies and/or the EGD. Scores are determined based on a set of scoring criteria that follow directly from the guiding questions in Table 2. The researchers conducting the scoring can select which criteria to apply depending on the results of the coherence analysis. How the criteria are aggregated up into the score will depend on the value judgements of the researchers involved. They will have to decide how much each criterion weighs in the particular context of the policies or case studies being assessed. The selected criteria as well as a brief explanation should always be provided alongside the coherence score to ensure transparency and traceability of scoring decisions.

Table 4 Criteria to guide the scoring of the coherence attributes.

Scoring coherence attributes	Negative/-1	Neutral/0	Positive/1	Instructions
Assessing policy objectives against objectives				
	Objectives are not aligned and contradict or impede each other.	**Objectives are unrelated.**	**Objectives are similar, overlapping, mutually reinforcing, or inextricably linked.**	*Select one overall score*
	- Achieving the objectives of policy A would make it difficult/impossible to achieve the objectives of policy B.	The objectives of policy A and policy B have no direct relevance for and/or impact on each other.	+ Achieving the objectives of policy A would be complementary to/support achieving the objectives of policy B.	*Determine and explain the overall score by using these explanatory points*
	- No explicit reference to objectives from other policies.		+ Objectives from other policies are explicitly referenced.	
	- No explicit reference of contribution to the EGD objectives.		+ Contribution to EGD objectives is specifically referenced.	
	- Spatial and temporal scales of the objectives are mismatching across policies.		+ Spatial and temporal scales of the objectives are aligned across policies.	
Assessing policy instruments against instruments				
	The instruments address issues in isolation and have conflicting implementation mechanisms.	**The instruments are unrelated.**	**The instruments consider issues in a joined-up way and have shared implementation mechanisms.**	*Select one overall score*
	- Compliance with the implementation mechanisms of policy A makes it difficult/impossible to comply with implementation mechanisms of policy B.	The instruments of policy A and policy B have no direct relevance for and/or impact on each other.	+ Policy A and B share implementation mechanisms (e.g. integrated licensing systems, shared monitoring frameworks, common indicators).	*Determine and explain the overall score by using these explanatory points*

	- Spatial and temporal scales of the policy instruments are mismatching across policies		+ Spatial and temporal scales of the policy instruments are aligned across policies
	- There is no cross-fertilization of knowledge, and knowledge and data is fragmented despite shared knowledge needs across policies		+ The instruments use, and contribute to, knowledge and data from other policies (cross-fertilization of knowledge)
	- There are no cross-sectoral coordination/ collaboration mechanisms to resolve conflicts between policies.		+ Cross-sectoral coordination/collaboration mechanisms are in place to avoid and resolve conflicts (e.g. inter-organizational consultations/committees, joint stakeholder groups, joint decision-making bodies).
	- Coordination/collaboration is hampered by power imbalances or lack of communication, infrastructure, resources, political will, etc.		+ Coordination/collaboration is facilitated by equitable and inclusive stakeholder engagement, good communication, appropriate infrastructure and resources, strong political will, etc..

Assessing policy instruments against policy objectives and/or EGD objectives

The instruments hinder the achievement of other policies and/or selected EGD objectives.	**The instruments are unrelated to objectives of other policies and/or the EGD.**	**The instruments clearly contribute to the realization of other policies and /or selected EGD objectives.**	*Select one overall score*
- Compliance with the instruments of policy A hampers/hinders the achievement of other policies and/or selected EGD objectives.	The instruments of policy A are irrelevant for/do not impact the achievement of objectives of other policies and/or selected EGD objectives.	+ Compliance with the instruments of policy A complements/supports the achievement of objectives of policies B, C, etc. and/or selected EGD objectives.	*Determine and explain the overall score by using these explanatory points*

2.5 Applying coherence scoring to policy clusters

CrossGov is assessing how different policies in the EGD policy landscape interact and how the contribution of individual policies to the EGD is affected by their relational coherence with other policies. Within the different policy clusters that are being assessed in WP2 and in the case studies (WP3), different constellations of coherence or incoherence can occur between the various objectives and instruments. For example, while three policies (A, B and C) might be coherent in terms of objectives, the instruments of policy A might be incoherent with the instruments of policies B and C. This might negatively affect the effectiveness of all three policies in delivering on their objectives (cross-compliance). In another scenario, policy A might be coherent with policy B in terms of objectives and instruments, while there might be coherence challenges with the objectives of policy C.

Graphical mapping can be used to visualize the complexity of coherence scoring across policy clusters and provide clarity on the relational aspects of coherence in a policy landscape. These mappings are mainly relevant for the scoring of policy clusters in WP2 and the case study work in WP3. The methodology is still being refined and might be subject to changes. In a policy landscape map, each policy is represented by a box and the coherence relations between them are symbolized by arrows. The color and strength of each connection is based on the qualitative assessment and scoring within task 2.2 or the case studies. A short text box on the arrows indicates the main reasons for the observed (in)coherence, while referencing to the respective page in the qualitative assessment report provides further clarifications. The illustration below (Figure 6) contains an illustrative draft of the graphical mapping of coherence between the Water Framework Directive, the Marine Strategy Framework Directive, and the Maritime Spatial Planning Directive. Additional policies that interact with the three framework directives can be added to the diagram.

WFD and associated RBMPs

Objectives: Objectives can be misaligned or contradictory despite cross-referencing

Instruments: Fragmentation of data, insufficient practice of impact assessments

Instruments: Mismatching spatial scales, fragmented knowledge production, limited coordination mechanisms *(see case study report Page Z)*

Objectives: Complementary objectives, but absence of cross-referencing

Marine Spatial Plans

Instruments: Aligned spatial scales, integrated consultation body, integrated knowledge platform and review mechanism (page Y case study report)

MSFD and associated PoMs

Objectives: Integrated

Map legend
Colour of connections = Degree of coherence (Scale - 0 +)
Shape of connections = Coherence according to attribute (Dashed line= coherence of objectives; straight line = coherence of instruments)
Strength of connections = Significance of relationship. (Bold=important, medium=medium, thin=not very significant)
Dotted ellipse = instruments are implemented through common legal act

Note: The grey boxes provide the explanatory points for the coherence scoring. For more detail and qualitiative description of each of the interactions, the boxes make refernece to the dedicated page/paragaph in the case study report that provides detailed information.

Figure 6 Hypothetical graphical mapping of coherence for a case study.

3 Practical guidance for the evaluation of policy coherence in CrossGov

3.1 Introducing the four-phased approach

The primary purpose of this chapter is **to provide the CrossGov partners with guidance for the organization of the coherence assessments within their relevant tasks**. The practical guidance breaks down the coherence assessment into four phases (Table 5, adapted from EEA 2017). These phases structure the coherence assessments in the CrossGov project to ensure a shared focus on the selected EGD strategies and objectives as well as selected EU and (sub)national policies. In the following sections, each of these phases is explained in more detail.

Table 5 Four-phased approach to coherence evaluation in CrossGov.

Phase of the evaluation	Steps to be undertaken
A. Structuring the evaluation	Preparing an initial overview of policies to be evaluated (step A.1)
	Setting the time frame (step A.2)
	Determining the geographical scope (step A.3)
	Defining the evaluation questions (step A.4)
B. Data collection	Data needs
	Data collection methods
C. Data analysis	Policy coherence analysis
D. Synthesis and conclusions	Answer evaluation question(s)

3.2 Phase A: Structuring the evaluation

The structuring phase defines the boundaries of the assessment in terms of policies, time frame and geographical scope and determines the evaluation questions to be addressed.

3.2.1 Preparing an initial overview of policies to be evaluated (step A.1)

The first step of the structuring phase is **to select the policies that will be part of the assessment**. For the CrossGov assessments, this means selecting:

a) The **EGD strategies** against which coherence and cross-compliance will be assessed.
b) The **EU policies** that are meant to operationalize/implement the selected EGD strategies.
c) The **national policies** that transpose the relevant EU policies at the national level.
d) The **(sub)national delivery mechanisms** that are relevant for implementing the selected EGD strategies in the CrossGov case studies.

Selected EGD strategies

CrossGov focuses on coherence and cross-compliance against the **marine components** of key EGD strategies for biodiversity, climate change and pollution. A comprehensive mapping exercise in Task 1.1 identified several EGD strategies and initiatives that are relevant for these three priority themes/topics from a marine perspective. Based on internal discussions and case study priorities in WP3, five strategies have been pre-selected for CrossGov research. **Assessments in all tasks should focus on the following five key EGD strategies** (Figure 7):

| 2030 Climate Target Plan | Climate Change Adaptation Strategy | Biodiversity Strategy to 2030 | Zero Pollution Action Plan | Sustainable Blue Economy Strategy |

Figure 7 Key EGD strategies for the CrossGov assessments.

While these five strategies will be the main focus of the assessments in CrossGov, tasks in WP2 and WP3 may choose to consider additional strategies where relevant to their specific context.

Selected EU policies

A predetermined core set of EU policies should be considered/included in both WP2 and WP3. This is to ensure comparability of findings related to policy design (WP2) and policy implementation (WP3). 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:**

1. Water Framework Directive (WFD)
2. Marine Strategy Framework Directive (MSFD)
3. Maritime Spatial Planning Directive (MSPD)
4. Habitats Directive
5. Birds Directive
6. Strategic Environmental Assessment Directive (SEA Directive)
7. Environmental Impact Assessment Directive (EIA Directive)
8. Renewable Energy Directive
9. Common Agricultural Policy (CAP, parts that are relevant for the selected EGD objectives in the marine sphere)
10. Common Fisheries Policy (CFP, parts that are relevant for the selected EGD objectives)

Task leaders can include additional policies that will be part of the assessment in their task (beyond the core ten).

National policies and (sub)national delivery mechanisms

The national policies to be selected are those that transpose some of the EU-level policies listed up above. Those policies that are evaluated in case study research in WP3 are specifically relevant.

3.2.2 Setting the time frame (step A.2)

The EGD is operationalized through an evolving framework of existing policies (some of which have been, will be, or are being reviewed), new policies, and proposed policies. **Determining the time frame of the assessment** is important to clarify which versions of policies are being evaluated and which policies are included or excluded. For assessing cross-compliance, it is also important to specify the time period within which progress/success of policy implementation is evaluated.

CrossGov will evaluate policies adopted/in force as of January 2023, and those expected to become adopted or enter into force in the period between January 2023 - Summer 2024. Relevant ongoing and planned revisions of the selected policies will be considered as far as possible until Summer 2024. If it becomes apparent within the time frame of CrossGov that the

proposed Nature Restoration Law is likely to be adopted, it should be included in the assessments.

Any new policies, revisions or amendments that are adopted later than Summer 2024 will not be included in the WP2 and WP3 assessments. Though these might be considered in WP4 in terms of their potential to improve coherence and cross-compliance or to mitigate any identified coherence challenges.

3.2.3 Determining the geographical scope (step A.3)

The geographical scope of the assessment should be set before the assessment can begin. This is particularly important when evaluating regional frameworks like EU policies that are implemented in specific national and sub-national contexts.

In CrossGov, the geographical scope is determined by the EGD framework which is set at the EU level and implemented at the national and local level in the EU countries. The specific geographical focus varies between tasks. Tasks 2.1 and 2.2 evaluate policies at the EU level. Task 2.3 focuses on the transposition into national policies in Norway, the Netherlands, Germany, France, Italy, and Finland. In Task 3.2, the CrossGov case studies assess relevant sub-national policies in the respective countries.

CrossGov further considers policy at the regional seas level for the three regional seas relevant to the CrossGov countries of interest: Baltic Sea, North Sea, Mediterranean Sea. International policies may also be part of the assessment if relevant in particular contexts (e.g. international regulations for sectors of interest in case studies).

3.2.4 Defining the evaluation questions (step A.4)

The key output of the structuring phase are the evaluation questions that will be addressed by the assessment. The main question CrossGov aims to answer through the research carried out in WP2 and WP3 is:

> *How does the degree of coherence across environmental and sectoral policies and governance levels affect progress towards achieving cross-compliance with the selected EU EGD goals and targets?*

To answer this overarching evaluation question, several sub-questions have been defined. These sub-questions will be answered by the different tasks in WP2 and WP3. **Each task leader selects the relevant sub-question(s) to be addressed by the assessment in their task:**

1. *To what extent are EU policies coherent with the selected EGD goals and targets related to/relevant for European seas? (Task 2.1)*
2. *To what extent are EU policies coherent with each other; How do specific horizontal coherence challenges across EU level policies affect a single policy's support towards the EGD goals and targets? (Task 2.2)*
3. *How do transposition processes (from EU-level to national level) affect the level of vertical policy coherence of the national-level policy framework towards the EGD goals and targets, and the level of horizontal coherence across these national policies? (Task 2.3)*

4. *How well aligned are the strategic plans according to transposed versions of the WFD, MSFD and MSPD, and how do they influence selected sectors in contributing to achieve EGD goals and targets? (Task 3.2)*
5. *How far do/can mainstreaming processes of environmental/biodiversity related aspects into sectoral decision-making affect coherent and effective policy implementation towards multiple EGD goals and targets? (Task 3.3)*
6. *In how far do regional seas commissions/policies affect policy coherence within the North Sea, Baltic Sea and Mediterranean Sea policy landscapes? (Task 3.2/3.3)*

3.3 Phase B: Data collection

In the second phase, **the data for the assessment are collected**. The type of data needed and appropriate data collection methods will depend on the evaluation question(s).

The first step in Phase B is to determine what kind of data and information are needed to answer the evaluation question(s). For the evaluation questions set in CrossGov, data and information are needed about the EGD strategies, EU policies, national policies and sub-national delivery mechanisms identified in Phase A.

3.3.1 Information about the EGD

CrossGov aims to support the delivery of ocean-related EGD objectives relevant to biodiversity, climate change and pollution. The focus is on the five key EGD strategies identified in Phase A.1 Figure 7 **shows the ocean-related objectives of these key strategies. These are the objectives against which CrossGov will assess coherence.**

Tasks in WP2 should consider all of the selected objectives in their assessments. **In WP3**, the focus might be narrower, depending on the sectors and policy areas of interest in the case studies. Case study/Task leaders in WP3 may also choose to include objectives from other EGD strategies where relevant to their study focus (e.g. from the Offshore Renewable Energy Strategy).

Both general and specific objectives have been included (pursuant to EU BRGT, EEA). **General objectives are the overall goals of a policy**, expressed in terms of 'policy outcome' or 'policy impact'. These objectives are often broad goals that are not quantifiable and do not have a specific timeline. **Specific objectives are targets to be achieved to meet the general objectives.** Specific objectives are expressed in terms of the direct and short-term results of a policy. Specific objectives tend to be measurable targets with a deadline or a specified time limit and may have associated result indicators. The distinction between general and specific objectives is not always clear. For example, general objectives can include deadlines and specific objectives might not always be quantifiable and easily measurable.

In CrossGov, the general EGD objectives are understood as the aspirational goals and visions set out for 2050 as well as the overarching objectives of the Sustainable Blue Economy Strategy. The specific objectives of the EGD are understood as the commitments and targets set for 2030.

CrossGov

The European Green Deal

Zero net ghg emissions by 2050 — Economy decoupled from resource use — Natural capital protected and enhanced — Health and wellbeing of citizens protected — No one left behind

Policy areas

Climate   Ecosystems & biodiversity   Pollution   Energy   Circular economy   Mobility   Food sector   Building

Green Deal Strategies and Action Plans

- 2030 Climate Target Plan
- Climate Change Adaptation Strategy
- Biodiversity Strategy to 2030
- Zero Pollution Action Plan
- Sustainable Blue Economy Strategy

General objectives

Climate neutrality by 2050

2050 vision
A climate-resilient society, fully adapted to climate change impacts

Adaptation will be
- Smart
- Systematic
- Fast
- Global

2050 vision
All of the world's ecosystems are restored, resilient and protected

2030 goal
Europe's biodiversity is on the path to recovery

2050 vision
Pollution is reduced to levels no longer considered harmful to health and ecosystems

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 to food and feed.

Specific objectives

By 2030, reduce net ghg emissions by at least 55% compared to 1990 levels

2030 commitments (ocean relevant)
1. Legally protect min 30% of the EU's sea area and integrate ecological corridors
2. Strictly protect at least 10% of the EU's sea area
3. Effectively manage all protected areas
4. Significant areas of ecosystems restored, habitats and species show no deterioration, at least 30% reach favourable status or positive trend
5. Risk and use of chemical pesticides is reduced by 50%
6. Number of Red List species threatened by invasive alien species is reduced by 50%
7. Nutrient losses from fertilisers are reduced by 50%
8. Negative impacts on sensitive species and habitats, including on the seabed through fishing and extraction activities, are substantially reduced
9. By-catch of species is eliminated or reduced to a level that allows species recovery and conservation

2030 targets (ocean relevant)
1. Reduce by more than 55% the health impacts (premature deaths) of air pollution
2. Reduce by 25% the EU ecosystems where air pollution threatens biodiversity
3. Reduce by 50% nutrient losses, use and risk of chemical pesticides, sale of antimicrobials for farmed animals and aquaculture
4. Reduce by 50% plastic litter at sea and by 30% microplastics released into the environment
5. Significantly reduce total wate generation

Fit for 55 Package

Hydrogen Strategy

Offshore Renewable Energy Strategy

Smart Mobility Strategy

Farm to Fork Strategy

Energy System Integration Strategy

Chemicals Strategy

Sustainable Algae Strategy

New Industrial Strategy
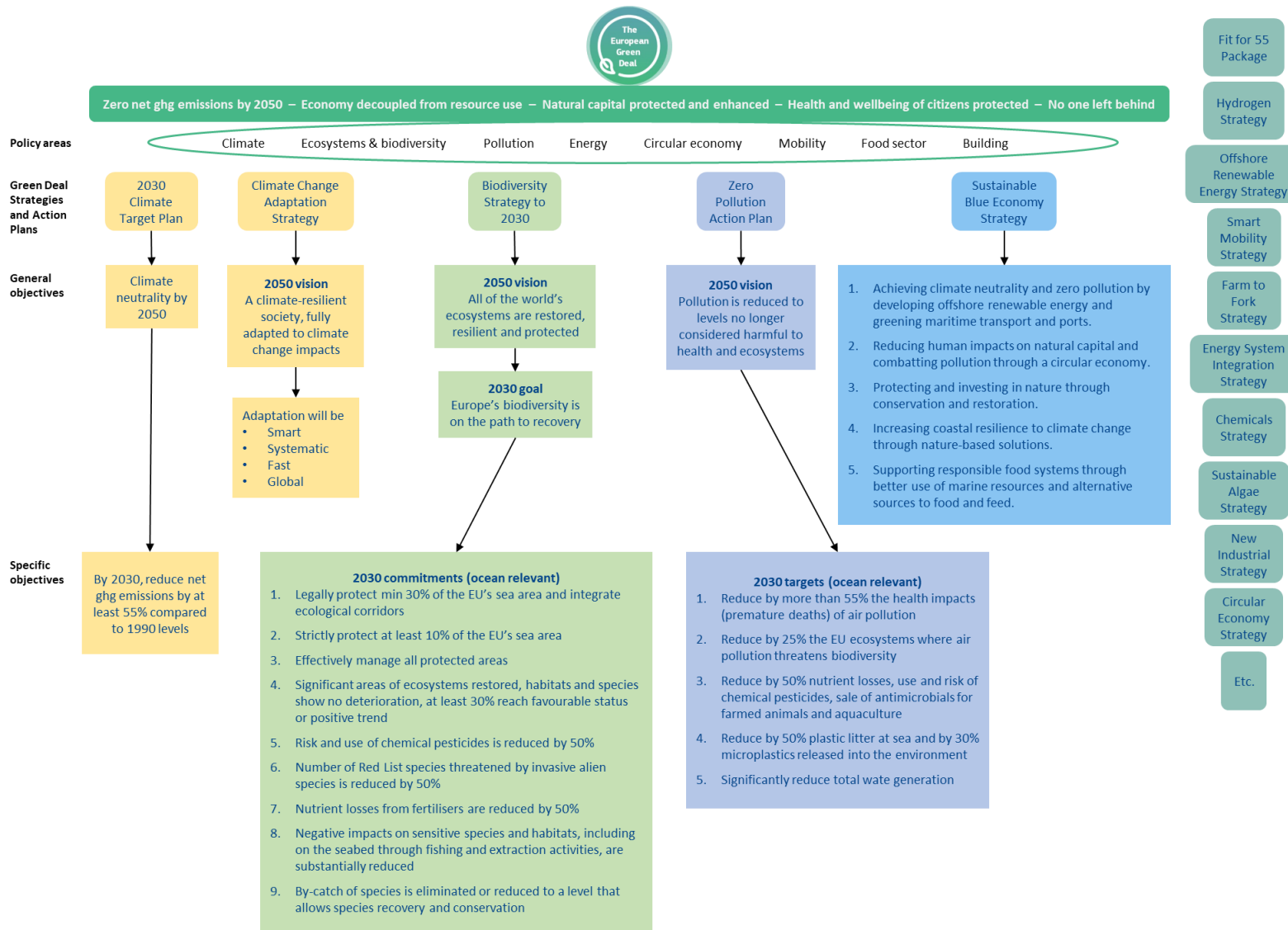
Circular Economy Strategy

Etc.

Figure 8 Overview of the five key EGD strategies and action plans for biodiversity, climate change and pollution, and their respective ocean-relevant objectives.

3.3.2 Information about the EU policies

The data needed from the EU policies to be assessed is determined by the **conceptual framework that underpins the CrossGov Policy Coherence Evaluation Framework, as introduced in chapter 2**. The conceptual framework is based on policy coherence attributes and variables. The coherence framework applies a broad approach to the study of policy coherence. In addition to the goals and objectives, various other aspects of policies that can affect coherent policy making and implementation and cross-compliance with the EGD are explored. The information and data about these attributes and variables can be from the official policy documents available in EU-Lex, stakeholder interviews, surveys, case study research or other methods.

3.3.3 Information from (sub)national policies and case study research

The information to be collected from (sub)national policies follows the methodological framework described above. Based on the case study topic and focus, case study leaders need to select the information related to the specific attributes explored in the case studies for the policies under assessment.

3.3.4 Data collection methods

Data collection methods generally depend on the type of data and information needed for the assessment. In CrossGov, different methods will be applied by the different tasks in WP2 and WP3. The most relevant methods for CrossGov are:

- **Legislative and policy document text analysis**
  Data is collected from the actual policy document text, as well as related documents including preparatory works such as evaluations and impact assessments, guidelines, explanatory memorandums and other possible documents that aim to explain the intention or anticipated effects of the policy, as well as case law.

- **Analysis of academic and policy literature**
  Data is collected from policy literature such as reports from the EU and other research studies. This includes impact assessments, fitness checks, strategic environmental assessments, mid-term and ex-post evaluations studies. It also includes academic literature on scholarly analyses of specific policies.

- **Surveys (interviews and questionnaires)**
  Data is collected through interviews or questionnaires. Survey participants can be experts, officials, stakeholders or anyone who has relevant knowledge of, or a concrete interest in, the subject under investigation.

- **Stakeholder workshops**
  Data is collected from a group of stakeholders or experts through workshops, expert panels or focus groups.

- **Case studies**
  Data is collected from case studies. Case studies can be an important approach to better understand the causal pathways between policy design, implementation and impacts. It

is possible to study single cases, though more insight can be gained by comparing findings across different case studies.

3.4 Phase C: Data analysis

Phase C is the main assessment phase. In this phase, **the collected data will be analyzed to address the defined evaluation questions**. In CrossGov, the coherence assessment is underpinned by an overarching conceptual framework that applies across WP2 and WP3. The specific focus and analysis approach will vary between tasks depending whether the focus is on:

- Policy coherence between EU policies and EGD objectives, across EU policies, between (sub)national and EU policies, or between policies at lower levels of governance; and
- Policy design or policy implementation.

The following sections provide some **guidance for each assessment task in WP2 and WP3 on how the Policy Coherence Evaluation Framework could be applied**. This is to support the WP/task leaders in designing and implementing their respective assessments in a consistent way that will enable the project as a whole to answer the overarching evaluation question. This guidance is not meant to be prescriptive and does not go into details on how to conduct the assessments. Chapter 2 and 3 explain how to apply the Evaluation Framework and is guiding for all tasks in CrossGov.

3.4.1 Vertical coherence with the EGD [Task 2.1]

Objective: To assess vertical coherence of EU policies with the ocean-related EGD objectives for climate change, biodiversity and pollution.

Assessment: Coherence against the EGD will be assessed through an analysis of selected EU policies against the five selected key EGD strategies and their objectives (see step A.1). [Document-based data collection, desk-based study.] Specifically, the assessment will look at two elements of the coherence evaluation framework:

- Comparison of **policy objectives** against objectives of five key EGD strategies [e.g. using a screening matrix].
- **Mainstreaming**: Do the policies explicitly state an intent to contribute to addressing biodiversity, climate change and pollution (beyond their specific objectives)?

Output: An overview of whether the policies under consideration are coherent with the selected EGD objectives and can therefore be assumed to contribute to the delivery of the EGD for European seas. More specifically, insight on whether there are any EGD objectives that are not covered by EU policies and which EU policies potentially contribute to two or more EGD objectives (and thus have higher cross-compliance potential).

Scoring: Yes

3.4.2 Coherence in policy design [Task 2.1]

Objective: To assess whether policy design is <u>likely to support</u> horizontal coherence between the policies intended to deliver the EGD. Based on the assumption that coherence between policies supports effective, cross-compliant implementation, horizontal incoherence can negatively affect policies' vertical coherence with the EGD.

Assessment: Coherence in design will be assessed for each of the policies using a series of guiding questions (Table 2). The questions will be addressed in a narrative way. [Document-based data collection, desk-based study.]

Output: A screening of how likely the design of the assessed policies is to support coherence across policies. Indications of where coherence issues might be [needed to inform Task 2.2].

Scoring: Yes

3.4.3 Horizontal coherence at EU level [Task 2.2]

Objective: In-depth understanding of policy inter-relationships for key selected policies with coherence tensions: Where are key coherence issues? What is causing (in)coherence? What are the implications for the individual policies' contributions to delivering the EGD?

Assessment: Horizontal coherence will be assessed for a selection of policy sets with key incoherence tensions. The choice of policy sets is informed by Task 2.1 and WP3. The selected policies will be assessed against each other using the Policy Coherence Evaluation Framework and guiding questions (see Table 2). The assessment will involve:

- A desk-top study of the policies, preparatory works, case law, impact assessments, evaluations etc. to help answer the guiding questions and conduct the scoring.
- Interviews/focus groups with stakeholders (policymakers, DGs, EC) to verify the findings. Also consider asking stakeholders about explanations for the choices made in the policy formulation process, and/or viewpoints on how they perceive certain policies to contribute to the various ambitions of the EGD.

Output: Key coherence issues at EU level are identified, causes and implications for EGD delivery understood.

Scoring: Yes, score at least the coherence attributes of those policies that are evaluated in WP3.

3.4.4 Coherence in national transposition [Task 2.3]

Objective: To understand what choices countries make in the transposition of EU policies and how this affects coherent implementation at the national level, vertical contribution to coherent delivery of the EGD and sets the frames for subsequent implementation processes to be studied in WP3.

Assessment: Coherence in national transposition will be assessed in two steps:

1) Identifying how the CrossGov countries have chosen to transpose key policies and assessing (using the coherence attributes as relevant):
   a. How do approaches compare across countries?
   b. How likely are design-related choices to contribute to (in)coherence?

2) Assessing coherence horizontally at the national level using the coherence attributes framework and guiding questions (see Table 2).

Output: Coherence in national level policies and implications for EGD delivery are understood.

Scoring: Yes, for the policy clusters or policies studied in task 2.2 and WP3

3.4.5 Coherence and Cross-compliance in planning processes at the local level [Task 3.2]

Objective: To understand how strategic plans prepared according to national transposition of the WFD, MSFD and MSPD affect coherent and effective policy implementation towards multiple EGD goals and targets.

Assessment:

- Assess the implementation of WFD, MSFD and MSPD' planning processes in selected case study areas using the relevant policy coherence attributes and their guiding questions (Table 2).
- Score the attributes together with stakeholders (policy makers, authorities, etc.) and collect qualitative explanations of the scores provided.

Output: An understanding of the level of coherence between the planning processes under the three policies. An understanding of whether planning processes can/do contribute to cross-compliance with the EGD marine ambitions, and the possible enablers, barriers and factors that can affect cross-compliance.

Scoring: Yes

3.4.6 Coherence and Cross-compliance in sectoral decision making [Task 3.3]

Objective: To understand how mainstreaming of environmental/biodiversity related aspects into sectoral decision-making does/can affect coherent and effective policy implementation towards multiple EGD objectives.

Assessment:

- Assess how biodiversity related aspects are integrated in various sectors, including fisheries, renewable energy development, agriculture (eutrophication) using the relevant policy coherence attributes and their guiding questions (Table 2)
- Score the attributes together with stakeholders (policy makers, authorities, etc.) and collect qualitative explanations of the scores provided.

Output: The role of mainstreaming in sectoral decision-making practices on the achievement of multiple EGD marine ambitions is understood.

Scoring: Yes

3.5 Phase D: Synthesis and conclusions

In the last phase, the results of the analysis are pulled together to **provide answers to the main evaluation questions (see A.4) and to draw overall conclusions to CrossGov's overall research question**.

How does the degree of coherence across environmental and sectoral policies and governance levels affect progress towards achieving cross-compliance with the selected EGD goals and targets?
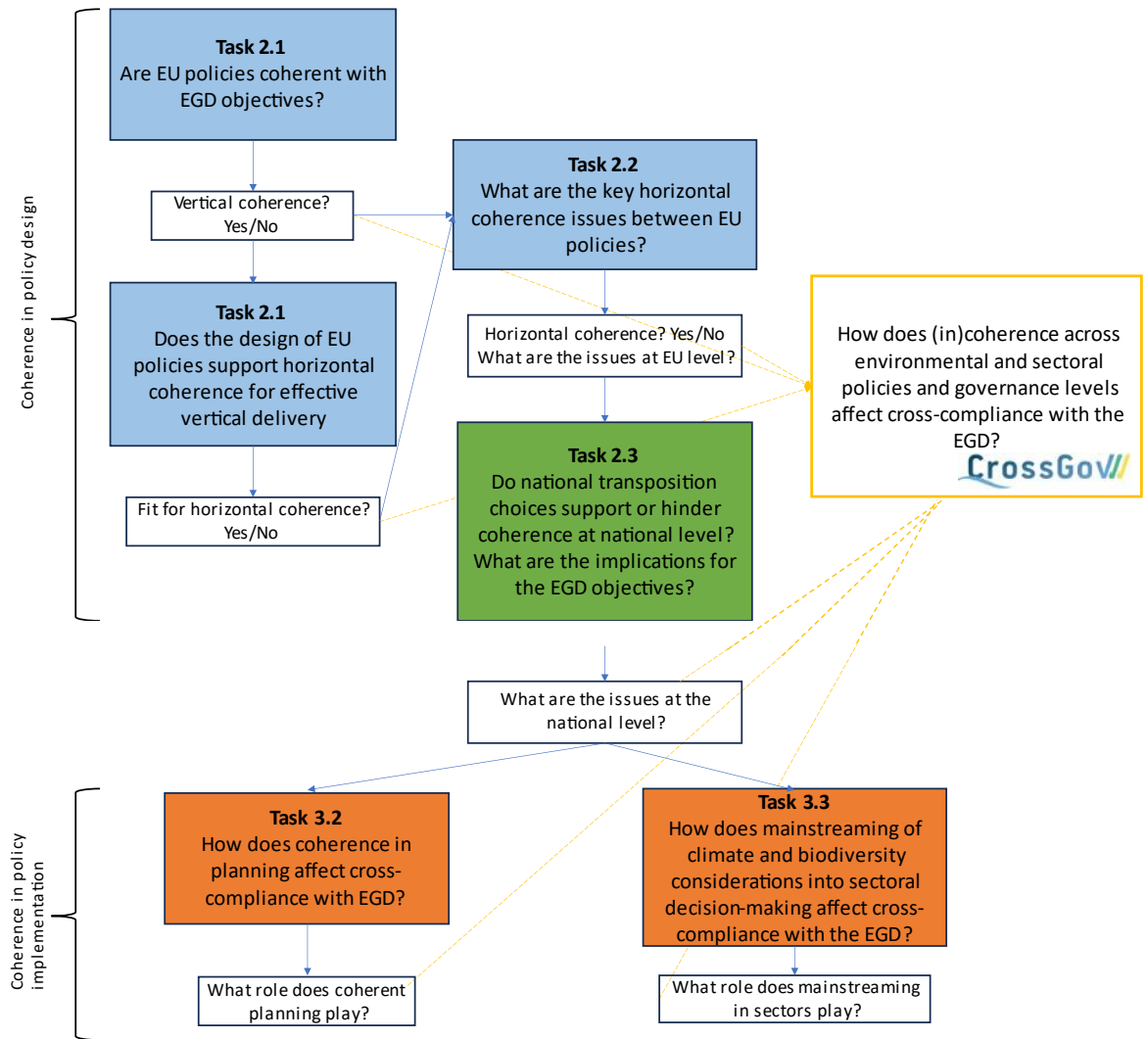

Figure 9 Coherence and cross-compliance assessments in CrossGov WP2 and WP3

Objective: To understand how coherence across environmental and sectoral policies and governance levels affects progress towards achieving cross-compliance with the selected EU EGD goals and targets. To understand which elements of policies are causing barriers to coherence and/or cross-compliance. To understand at which governance level(s) and phases of the policies' life cycles, coherence and cross-compliance challenges mostly emerge and where they can be best mitigated.

Assessment:

- To synthesize the research carried out in WP2 and WP3 by comparing conclusions and findings with each other in terms of policy coherence and cross-compliance.
- To explore scorings provided to the policies and their attributes across tasks and to investigate whether any patterns can be identified, such as coherence challenges or opportunities across policies or governance levels.
- To verify conclusions with a set of stakeholders previously involved in the WPs.
- To hand-over the synthesis to WP4 leads.

Output: The effect of coherence across environmental and sectoral policies and governance levels on progress towards achieving cross-compliance with the selected EGD goals and targets is understood and findings are clearly communicated to WP4.

Scoring: An aggregate scoring approach may be useful for presentations, policy briefs, publications. Apart from that, we maintain detailed assessments of the various policies and their attributes as these provide valuable insight into specific challenges and obstacles towards policy coherence and cross-compliance.

Annex I: A conceptual introduction to Policy Coherence and related concepts

1. What is policy coherence?

Policy coherence refers to the alignment and coordination of policies across different policy areas and governance levels to achieve mutually reinforcing outcomes and avoid that policy interventions contradict or undermine each other. Policy coherence is an aspiration in policy making and can be observed along three major axes: 1) On the horizontal level, coherence describes policies that are cross-cutting though institutional and sectoral boundaries 2) vertical coherence refers to the alignment of policy interventions and plans across governance levels 3) International coherence aims at harmonizing policy interventions across countries to be mutually supportive and avoid negative externalities (United Nations Committee of Experts on Public Administration (CEPA) 2021).

Research on policy coherence has mainly focused on the institutional settings of governance to understand how coherent decision making is affected by administrative boundaries and which instruments are used to improve coordination across scales and levels of governance. There are different conceptual frameworks for looking at policy coherence that emphasise distinct phases in the policy cycle and shift their attention between focusing on policy documents or broader approaches to networks and discourse analysis.

Through a systematic review of literature on policy coherence, Tchinda & Talbot suggest that policy coherence can be studied through formal and informal perspectives. The informal perspective implies a discourse analysis of the political debate, press release and document analysis to understand how perceptions of actors and policy frames about interconnected problems influence policy coherence, both in design and implementation. The formal perspective refers to analysing policy coherence along the vertical and horizontal dimensions of governance, looking at how policies interact and in how far policy objectives and the choice of policy instruments are mutually reinforcing (Tchinda and Talbot 2023).

A similar methodological categorization can be found in the strategic guidance for coherent policymaking by the UN Committee of Experts on Public Administration. They provide a coherence assessment framework that measures the level of coherence along three dimensions. The first dimension is policy framing, that largely resonates with what Tchinda & Talbot have referred to as informal dimension. When policy issues are delineated within the boundaries of existing administrative entities and no efforts are made to understand cross-cutting linkages, coherence is low. Increasing perception and framing that a policy issue requires cross-cutting action is a sign of extending coherence. The second and third dimension are structured around policy goals and instruments respectively and correspond to the formal perspective. Coherence assessment with regards to these dimensions looks at whether goals and instruments are only designed to address issues within a limited subsystem or whether interactions are considered that require overarching strategies and cross-cutting policy instruments. A last dimension that can be assessed are the existence of procedural instruments, assessing whether governance structures are in place that increase coordination and information exchange (United Nations Committee of Experts on Public Administration (CEPA) 2021).

2. Interrelated concepts to policy coherence

The idea that societal problems require holistic approaches with interaction across different policy areas is not novel. Thus, several conceptual frameworks and terminologies that are related to policy coherence have evolved over the years. These **include multilevel governance; policy integration, and coordination; environmental policy integration and policy mainstreaming; and the nexus approach**. These concepts will be shortly described here.

2.1. Multilevel governance

Multilevel governance (MLG) systems have been conceptualised to describe the transformation of the political and institutional landscape of the post-Maastricht EU integration process, but have increasingly been applied beyond studies of the EU (Behnke, Broschek, and Sonnicksen 2019; Hatenboer, van den Berg, and Holzhacker 2022). While earlier theories of European integration have focused on the upwards transfer of power from nation states to the supranational level, MLG seeks to capture non-hierarchical, mutual relations across different levels of governance and their associated actors (Thomann and Sager 2017). MLG contributes to the shift in attention from governments to a broader governance concept by introducing non-state-; private sector- and informal actors into the governance network (Behnke, Broschek, and Sonnicksen 2019; Tortola 2017). Thus, studying marine governance through the lenses of MLG allows to capture a diverse set of relationships between different actors that shape decision-making processes. Hierarchical power relations are substituted by interdependent management structures where negotiation and bargaining become the dominant approaches to governance (Hooghe and Marks 2020). MLG is often used interchangeably with the terms of *nested or polycentric governance*, emphasising that decision-making has been decentralized between a multitude of actors located at different levels. The dispersion of governance is regarded as effective because it enables specialisation at the same time as it allows for the integration of a multitude of knowledge sources and actors.

The OECD has developed a conceptual framework for studying complex interactions in multi-level governance systems that captures both the formal and informal interactions of institutions and associated actors that are linked vertically and horizontally. The vertical dimension in MLG refers to the dispersion of governance across jurisdictional levels, recognizing that anchoring of policies at different levels is more effective. Horizontally, MLG captures the coordination across actors from different organisations or policy areas and takes place at all levels of governance, from national to local settings. However, the effectiveness of interfaces across multiple actors and governance levels relies on a set of favourable conditions. The OECD has developed a list of principles for good practice in MLG systems. Policy coherence is amongst one of the principles and is assessed by looking at how well incentives are aligned horizontally and vertically, and to what extent the MLG system exploits synergies and reduces contradictions. This refers to both how synergies with objectives from other policy areas are aligned and to what extent the MLG system has achieved integration of a specific policy objective into other policy areas (OECD 2010).

The marine policy landscape that will be studied in CrossGov is highly fragmented, not only across different policy areas but also across policy levels. Pathways towards increased coherence of the marine policy landscapes must therefore take account for these complex multilevel governance systems to understand how policy formulation and implementation is

affected by various actors across multi-levelled governance systems. So far, MLG remains a rather conceptual framework with different interpretations, and the implementation of MLG into case studies is limited (Tortola 2017).

In the CrossGov project, multi-level governance systems are studied. While Task 2.1 and 2.2 primarily focus on the EU level, Task 2.3 addresses policy dynamics at the national state level. Sub-national implementation is studied in case studies in both Task 3.2 and 3.3. Policy coherence challenges and opportunities can appear differently at the various levels of governance. Studying policy coherence at different levels of governance provides insight into where exactly problems or challenges towards cross-compliance with the EGD ambitions emerge and can be mitigated.

2.2. Policy integration and coordination

Policy integration can be understood as an umbrella concept of inter-sectoral policy action where policy making integrates effects and possible interactions between adjacent policy areas to achieve joint benefits. Integration is described both in a vertical (across governance levels) and horizontal dimension (across policy areas). The main approaches to policy integration are to establish interdependencies between policy areas, which can lead from independent to shared decision making processes across organisational boundaries. Whilst coordination, co-operation and policy coherence are recurring terms in the field of integrated policy making, Meijers & Stead have attempted to disentangle their meaning (Meijers and Stead 2004).

Policy integration refers to the highest level of coordination where objectives from different policy areas are integrated into a common framework to achieve coherent policies. Coordination as such implies an alignment between policies with similar sectoral objectives, whereas co-operation describes a weaker form of interaction in which organisations are mainly preoccupied by individual objectives. Policy integration is driven by the need for enhanced efficiency and effectiveness. Integrated policy measures are regarded as more efficient because they are seen as reducing conflict and promoting synergies across policy areas and are often associated with lower costs.
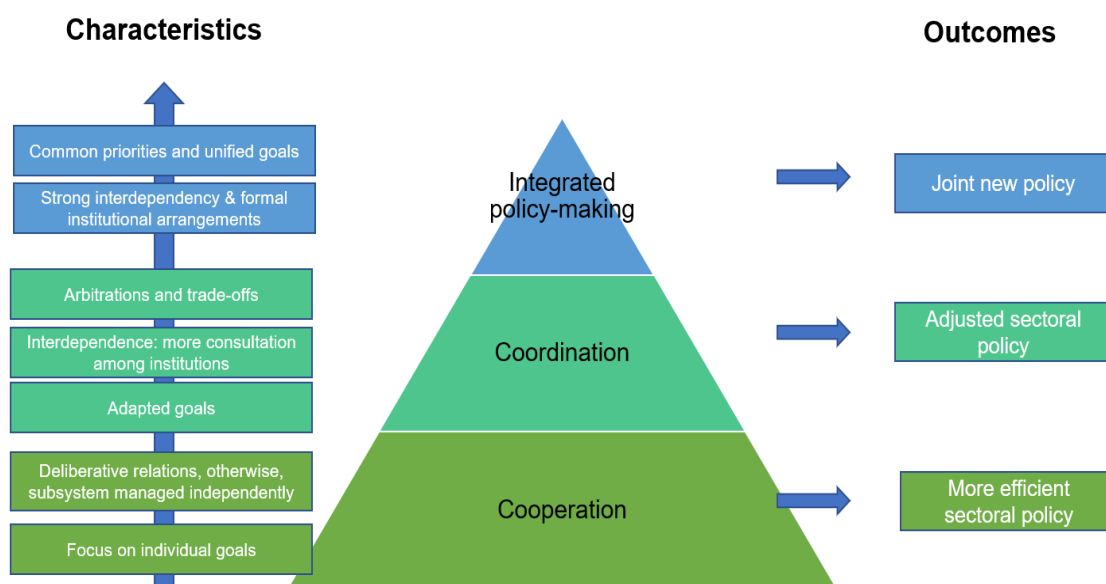

Figure 10 Dimensions of integrated policy making, adapted from Meijers & Stead 2004 and Metcalf's scale on policy coherence as presented in UN CEPA 2021.

The concept of policy integration has been applied in public policy and academia both with a government-centric as well as a governance-centric approach. In response to government structures of the New Public Management era that are characterized by strong organisational boundaries (often termed "policy silos"), the government-centred policy integration concepts such as "*holistic government*", "*whole of government*" and "*joined-up government*" have emerged. A reformation of the public sector in line with these concepts implies to overcome fragmentation through enhanced cross-sectoral policy making. This is mainly achieved by procedural and organisational means, such as inter-department and -administrative coordination efforts like common plans or task forces to enable the exchange of information and the creation of a common understanding of the policy problem (Tosun and Lang 2017). In addition, policy instruments such as *regulatory impact assessments or policy appraisals* can be applied that identify potential and unintended effects of a policy on another policy area. Policy integration through the lenses of a *governance-centric approach* moves away from hierarchical government structures and focuses on the wider networks between government units and non-governmental actors such as civil society and private sector. In governance centric policy integration approaches, the expansion of policy recommendations from one policy area into another are captured by looking at the relationships and power dynamics of actors in the policy networks. (Meijers and Stead 2004; Tosun and Lang 2017)

Policy integration can be seen as the overarching concept whereas the CrossGov project employs the terms of policy coherence and cross-compliance to delineate the focus. Policy coherence is strongly linked to integrated policy making and requires a high level of interaction and interdependency. In CrossGov, policy coherence captures both the procedural and organisational steps of integrated policy making. Cross-compliance, or the concurrent achievement of multiple EGD objectives, is equally described as the output dimension of integrated policy making.

2.3. Environmental Policy Integration and Mainstreaming

The Brundtland Report in 1987 made a strong argument for integrating environmental concerns into other sectoral policies (Persson 2004). The EU has further developed the concept of Environmental Policy Integration (EPI) and enshrined it into its political mandate with legislative status. EPI has a strong normative dimension by ensuring that a "principled priority" is given to environmental concerns throughout all policy sectors (Jordan and Lenschow 2010). This was mainly justified by the acknowledgment that environmental problems are cross-sectoral and environmental authorities on their own have limited competences to resolve the environmental challenges originating as externalities of different sector's activities (Nilsson et al. 2012). EPI has been interpreted in different ways, but several scholars and organisations such as the OECD and the EU have made attempts in moving from a conceptual framework towards an analytical tool with practical guidelines for policymaking. EPI is sometimes measured in organisational terms, thus focusing on institutional structures and compartmentalisation, while other scholars approach EPI from a procedural perspective by looking at strategies and impact assessments. The European Environment Agency has created checklists for evaluating EPI, focusing both on organisational and procedural criteria, however their general character makes them difficult to operationalise (Persson 2004). EPI does not break with the concept of policy silos, instead it seeks to integrate environmental concerns and objectives into policy areas to achieve a "greening" of the sectoral governance architecture

(Venghaus et al. 2019). The use of the EPI framework has faded over the recent years, mainly due to the strong commitments towards the sustainable development agenda. While attainment of the SDGs requires high levels of policy integration and harmonisation, the normative dimension of EPI that gives principled priority to environmental issues is put into question, since all SDGs are considered equally important (Nilsson and Persson 2017).

Closely related to EPI is the concept of '*Policy mainstreaming*', which has extended from its initial focus of integrating social policy concerns into all policy areas to also capture integration of environmental and climate concerns and is now used interchangeably with the term of environmental policy integration.

2.4. Nexus approach

The nexus approach has first been developed in the 1980s and has evolved over the years to capture an increasing number of cross-sectoral interactions. The approach can be found in UN reports and strategies and has also been applied by the World Economic Forum, the International Energy Agency, the Intergovernmental Science-Policy Platform on Biodiversity and other international fora and organisations (Estoque 2023). The nexus approach is closely related with and builds upon environmental policy integration but extends the concept further by emphasizing a more holistic perspective. While policy integration, especially EPI, calls for incorporating (environmental) objectives into another policy area, the nexus approach addresses complex challenges at the intersection of several policy sectors. The rationale of the nexus approach is not to focus on policy objectives related to one policy area but understand interaction other policy goals through shared and interrelated resources. Nexuses are a broad concept with varying interpretations, however nexuses such as the water-energy-food nexus and the closely related water-energy-land nexus have found broader application. Applying the water-energy-land nexus to hydropower constructions for instance is a prominent example to demonstrate how energy production affects land-use and requires well-integrated water allocation management. A nexus serves as analytical tool to identify complex interdependencies and unintended feedbacks that need to be accounted for in integrated policy making (Estoque 2023). The nexus approach is primarily an analytical framework to support the development and implementation of policies that are more integrated, both horizontally and vertically.

2.5. Implementation theory

Implementation theory originates from evaluation research and is one sub-discipline of policy analysis, also with strong ties to public administration, yet with few applications to ocean governance (Sander 2018). Implementation research is a good lens through which a holistic perspective on the policy process can be observed. The theory emphasizes that for understanding the results of policies, the preceding stages of the policy cycle and the policy design also must be taken into account. Søren Winter has presented a framework for implementation studies that zooms in on the events in the implementation phase, but also takes into account the whole policy cycle (Winter 2012) (Fig 8). It is meant as a roadmap for investigations, presenting some key factors that affect policy results. Moreover, it is open towards specialized approaches in policy-disciplines that focus on only single stages or mechanisms.
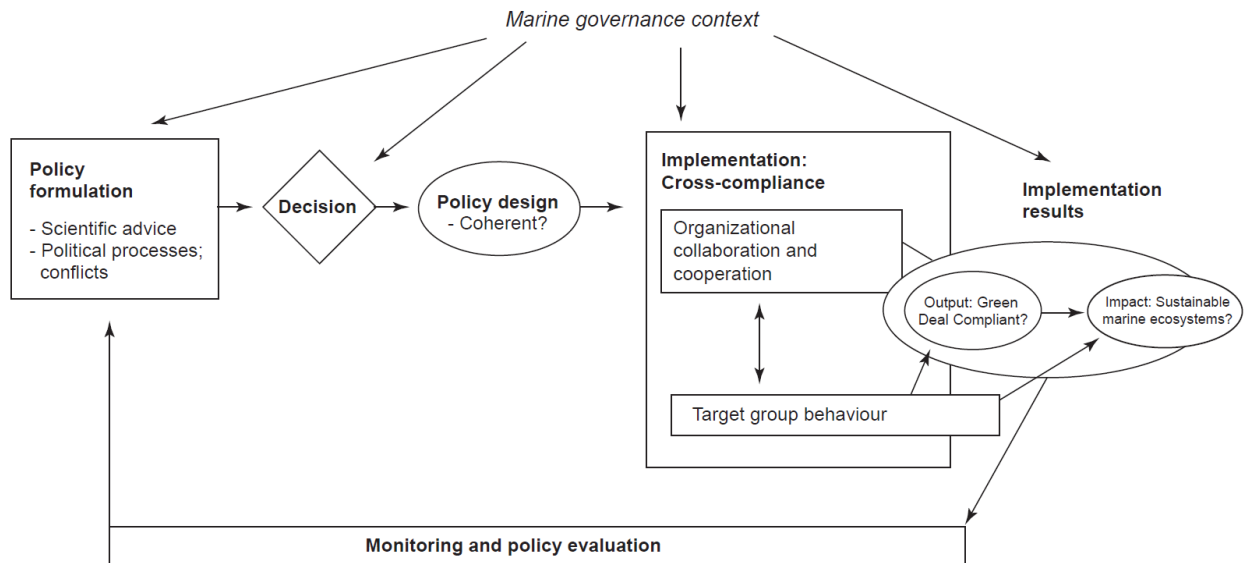
Figure 11 A framework for evaluating policy implementation, including several stages of the policy cycle. Adapted from Winter, S. 2012

A common research question in implementation theory is 'What has been achieved, and why?' The achieved results can be described by two evaluation standards: *output* is the delivered results after implementation, for instance a regulation that has been put into practice and starts to work. Such working outputs lead to impacts, termed *outcomes* by Winter. This can be measured according to the problems that motivated the formulation of the policy, for instance climate change or pollution. However, within such wide frames, a policy needs to carve out a niche, within which it formulates its own objectives. These create another standard against which one can evaluate outcomes/impacts. Tracing the linkages from output to outcomes ex post, means that one tests to what extent the causal theory built into the selected design of the adopted policy, delivers what was expected ex ante. This may be complicated by other intervening policies and external and unforeseen events (Dige and Dilling 2017). Output is therefore often used as an indicator for results and a proxy for outcomes.

The explanations to the results can be found in the policy formulation, the adopted policy design and the implementation process, as well as the context.

During policy formulation, Winter highlights the need for a valid *causal theory*. Policies should be designed with instruments that will work in a way that allows the objectives to be met (internal coherence). This may not be described by scientific advice, be unknown, uncertain, or unappealing to stakeholders and political decision-makers. He also refers to *symbolic policies*, those that are never seriously meant to be put into practice, but rather signal good intentions or alliances. *Conflicts* between different actors involved, potentially involving both public organizations and stakeholders, are also important. If they are not solved in a manner that the parties conceive as legitimate and reasonable, they may reappear and create problems in the implementation phase.

The policy formulation phase ends with a decision that leads to a certain policy design. It will typically contain a description of the problems to be solved, the desired direction of change by visions, objectives and/or targets, and a set of measures. Measures is usually a package of policy instruments (Lascoumes and Galès 2007). The policy should also designate responsibilities for follow-up, and resources for those involved in implementation. The selected

48

policy instruments and organizational structures are the visible results of the political processes prior to the decision (Matland 1995).

The implementation process shall transform the policy on paper into operational practices that shall deliver results. Policymaking often continues during implementation, for instance by actors seeking "revenge" from the formulation phase, or affected *target groups* that start to react. This may lead to modifications, taking the policy astray (policy drift) or correcting unanticipated flaws. The complex environmental problems that the EGD address require engagement by many individual organizations and often *cooperation and collaboration* between them. The motivation of individuals and organizations, and the resources available, are important. Collaboration implies costs and benefits for those involved. Costs may include reduced autonomy, and transaction costs such as time and resources spent on maintaining a relationship. Different interests may lead to dysfunctional strategic games, such as free-riding or turf wars (Lundin 2007). Benefits include discovering shared interests and goals, and access to other organization's resources and networks. Overcoming the fragmentation caused by silo organizations remains a major challenge.

Winter's implementation framework is very much aligned with the descriptions in the Better Regulation Guidelines & Toolbox of the intervention logic. However, sometimes different words are used for describing the same phenomena. The implementation framework also draws important lines to literature on policy design and policy coordination. Thus, the basic understanding it conveys and the guidelines for what to search for are highly relevant for CrossGov.

There are two complexities in CrossGov that require additional considerations and approaches. Firstly, there are sequences of policy cycles involved. At any level of governance, overarching, strategic policies, such as the EGD in the EU, need to be gradually made more concrete by other more detailed policies. This may occur in several steps, each involving new policy cycles, before tangible results are delivered that can lead to desired outcomes/impacts. Moreover, policies at one governance level may require actions by lower levels. The transposition of EU laws and policies by the Member States is a typical example. The transposition itself is a new policy process. It may lead to several new policy processes to be put into practice, for instance the preparation of strategic plans (WFD, MSFD, MSPD), which again will need several new implementation initiatives before tangible results are delivered. Secondly, there are many policies operating simultaneously. Winter's framework does not take sufficiently account of the interlinkages between bundles of policies, designed to operate in concert with some sort of coherence, or simply influencing each other. The CrossGov Policy Coherence Evaluation Framework aims to provide a more advanced and comprehensive approach to meet these complexities in policy evaluation.

3. Barriers and enablers for policy coherence

Several scholars have worked on identifying factors that facilitate or hinder the achievement of integrated and coherent policies. The Meijers & Stead publication from 2004 provides a comprehensive overview of research findings in this field. In terms of cooperation and coordination within and across organisations, it is pointed out that behavioural elements such as shared understanding and recognition of interdependence related to a policy problem enhance coordination. At the same time, structural elements such as information exchange

across institutional boundaries or the level of institutional fragmentation can either positively or negatively act towards further integration. While it has been argued that structural elements are more decisive on the level of cooperation and coordination than behavioural elements, this remains highly context dependent and mostly involves a combination of both. Another dimension that influences integrated policy making are described as process factors, explaining why (and why not) interaction within and across administrative boundaries occur. Here, administrative factors such as limited time and resource allocation as well as blurred lines of accountability and a perceived loss of domain might explain why decision makers often restrict themselves to a narrow focus towards a policy problem, ignoring the need for cross-departmental and institutional cooperation. Overall, literature points towards both structural and behavioural and process related elements that influence policy integration (Meijers and Stead 2004).

More recently, a systematic review by Tchinda and Talbot (2023) has assessed enablers and inhibitors towards policy coherence across academic literature. The authors have come forward with eight factors that contribute directly to coherence (internal layer) and how they are conditioned by governance structures (external layer).

The authors provide a graphical representation of the eight factors:
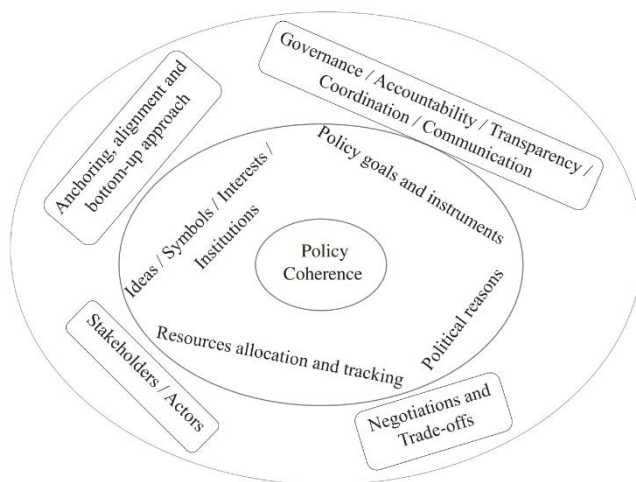

Figure 12 Enablers and inhibitors of coherence, from Tchinda & Talbot, 2023.

In the internal layer, the common understanding and shared belief system surrounding a policy issue is considered important. This does not merely relate to individuals but the way how institutions are structured around a given policy issue is regarded as an important factor for policy coherence. While fragmented institutional structures might be one barrier to policy coherence, a lack of political will or awareness might contribute to a lack of coherence. Another factor relates to resource allocation, looking at how governmental budget allocations affect the attainment of various policy objectives. A fourth dimension relates to policy goals and instruments and how they are understood throughout the policy cycle. For instance, a lack of involvement and shared understanding might lead to a situation where agents in charge of implementing a policy are not fully aware of the objectives that were initially intended by the policy.

The external layer provides a set of explanatory factors for why the inhibitors or contributors in the internal layer are to occur. As demonstrated by the example of transmitting policy objectives throughout the policy cycle, involvement of stakeholders at all stages can significantly increase policy coherence. Stakeholder networks should be diverse and include not only government officials but all stakeholders that are potentially affected by the interventions. Through this bottom-up approach, it can be ensured that policies are reflecting local realities and potential trade-offs. At the government level, it is pointed out that

parliamentary committees are one suitable mechanism for improving coherence across policy fields, in addition to creating robustness of a policy in case of shifts in partisan structures. Communication across stakeholders of different networks and institutions is a key factor for policy coherence and can be promoted by national strategy documents or informal exchange platforms across departments and institutions. The focus of CrossGov will not only lie on identifying where coherence challenges emerge but specific attention will also be given to investigating necessary conditions for resolving them, building on the literature that has been presented above (Tchinda and Talbot 2023).
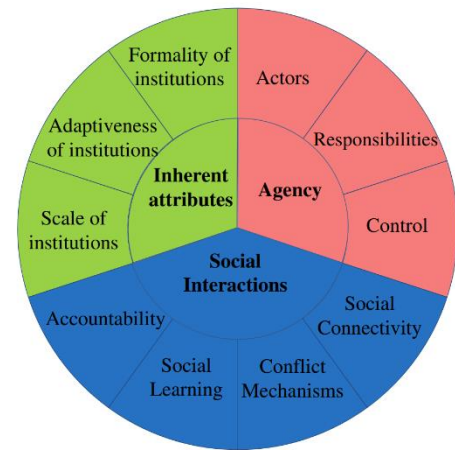

Figure 13 Institutional attributes, Oberlack 2017.

In the context of adaptive governance, a significant contribution comes from Oberlack's systematic review paper (Oberlack, 2017). This paper investigates the role of institutions in climate adaptation. While it does not directly address policy coherence, the typology of institutional attributes it presents offers valuable insights for understanding and defining explanatory variables within the CrossGov framework.

Oberlack's taxonomy breaks down institutional attributes related to climate adaptation into three main dimensions, as depicted in Figure 13:

1. Agency Attributes: These describe the rules and procedures that shape decision-making processes. Barriers associated with agency attributes arise when rules defining eligible actors are unclear, responsibilities among actors lack clarity, or power imbalances hinder effective coordination.

2. Social Interaction Attributes: These pertain to the procedures linking actors. Challenges emerge when governance issue scales are poorly understood, actors operate in isolation (silos), or knowledge-based decision-making faces limitations due to inadequate coordination across actors.

3. Inherent Institutional Attributes: These characterize an institution's adaptive capacity. Barriers related to this attribute result from mismatches in temporal or geographical scales between institutions and the governance challenge, as well as inflexible formalized rules.

Oberlack's assumption is that the various institutional attributes are the decisive factor (=*explanatory variables*) to understand climate adaptation actions. Additionally, he identifies a set of non-institutional explanatory variables that can impact adaptation. These non-institutional variables encompass stressor characteristics, such as exposure or vulnerability to climate change effects. While these non-institutional factors do not directly drive adaptation actions, they can influence the outcomes of institutional attributes. (Oberlack, 2017).

Annex II: Existing methodologies to evaluate policy coherence

Policy coherence has been subject to assessments both in EU legal and policy documents as well as academic literature. This annex provides a brief overview of selected methodologies as the basis for the CrossGov Policy Coherence Evaluation Framework. The selected methodologies include the 1) European Commission's Better Regulation Guidelines and Toolbox (evaluations, fitness checks and impact assessments); 2) the OECD's recommendations on Policy Coherence for Sustainable Development; 3) the SDG Synergies approach (Stockholm Environment Institute); 4) the Joint Research Centre's support material for Policy Coherence: and 5) the EEA guidance document on policy evaluation. Several methodologies are framed around the UN 2030 Agenda and contain specific guidance on how policy coherence with the SDGs can be assessed. Some similarities can be drawn with policy coherence assessments in the context of the EGD. At the same time though, the EGD is still relatively recent and specific reference to it in assessment methods is sparse.

1. The Better Regulation Guidelines and Toolbox: Evaluations, Fitness Checks, and Impact Assessments

The Better Regulation Agenda has been launched by the European Commission to ensure transparency, efficiency, coherence, and evidence-based decision making across EU interventions (both legislative and non-legislative nature) (European Commission 2021a). They have been developed in cooperation with stakeholders and build on international methods for policy recommendations such as those from the OECD. The Better Regulation Agenda contains a set of guiding documents and initiatives, whereof the "Better Regulation Guidelines and Toolbox" (hereafter BRGT) are internal instructions to the Commission staff that apply to all DGs. Whereas the Guidelines indicate overarching requirements in each step of the policy cycle, the 69 tools within the toolbox provide specific and operational advice. Policy coherence is a key concept in the BRGT, they cover the whole policy cycle and assessment of an intervention towards multiple goals are included, making them very relevant with regards to CrossGov.
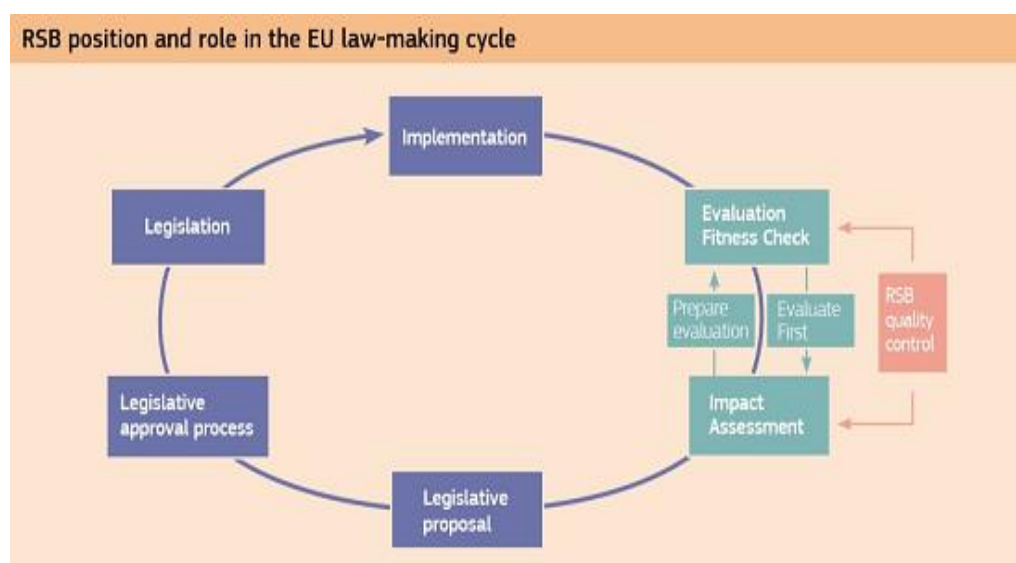

Figure 14 RSB in the policy cycle (European Commission).

The main elements of the BRGT and to which phase of the policy cycle they apply can be described as followed:

- New EU interventions should have a clear rationale, which is explored in the Call for Evidence phase, which often involves a public consultation process. If the initiative is linked to existing legislation or policies, the scoping of a new initiative should build on systematic evaluation (*evaluate first principle*). There are two types of evaluations: Evaluation of an individual instrument (*evaluation*) or a bundle of instruments (*fitness check*). Evaluations are ex post and can build on observations of actions and impacts.
- If the initiative is expected to have significant economic, social, or environmental impacts, and there are alternative policy options available, an *impact assessment* should be carried out. This is an ex-ante assessment that tries to anticipate likely and significant impacts of alternative ways of addressing the problem.
- The Regulatory Scrutiny Board (independent body in the Commission) ensures quality control of both ex-post and ex-ante products.
- The impact assessment and comments from the hearing process may lead to changes in the Commission's proposal, as may the political processes in Parliament and the Council, leading to a final, adopted intervention. Assessments may be undertaken of suggested changes as well as the final instrument.
- After the adoption, compliance promotion tools shall help Member States transpose, implement, and apply EU law.

1.1 The intervention logic

The intervention logic is key for analysis of policy in any phase. It is the narrative of the policy action that describes the initial needs and how the intervention has been designed to respond to this problem. Thus, a key issue is the causal relations between the stated policy problem, the intervention's goals and the impacts of its measures (internal coherence). Through an evaluation, the intervention logic described in the design of the intervention is assessed against what actually was achieved, addressing causal relationships between the intervention and the observed outcomes. To what extent the intended impacts have been achieved depends on the design of the intervention, as well as the implementation process, unanticipated external events and interactions with other interventions (EU/national/local). In the design and evaluation, one should also identify impacts beyond those that are desired to achieve the objectives, for instance positive or negative impacts on other sectors (externalities). In an evaluation, unexpected
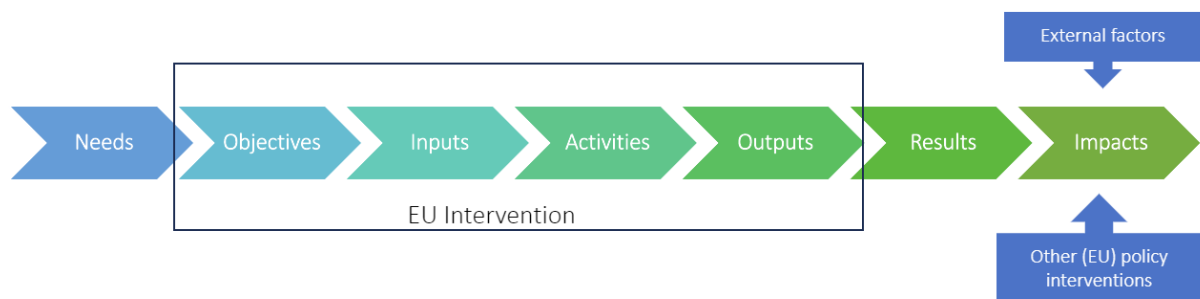

Figure 15 Simplified intervention logic, adapted from Better Regulation Toolbox. Figure 16 provides a more complete overview of the intervention logic.

outcomes that were not foreseen in the design of the policy can also be identified (European Environment Agency 2017).

1.2 Evaluations

In line with the "evaluate-first" principle, evaluation of prior EU interventions is the first step before its potential revision or the creation of new and related interventions. Evaluations are evidence-based ex-post assessments guided by the intervention logic. While *evaluation* refers to assessment of a single intervention, *fitness checks* consider interplays between a bundle of interventions. It is upon discretion to identify the scope of such an evaluation; to either assess only interventions that are designed to interact on purpose or enlarge the scope to related interventions. The latter is more resource demanding but may help to identify more synergies and trade-offs. Fitness checks are a major tool to identify policy coherence challenges and suggest better alignment across interventions. Through the assessment of synergies, inefficiencies, overlaps, and cumulative impacts that result from the simultaneous application of several interventions, conclusions can be drawn with regards to simplification, optimization and streamlining. (Tool 45).

1.3 Impact assessments

Impact assessments are used as an ex-ante tool to investigate a policy problem, find the impacts of the planned intervention and explore alternative policy responses. It is required when significant social, economic, or environmental impacts are expected, and several policy response options are available. An overview of actions that may require an impact assessment are listed in tool number 7 of the BRGT. The impact assessment is carried out in two steps: An inception impact assessment is made available for public hearing, after which the Commission services conduct a full impact assessment. It is designed to support the Commission in identifying the most appropriate policy response by assessing impacts across policy response options. As such, it is a tool for planning. However, the impact assessment report also serves as an external explanation of the Commission's proposal as a result of its planning process, with involvement of other Commission services.

A good example of a recent impact assessment is in relation to the proposed Nature Restoration Law. As part of the impact assessment, policy coherence was assessed with respect to the EU policies linked to the EGD Biodiversity Strategy and the EGD (European Commission 2022). Policy options, ranging from no binding targets to legally binding ecosystem-specific targets, were scored as either (0) neutral, (1) slightly positive, (2) moderately positive, (3) positive, and (4) very positive. The option of a law with ecosystem-specific targets with or without an overarching goal was considered to be most coherent with the EGD, due to overlapping monitoring methodologies and other synergies, and filling in gaps in existing legislation (thus being complementary). Specific targets directly contribute to the EGD objectives. The highest scored option was considered to work in synergy with and add value to the existing acquis, it is also expected to accelerate implementation of important directives. The impact assessment does not provide a specific description of the scoring methodology.

To understand how elements of coherence and cross-compliance are integrated in the BRGT of the Commission, the following section gives an overview of where these concepts are

addressed in the toolbox and to which part of the policy cycle and assessment instrument they refer.

1.4 Cross-compliance and relation to the Sustainable Development Goals

Tool #18 on impact identification has relevance for conducting evaluations, fitness checks and impact assessments. While impacts have to be identified in an ex-ante assessment, monitoring and evaluation throughout the policy cycle are equally important. It is required to identify direct behavioral impacts on affected parties (e.g what is required to comply with new obligation); then investigate indirect behavioral change (will interventions have price-effects or spillover effects?). The third step consists of considering impacts on other policy goals that are provided by strategic EU frameworks or politically important objectives. Especially when an intervention is part of a larger strategy, one has to assess the impacts towards the overarching framework. Where impacts are expected to be significant, in-depth analysis (if possible quantitative) has to be carried out.

CrossGov's focus on attainment of multiple goals and cross-compliance resonates with what the impact identification in the BRGT requests towards examining the impact on other major policy goals. While CrossGov assesses cross-compliance with EU EGD objectives, the BRGT provides specific guiding questions tailored towards assessing impacts of an intervention on each of the SDGs. This builds on the EU's commitment to implement the 2030 Agenda and the Commission has therefore highlighted the role of SDGs across its political agenda. SDGs and the EGD objectives are similar in nature as progress in the respective agendas requires simultaneously achieving multiple goals (synergies) without compromising on the achievement of others. An understanding of how the Commission considers the SDGs has relevance for CrossGov's ambition to develop tools towards enhanced cross-compliance with EGD objectives.

Tool #19 on coherent policy making gives guidance on how all aspects of the SDGs can be mainstreamed into the Commission's interventions and builds on insights from recommendations of the OECD. Impacts of an intervention on SDGs are identified through guiding questions as described in tool #18 (Example for how to assess an intervention with impact on water quality and resources relating to SDG 6 &14 is "Does it raise or lower the quality of waters in coastal and marine areas (e.g., through discharges of sewage, nutrients, oil, heavy metals, and other pollutants)?" When policy initiatives are formulated, SDGs should provide the framing of what is intended to be achieved (objectives) and what potential impacts on other SDGs might occur. SDG related indicators (provided by tools #21 and #36) help to monitor and quantify the expected impacts. Impact assessments are supplemented by a table that indicates interlinkages across SDGs and how the preferred policy response acts towards the achievement of the relevant SDGs. Explanations for where synergies and tradeoffs occur and how they can be optimized should also be added to the Commission's proposal. The method of framing a policy initiative with regards to its contributions to the SDGs is mainly used as an ex-ante tool in the call-for-evidence phase. However, evaluations of adopted interventions (ex-post) should monitor the observed contribution to the SDGs, even when their impact assessment that provides monitoring guidance precedes the SDG approach. The KnowSDGs online platform is designed to support such evaluations and will be described below.

1.5 Evaluating for coherence and related criteria

While coherence with the Sustainable Development Agenda is one major part of the toolbox, the conduction of an evaluation (or fitness check) also requires looking for overall coherence in the policy intervention.

The process of an evaluation/fitness check is described in the toolbox and consists of following major steps:

1) Clarify scope and purpose of the evaluation
2) Understand intervention logic
3) Design evaluation questions
4) Identify baseline scenarios and points of comparison
5) Data collection
6) Analysis

The evaluation questions are drafted with respect to the intervention logic to assess how the objectives have been achieved. The BRGT defines five evaluation criteria that should be integrated in an evaluation, the focus on each criterion should be proportionate to the purpose of the evaluation:

- Effectiveness (*Has the intervention progressed towards achieving its objectives and why?*)
- Efficiency (*Have resources for the intervention been used efficiently? Potential for burden reduction?*)
- Coherence (*How well does the intervention work together with other policy elements?*)
- Relevance (*Are objectives of intervention still aligned with current needs?*)
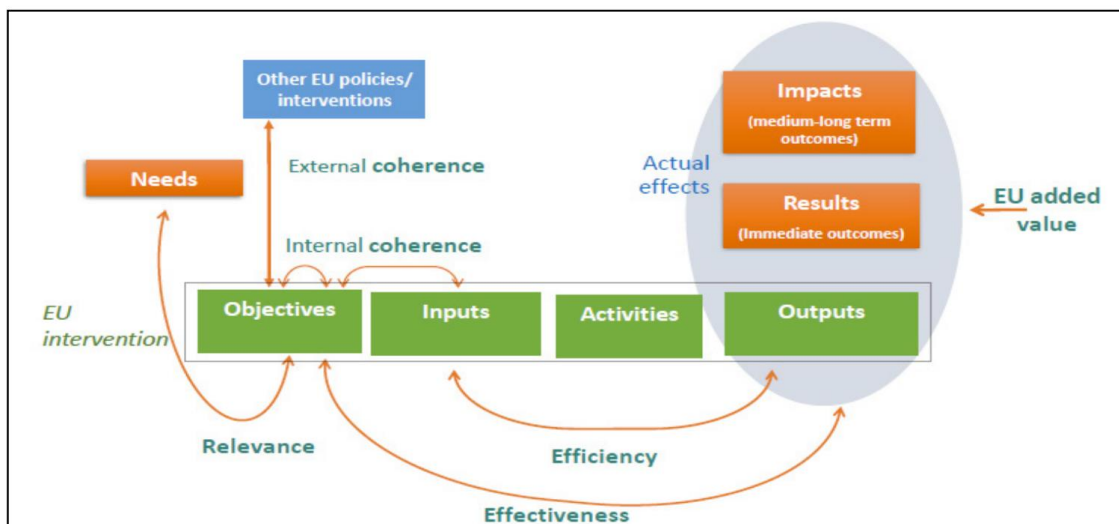- EU added value *(was there an added value compared to national legislation – subsidiary analysis?)*

Figure 16 The intervention logic of the BRGT.

The assessment of coherence is especially relevant for the CrossGov project. Internal coherence addresses the different parts of the same intervention, for instance to what extent the selected instruments may deliver the stated objectives, or whether inputs such as resources for implementation are sufficient. External coherence refers to synergies and tradeoffs with other

policies, such as EU/national/regional interventions or the UN 2030 Agenda or the EGD. The BRGT contains examples for coherence assessment questions that are structured around two dimensions. The first type of question assesses to what extent interventions are coherent with one another (or coherent with overarching objectives), while the second dimension looks into the coordination between actors and agencies. (Tool #47).

While the suggested coherence assessment questions are general, the evaluation roadmap of the Marine Strategy Framework Directive (MSFD) provides an example of how they can be refined. The evaluation is carried out along with an impact assessment for a potential revision of the Directive. The aim of the evaluation is to understand how far the MSFD has (not) achieved integration of environmental aspects into activities that affect the marine environment and which relevance the MSFD has in the context of the EGD and its newly adopted strategies. The following evaluation questions on coherence have been defined in the roadmap (European Commission 2021b):

- To what extent is the MSFD coherent with other EU policies, especially water, pollution and waste control, biodiversity and nature protection?

- To what extent is the directive coherent and mainstreamed into other EU legal instruments addressing specific activities/pressures, like fisheries, aquaculture, agriculture, maritime spatial planning, energy, transport, climate change, offshore safety, single use plastics or on ship-source pollution? How is the MSFD helping to manage the sources of pressures from human activities under other policies?

- To what extent is the MSFD aligned with the EU's international commitments, in particular with the goals and targets set in the 2030 Agenda for Sustainable Development, the Convention on Biological Diversity, the International Maritime Organisation (IMO), the UNFCCC Paris Climate Agreement, the United Nations Convention on the Law of the Sea, and agreements under the Regional Sea Conventions and Regional Fisheries Management Organization? Does it support the fulfilment of these commitments?

1.6 To sum up

The BRGT is highly relevant for the CrossGov Policy Coherence Evaluation Framework. The CrossGov framework needs to innovate though due to a specific focus on the EGD and particular attention given to policy coherence. This means that the evaluation questions and attributes to look into, as part of the policy coherence assessment, need to be developed and brought to a new level of comprehensiveness and EGD specificity.

2. OECD's recommendations on Policy Coherence for Sustainable Development

The promotion of policy coherence has been a key mandate of the OECD for over two decades. Acknowledging that progress towards the UN 2030 Agenda can only be achieved when the SDGs are addressed in concert, SDG 17.14 has been included into the agenda, calling for countries to enhance policy coherence for sustainable development (PCSD). The OECD's Recommendation on PCSD provides policymakers with advice on institutional mechanisms and policy instruments that support the integration of sustainable development in the political

agenda. The recommendations are structured around three main pillars that can be tailored to the specific national context (OECD 2019):

1. Strategic vision for implementing the 2030 Agenda

The OECD recommends that the highest political level should adhere to the 2030 Agenda by promoting whole-of-government structures. The *whole-of-government approach* consists of creating cross-sectoral government structures and governmental programs to overcome the sectoral fragmentation, ideally overseen by a lead institution that is responsible for the PCSD implementation. In addition, the importance of resilient structures that are not dependent on electoral changes are underlined, those can for instance be achieved by long-term strategic foresights. The whole-of-government approach should specifically focus on integrating sustainable development considerations into budgeting and policy planning tools to ensure that the mandates of different ministries are aligned towards the SDGs.

2. Effective and inclusive governance mechanisms

Those governance mechanisms support the creation of a whole-of-government described above. While formal governance arrangements are required for integrating the PCSD across all agencies, informal communication channels between public bodies are also encouraged. Interaction with lower-level governance units is further stressed as an important way to ensure alignment across all levels. In addition to governmental units, a wider set of stakeholders should take part in the policy formulation and implementation phase, both when it comes to integrating a more diverse set of knowledge and create public support and comprehension for initiated policy actions.

3. Responsive and adaptive tools

To evaluate the impacts of interventions and understand possible unintended consequences, both ex-ante and ex-post assessments should be carried out regularly to evaluate social, economic, and environmental consequences that might impact the implementation of the 2030 Agenda. Policy coherence should be a specific evaluation criterion in those assessments that helps to identify linkages between sectoral policies.

It is important to note that the third pillar on evaluation tools is addressed through the Better Regulation Guidelines and Toolbox. The BRGT builds upon the recommendations of the OECD on PCSD and has indeed integrated policy coherence as one main evaluation criterion.

3. The SDG Synergies approach (Stockholm Environment Institute)

The SDG Synergies approach has been developed by the Stockholm Environment Institute (Weitz et al. 2019). The approach focuses on identifying interlinkages between the Sustainable Development Goals to gain a better understanding of potential implications for policymaking. The approach utilizes a cross-impact matrix and network analysis techniques to explore synergies and trade-offs. Through the network approach, not only direct interactions between targets are captured but also indirect second-order effects are shown with the method. Implementing the SDGs requires multi-scale and multi-actor integration that goes beyond traditional sectoral approaches in order to produce coherent policies. This systemic view of policy analysis can assist in identifying optimal cross-sectoral collaborations among different actors, leading to mutual benefits, as well as identifying situations where trade-offs might occur due to conflicting interests. Moreover, it can be used to prioritize initiatives of a policy agenda

by highlighting which of the interventions has the highest net positive influence on the whole agenda. Encompassing the knowledge of how policies interact (positively and negatively) towards achieving the SDGs is key for developing policies that are coherent with one another.

The SDG synergies approach relies on qualitative expert assessment coupled with a quantitative network modelling. The data collection process involves obtaining input from stakeholders regarding the relationships between different SDG goals and targets. One is asked to consider how progress on a given SDG goal/target (X) would affect the attainment of other SDG goals/targets (Y). Responses are rated using a seven-point scale that was initially developed by Nilsson et al. in 2016. The scale categorizes the interactions between goals/targets as promoting (positive), restricting (negative), or neutral (consistent) (Weitz et al. 2019).
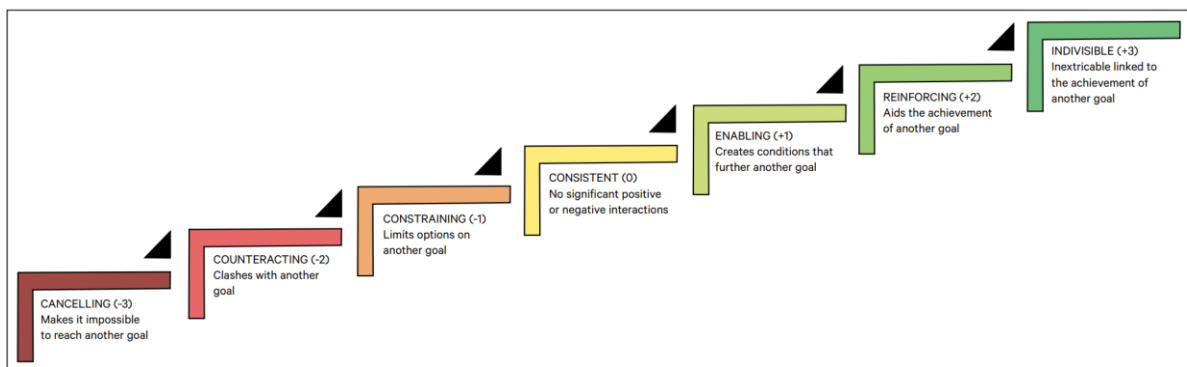

Figure 17 The seven-point score developed by Nilsson et al 2016.

It is worth noting that this concept is applied to the SDGs, as the goals and targets of the SDGs align closely with those of the EGD, forming a cohesive process. Consequently, the analysis focuses on the internal goals and targets to ascertain their logical relationships and trade-offs. The proof of concept presented in various reports pertains to the analysis of the overarching goals and targets, rather than examining specific EU policies and measures within it. While the concept appears to have potential for comprehending various policies, further analysis and testing would be necessary. Policies tend to be more intricate and detailed, and the underlying logic between them may not be readily apparent or explicitly expressed. One possible application of this concept is to support a structured identification of synergies or trade-offs within the EGD or between different EU policies. As an example, the SDG synergies approach can map potential conflicts of renewable energy policies that are intended to act towards the SDGs clean energy and climate action, however they might negatively impact the attainment of SDGs such as clean water and sanitation. Those direct and rippling effects can then be targeted for a more detailed coherence analysis and cross-compliance evaluation.

4. Joint Research Centre's support material for Policy Coherence

The Joint Research Centre (JRC) provides additional advice for evidence-based and coherent policy making and can be used as support when implementing the Better Regulation Guidelines and Toolbox. Mainstreaming of SDGs into EU policies is the core step for identifying synergies and gaps that should be addressed by policy actions. Based upon the SDG Synergies approach developed by the Stockholm Environment Institute, the JRC also developed a tool that initially started as a manual mapping exercise. It now integrates automated AI semantic analysis to

identify how a given policy intervention relates to the 2030 Agenda. Links to the SDGs are identified either through direct references or indirect use of keywords that are related to a certain SDG. The database of the mapping analysis contains policy documents in the EUR-Lex portal for 2019-2022 and allows for various angles of interpretations. For instance, gaps towards SDGs that are not sufficiently addressed can be highlighted, or policy trends and focus areas can be mapped over time. In addition, the tool can show the extent of integrated and coherent policy making by looking at how many policies achieve cross-cutting objectives. A core function of the mapping tool is to understand systemic changes of the EU policy agenda over time.

The JRC has analyzed the EGD in relation to the 2030 Agenda to point out the diverse links between EGD policies and the SDGs. The mapping results can help to illustrate policy coherence by indicating the extent to which policies are designed in an integrated approach across policy areas, as shown in the figure below.

Figure 18 Matrix developed by the JRC to assess coherence between EGD and SDGs.

However, also single policy instruments can be compared over time to understand changes in policy design. The JRC provides the example of the Biodiversity Strategy 2020 in comparison with the Biodiversity Strategy 2030 that has been adopted following the EGD. Semantic analysis indicates a higher degree of integration of various policy areas and objectives in the recent strategy, essentially contributing to policy coherence. Policy coherence can also be approached by reversing the process and zooming into a specific SDG and identifying policies that affect its realization. This can inform policy makers which policy initiatives could benefit from increased coherence.

The SDG mapping tool has a high value in providing an overarching view of policy coherence. While the analysis of different network graphs and visualizations contribute to a better understanding of linkages across policies, one should be cautious with drawing far-reaching conclusions. It is important to remember that the methodological approach may be biased by which keywords have been pre-defined in the initial stage and without capturing the context in which the keywords have been employed. Moreover, the type of policy document in the database vary in their degree of specification: impact assessments contain specific reference to SDGs whereas legislative documents are more abstract, potentially not capturing all the interactions. It is also important to emphasize that the mapping model relies on semantic analysis and should only be regarded as the first step of a more thorough assessment that should follow. For instance, findings that one strategy contains less references to SDGs than another

based on semantic analysis does not provide insight into the actual links and how strong they are. The tool provides an overarching view of how policies are *intended* to work towards multiple goals, whereas possible trade-offs and unintended effects are not captured (Borchardt et al. 2023).

5. European Environment Agency's Guidance on Policy Evaluation

The European Environment Agency (EEA) provides guidance for policy evaluation that builds on the evaluation methods and criteria that are specified in the Better Regulation Guidelines & Toolbox of the Commission (European Environment Agency 2017). The guidance is more specific in terms of the procedure of a policy evaluation and provides an assessment framework, it is however noted that the framework is overarching and requires adaption to the specific context. The evaluation framework of the EEA is designed for ex-post evaluation of policy interventions and their measures, contributing to an understanding if the intervention (or elements of it) are acting towards its objectives, which impacts are occurring and whether the process can be improved.

The five evaluation criteria that have been set out by the Commissions BRGT (relevance, coherence, effectiveness, efficiency, EU-added value) are the main elements of the framework, and their respective importance depends on the framing of the evaluation. It is for instance pointed out that evaluations at the national level tend to be more focused on the elements of efficiency and effectiveness, while coherence is less prioritized.
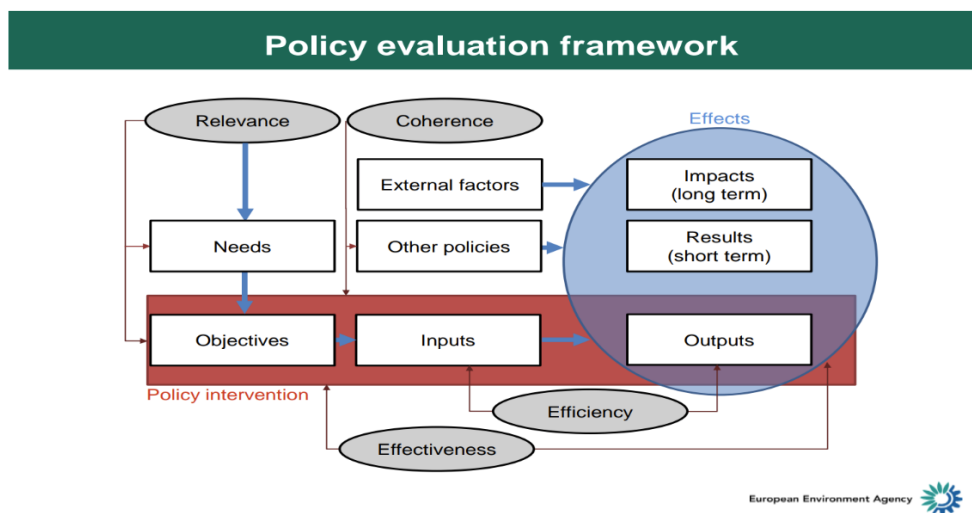

Figure 19 EEA's Policy evaluation framework and connection to the evaluation criteria.

Nevertheless, coherence should be regarded as a central element in the evaluation framework, indicating that interaction with other policies has strong influence upon the impacts of a policy intervention. The Driver-Pressure-State-Impact-Response (DPSIR) framework is presented as a useful tool for the evaluation as it helps to clarify the causalities and understand which drivers and pressures the measures are tackling. The DPSIR frameworks can be employed in different steps of the policy evaluation, as presented below.
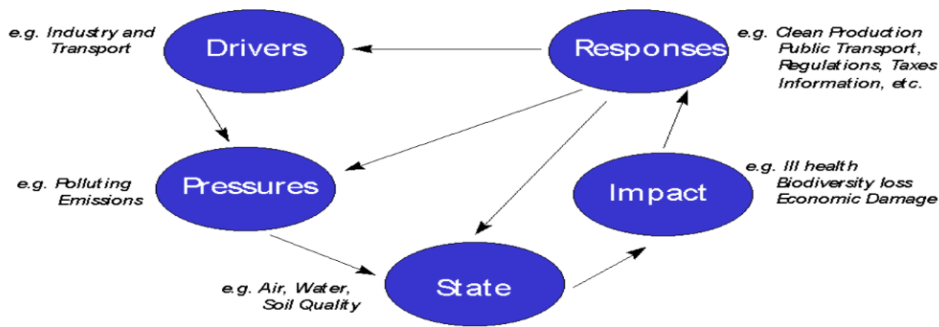
Figure 20 The DPSIR framework used by the EEA.

The EEA evaluation framework consists of four steps:

1) Structuring

Setting the scope of the evaluation (geographical, temporal, administrative level) is the first element of the evaluation to understand which policies or elements are to be evaluated. Once the scope is delineated, the evaluation questions centred around the five evaluation criteria need to be refined and the evaluation framework is adapted accordingly. The structuring phase includes also drafting which information is relevant and how and where it can be obtained. DPSIR modelling can contribute to consider which impacts the policy and its measures might have.

2) Information and data collection

Based on data from legal and policy documents, academia, research studies, qualitative and quantitative data, expert input, and case studies information is collected that relates to the evaluation questions.

3) Data analysis

Different methods are presented to analyse the collected data. For coherence, it is noted that due to complexity an advancement of the coherence analysis method is required. Following methods for coherence analysis are suggested:

Table 6 Key evaluation methods for policy coherence and effectiveness (based on EEA 2017).

Evaluation criteria	Key evaluation methods
Coherence	• Policy coherence analysis based on the methodology provided by Nilsson et al. (2012). • Legal and policy analysis of Strategic Environmental Assessments or other assessments that could influence policy implementation. • Qualitative analysis of data from case studies, interviews or expert panels. • Quantitative analysis of data (e.g. from text mining) using statistical correlation and regression analysis.
Effectiveness	• Influence diagrams of direct and indirect policy links to study results and impacts. • Mapping of outputs, results and impacts to identify the extent of policy influence. • Modelling of past and/or potential future results and impacts to understand causalities (e.g. scenarios, DPSIR).

4) Synthesis and conclusion

The results are synthesized and presented with respect to the evaluation questions and criteria.

6. Nexus approach

A paper from Venghaus et al. provides methodological insights for a nexus analysis (Venghaus et al. 2019). The nexus approach provides an analytical tool to delineate the scope of assessment by focusing on how the interconnections between the nexus resources are accounted for. The proposed methodology relies exclusively on policy document analysis and can thus be regarded primarily relevant for assessing coherence in policy design.

The methodology is presented and applied to the water-energy-land nexus which would also be relevant for most aspects that are considered in CrossGov.

The first step of analysis considers a mapping of sectors that are relevant for the nexus resources and assess to what extent the nexus has been integrated into the respective sectors. This is mainly carried out through looking for references of cross-sectoral considerations of the main policy documents in each sector. The authors suggest that for instance the sector dealing with water has integrated references that relate to the other nexus resources within the sectoral documents, whereas the energy sector is largely lacking reference to the other nexus resources. This first analysis can be complemented by an analysis of more implicit references within sectoral documents. Specific emphasis is given to policy coherence in the objectives of the sectoral policies, addressing whether cross-sectoral understanding related to the nexus resources is included in the policy objectives. Overall, this first dimension of analysis serves to demonstrate in which sectors integrated policy perspectives related to the nexus are incorporated.

The second dimension of analysis consists of more thorough assessment of the sectoral policies that are relevant for the sector. Contrary to other research on policy integration that understands vertical integration across levels of governance, vertical integration here refers to integration of externalities into sectoral policies and measures. The authors demonstrate that the agriculture and water sectors indicate a relatively high level of vertical integration because measures and policy instruments in these sectors take externalities on the nexus resources into account. Document analysis in the energy sector however indicates limited integration of the nexus approach.

Horizontal integration refers to overall strategic documents such as roadmaps and investigates whether the nexus idea has been integrated. The authors note that despite that the nexus view that considers externalities on its resources is often reflected in strategic documents, these documents often lack operationalization so that this is not sufficient to conclude on the overall integration of the nexus approach. Similar to roadmaps, requirements for environmental impact assessments can be a way to promote the nexus approach (Venghaus et al. 2019).

7. EU Taxonomy

Even though the term cross-compliance is not specifically used, the EU Taxonomy is an interesting example of the balancing of multiple objectives (European Commission 2023).

The initiative of the Taxonomy is linked to the implementation of the SDGs. It predates the launch of the EGD but is regarded as a major tool to contribute to its implementation by directing private investments towards sustainable activities, which can complement public

funds in the transition to a greener and more just society. The Taxonomy Regulation (European Commission 2020) establishes the criteria for determining whether an economic activity qualifies as environmentally sustainable. These criteria should later be applied to determine the degree to which a specific investment is environmentally sustainable (art 1). Four criteria must be met for an economic activity to qualify as such (art 3) (European Commission 2021c):

a) It contributes *substantially* to one or more of six environmental objectives (see below).
b) It does not cause *significant* harm to any of the other environmental objectives.
c) It meets minimum safeguards on the social dimension of sustainability.
d) It complies with technical screening criteria.

The six environmental objectives, that must be balanced according to a) and b) above, are (art 9):

1. Climate change mitigation
2. Climate change adaptation
3. The sustainable use and protection of water and marine resources
4. The transition to a circular economy
5. Pollution prevention and control
6. The protection and restoration of biodiversity and ecosystems

Figure 21 The three basic criteria in the Taxonomy.

While the EGD has a broader approach to sustainability, both the Taxonomy and CrossGov focus on the environmental dimension. However, the Taxonomy establishes a "floor" of minimum requirements related to certain OECD and International Labour Organization instruments on human rights, workers' rights and anti-corruption (art. 18). For the balancing of the six environmental objectives, there are two conceptual thresholds that are about to be defined: "*substantial contribution*" (art 3a) and "*significant harm*" (art. 17). Harm towards certain objectives is accepted if it is below a "significant" level, however, only if there are major improvements towards other objectives. The underlying rationale is that there should be a net benefit of an activity; the positive contribution should be well above the negative harm. The Commission is working on technical screening criteria that are adopted as delegated acts. The first delegated act covering the first two objectives, climate mitigation and adaptation, contain screening criteria for "substantial contribution" and "no significant harm" for a long range of economic activities ordered under 9 sectors. There are extensive annexes with generic criteria, to which the screening of each activity refers (the Act is 350 pages in total).

In the context of CrossGov's marine scope, it should be noted that the ocean is left out by some of the taxonomy's screening criteria. As an example, only terrestrial carbon sinks are

considered, and sustainability of water is only mentioned in relation to land-based activities. However, the taxonomy screening criteria also refer to general standards that are set out in other EU legislations, such as the WFD and the MSFD. An example for this can be found in the classification of offshore wind projects. When renewable energy is produced, the activity qualifies for the first step of the taxonomy to have a "substantial contribution" to at least one of the six objectives. The technical screening criteria for ensuring that the activity does not cause significant harm on the other objectives, refer for instance to the noise level thresholds or seabed integrity to meet the criteria of good ecological status according to the MSFD.

References

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

Behnke, Nathalie, Jörg Broschek, and Jared Sonnicksen. 2019. *Configurations, Dynamics and Mechanisms of Multilevel Governance*. Comparative Territorial Politics. Springer International Publishing.

Bemelmans-Videc, Marie-Louise, Ray Rist and Evert Oskar Vedung. 2011. *Carrots, Sticks, and Sermons: Policy Instruments and Their Evaluation.* Volume 1 of Comparative Policy Evaluation. Transaction Publishers.

Borchardt, Steve, Vignola Giulia Barbero, Daniela Buscaglia, Michele Maroni, and Luisa Marelli. 2023. "Mapping EU Policies with the 2030 Agenda and SDGs." JRC Publications Repository. January 4, 2023. https://doi.org/10.2760/110687.

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

Estoque, Ronald C. 2023. "Complexity and Diversity of Nexuses: A Review of the Nexus Approach in the Sustainability Context." *Science of The Total Environment* 854 (January): 158612. https://doi.org/10.1016/j.scitotenv.2022.158612.

European Commission. 2019. *Communication from the Commission. The European Green Deal*.

———. 2020. *Regulation (EU) 2020/852. PE/20/2020/INIT*. Vol. 198.

———. 2021a. "Better Regulation: Guidelines and Toolbox."

———. 2021b. "Combined Evaluation Roadmap / Inception Impact Assessment."

———. 2021c. *Regulation (EU) 2021/2139. C/2021/2800*. Vol. 442.

———. 2022. "Commission Staff Working Document - Impact Assessment - Accompanying the Proposal for a Regulation of the European Parliament and of the Council on Nature Restoration."

———. 2023. "EU Taxonomy Navigator." European Commission - European Commission. 2023. https://ec.europa.eu/sustainable-finance-taxonomy/.

European Environment Agency. 2005. "Effectiveness of Packaging Waste Management Systems in Selected Countries: An EEA Pilot Study." No 3.

———. 2017. "EEA Guidance Document - Policy Evaluation." EEA (Dige and Dilling).

Flanning, Lucia et al. 2021. "Challenges to Implementing Regional Ocean Governance in the Wider Caribbean Region." *Frontiers in Marine Science*. 8. https://doi.org/10.3389/fmars.2021.667273

Hatenboer, Constant, Caspar van den Berg, and Ronald Holzhacker. 2022. "The Dutch Fisheries Sector and the North Sea Accord: Unpacking Stakeholder Participation in Multi-Levelled Marine Governance." *Marine Policy* 147: 105364. https://doi.org/10.1016/j.marpol.2022.105364.

Hooghe, Liesbet, and Gary Marks. 2020. "A Postfunctionalist Theory of Multilevel Governance." *British Journal of Politics & International Relations* 22 (4): 820–26. https://doi.org/10.1177/1369148120935303.

Jordan, Andrew, and Andrea Lenschow. 2010. "Environmental Policy Integration: A State of the Art Review." *Environmental Policy and Governance* 20 (3): 147–58. https://doi.org/10.1002/eet.539.

Kidd, Sue, Andy Plater, and Chris Frid, eds. 2011. *The Ecosystem Approach to Marine Planning and Management*. Earthscan.

Lascoumes, Pierre, and Patrick Galès. 2007. "Introduction : Understanding Public Policy through Its Instruments." *Governance* 20 (January): 1–21. https://doi.org/10.1111/j.1468-0491.2007.00342.x.

Lundin. 2007. "When Does Cooperation Improve Public Policy Implementation?" *Policy Studies Journal*. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1541-0072.2007.00240.x.

Matland, Richard. 1995. "Richard E. Matland (1995) 'Synthesizing the Implementation Literature: The Ambiguity-Conflict Model of Policy Implementation.' Journal of Public Administration Research and Theory, 5(2): 145-174." *Journal of Public Administration Research and Theory* 5 (April): 145–74. https://doi.org/10.1093/oxfordjournals.jpart.a037242.

Meijers, Evert, and Dominic Stead. 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 Integration*.

Nilsson, Måns, Dave Griggs, and Martin Visbeck. 2016. "Policy: Map the Interactions between Sustainable Development Goals." *Nature* 534 (7607): 320–22. https://doi.org/10.1038/534320a.

Nilsson, Måns, and Åsa Persson. 2017. "Policy Note: Lessons from Environmental Policy Integration for the Implementation of the 2030 Agenda." *Environmental Science & Policy* 78: 36–39. https://doi.org/10.1016/j.envsci.2017.09.003.

Nilsson, Måns, Tony Zamparutti, Jan Erik Petersen, Björn Nykvist, Peter Rudberg, and Jennifer McGuinn. 2012. "Understanding Policy Coherence: Analytical Framework and Examples of Sector–Environment Policy Interactions in the EU." *Environmental Policy and Governance* 22 (6): 395–423. https://doi.org/10.1002/eet.1589.

Oberlack, Christoph. 2017. "Diagnosing institutional barriers and opportunities for adaptation to climate change." *Mitigation and Adaptation Strategies for Global Change* 22: 805-838. DOI:10.1007/s11027-015-9699-z

OECD. 2010. "Multi-Level Governance: A Conceptual Framework." Paris: OECD. https://doi.org/10.1787/9789264091375-11-en.

———. 2019. "Recommendation of the Council on Policy Coherence for Sustainable Development." OECD/LEGAL/0381.

Persson, Åsa. 2004. "Environmental Policy Integration: An Introduction," June. https://www.sei.org/publications/environmental-policy-integration-introduction/.

Platjouw, Froukje Maria. 2016. *Environmental Law and the Ecosystem Approach: Maintaining Ecological Integrity through Consistency in Law*. London: Routledge. https://doi.org/10.4324/9781315646022.

Platjouw, Froukje Maria, Ingrid Nesheim, and Caroline Enge. 2023. "Policy Coherence for the Protection of Water Resources against Agricultural Pollution in the EU and Norway." *Review of European, Comparative & International Environmental Law (RECIEL)*, 1–16. https://doi.org/10.1111/reel.12509.

Sander, Gunnar. 2018. "Ecosystem-Based Management in Canada and Norway: The Importance of Political Leadership and Effective Decision-Making for Implementation." *Ocean & Coastal Management* 163 (September): 485–97. https://doi.org/10.1016/j.ocecoaman.2018.08.005.

Tchinda, Alain, and David Talbot. 2023. "Barriers and Enablers of Environmental Policy Coherence: A Systematic Review." *Environmental Policy and Governance*. https://doi.org/10.1002/eet.2057.

Thomann, Eva, and Fritz Sager. 2017. "Moving beyond Legal Compliance: Innovative Approaches to EU Multilevel Implementation." *Journal of European Public Policy* 24 (9): 1253–68. https://doi.org/10.1080/13501763.2017.1314541.

Tortola, Pier Domenico. 2017. "Clarifying Multilevel Governance." *European Journal of Political Research* 56(2): 234–50. https://doi.org/10.1111/1475-6765.12180.

Tosun, Jale, and Achim Lang. 2017. "Policy Integration: Mapping the Different Concepts." *Policy Studies* 38 (6): 553–70. https://doi.org/10.1080/01442872.2017.1339239.

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.

Venghaus, Sandra, Carolin Märker, Sophia Dieken, and Florian Siekmann. 2019. "Linking Environmental Policy Integration and the Water-Energy-Land-(Food-)Nexus: A Review of the European Union's Energy, Water, and Agricultural Policies." *Energies (Basel)* 12 (23): 4446-. https://doi.org/10.3390/en12234446.

Weitz, Nina, Henrik Carlsen, Kristian Skånberg, and Adis Dzebo. 2019. "SDGs and the Environment in the EU: A Systems View to Improve Coherence. Report Commissioned by the European Environment Agency." *Stockholm Environment Institute*, October. https://www.sei.org/publications/sdg-synergies-environment-eu/.

Winter, Søren. 2012. "Implementation Perspectives: Status and Reconsideration." In *The Sage Handbook of Public Administration*, 2nd ed., 265–78. Sage Publications.