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# Towards a joint implementation of the 2030 Agenda / SDGs and the Paris Agreement

## Conceptual and analytic paper

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On behalf of the German Environment Agency

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**Abstract: Towards a joint implementation of the 2030 Agenda / SDGs and the Paris Agreement**

To date, processes to implement the global Sustainable Development Goals (SDGs) and international climate change mitigation and adaptation obligations are largely disconnected in most countries. This creates administrative overlaps, costs and hampers the development of effective problem solutions.

Against this background, the report presents the state of research on policy integration and integrated policy-making. We discuss different understandings of policy integration and elaborate criteria for assessing policy integration from different academic perspectives.

With the help of a comprehensive screening of the empirical practices of integration, we identify three approaches: Cognitive capacity development, institutional coordination and joint implementation strategies.

In addition, we identify factors that can promote the use of integration mechanisms ("drivers" of integration). These include political leadership, civic participation and deliberation, inputs from science and sustainable finance.

For some countries that are particularly successful in both their sustainability and climate policies, we analyse the use of integration mechanisms. For selected countries, the analysis is deepened and linked to the drivers of integration.

Finally, we discuss the possibilities for transferring practices and drivers of integration both to Germany and to other countries. The report concludes with conclusions drawn from the extensive empirical surveys.

**Kurzbeschreibung: Auf dem Weg zu einer gemeinsamen Umsetzung der 2030-Agenda / SDGs und des Pariser Abkommens**

Bis dato stehen die Prozesse zur Umsetzung von globalen Nachhaltigkeitszielen (SDG), Klimaschutz und Anpassung an den Klimawandel weitgehend unverbunden nebeneinander. Dies führt zu administrativen Überlappungen und Kosten und verhindert die Entwicklung wirksamer Problemlösungen.

Vor diesem Hintergrund präsentiert der Bericht die Analyse des Forschungsstands zu Politikintegration und integrierter Politik. Wir erörtern die verschiedenen Verständnisse von Politikintegration und arbeiten aus unterschiedlichen akademischen Perspektiven Kriterien für die Bewertung von Politikintegration heraus.

Im Rahmen eines umfassenden Screenings empirischer Praktiken von Integration werden drei Kategorien identifiziert: Entwicklung von kognitiven Kapazitäten, interinstitutionelle Koordinationsmechanismen und gemeinsame Umsetzungsstrategien.

Weiterhin arbeiten wir Faktoren heraus, die die Nutzung von Integrationsmechanismen fördern können („Treiber"). Dazu gehören politische Führung, Bürgerbeteiligung und Deliberation, Beiträge der Wissenschaft und Nachhaltige Finanzierung

Für Länder, die besonders erfolgreich in sowohl ihrer Nachhaltigkeits- als auch Klimapolitik sind und mit denen Deutschland besonders enge Beziehungen pflegt, analysieren wir die Nutzung von Integrationsmechanismen. Für eine kleinere Auswahl von Ländern wird die Analyse vor dem Hintergrund der Treiber von Integration weiter vertieft.

Abschließend diskutieren wir die Möglichkeiten des Transfers von Praktiken und Treibern der Integration sowohl nach Deutschland als auch in weitere Länder. Der Bericht schließt mit Schlussfolgerungen aus den umfangreichen empirischen Erhebungen.

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| | |
|---|---|
| **BURs** | Biennal update reports |
| **CBD** | Convention on Biological Diversity |
| **CCA** | Climate Change Adaptation |
| **$CO_2$** | Carbon dioxide |
| **CPI** | Climate Policy Interaction |
| **CPEIR** | Climate Public Expenditure and Institutions Review |
| **DRR** | Disaster Risk Reduction |
| **DRM** | Disaster Risk Management |
| **EPI** | Environmental Policy Integration |
| **GHG** | Greenhouse gas |
| **HLPF** | High-Level Political Forum |
| **i.a.** | inter alia / among others |
| **i.e.** | id est / that is |
| **IMAG NE** | Interministerial Working Group on Sustainable Development |
| **IPCC** | Intergovernmental Panel on Climate Change |
| **NAOF** | National Audit Office |
| **NAP** | National Adaptation Plan |
| **NCs** | National Communications |
| **NDC** | Nationally Determined Contributions (in Paris Agreement) |
| **NGO** | Non-Governmental Organization |
| **NPM** | New Public Management |
| **PA** | Paris Agreement |
| **SDG** | Sustainable Development Goal |
| **SDS** | Sustainable Development Strategy |
| **SFDRR** | Sendai Framework for Disaster Risk Reduction |
| **UNFCCC** | United Nations Framework Convention on Climate Change |
| **VNR** | Voluntary National Review |

## Summary

Against the backdrop of the climate crisis and the need for sustainable development, the UN member states have committed themselves to several demanding agendas in 2015. In the **Paris Agreement**, nations engaged to limit the rise in the global average temperature to well below 2°C and pursue efforts to limit the temperature increase to 1.5°C. The nations also have pledged to mitigate the risks of climate change, while observing fair burden-sharing. The 17 **Sustainable Development Goals (SDGs)** are no less ambitious, aiming for socially and environmentally sustainable development that opens up fair development opportunities for future generations as well. The **Sendai-Framework for Disaster Risk Reduction** defines objectives and priorities for action to reduce existing vulnerabilities to disaster risks, prevent new ones and strengthen the resilience of the population to natural or man-made hazards.

There are obvious thematic **overlaps between the three post-2015 agendas**. Sustainable development is inconceivable without climate change mitigation and adaptation and, conversely, effective climate change mitigation and adaptation only possible if people's needs are met, which is the core of the sustainable development concept. Nevertheless, in many countries including in Germany, the implementation of the three agendas is at best loosely connected. Most countries have their own institutions, instruments, actors and responsibilities for the post-2015 strategy processes.

In this report, we examine to what extent the **integrated implementation** would be useful and by what means it can be achieved. To this end, the report is structured as follows:

In **Chapter 2**, we approach **conceptual questions** and present the state of research on policy integration. As a start, we briefly present an overview of the **different facets policy integration** can take and present integrated implementation as a form of policy integration (Chapter 2.1). In chapter 2.2, we show that the need for policy integration can result from the **interaction of policies**, including international policy agendas. Policy agendas can interact at the level of objectives, implementation measures and resulting impacts; interactions can be positive (**synergies**) or negative (**trade-offs**), and the strength of these interactions can be measured on scales (e.g. from -3 to +3). In Chapter 2.3, we examine the **evolution of policy integration research and practice**. Chapter 2.4 provides an overview **of concepts and definitions of policy integration**. These different definitions do not just reflect the various epistemic traditions of scholars and practitioners engaged in policy integration. Ultimately, they also express different interests, policy fields and stages at which policy integration can occur. We refer to the definition of **integrated policy-making** which focuses on collaborative and joint ("**co-creative**") policy-making. The concept relates to different organizational aspects such as the cooperation between different policy areas, government departments as well as hierarchies or instruments such as interdepartmental strategies or integrated assessments. In Chapter 2.5, we conceptualize „**entry points**" that can be used for analysing as well as shaping policy-integration (and more specifically: the integrated implementation of international agendas). Such entry points can be: the substantive issues, administrative levels and outputs of integrated implementation, governance mechanisms involved, dimensions of policy-making (policy, politics, polity) and phases of the policy cycle (policy formulation, implementation, monitoring and evaluation) in which integrated implementation may take place. Chapter 2.6 elaborates the **costs and benefits** of integrated implementation. (Transaction) Costs range from the loss of specialisation benefits, longer payback cycles, dissonant planning cycles and budget time horizons to blurred accountability, diluted priorities, administrative overburdening and insufficient stakeholder acceptance. Benefits include the prevention of negative impacts on other policy goals and the promotion of welfare effects and genuine problem-solving. Aside from the

benefits of policy integration, there is a large number of **constraining factors** when attempting to integrate different policies. We are also confronted with certain **limitations** of what policy integration can actually achieve. These limitations must be considered when evaluating and attempting policy integration. Concluding the conceptual considerations and based on a brief review of different evaluation concepts, we present a metric by Metcalfe (1994) for **assessing policy integration** (Chapter 2.7). The metric involves 9 levels of integration, ranging from independent decisions (level 1) and exchange of information (level 2) via avoidance of contradictions (level 4) to the agreement of common priorities (level 8) and the development of common strategies (level 9).

In **Chapter 3**, empirical **practices for integrating the 2015 agendas are identified**. Based on a comprehensive screening of policy documents (including Voluntary National Reviews submitted in the SDG process), we identify different approaches for the integrated implementation of the 2015 agendas:

- **Creation of cognitive and analytical capacities:** Policymakers promote integrated implementation through creating cognitive and analytical capacities for policy integration. In practice this includes, above all, the (ex ante and ex post) analysis of policy coherence and integrated monitoring. These approaches are employed in the context of policy formulation and implementation.
- **Institutional coordination**: Another common way of promoting integrated implementation is institutional coordination, for instance through centralized high-level processes, cross-ministerial structures, involvement of national parliaments, other administrative levels and non-state actors. Institutional coordination addresses the *process* of policy-making, not its outputs.
- **Joint strategy development**: Frequently based on the previous approaches (capacity creation, institutional coordination), joint strategies can be developed by
    a. **mainstreaming** (aligning 'by design') SDG implementation, climate action and disaster risk reduction
    b. designing policies that have **inherent co-benefits** for other concerns

According to the findings of our screening, the adaptation and disaster risk reduction agendas – play a much smaller role in integration efforts than the mitigation agenda. Based on the screening findings, we assume that the existence of such processes, instruments and strategies for integration is not in itself an indication of *deepened* integration. Further factors are necessary to drive forward effective integrated implementation.

In **Chapter 4**, we propose four **factors that can drive deepened integration**. While the driver "**political leadership**" is often referred to, other drivers are increasingly being called for (and actually used), too: Governments can be bound by the votes of **scientists** or the results of **deliberative participation** processes, or they can be encouraged by the markets for **sustainable finance**: financial market actors investing in a climate-friendly and sustainability-oriented way require an integrated policy framework. All four drivers can create a demand for integrated policy.

In **Chapter 5**, a non-exhaustive list of **15 countries** is presented. These are countries which stand out for their **integrated implementation of** both the climate and sustainability agendas. Although the examined countries nevertheless may have some implementation deficits, they are engaged in multiple aspects of policy integration. For the selected countries, we describe which of the integration practices classified above are actually applied. In the fifth step, we focus

further and ask for selected countries how exactly these practices are employed, what the drivers are behind them, and – as far as data is available – what their impact is. The **analysis of selected countries** resulted in the determination of one outstanding example for the creation of cognitive and analytical capacities (Costa Rica), and respectively two outstanding cases for institutional coordination at governmental level (Mexico and Japan), institutional coordination with non-governmental actors (Kenya and France), and joint strategy development (Bangladesh and Mongolia).

In **Chapter 6**, the report reflects on the **transferability** of deepened policy integration and its drivers for Germany and beyond. We first reflect on potential **influencing factors** that need to be considered. Further on, we draw upon insights from the policy transfer literature and the enabling and constraining factors that were outlined above (Chapter 2.5). Enabling and constraining factors include: 1) Objects of transfer and integration tools, 2) transfer mechanisms, 3) contexts, capacities, motives as well as actor constellations, 4) aspects of time, and 5) project design and management, communication and performance review. We then survey factors that influence the implementation of integration drivers and/or learning from other countries in this regard. This includes but is not limited to the early involvement of actors that are not commonly involved in environmental and climate policy planning processes (which we will call "non-usual suspects"). They can include other lead ministries (e.g. finance ministry) as well as non-state actors such as randomly selected citizens or private sector companies. Considering the context conditions in a given country for initiating deliberation is also important to implement policy integration (Chapter 6.2). Chapter 6.3 presents potential enabling and constraining factors for the transfer of integration tools, benchmarks and drivers to **Germany**.

One major finding of chapter 6 is that policy transfer is deeply context specific and thus requires the consideration of integration needs. While we could not, within the limits of this study, conduct an analysis of integration demands, gaps and limitations in Germany, we briefly described the processes of implementing the SDGs and Paris Agreement in Germany. The two processes, to date, are only loosely coupled.

Finally, we draw **conclusions** on the conceptual insights and empirical findings (**Chapter 7**). We argue that integrated implementation of the post-2015 agendas makes the respective agenda policies more efficient, relevant, socially acceptable and provides them with more political clout. Integrated implementation is not only expedient, it is also possible, as other countries show. However, processes and capacities in the administration are needed to identify co-benefits. It should also be noted that integrated implementation is costly and risks diluting policy objectives. Even if policymakers do not decide to merge implementation processes, the need to integrate individual agendas into other policies remains.

## Zusammenfassung

Vor dem Hintergrund der Klimakrise und der Notwendigkeit einer nachhaltigen Entwicklung haben sich die UN-Mitgliedstaaten 2015 zu mehreren anspruchsvollen Agenden verpflichtet. Im **Pariser Abkommen** haben sich die Staaten verpflichtet, den Anstieg der globalen Durchschnittstemperatur auf deutlich unter 2 °C zu begrenzen und die Bemühungen zur Begrenzung des Temperaturanstiegs auf 1,5 °C fortzusetzen. Die Staaten haben sich außerdem verpflichtet, die Risiken des Klimawandels zu mindern und dabei auf eine faire Lastenverteilung zu achten. Die 17 **Ziele für nachhaltige Entwicklung (SDGs)** sind nicht weniger ehrgeizig und zielen auf eine sozial und ökologisch nachhaltige Entwicklung ab, die auch künftigen Generationen faire Entwicklungschancen eröffnet. Das **Sendai-Rahmenwerk** für Katastrophenvorsorge legt Ziele und Prioritäten für Maßnahmen fest, um bestehende Anfälligkeiten für Katastrophenrisiken zu verringern, neue Risiken zu verhindern und die Widerstandsfähigkeit der Bevölkerung gegenüber natürlichen oder vom Menschen verursachten Gefahren zu stärken.

Es gibt offensichtliche thematische **Überschneidungen zwischen den drei post-2015 Agenden**. Nachhaltige Entwicklung ist ohne Klimaschutz und Anpassung an den Klimawandel nicht denkbar, und umgekehrt ist ein wirksamer Klimaschutz und eine wirksame Anpassung an den Klimawandel nur möglich, wenn die Bedürfnisse der Menschen erfüllt werden, was der Kern des Konzepts der nachhaltigen Entwicklung ist. Dennoch ist in vielen Ländern, auch in Deutschland, die Umsetzung der drei Agenden bestenfalls lose miteinander verbunden. Die meisten Länder haben ihre eigenen Institutionen, Instrumente, Akteure und Verantwortlichkeiten für die post-2015 Strategieprozesse.

In diesem Bericht untersuchen wir, inwieweit eine **integrierte Umsetzung** sinnvoll wäre und wie sie erreicht werden kann. Zu diesem Zweck ist der Bericht wie folgt gegliedert:

In **Kapitel 2** gehen wir auf **konzeptionelle Fragen** ein und stellen den Stand der Forschung zur Politikintegration dar. Zunächst geben wir einen kurzen Überblick über die **verschiedenen Facetten von Politikintegration** und stellen die integrierte Umsetzung als eine Form der Politikintegration vor (Kapitel 2.1). In Kapitel 2.2 zeigen wir, dass die Notwendigkeit der Politikintegration aus der **Wechselwirkung von Politiken** (einschließlich von internationalen Politikagenden) resultieren kann. Politikagenden können auf der Ebene der Ziele, der Umsetzungsmaßnahmen und der sich daraus ergebenden Auswirkungen interagieren; die Wechselwirkungen können positiv (**Synergien**) oder negativ (**Zielkonflikte**) sein, und die Stärke dieser Interaktionen kann auf Skalen gemessen werden (z. B. von -3 bis +3). In Kapitel 2.3 wird die **Entwicklung der politikwissenschaftlichen Integrationsforschung und -praxis** untersucht. Kapitel 2.4 gibt einen Überblick über die **Konzepte und Definitionen im Kontext von Politikintegration**. Diese unterschiedlichen Definitionen spiegeln nicht nur die verschiedenen epistemischen Traditionen von Wissenschaftlern und Praktikern wider, die sich mit politischer Integration beschäftigen. Letztlich drücken sie auch unterschiedliche Interessen, Politikfelder und Stadien aus, in denen Politikintegration stattfinden kann. Wir beziehen uns auf die Definition der **integrierten Politikgestaltung,** die sich auf die kollaborative und gemeinsame („co-kreative“) Politikgestaltung konzentriert. Das Konzept kann sich auf verschiedene organisatorische Aspekte beziehen und beschreibt u.a. die Zusammenarbeit zwischen verschiedenen Politikbereichen, Regierungsabteilungen sowie Hierarchien oder Instrumenten wie z.B. ressortübergreifende Strategien oder integrierte Bewertungen. In Kapitel 2.5 konzeptualisieren wir **Ansatzpunkte**, die für die Analyse und Gestaltung der Politikintegration (genauer gesagt: der integrierten Umsetzung internationaler Agenden) genutzt werden können. Solche Ansatzpunkte können sein: die inhaltlichen Fragen, die

Verwaltungsebenen und die Ergebnisse der integrierten Umsetzung, die beteiligten Governance-Mechanismen, die Dimensionen der Politikgestaltung (Policy, Politics, Polity) und die Phasen des Politikzyklus (Politikformulierung, -umsetzung, -überwachung und -bewertung), in denen die integrierte Umsetzung stattfinden kann. In Kapitel 2.6 werden die **Kosten und der Nutzen der integrierten Umsetzung** näher erläutert. Die (Transaktions-)Kosten reichen vom Verlust von Spezialisierungsvorteilen, längeren Amortisierungszyklen, nicht übereinstimmenden Planungszyklen und Haushaltszeithorizonten bis hin zu verschwommener Rechenschaftspflicht, verwässerten Prioritäten, administrativer Überlastung und unzureichender Akzeptanz durch die Beteiligten. Zu den Vorteilen gehören die Vermeidung negativer Auswirkungen auf andere politische Ziele sowie die Förderung von Wohlfahrtseffekten und echten Problemlösungen. Versuche, verschiedene Politiken zu integrieren, stoßen jedoch auf eine Vielzahl von **Hemmnissen** und es gibt auch **Grenzen** dessen, was die Politikintegration tatsächlich erreichen kann. Diese Grenzen müssen bei der Bewertung und dem Versuch der Politikintegration berücksichtigt werden. Zum Abschluss der konzeptionellen Überlegungen und auf der Grundlage eines kurzen Überblicks über verschiedene Evaluierungskonzepte stellen wir eine Metrik von Metcalfe (1994) zur **Bewertung von Politikintegration** vor (Kapitel 2.7). Die Metrik umfasst neun Stufen der Integration, die von unabhängigen Entscheidungen (Stufe 1) und Informationsaustausch (Stufe 2) über die Vermeidung von Widersprüchen (Stufe 4) bis hin zur Vereinbarung gemeinsamer Prioritäten (Stufe 8) und der Entwicklung gemeinsamer Strategien (Stufe 9) reichen.

In **Kapitel 3** werden empirische **Praktiken einer Integration der 2015-Agenden** aufgezeigt. Auf der Grundlage eines umfassenden Screenings von Politikdokumenten (einschließlich der im Rahmen des SDG-Prozesses eingereichten Voluntary National Reviews) werden verschiedene Ansätze für die integrierte Umsetzung der 2015-Agenden ermittelt:

- **Schaffung von kognitiven und analytischen Kapazitäten**: Politische Entscheidungsträger fördern die integrierte Umsetzung durch die Schaffung von kognitiven und analytischen Kapazitäten für die Politikintegration. In der Praxis umfasst dies vor allem die (Ex ante- und Ex post-) Analyse der Politikkohärenz und das integrierte Monitoring. Diese Ansätze werden im Rahmen der Politikformulierung und -umsetzung eingesetzt.

- **Institutionelle Koordinierung**: Eine weitere gängige Methode zur Förderung der integrierten Umsetzung ist die institutionelle Koordinierung, z. B. durch zentralisierte Prozesse auf hoher Ebene, ressortübergreifende Strukturen, die Einbeziehung der nationalen Parlamente, anderer Verwaltungsebenen und nichtstaatlicher Akteure. Die institutionelle Koordinierung bezieht sich auf den Prozess der Politikgestaltung, nicht auf deren Ergebnisse.

- **Entwicklung von gemeinsamen Strategien**: Häufig auf der Grundlage der vorherigen Ansätze (Schaffung von Kapazitäten, institutionelle Koordinierung) können gemeinsame Strategien entwickelt werden durch

    - **Mainstreaming** der Umsetzung von SDGs, Klimaschutz und Katastrophenvorsorge in alle Politikbereiche

    - Gestaltung von Politiken, die einen **inhärenten Zusatznutzen** (Co-Benefit) für andere Anliegen haben

Die Ergebnisse unseres Screenings zeigen, dass Anpassung an den Klimawandel und Katastrophenvorsorge bei den Integrationsbemühungen eine weitaus geringere Rolle spielen als Klimaschutz. Aufgrund der Ergebnisse des Screenings gehen wir davon aus, dass das

Vorhandensein solcher Prozesse, Instrumente und Strategien für die Integration an sich noch kein Hinweis auf eine *vertiefte* Integration ist. Es sind weitere Faktoren erforderlich, um eine effektive integrierte Umsetzung voranzutreiben.

In **Kapitel 4** schlagen wir vier Faktoren vor, die eine vertiefte Integration vorantreiben können („**Treiber" von Integration**). Auf den Faktor „**politische Führung**" wird häufig verwiesen, doch zunehmend werden auch andere Faktoren gefordert (und tatsächlich genutzt): Regierungen können durch das Votum der **Wissenschaft** oder die Ergebnisse **deliberativer Beteiligungsprozesse** gebunden sein, oder sie können durch die Märkte für **nachhaltige Finanzierung** ermutigt werden: Finanzmarktakteure, die klimafreundlich und nachhaltigkeitsorientiert investieren, benötigen einen integrierten politischen Rahmen. Alle vier Triebkräfte können die Nachfrage nach einer integrierten Politik anregen.

In **Kapitel 5** wird eine nicht abschließende Liste von fünfzehn **Ländern** vorgestellt, die sich durch eine besonders **erfolgreiche integrierte Umsetzung** sowohl der Klima- als auch der Nachhaltigkeitsagenda auszeichnen. Obwohl die untersuchten Länder dennoch einige Umsetzungsdefizite aufweisen, sind sie in mehreren Aspekten der Politikintegration engagiert. Wir beschreiben für die ausgewählten Länder, welche der oben klassifizierten Integrationspraktiken tatsächlich angewendet werden. Für ausgewählte Länder fragen wir, wie genau diese Praktiken angewandt werden, welche Triebkräfte dahinterstehen und – soweit Daten verfügbar sind – welche Auswirkungen sie haben. Wir identifizieren ein herausragendes Beispiel für die Schaffung kognitiver und analytischer Kapazitäten (Costa Rica) und jeweils zwei herausragende Fälle für die institutionelle Koordination auf Regierungsebene (Mexiko und Japan), die institutionelle Koordination mit nichtstaatlichen Akteuren (Kenia und Frankreich) und die gemeinsame Strategieentwicklung (Bangladesch und Mongolei).

In **Kapitel 6** reflektiert der Bericht die **Übertragbarkeit** einer vertieften Politikintegration und ihrer Triebkräfte auf Deutschland und darüber hinaus. Zunächst werden in Kapitel 6.1 potenzielle **Einflussfaktoren** erörtert, die berücksichtigt werden müssen, und es wird auf Erkenntnisse aus der Literatur zum Politiktransfer sowie auf die oben (in Kapitel 2.5) dargelegten förderlichen und hinderlichen Faktoren zurückgegriffen. Zu den förderlichen und hinderlichen Faktoren gehören: 1) Gegenstände des Transfers und Integrationsinstrumente, 2) Transfermechanismen, 3) Kontexte, Kapazitäten, Motive sowie Akteurskonstellationen, 4) zeitliche Aspekte und 5) Projektdesign und -management, Kommunikation und Erfolgskontrolle. Anschließend (Kapitel 6.2) wird ein kurzer Überblick über die Einflussfaktoren gegeben, die die die Umsetzung von Integrationstreibern oder das Lernen von anderen Ländern in Bezug auf diese beeinflussen. Dies beinhaltet (ist aber nicht beschränkt auf) die frühe Einbindung von Akteuren, die in der Regel nicht in umwelt- und klimapolitische Planungsprozesse involviert sind (und die wir „nicht-übliche Verdächtige" nennen werden). Dies können andere federführende Ministerien (z.B. Finanzministerium) sein, aber auch nicht-staatliche Akteure wie per Losverfahren ausgewählte Bürger oder privatwirtschaftliche Unternehmen. Die Kontextbedingungen eines Landes zu berücksichtigen, wenn deliberative Verfahren eingesetzt werden, ist ebenfalls wichtig für die Umsetzung von Politikintegration (Kapitel 6.2). In Kapitel 6.3 werden potenzielle förderliche und hinderliche Faktoren für den Transfer von Integrationsinstrumenten, Benchmarks und Treibern nach **Deutschland** vorgestellt. Eine wichtige Erkenntnis dieses Kapitels ist, dass der Politiktransfer zutiefst kontextspezifisch ist und daher die Berücksichtigung der Integrationserfordernisse erfordert. Während wir im Rahmen dieser Studie keine Analyse der Integrationsanforderungen, -lücken und -beschränkungen in Deutschland durchführen konnten, haben wir die Prozesse zur Umsetzung der SDGs und des Pariser Abkommens in Deutschland kurz beschrieben. Die beiden Prozesse sind jedoch nur lose miteinander gekoppelt. Schließlich ziehen wir **Schlussfolgerungen** aus den konzeptionellen

Erkenntnissen und empirischen Ergebnissen (**Kapitel 7**). Wir argumentieren, dass eine integrierte Umsetzung der post-2015-Agenden die jeweiligen Agendapolitiken effizienter, relevanter und gesellschaftlich akzeptabler macht und ihnen mehr politische Schlagkraft verleiht. Eine integrierte Umsetzung ist nicht nur zweckmäßig, sondern auch möglich, wie andere Länder zeigen. Allerdings sind Prozesse und Kapazitäten in der Verwaltung erforderlich, um Co-Benefits zu ermitteln. Es sollte auch beachtet werden, dass eine integrierte Umsetzung ggf. mit zusätzlichen Kosten und Risiken verbunden ist und die Gefahr besteht, dass die politischen Ziele verwässert werden. Selbst wenn sich die politischen Entscheidungsträger nicht für eine Zusammenlegung der Umsetzungsprozesse entscheiden, bleibt die Notwendigkeit bestehen, einzelne Agenden in andere Politikbereiche zu integrieren.

# 1 Introduction

A number of policy agendas relevant to sustainable development have been adopted at the international level in the past years and decades. The 2030 Agenda for Sustainable Development features prominently, but further global policy agendas are interlinked such as the Paris Agreement and the Sendai Framework for Disaster Risk Reduction (post-2015 agendas). The agendas overlap to a significant extent. Such interactions pose challenges for a joint (or 'integrated') implementation at the national level: In the best case, the objectives, implementation measures and impacts of one agenda reinforce those of another policy agenda. In the worst case, they weaken or even undermine them. In any case, implementation of parallel and interacting agendas requires political attention and institutional capacities in dealing with the respective interactions and complexities, and in comprehending and translating them into policies at the domestic level. In this paper, we explore how an integrated implementation can look like, by focusing on interactions between the 2030 Agenda and the Paris Agreement. Due to scope, overlaps with the Sendai Framework could not be touched upon in detail but will be taken into account on the side.

The **2030 Agenda for Sustainable Development**, adopted in 2015, defines 17 Sustainable Development Goals (SDGs) and 169 targets. All UN member states are to achieve these goals by 2030. It is a broad canon of goals ranging from the fight against hunger and poverty to climate protection, nature conservation, and building peaceful, just and inclusive societies. The 2030 Agenda's overarching principle is to 'leave no one behind'. The **Paris Agreement** (PA), adopted in 2015 under the UN Framework Convention on Climate Change for the first time commits both industrialized and developing countries to climate change mitigation and adaptation. In concrete terms, it sets the goals of limiting the rise in the global average temperature to well below 2°C and pursue efforts to limit the temperature increase to 1.5°C, increasing the ability to adapt to climate change and reconciling financial flows with low-emission and resilient development. The **Sendai-Framework for Disaster Risk Reduction** (SFDRR), also adopted in 2015, defines seven objectives and four priorities for action to reduce existing vulnerabilities to disaster risks, prevent new ones and strengthen the resilience of the population to natural or man-made hazards.

To date, **implementation** of the agendas lags behind and overall **goal achievement** is limited. Despite efforts and successes in certain areas, the UN member states are not on track in achieving most of the 169 SDG targets. In the areas of inequality, climate change, biodiversity loss and waste generation, the trend is even going in the wrong direction (IGS 2019; UN ESC 2020). With regard to the Paris Agreement, the Emissions Gap Report 2020 shows that global greenhouse gas emissions continue to rise. High-level UN events such as the Climate Action Summit 2019 and the SDG Summit 2019 have so far been able to generate only limited increases in ambition, and only few of the Nationally Determined Contributions (NDCs) to the Paris Agreement or the Voluntary National Reviews (VNR) of the SDGs have the potential to trigger **transformative change** (e.g. Climate Action Tracker 2021; Climate Transparency 2020). While the Sendai Framework is increasingly being translated into national disaster risk reduction strategies, there are enormous further challenges about adequate risk mitigation, response and transfer mechanisms, not least because of severe inequalities between richer and poorer countries and the increasing effects of climate change (UNDRR 2019).

**Germany** has missed its climate goals for 2020 and has reached only four of the twelve envisioned sustainability goals that it had set for that year as part of its National Sustainability Strategy (DeStatis 2021). Other than that Germany is not on track in achieving its national sustainability goals. Similar developments can be observed at the European level. Here, the SDG

Index finds that no European country is on track to achieve all 17 SDGs by 2030 (SDSN and IEEP 2020). In addition, some analysts contend that Germany even put the brakes on more ambitious European action in some areas other than green energy (Scholz et al. 2016). Against this backdrop, discussions center on whether the implementation of international policy agendas can be improved by **integrating the implementation of the overlapping policy agendas.** At best, policy integration can lead to an improved implementation of the post-2015 agendas.

Yet, it is only insufficiently explored, what 'integrating overlapping policy agendas' can entail. **Different notions** range from policy mainstreaming, coordination and joint target-setting to coordinated policy-making. As these examples illustrate – implementing overlapping policy agendas in an integrated fashion provides different possibilities for exploiting the synergies between and mutual 'co-benefits' of the policies. While there has been a long-standing research interest in integrated policy approaches, the practical integration of the different policy processes of sustainable development, climate protection and adaptation, biodiversity and disaster risk reduction within political institutions and strategies is lagging behind.

Integration is considered **challenging** due to a variety of reasons. These include different understandings of policymakers of what policy integration can mean, coupled with different interests and conflicting policy priorities or strategies. There are costs linked with integrating policies, and limitations to what policy integration can achieve generally. Also, there is the current implications of **Covid-19 pandemic**: The pandemic has increased the 'stagnation' of SDG implementation and will have severe negative impacts on most SDGs – especially goals related to poverty, human well-being, inequality and resilience (UNDP 2020, Sachs et al. 2020). The economic effects of the pandemic threaten to weaken the societal and institutional capacities for dealing with transformative change – though they might also help curbing some non-sustainable practices (e.g. air travel) and strengthening some more sustainable practices (e.g. local community support). In any case, an integrative implementation of the transformative agendas needs to be linked to the "Building back better" agenda (also see Bauer et al. 2021).

On the positive side, policy integration has a range of **benefits** and helps developing genuine problem solutions. This is all the more important as the 2030 Agenda and the Paris Agreement define a **need for transformative change** – i.e., for fundamental changes that reaches beyond incremental approaches and helps reconfiguring present systems of production and consumption, including the underlying socio-political and -cultural patterns of housing, mobility, nutrition etc. (Wolff et al. 2020; cf. Jacob et al. 2020). Policy integration can help achieve such transformative change.

Against this background, we evaluate existing good practices of countries engaged in policy integration of the post-2015 agendas. While recognizing the importance of integrating implementation of the Sendai Framework (as well as of other international goals and policies, such as biodiversity conservation), the report and the empirical analysis focus on the integration of the 2030 Agenda and the Paris Agreement.[1] Our study ties in with the argument on the importance of (international) cooperation recently made by Bauer et al. (2021). Their report examines potential ways for cooperation between the Paris climate goals and sustainable

[1] This is not just due to the scope of the project, which could not cover a thorough analysis of all post-2015 agendas, but is also a consequence of finding much more evidence of respective implementation efforts regarding these two agendas. Also, the goal of improving disaster risk reduction forms part of the 2030 Agenda and is thus at least partially included. By focusing on the integration of sustainable development and climate policy efforts we do not intend to underestimate or sideline recent progress that has been made, for instance, with regard to the integration of disaster risk reduction (DRR) and climate change adaptation (CCA). For instance, the most recent German conference on disaster risk reduction, held in October 2021, offered fruitful insights on policy integration of climate change adaptation as part of disaster risk reduction at the domestic and international level. Documentation of the conference is available in English and German via: https://fachtagung-katastrophenvorsorge.de/en/index/?strytlpage=91 (last accessed November 16, 2021). However, the progress with regard to such policy integration has been less systematically assessed both from a theoretical and empirical perspective.

development. It provides a solid foundation as to why a consistent implementation of both agendas is needed, also because climate change significantly impacts the framework conditions for sustainable development (ibid. viii). Our study provides additional insights where integration is already occurring within countries and how it can be strengthened. We focus less on the international aspect of cooperation but suggest that ample country practices can be used to foster policy learning and exchange between governments.

The report is structured as follows:

In **Chapter 2**, we provide a background on the evolution, different concepts as well as costs and benefits of policy integration. There is a long tradition of policy integration research and practice, which points to the different facets policy integration can take. These facets often correspond with different logics of integration and thereby have important implications for political practice. Against the background of the ubiquitous need for transformation, a notion of 'integrated policy-making' is presented. In this context, we introduce Metcalfe's (1994) metric for policy coordination. It concludes with an introduction of potential entry points for policy integration/ integrated implementation, considering different aspects of policy-making (polity, policy, politics) and different stages of the policy cycle.

**Chapter 3** presents the results of a literature and document screening of how countries to date deal with overlap, inconsistencies and synergies between different international agendas when implementing them domestically. We identify a number of approaches that governments employ, including the creation of cognitive and analytical capacities for policy integration, institutional integration and joint strategy development.

**Chapter 4** presents four potential drivers which may support actors in reaching a deeper level of policy integration. These include high-level political leadership, self-commitment to citizen participation, self-commitment to science as well as sustainable finance. Partly, these drivers have already been highlighted as 'levers' for sustainability transformations by the Global Sustainable Development Report (IGS 2019).

The preliminary screening of different integration practices and approaches is supplemented by an in-depth analysis of approaches for an integrated implementation in 15 selected countries in **Chapter 5**. This chapter presents how the countries were selected, based on a review of performance-driven datasets and indicators. It briefly describes how the different clusters of policy integration manifest in the selected countries. This analysis is complemented by a detailed examination of select practices and offers hints to further factors in these countries that have the potential to promote deepened integration.

In **Chapter 6** we reflect on the transferability of integrated approaches and drivers. Finally, we draw conclusions on the conceptual insights and empirical findings (**Chapter 7**).

# 2 Policy integration and the post-2015 policy agendas: Conceptual aspects

The progress of implementing the goals set by the post-2015 agendas is limited, policy upscaling and ambition are lacking, and climate change is occurring at a much faster rate than expected (Shawoo 2020, Dzebo et al. 2019a, UNFCCC 2017). Against this background, there is an urgent need for more effective policy implementation and upscaling of existing policy efforts. Exploring opportunities for synergies and dealing with overlaps, gaps and conflicts are expected to improve effective policy implementation of the post-2015 policy agendas (Dzebo et al. 2019a).

The analysis of the different understandings and concepts of policy integration is structured along the following questions (in order of the chapter sections):

- What do we mean by **policy integration** and **integrated implementation**? (Chapter 2.1)
- How do **interactions** between international policy agendas **drive the need for integrated implementation** (and thus policy integration)? (Chapter 2.2)
- How has **research on policy integration evolved** in the different policy domains (environmental and sustainability policy, climate policy and disaster risk reduction, biodiversity)? (Chapter 2.3)
- What **concepts** are **inherent in or related to policy integration**? (e.g. vertical and horizontal integration, coherence, coordination, holistic governance, integrated policy-making, as well as policy interlinkage) (Chapter 2.4)
- What are **entry points** for integrated implementation? (Chapter 2.5)
- What are the costs and benefits and opportunities for policy integration, what are its enablers, barriers and limitations? (Chapter 2.6)
- How can policy integration be **measured and evaluated**? (Chapter 2.7)

## 2.1 Understanding policy integration and integrated implementation

Integrating the implementation of different international policy agendas – in short: "**integrated implementation**" – is a form of policy integration. While not much literature exists on the former concept, there is a long scholarly tradition with regard to the latter. However, different authors define **policy integration** differently. The term can describe:

- a **process**: Policy integration as process involves the **mainstreaming** of concerns from one policy field (e.g. health) into other policy fields (e.g. environment) and across different institutional levels and spheres (including non-state actors);
- a **structure**: Policy integration as structure refers to the organizational structures set up to better **coordinate** mainstreaming and different actors across policy fields and levels of government;
- an **output**: Policy integration as an output covers **strategies / policies** that are aligned ('by design') or that have inherent co-benefits for other concerns;
- a **state of alignment**: Policy integration as state describes the degree to which coordination and alignment of different sectoral objectives and interests has occurred. Policy integration in this understanding is used interchangeably with "policy **coherence**".

"Integrated implementation" is a sub-type of policy integration in the first understanding (policy integration as a process of mainstreaming). It specifically applies when the policy concerns that shall be integrated result from different international policies or agendas.

The different definitions of "policy integration" are related to different integration logics, (policy) interests and types of knowledge. Policy integration can relate to different policy fields and take different 'directions' - e.g. adaptation concerns can be integrated with the SDGs and Sendai Framework (see UNFCCC 2017), SDGs be mainstreamed into adaptation policies, disaster risk reduction into the post-2015-agendas (see Sandholz et al. 2020), or policy integration can be improved within the SDGs (see Breuer et al. 2021).

## 2.2 Interactions between policy agendas creating the need for integrated implementation and policy integration

The need for policy integration (here: integrated implementation) results from the fact that policies (here: international policy agendas) interact. Such interaction is more likely in the case of 'policy agendas'. These are documents through which policy-makers commit to a multitude of policy goals, rather than to individual goals. The 2030 Agenda with its 17 goals and 179 targets represents a particularly complex multi-issue agenda. The higher the number of issues and policy goals is, the higher the number of interlinkages between agendas turns out to be – even within one agenda, interaction between goals may occur. The interaction of policy agendas is hence a more complex process than the mere integration of, for instance, 'environmental concerns' into agricultural policy ('complex', multi-dimensional vs. 'simple', one-dimensional integration).

International policy agendas can **interact at different levels** – at the level of objectives, implementation measures, and at the level of impacts:

- **Objectives**: The 2030 Agenda reflects the objectives of the Paris Agreement, the CBD and the Sendai Framework in SDG 13 (PA), 14 and 15 (CBD) and 11.b (SFDRR). The Paris Agreement, in turn, aims to strengthen the response to the threat of climate change "in the context of sustainable development and efforts to eradicate poverty" (Art. 2, PA). It also stipulates how to deal with loss and damage caused by climate change and extreme weather events (Art. 8 PA), thus touching on the objectives of the Sendai Framework, which is mentioned in the preamble of the decision that adopted the Paris Agreement. Some of the objectives of the respective agendas may conflict with each other. An example is SDG 8 on economic growth: striving for sustainable economic growth is likely to be accompanied by increased consumption of energy and resources, and thus conflicts with climate mitigation and biodiversity conservation (SDG 13, 15).[2]
- **Implementation measures**: Measures to achieve climate mitigation, climate adaptation and disaster risk reduction can be designed in such a way that they simultaneously promote other (non-climate-related) SDGs, or that they make it more difficult to achieve these. The latter is assumed, for instance, for the approach 'bioenergy with carbon capture and storage', the former for reduced deforestation. On the other hand, implementing (non-climate-

[2] For the macroeconomic debate on the relation between growth and environmental degradation (which differs according to emissions / types of environmental degradation), see, for instance, Uddin (2021); Marques et al. (2019); Stern (2017); Özokcu und Özdemir (2017); or Dietz und Adger (2003). While a number of pollutants are reduced when countries achieve higher economic income levels (environmental Kuznets hypothesis), evidence suggests that this does not hold for $CO_2$ emissions or biodiversity. Resource use and lacking resource efficiency also imply greenhouse gas emissions (IRP (2020)).

related) SDGs may be more or less climate-friendly, biodiversity-conserving and adaptation-promoting (e.g. measures for sustainable economic growth or food security).

- **Impact**: Achieving the objectives of the Paris Agreement and the CBD is considered simply not possible without taking sustainability aspects (and thus the SDGs) into account (IPCC 2018; UNEP 2019b). Education and peace, for example, are key prerequisites for the success of efforts to protect the climate and biodiversity: if people are not educated about the value of nature and climate stability, they will not be willing to shoulder the costs of taking action. Similarly, in conflict- and war-torn societies, attention and resources are withdrawn from the governance of concerns unrelated to these conflicts, such as environmental or educational policy.

Conversely, a progression of climate change and its severe or even catastrophic impacts will make it more difficult to achieve the conservation of biodiversity as well as 'social' SDGs such as the fight against hunger and poverty. And it is estimated that roughly a third of the net reductions in greenhouse gas emissions required to meet the Paris Agreement's goals could come from 'nature-based solutions' (SCBD 2020, p. 9).

What are the **consequences** of such interactions? Interventions to achieve one objective can cause underachievement or failure in achieving others, either in the short term or in the long run. On the other hand, a successful intervention to further one objective can create synergies promoting progress on others and tap co-benefits. A heuristic developed by Nilsson, Greggs & Visbeck (2016) expands on possible consequences **at the level of impacts**. In the case of positive interactions, progress in one objective can create conditions that enable progress on another ("enabling interaction", +1); can make it easier to make progress on another ("reinforcing interaction", +2); or can automatically deliver progress on another ("indivisible interaction", +3)". In the case of negative interactions, progress on one objective can constrain the options for how to deliver on another ("constraining interaction", -1); can make it more difficult to make progress on another ("counteracting interaction", -2); or can automatically lead to a negative impact on another ("cancelling interaction", -3). There is also the possibility that there is no significant link between two targets' progress ("consistent interaction", 0). Table 1 provides examples covering a broad range of SDGs (Nilsson, Griggs & Visbeck (2016, p. 321). The heuristic was developed to catch interactions between SDGs (applied, for instance, by Pham-Truffert et al. 2020 as input into the Global Sustainable Development Report 2019). However, it can also be applied to interactions between SDGs and other policy agendas: interactions between a specific SDG and the goals of the Paris Agreement can also be rated as reinforcing, constraining or counteracting etc. (see also Chapter 2.7).

**Table 1: Scale of positive and negative policy interactions**

| Interaction | | Description | Example |
|---|---|---|---|
| +3 | Indivisible | Progress on one target automatically delivers progress on another | Ending all forms of discrimination against women and girls is indivisible from ensuring women's full and effective participation and equal opportunities for leadership. |
| +2 | Reinforcing | Progress on one target makes it easier to make progress on another | Providing access to electricity reinforces water-pumping and irrigation systems. |

| Interaction | | Description | Example |
|---|---|---|---|
| | | | Strengthening the capacity to adapt to climate-related hazards reduces losses caused by disasters. |
| +1 | Enabling | Progress on one target creates conditions that enable progress on another | Providing electricity access in rural homes enables education, because it makes it possible to do homework at night with electric lighting. |
| 0 | Consistent | There is no significant link between the progress on the two targets | Ensuring education for all does not interact significantly with infrastructure development or conservation of ocean ecosystems. |
| -1 | Constraining | Progress on one target constrains the options for how to deliver on another | Improved water efficiency can constrain agricultural irrigation. Reducing climate change can constrain the options for energy access. |
| -2 | Counteracting | Progress on one target makes it more difficult to make progress on another | Boosting consumption for growth can counteract waste reduction and climate mitigation. |
| -3 | Cancelling | Progress on one target automatically leads to a negative impact on another | Fully ensuring public transparency and democratic accountability cannot be combined with national-security goals. Full protection of natural reserves excludes public access for recreation. |

Source: Nilsson et al. (2018, p. 1492) combined with Nilsson, Griggs & Visbeck (2016, p. 321).

It is important to keep in mind that the design of **implementation measures** is crucial for the effect of interactions at the impact level (Wolff et al. 2016). Take the above example of a 'counteracting' (score -2) interaction – 'Boosting consumption for growth can counteract waste reduction and climate mitigation': If implementation measures are designed in a way so that they decouple economic growth in absolute terms from resource and energy consumption, or if the consumed energy is from renewable sources, the interaction may in fact be 'consistent' (score 0). The goal operationalization and manner of implementation profoundly affects whether and to what degree specific policy goals/ targets are consistent or synergetic.

On a final note, in the case of **transformative policy agendas**, realizing the (interacting) agenda objectives likely leads to complex interconnected feedback loops as well as nonlinear cause-effect relationships with lengthy-time lags between causes and effects. It is hence more complex to orchestrate implementation. A monitoring and adaptive management of outcomes (including unexpected, counterintuitive ones) should accompany integrated implementation.

## 2.3 Evolution of policy integration research and practice

The pursuit of policy integration has been described as the "Holy Grail" of public governance (Perri et al. 2002; Candel 2017; Candel 2019). The **aim of policy integration** is to formulate coherent strategies across policy sectors, increase policy effectiveness while reducing inefficiencies in public policy-making (Candel and Biesbroek 2016; Jacob et al. 2019; Candel 2019). Policy integration is commonly presented as a key concept for policy-making that helps to deal with complex problems and negative implications of fragmented government action (e.g. Perri et al. 2002; Meijers and Stead 2004; Candel 2017; Cejudo and Michel 2017). The **complexity** has not just increased as a result of various concurrent trends but also due to an increasing number of actors involved in the policy process and manifold subsectors of policy-making (also see Meijers and Stead 2004). Against the background of the evolution of New Public Management (NPM) principles[3] over the last three decades, governments have developed **specializations** to deal with public problems and thereby make government more efficient (Cejudo and Michel 2017). Although NPM was initially intended to reinvent government by confining new co-operative models and market-style competition as part of administrative reforms, the limitations and paradoxes of NPM manifest amongst other things in drastically decentralized decision-making, single-purpose organizations, privatization, and managerial performance standards in terms of target accountability and cost reduction (Perri et al. 2002; Mehde 2006). The multiple shortcomings and problems resulting from NPM reforms have provided a solid case for holistic governance and policy-making demands (Perri et al. 2002). Connected with critiques of NPM reform is the search for solutions to the ever-increasing complexity and intertwinement of (global) public problems (Peters and Savoie 1997; Cejudo and Michel 2017, pp. 747). Since then, a vivid literature has evolved, reflecting upon different aspects and notions of policy integration within different domains. These are briefly revisited upon in the following.[4]

### 2.3.1 Environmental policy integration

The notion of policy integration became known in sustainable development, where the term Environmental Policy Integration (EPI) evolved around the principle of incorporating environmental concerns in non-environmental policy domains to enhance environmental policy outcomes and to ensure environmental concerns as an overarching principle guiding (policy) decisions (Lafferty and Hovden 2003; Candel and Biesbroek 2017, pp. 212).[5] EPI has become firmly embedded in policy practice, where environmental objectives are often no longer pursued through mere environmental channels but incorporated into non-environmental policy areas such as agriculture, energy or transport (Runhaar et al. 2020). This phenomenon also became known as **environmental policy mainstreaming** to promote environmental concerns in governmental planning processes, strategy documents and across policy sectors. EPI aims to overcome policy incoherence and institutional fragmentation and is also understood as a means to enable environmental protection and reach sustainable development (Meijers and Stead 2004; Runhaar et al. 2020).

The environmental objectives of integration are manifold and range from ecosystems, biodiversity and nature conservation, to green/renewable energy and energy efficiency as well the depletion or contamination of natural resources (see Runhaar 2020, pp. 191). Although climate change related issues such as emission reductions (mitigation) and resilience

[3] New Public Management is a paradigm that calls for adopting private sector management principles and techniques in public administration.

[4] For a multidisciplinary review of policy integration see Meijers and Stead (2004).

[5] For a state-of-the-art review of environmental policy integration see Jordan (2010) and Runhaar et al. (2020).

(adaptation) are overlapping by running across these environmental themes, the literature on EPI initially did not feature climate change strongly (Ahmad 2009). It is also against this background that Climate Policy Integration (CPI) evolved as an own field of research and practice, in order to more explicitly address climate change concerns.

Aside from studying environmental policy integration from a perspective of process that focuses on how and to what extent environmental concerns were mainstreamed to other non-environmental policy areas, policy integration can also be studied by examining specific policy sectors (agriculture, health, transport) or policy levels (regional, national, local). The latter two are also known as the directions of integration, i.e. examining (environmental) integration across different policy sectors (**horizontal integration**) or "up and down" between different government tiers (**vertical integration**) (also see Runhaar 2020, 189). A different understanding of vertical/horizontal EPI is suggested by Jänicke (2000): To his understanding, horizontal integration originates from the department of environment and addresses other ministries, while vertical integration originates from a higher level, e.g. the prime minister.

The notion of environmental policy integration gradually evolved to also analyse policy integration of the UN 2030 Agenda and the SDGs.[6] In this context, the SDGs themselves are discussed to have brought about changes in the interpretation of policy integration (Bornemann and Weiland 2021). The 2030 Agenda is characterized by a complex form of goal integration, which strongly differs from environmental policy integration (Nilsson und Persson 2017). As a result, an overlapping but own research strand evolved that looks at policy interlinkages and integration issues in the context of SDG implementation (also see Miola et al. 2019; Breuer et al. 2019). These studies have also examined the institutional design needed for integrated SDG implementation. Enabling factors for successful, integrated SDG implementation are high-level political leadership; horizontal integration; vertical integration; and societal inclusiveness (Breuer et al. 2019).

The box below lists pioneers of environmental policy integration.

**Policy integration pioneers**

In the past, a number of countries, including the United Kingdom, Canada, New Zealand, the Netherlands and Scandinavian countries (especially Norway, Denmark and Sweden) have established themselves as pioneers of environmental policy integration. In these countries, institutions and processes aimed at integrating environmental requirements into various policy areas were established early on. These include (see also Jacob, Volkery, and Lenschow 2008):

- The inclusion of environmental protection as a state objective in the respective constitutions (including Finland, Norway, and Sweden).
- The introduction of environmental assessments to be applied to planned laws and regulations (e.g. Canada, UK)
- The obligation for different departments to develop their own environmental strategies (Canada, Denmark, Finland, Norway)
- The establishment of independent institutions to assess the environmental performance of government departments (Canada and New Zealand)

[6] For a recent literature review of policy integration of the 2030 Agenda see Bornemann and Weiland (2021).

- The assessment of the environmental impact of public budgets (Netherlands and Norway)

Source: Own.

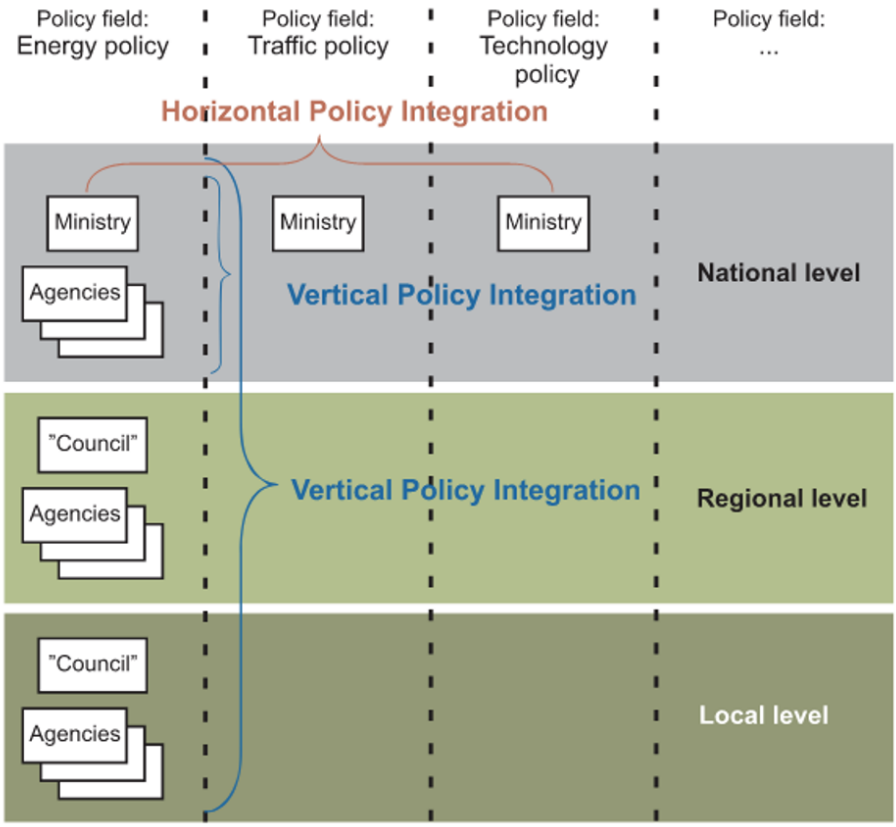
### 2.3.2 Climate policy integration (CPI)

CPI studies have begun to flourish as well and mark yet another view on the topic of integration (Mickwitz et al. 2009; Jordan and Lenschow 2010; Rietig 2012, Jensen et al. 2020). CPI research and practice overlap with and draw from EPI, but focus more strongly on the incorporation of climate change mitigation and adaptation into other policy sectors and all stages of policy-making with the aim to minimize contradictions between climate policies and other policies (Mickwitz et al. 2009). Because climate policy is considered 'firmly a cross-sectoral and whole-of-government activity', the acutely increasing demand for integration has been pointed out (Ahmad 2009, 1; Urwin and Jordan 2008).

According to this understanding, the degree and evaluation of (climate) policy integration can focus on different aspects such as **policy outputs and outcomes.** Policy output can relate to governmental strategies and programs as well as a selection of policy instruments that seek to foster integration. Outcomes on the other hand refer to the actions by actors (notably, target groups) undertaken in response to the output and are rarely the result of a policy output alone (see Beck et al. 2009: 20). Policy outcomes relate to policy efficacy, for instance in terms of mitigated emissions, more resilient populations, or increased governmental adaptive capacity. Within CPI practice, **horizontal and vertical integration** follow their own rationale, i.e. they focus on climate-specific concerns (also see: Ahmad 2009, Beck et al. 2009). Here, horizontal integration refers to climate mitigation and adaptation mainstreaming as the two major policy strands and how they are aligned across different policy sectors such as energy, education or transportation and vertical integration refers to climate policy mainstreaming within a specific organizational setting but also across different organizational levels (e.g. global, national, local) (see Beck et al. 2009 and Figure 1). These organizational levels can correspond with a slightly different but overlapping governance architectures (e.g. UNFCCC, IPCC) than that of EPI and might also make use of different instruments for vertical integration. At the same time, horizontal integration can also refer to the participation of non-state actors, which is sometimes subsumed in the local level. Yet, this extended sense of horizontal integration is more rarely the case, despite the high relevance of constructive role non-state actors can play for local solutions and decision-making processes at the national level.

In **contrast to EPI**, CPI research focuses more strongly on developing countries. The EPI literature on the other hand is said to provide greater details on actual structures and processes needed for policy integration (Ahmad 2009).

**Figure 1: Horizontal and vertical policy integration**




Source: Beck et al. (2009: 21).

Within the literature and practice of CPI, significant **gaps** are identified. Overall, adaptation appears as a relatively new and neglected item (Urwin and Jordan 2008; Di Gregorio et al. 2017). As a result, climate adaptation mainstreaming appears to be underdeveloped and **drastic integration demands within the CPI field** persist (Di Gregorio et al. 2017). These integration demands are characterized by the lack of in-depth alignment between mitigation and adaptation objectives and their simultaneous consideration (ibid.). As a result, analysts argue for the integration of policy objectives, governance arrangements and policy processes related to adaptation and mitigation. Di Gregorio et al. (2017) do so by looking at the land-use sector in Indonesia and different characteristics: climate change policy architecture in this specific policy sector; positive and negative interactions between related mitigation and adaptation and other non-climate policy related objectives; as well as internal and external policy coherence. External interactions regard interactions of climate policy with other fields such as development planning. Internal interactions focus on linkages between adaptation and mitigation themselves. The study presents an analytical framework which can guide policy integration attempts regarding mitigation-adaptation alignment and avoid conflicts between different policy objectives, actors and policy sectors. Ultimately, it also demonstrates the need for concrete prioritization when integrating.

There is a growing recognition of the need to consider mitigation-adaptation linkages and exploring political attempts to do so. Not considering the benefits and trade-offs between them is likely to impede sustainable development as well as climate change responses (Denton et al. 2014, Di Gregorio 2017). Against this background, a literature on **pathways** has evolved, stressing different aspects of pathway development, such as climate-resilient pathways, adaptation pathways, or sustainable urban development pathways (e.g. Denton et al. 2014,

Grafakos et al. 2019, Werners et al. 2021). At the same time, the non-linearity, variability, uncertainty and unpredictability of climate impacts is a specific circumstance that needs to be considered for policy integration and the development of climate-resilient pathways (e.g. Denton et al. 2014). Aspects of constant iteration and dynamic adjustment mark core characteristics of climate policy integration.

Another specific circumstance of integration related to climate policy is that it is especially **adaptation** actors and policies that are considered the main advocates and **drivers for internal policy coherence** (e.g. Di Gregorio 2017). Here, calls for multisectoral governance are especially prevalent in order to address the multifaceted climate-induced dilemmas, which require increased public sector coordination (e.g. see Dotterud Leiren and Steen Jacobsen 2018).

Recently, studies on the integration of the 2030 Agenda and the Paris Agreement have evolved, examining thematic policy coherence (see definition below) per analysis of voluntary commitments (Janetschek et al. 2019), or aiming to enhance the understanding of potential overlaps, gaps and conflict between the two agendas through analyzing the key implementation instruments of Nationally Determined Contributions (NDCs) and SDGs (Dzebo et al. 2019a). Janetschek et al. (2019) find that the connection of NDCs and SDGs go far beyond climate action (SDG 13) and develop a three-step linkage framework for streamlining better alignment of voluntary domestic contributions. Here again, the integration can be enhanced by taking into account existing national development strategies and priorities. In line with this, and exploring synergies based on national development priorities, Dzebo and colleagues (2019a) find that there are certain SDGs which have stronger connections to NDCs. The six strongest links are with SDG 7 (affordable and clean energy), SDG 15 (life on land), SDG 2 (no hunger), SDG 11 (sustainable cities and communities), SDG 6 (clean water and sanitation) and SDG 17 (partnerships for goals). The global analysis further finds that significant gaps persist regarding SDG 5 (gender equality), SDG 1 (no poverty) and SDG 16 (peace and justice).

These recent studies on the post-2015 agendas have in common that they focus on thematic alignment and policy aspiration as per **planning**. Policy coherence of the two agendas at the national level is also examined by looking at the **three "I's"** (ideas, institutions and interests) and developing an analytical framework for studying policy coherence at different policy stages (Shawoo et al. 2020). This framework helps understanding how theories of comparative politics contribute to explaining varying levels of policy coherence in implementing the post-2015 agendas across different governance contexts (ibid.: 3). It finds that the three "I's" influence policy options and shape the ambition related to integration and coherence. The study by Shawoo et al. (2020), too, can serve as a basis for a comparative country case study and how ideas, institutions and interests shape synergies and conflicts between climate goals and SDGs.

Several enabling and constraining factors are also discussed in the CPI literature. These also point to the need of procedural adjustments for integration in terms of mixing top-down and bottom-up approaches or enhancing governance structures through building institutions for improved coordination between sectors and different levels of government (see Table 2).

### 2.3.3 Integration in disaster risk reduction (DRR) and disaster risk management (DRM) research

There is only little literature on integration within DRI and DRM frameworks. Most of the literature to date has focused on exploring synergies between CCA and DRR (e.g. Kelman and Gaillard 2008, Kelman 2015, Forino et al. 2015). These perspectives argue for streamlining DRR and CCA for improving the adaptative capacities of governmental institutions and thereby enhancing resilience. However, there is also different perspectives on the question from which

direction shall be integrated. Kelman (2015) argues for an "all-vulnerabilities" and "all-resiliences" approach and placing climate adaptation as one subset in disaster risk reduction through examining "climate change" within the Sendai Framework for Disaster Risk Reduction (SFDRR). Besides finding that integration of DRR and CCA agendas constitutes a politicized phenomenon, which has fostered the separation of the policy fields, Kelman states that SFDRR is lacking appropriate framing of climate change.

At the international level, Burton et al. (2014) focus, amongst other things, on institutions and argue for streamlining political processes through the related political bodies such as the UNISDR and the UNFCCC.

In the context of CCA and DRR mainstreaming, it is emphasized that neither DRR nor CCA is as well integrated as they could be in current development policies and practices (ibid: 396). Aside from policy integration within the distinctive domains, several studies examine integration between (different aspects of) the agendas by focusing on specific aspects such as improved linkage of DRR and CCA regarding health (Banwell et al. 2018). Further research has examined how disaster risk management strategies can be mainstreamed in development instruments or how DRR and sustainable development interrelate more broadly (see Bello et al. 2017).

## 2.4 Concepts inherent in and related to 'policy integration'

### 2.4.1 Overview of concepts

In its most simplistic form, policy integration is about **mainstreaming** specific policy objectives into other public policies and aligning different policy agendas. Thereby, mainstreaming refers to **the process of exploring thematic alignment and interlinkages** of different policy aspects. Yet, what can and should be mainstreamed is an inherently politicized exercise (Sandholz et al. 2020). One prominent example discussed in this context regards the mainstreaming of climate adaptation and environmental concerns into development policies as part of interventionist practices.

Another aim of policy integration in the sense of mainstreaming is to improve **policy coherence**. Policy coherence and policy integration are often used interchangeably and understood as types of coordination that seek to align objectives of different policy areas (also see Cejudo and Michel 2017). Policy coherence refers to the alignment of specific problems with broader issues. In that sense, policies can be considered a piece of a broader, more complex puzzle. Orienting policies towards each other so that they fit the puzzle and jointly constitute a response to the underlying problem is what can be understood a policy coherence. The set, or mix, of public policies can be complementary within a policy domain or across different policy sectors.

Besides thematic integration of specific policy concerns, policy integration also aims to improve **cooperation and coordination** between governmental agencies and public policy sectors. Both **integration and coherence** require coordination of different actors, and thus can also be understood **as outcome of coordination** (ibid.). Though the related notions of coherence and integration are seen as loosely equivalent terms, they carry different implications for policy design and implementation (ibid). Cejudo and Michel (2017) argue that coordination, coherence and integration are related but substantively different concepts. They define **coordination as a process** in which members of different organizations (such as the public administration) "define tasks, allocate responsibility and share information, in order to be more efficient when implementing the policies and programs they select to solve public problems" (p. 752). Against the background of broader problems, they reflect upon **policy coherence as a process of considering the whole**. Thus, policy coherence refers to various components of policies and the process of designing a set of policies that can achieve a larger goal (p. 755). According to this definition, integration is understood as an overarching way to address multidimensional public problem by using both coordination and policy coherence (p. 757). Policy integration is understood to be more than the sum of coherence and coordination but as a new logic of how organizations operate to address complex problems and as "the process of making strategic and administrative decisions aimed at solving complex problems" (ibid., p. 758).

For many, **policy integration** has become a **normative principle**, to which the policy process should adhere in order to avoid policy contradictions, promote synergies and establish environmental concerns as an equal counterpart to sectoral objectives and promote sustainability as an overarching, guiding principle (Laverty and Hovden 2003, also see Runhaar et a. 2020: 184). Going back to the initially posed research questions: policy integration can be understood in terms of an **outcome**, a **condition** and a **process** in terms of mainstreaming. Whereas earlier studies on policy integration used to focus on the outcome – in terms of policy mainstreaming –, later studies have been focusing on the process and the dynamics of policy integration and the question: how is integration occurring? Against the background of high motivation but low levels of actual implementation, we have reason to believe it relates to the political capacity and governmental bodies that organize integration.

There are manifold interpretations of **(policy) interlinkages.** Miola et al. (2019) have summarized the main debates and approaches in the context of the SDGs. They define interlinkages as "causal and/or statistical relationships between goals, targets and indicators," (p. 10). Related approaches for assessing interlinkages include:

- the linguistic approach based upon keyword search that looks at how interlinkages are reflected in wording;
- the literature approach examines SDG interlinkages as reflected in the literature, such as the perspectives of co-benefits and trade-offs, synergies as well as nexus approaches;
- the argumentative/expert judgment approach refers to the identification of relationships of concepts based upon argumentation.
- Lastly, quantitative methods for exploring interlinkages and methods for complex system interactions are presented.

The horizontal coordination and integration of different branches of government and hierarchies is also understood as "**joined up government**" (Six 2004). This term refers to "the consistency between the organizational arrangements of programs, policies, or agencies, which may enable them to collaborate (ibid: 106). In contrast to joined up government, **holistic government** is discussed and conceptualized as a more demanding task that is characterized by jointly coming up with mutually reinforcing objectives as an outcome, from which governmental actors identify a set of instruments to achieve those outcomes (ibid: 106). Whereas some perspectives on integration perceive the specialization and fragmentation as main problems for policy integration, the literature on holistic government emphasizes policy integration as a problem that is procedural in nature and characterized by the lack of good conflict management "or inadequately structured relationships between specialties (ibid. 107).

### 2.4.2 From policy integration to integrated policy-making

Aside from mainstreaming environmental and climate concerns into other policy domains and sectors, solving complex problems under conditions of fragmented governments has become a pressing concern and a new item for the study of policy integration. In this context, **policy integration** has also been discussed as **principle** for modern governance and process of governing (Jordan and Lenschow 2010; Meadowcroft et al. 2012). Here, the understanding of policy integration not just includes a notion of **output** in terms of mainstreamed policies into other policy sectors but also as a **process** of making strategic and administrative decisions (Cejudo and Michel 2017). Against this background, studies on integrated policy-making and holistic governance have evolved (Perri et al. 2002, Breuer et al. 2019, Jacob et al. 2019, Horan 2020).

Recently, integrated policy-making has also been suggested as a core pillar and new paradigm for **transformative environmental politics** (EEA 2021; critically: Jacob et al. 2019). In this context, the far-reaching reconstruction of existing sectors and political structures is required, such as introducing more reflexive administrative structures, improving the culture of cooperation between ministries etc. (Jacob et al. 2019). According to this understanding, transformative environmental politics cannot be attempted through one actor alone or centralized principles of responsibility in the hands of a few. Instead, the **collaboration** and **co-creation** of policy-making through different (including non-state) actors are core tenets of integrated policy-making. These fundamentally relate to the joint design of policies and strategies beyond siloed approaches of single ministries or sectors therein. For instance,

exploring the economic development and social distributional effects of environmental technologies can generate numerous co-benefits. Aside from co-created planning and strategizing of among different government actors and levels of hierarchy, creating new room for **non-state actors** can provide new opportunities for integrated policy-making regarding political style, ideas, processes and actor configurations. This stands in contrast with common understandings of transformation as steerable phenomenon and implicit connotations of managerial approaches that put government front and center.

A comprehensive integrated policy approach was already proposed at the Rio Conference in 1992. An integrated policy in this context is conceived as a comprehensive **sustainability policy**. It aims at a far-reaching transformation of central sectors and structures. This can only be achieved through the interaction of different sector policies, for example infrastructure development, transport, industry, energy, agriculture, etc. In the best case, sustainability policy is developed jointly and in an integrated manner. This is also justified by the fact that numerous co-benefits can be generated, be it in the form of economic development associated with the spread of environmental technologies, related positive employment effects or other positive synergies between environmental policy and poverty reduction or financial policy and health.

Accordingly, sustainability or environmental policy cannot be understood as sectoral policy either, but in each case the economic effects, distributional effects and co-benefits must be taken into account. Integrated policy approaches appear to be a key to overcoming resistance from other departments and actors and mobilizing the necessary resources for comprehensive sustainability transformations.

Integrated policy approaches are ideally **strategically-oriented**. In this context, the transformation processes are largely driven by the framework set by state control. This does not preclude the creation of incentives and scope for action for non-state actors. The central role of state control can be seen as a difference from a transformation-oriented sustainability policy, in which change processes are primarily initiated in a decentralized, bottom-up manner by society, communities and companies, which are co-designed but not within the direct sphere of influence of the state.

Several examples exist of **tools** which can enable integrated policy-making within and between different policy agendas. Horan (2020) for instance examines a monitoring and coordination tool based on SDG indicators and mappings of SDG responsibilities across ministries. Jacob et al. (2008) distinguish communicative, organizational and procedural instruments and attribute different depth of impact on the routines of policy making. Integrated policy approaches differ from sectoral efficiency-oriented environmental policy primarily in terms of policy style, processes and actor configurations. A concrete example is the energy transition in Germany: This has long been more than just an environmental policy project but is also being shaped (more or less proactively) by other departments. Based on this policy model, corresponding transition policies are demanded not only in Germany, be it as transport transition, agricultural transition or food transition. The DIE calls for six transformations and includes science systems, cities, consumption and production, and health care (DIE TWI 2018).

The example of the energy transition ("Energiewende") in Germany also shows that, unlike previous efficiency-oriented environmental policy, there is (so far) no comparable institutional apparatus and no toolbox. Rather, the instruments of the various policy fields are ideally used in a coordinated manner to achieve common goals. Such coordination is extremely demanding and potentially contradicts the respective individual interests of the departments. Therefore, a strong role of the heads of government is often called for, but this is usually not the case in the long run. These framework conditions of competing departmental interests and often lacking

capacities for policy coordination are often a restriction in the development of integrated policies. The following approaches aim to **create the conditions for integrated policy**:

- **Interdepartmental sustainability and transition strategies**: The implementation of the 2030 Agenda, climate policy or transformation strategies for key sectors can be specified in strategies. Precisely because of the interdepartmental approach, it is important that strategies are not only thought of as documents, but that processes are associated with them that ensure a permanent or recurring impetus as well as implementation mechanisms: specifications for evaluation, reporting and updating, participation procedures, high-level steering committees, financing mechanisms, etc. provide the framework for corresponding design options. More and more countries are also operating with the legal definition of such processes, particularly in the area of climate protection. Interdepartmental strategies can be supplemented by sectoral or thematic sub-strategies. To give an example: the German Sustainability Strategy is specified by the resource efficiency strategy "ProgRess" and by the research framework programme "FONA" of the Federal Ministry of Education and Research.
- **Integrated assessments**: Integrated assessments, such as those already established at international level within the framework of IPCC for climate, IPBES for biodiversity, GEO for various environmental issues and the IRP for resource policy, can serve as a starting point for the development of comprehensive sustainability strategies. These assessments identify needs for action, effectiveness of previous policies and possible development paths that can be used as a basis for formulating knowledge-based targets for strategies. However, assessments often precede strategy development at the national level as well. Examples include vulnerability assessments prior to the development of climate adaptation plans.
- **Evidence-based and co-benefit assessments**: a key approach to implementing strategies and developing interagency policy is impact assessments and evaluations. Knowledge-based examination of the achievement of intended impacts and unintended co-benefits of policy instruments can be used to test coherence with overarching goals (in this case, sustainability goals). More and more countries have environmental or sustainability assessments for new legislation. Ex-post evaluations are also gaining importance to assess the effectiveness of policy approaches.
- This can build on a rich **methodological base**: The IPCC has developed a systematic approach to analyze the impact of co-benefits of climate policy on other policy areas and objectives. There are numerous environmental economic models and data sources to consider the effects of both environmental change and environmental policy on employment, value added, health, and on other social aspects. The analysis of distributional impacts, both of planned environmental policy and, for example in reference scenarios, of no environmental policy, can be used to justify environmental policy.

### 2.4.3 Preliminary conclusions

When approaching policy integration, it is important to keep in mind the **absence of a standardized concept of what policy integration and coherence (can) mean**. Many definitions exist in the literature as well as within the two global agendas and are also not limited to them. Further discussions extend to the Sendai Framework for Disaster Risk Reduction (2015) and the Biodiversity Convention (1992). There is no scientific or political consensus how to meaningfully integrate complex policy agendas and policy problems within them. The different interpretations of policy definition often come with different integration logics. Therefore, it is important to make transparent what is specifically meant and intended.

There is a need for **building a common understanding of policy integration** when attempting it in political practice.

The meaning of policy integration gradually evolved over the years and as part of different but overlapping policy fields. These are: environmental policy integration and sustainable development, climate policy integration and disaster risk reduction. Especially the literature on EPI and CPI increasingly focused on integration deficits and pointing to the importance enhancing governance structures.

As a result of these deficits, studies on policy integration increasingly included notions of integrated policy-making and coordination, thereby focusing on the process and how policy mainstreaming occurs. Thereby, the focus shifts from thematic alignment to looking at the political capacities of a system for a different type of policy-making. By **integrated policy-making** we refer to collaborative and co-created policy-making that relates to different organizational aspects such as the cooperation between different policy sectors, government departments as well as hierarchies or instruments such as interdepartmental strategies or integrated assessments. In addition, integrated policy making to our understanding is characterized by the inclusion of core actors from within society and 'unusual suspects' within the government. Unusual suspects relate to those actors that are not commonly involved in processes of environmental and/or climate policy integration, such as other lead ministries, society, local communities or private sector companies. Thereby, and in contrast to existing processes that are often characterized by top-down centralized governmental planning, we propose a notion of bottom-up initiation and the co-creation of policy as core components for integrated policy-making.

## 2.5 Entry points for integrated policy-making and the integrated implementation of international policy agendas

In the following, we explore conceptual entry points for integrated policy-making – and implicitly, for the integrated implementation of different international policy agendas. For this purpose, we take into account different issues, outputs of, administrative levels and governance mechanisms for integration; different dimensions of policy-making (policy, politics, polity); and different phases of the policy cycle.

Integrated implementation can concern different **issues**, **outputs, administrative levels and governance mechanisms**:

- **Issues:** Different thematic issues can be included into integrated implementation to a greater or lesser extent. The issues result from the international policy **agendas** in question. We focus on the sustainable development issue areas resulting from the 2030 Agenda, climate mitigation and adaptation (Paris Agreement) and disaster risk management (Sendai Framework).
- **Outputs**: The concrete outputs (products) of integrated implementation can range from (changes to) goals, instruments, strategies and legislation via projects and processes to organizational decisions.
- **Administrative levels:** the implementation of international policy agendas can be coordinated at international, national or sub-national level
- **Governance mechanisms**: Integrated implementation can draw on different means of governance, such as knowledge, money, participation, rules, competences, leadership etc.

Furthermore, integrated implementation may concern different **dimensions of policy-making**, namely **policy, politics and polity**[7]:

- **Policy**: To integrate the implementation of different policy agendas, "translating" the material content and goals of the agendas into the domestic settings (e.g. by specifying, localizing, prioritizing them) can be (better) coordinated and integrated. For instance, climate policy can be designed in a way that co-benefits for non-climate SDGs are realised, too.
- **Politics**: To integrate the implementation of different policy agendas, the activities and strategies of different actors need to be (better) coordinated. The actors can include state actors (executive, legislative, judicative) and non-state actors (business sector, civil society, others) in different roles. They may be working at different levels (federal, state, municipal) and may compete with each other (e.g. belonging to different parties). An example of integration in the politics dimension is interest alignment or building a common understanding of integration goals through joint workshops with climate and sustainability actors. Another example is the establishment of shared responsibility or joint memberships in SDG-NDC related I.[8]
- **Polity**: Finally, to integrate the implementation of different policy agendas, the institutional and organizational infrastructure of policy-making may need to be adjusted, too. For instance, planning cycles and review processes related to the different agendas can be harmonized, inter-ministerial task forces or federal- and state government-commissions be established or more fundamental changes be initiated such as institutionalizing deliberation with non-state actors.

Finally, the integrated implementation of different policy agendas can take place at different points along the **policy cycle**:

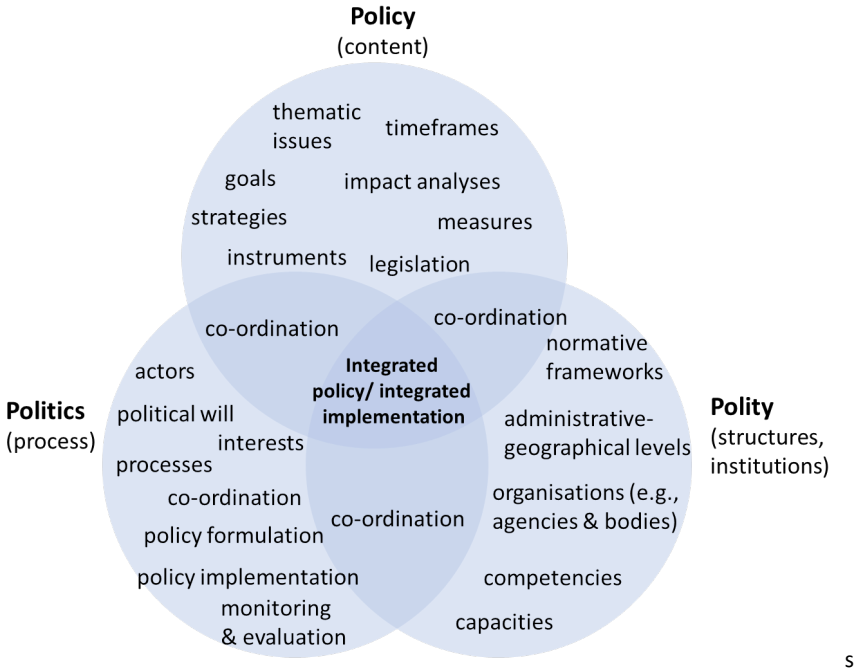
- **Policy formulation**: Integrated implementation can concern, for instance, policy preparation, the specification and adaptation of global goals, or the development of strategies, plans and instruments.
- **Policy implementation**: Integrated implementation can also relate to the implementation of policy instruments or support measures for implementing authorities (e.g. capacity building).
- **Policy monitoring & evaluation**: Integrated implementation can also concern reporting, monitoring and evaluation.

These conceptual entry points can be visualized in a "landscape" of integrated policy implementation (Figure 2):

[7] While 'policy' relates to the material content and goals of policies, 'politics' is about the activities, strategies, the powerplay and conflicts between policy actors (partly situated at different administrative-geographic levels). 'Polity' finally concerns the institutional and organizational infrastructure of policy-making (Rohe (1994).

[8] Note that adjusting established institutions and improving coordination through, for instance, interest alignment is closely related to the polity dimension, which focusses on more fundamental organizational changes.

**Figure 2: Entry points for integrated policy-making**




Source: own (Öko-Institut).

The above considerations are *conceptual* in nature. ***Empirically***, countries have been experimenting with integrated implementation in various contexts and have made use of (**clusters** of) different entry points. We will present such empirical results in Chapter 3 and 5.

## 2.6 Costs and benefits and, enablers, barriers and limitations of integration

Integrated implementation comes along with costs and benefits. These differ in accordance with the nine levels of coordination or integration.

In terms of **costs**, the coordination linked to integrated implementation is more time- and conflict intense than not coordinating policy implementation, is more cumbersome to prepare and has longer payback cycles. Integrated implementation often needs to grapple with dissonant political cycles and budget time horizons. Also, it is more difficult to 'sell' to stakeholders, the public, media as well as internal accountability systems (Nilsson und Persson 2017, p. 38), among others because impact and effectiveness are difficult to measure. Finally, existing bureaucratic practices and routines are uprooted and bureaucratic entities lose their previous control, influence or autonomy (UN DESA und CEPA 2021). Accountability gets blurred and priorities may get diluted (ibid). Generally, 'Coordination is always precarious because the organizational division of labor, reinforced by professional specialization, political demands and bureaucratic self-interest, engenders centrifugal tendencies' (Metcalfe 1994, p. 278).

In terms of **benefits**, the coordination linked to integrated implementation can inhibit the emergence of externalities (i.e. costs for others) (in the case of 'negative coordination') and ideally enable the creation of welfare effects and genuine problem-solving (in the case of 'positive coordination') (Scharpf 1993). To the extent that synergies are exploited, trade-offs are mitigated and duplication is avoided, integrated implementation is more effective and efficient than non-integrated implementation. Furthermore, integrated implementation makes possible (and requires) priority setting. As a result, coordination ‚enables the whole to perform better than the sum of the parts (…)' (Metcalfe 1994: 278).

The question about **enabling and constraining factors** for policy integration (or **opportunities and barriers**) overlaps with that about costs and benefits. Despite its firm embeddedness in political practice, recent research recognizes a discrepancy between the adoption of policy integration in terms of objectives and commitments in contrast to the actual implementation signified by a translation into concrete policy measures (Runhaar et al. 2020). This is in line with earlier research, which argues "the fulfilment of EPI seems as far away as ever" (Jordan and Lenschow 2010: 147). Although EPI has enjoyed considerable political backing and has a quasi-constitutional status in the EU, the practical fulfilment appears to lag behind its aspirations (ibid.). As a result, and based on empirical evidence, the literature has also been focusing on discussing enabling and constraining factors for implementing (environmental) policy integration (e.g. see Runhaar et al. 2020). These factors are not necessarily limited to environmental policy integration but also matter for climate policy integration and other policy sectors.

**Enabling factors** among others are for instance, high-level political commitment, leadership and support, cooperation with private actors, strategies of persuasion, such as framing and constructing win-win narratives. Room for (policy) learning, a translation of concepts in light of different understanding and organizational innovations are prominently discussed because policy integration is firmly anchored in the political system (also see e.g. Jordan and Lenschow 2010, Di Gregorio et al. 2017). Building enhancing governance structures and mechanisms for cross-sectoral coordination and reforming bureaucracy has been a core demand in this context. Thus, the institutions of the political system and political context matter in combination with the social, legal and administrative tradition of a polity ("cognitive dispositions") (Jordan and Lenschow 2010: 150). Some of these enabling factors can be time sensitive, e.g. providing political commitment through, for instance, legal provisions in the form of integrated monitoring regulations in an agenda-setting phase, or mixing horizontal and vertical policy integration in combination with non-state actors (see Table 2: Selected enabling and constraining factors for (environmental) policy integrationTable 2).

At the same time, measuring the effects of environmental policy integration is considered difficult given the lack of a shared understanding of what policy integration entails and lack of robust comparative research (Runhaar et al. 2020).

**Table 2: Selected enabling and constraining factors for (environmental) policy integration**

| Enabling factors | Constraining factors | Explanatory attempts for constraining factors |
|---|---|---|
| Political commitment and support in combination with formal requirements, i.e. supportive legal provisions in form of a legal mandate to act or integrated monitoring regulations (likely in the early agenda setting phase) | Rigid organizational structures, routines and practices inhibit the uptake of new processes | High-level institutionalization of inadequate organizational structures, lack of supportive organizational structures, low presence of procedural strategies, ministerial resistance to adopt integration into procedures (especially in more federal systems) |
| Mixed forms of horizontal and vertical integration: linking up coordination processes of different sectors, political levels and cooperation with non-state actors | Conflicting interests and deep disagreement on policy integration, common prioritization of economic objectives across sectors and scales | Clientelism-oriented practices, interlinks with specific framing and lack of access to knowledge and guidance |

| Enabling factors | Constraining factors | Explanatory attempts for constraining factors |
|---|---|---|
| Strategies of persuasion, framing, successful interlinking with sectoral objectives and win-win narratives e.g. "green growth", "low-carbon development", room for (policy) learning, organizational innovation | Lack of knowledge, shared understanding, guidance and procedural tools to facilitate integration (e.g. reporting, monitoring, ex ante/ex post assessments) | Policy systems ill prepared to address this need, tools provided are not instructive or practical, do not translate into daily routines, more research into translation and policy learning needed |
| Matching integration agendas with domestic development priorities and at different time scales | Complexity of integration in multilevel governance | Different priorities, resources and capacity for promoting environmental objectives |

Source: Own, based upon Runhaar et al. (2020), Jordan and Lenschow (2010).

Despite an intense scrutinization of disaggregation, specialization, silo-thinking, policy fragmentation, decentralization and departmentalism other voices are also emerging to not "break down the silos just yet", pointing to the **limitations** of what can be integrated (Persson 2016) or the loss of specialization that would go hand in hand with too much integration. Aside from managing our expectations, what the holy grail of policy integration can actually achieve, these recent critiques also bring forward very different understandings of what policy integration can entail. These will be briefly reflected upon in the following.

Amongst other things, limitations include the risk of dilution, watering down policy agendas and losing focus by doing all and nothing. Setting priorities sits at the heart of effective governance and policy-making. Accordingly, weighing different policy options, interest and urgencies is important. Additional costs, in terms of finance and time can make policy integration a strenuous endeavor. When integrating different policy sectors, actors and institutions, making sense of the different logics they operate can be especially time-consuming. The overburdening of political institutions and administrations is another challenge. Capacity-building for systematic integration is key but can come on top of already overloaded institutions. Further, efforts to enhance integration can lead to a high degree of central control and, consequently, to a loss of flexibility in the policy-making system (Meijers and Stead 2004). Calls for enhanced integration disguise the fact that policy-making always consists of different interest, policy priorities and responsibilities that will complement each other (ibid.).

Against the normative implications of policy integration related to sustainable development, other aspects have been overlooked such as cognitive and instrumental opportunities (Bornemann and Weiland 2021). This regards not just the extensive understanding required regarding the complexity of the SDG system vis-à-vis climate policy-making under the Paris agreement, it also stands in contrast to selective interpretations or an (earlier) understanding of integration as mainstreaming of select environmental goals into sectoral policies. As has been pointed out in the SDG context: policy integration involves a high level of integration complexity (ibid.).

## 2.7 Evaluating policy integration

Against the background of the manifold calls for policy integration within and across policy sectors, policy integration has come under intense scrutiny, as many policy integration attempts do not proceed beyond symbolic levels (Jacob et al. 2008; Jordan and Lenschow 2010; Candel 2019). Because of the shortcomings of existing policy integration action and conceptualization

efforts, research on the evaluation of policy integration has flourished as of late (e.g. Roy and Chan 2014; Mickwitz and Kivimaa 2007). As part of the different literatures on integration (CI, EPI), **distinctive concepts for the evaluation of policy integration** have been developed. Depending on the understanding of policy integration, evaluations can focus on different aspects. For instance, an evaluation of policy integration understood as mainstreaming of distinctive policy objectives into other policy arenas will focus on how integration has occurred horizontally. An evaluation of integration based on an understanding that focuses on mainstreaming throughout different organizational levels will examine integration vertically.

In this paper, we focus on a **metric** developed by **Metcalfe** (1994), which we slightly adjust by a processual understanding. Metcalfe measures policy coordination within governments by developing a scale from 1 to 9. The scale was initially considered ordinal, with the nine levels being qualitative building cumulatively upon each other. Based on Candel and Biesbroek (2017) and others, who emphasize a non-linear, processual understanding of policy-making and integration, we understand the **levels** 2 to 9 to be **non-linear and dynamic**. Policy integration and its various elements do not have to move in a concerted manner, are often asynchronous in nature and may develop at different paces or even opposite directions (Candel and Biesbroek 2017, 211). Deep integration must rather be viewed as an iterative process. It does not just include a constant exchange of information but implies mediating and deliberating conflicts and articulating common strategies at the same time. This also implies that the merit of lower degrees of integration should not be underestimated (ibid.).

Metcalfe's metric and the enhanced understanding can help in assessing policy integration, as policy integration can be understood as "a coordination problem, where various actors must work together to deliver outcomes and eliminate redundancies or gaps in services" (UNFCCC Secretariat 2017). Metcalfe's metric describes the degree of coordination between administrative entities on nine levels (see also UN DESA und CEPA 2021, p. 8):

- L1 - Independent decisions: departments make their decisions completely independently of each other;
- L2 - Exchange of information: departments inform each other about their decisions (communication);
- L3 - Consultations between ministries: Ministries seek the opinion of other ministries on planned decisions (feedback);
- L4 - Avoidance of contradictions: for political decisions and their justifications, contradictions are avoided (speaking with one voice);
- L5 - Searching for consensus: for political decisions, consensus is sought (conflict management);
- L6 - Mediation of conflicts: in order to resolve conflicts, ministries commit themselves to dispute resolution mechanisms and recognize the decisions of these mechanisms as binding;
- L7 - Establishment of common parameters: departments agree on common goals;
- L8 - Agreement on common priorities: the goals are prioritized together;
- L9 - Common strategies: in order to achieve the goals, joint programs and processes for their implementation are agreed upon.

**Policy coordination in Germany**

Analyzing the coordination capacities of different EU countries, Metcalfe observes that Germany scores surprisingly low (4) compared to, for instance, the UK or Denmark (8): 'Its combination of coalition government, the constitutional independence of ministries and the greater complexity of coordination in a federal system makes it difficult even to ensure speaking with one voice' (Metcalfe 1994, p. 285).

While this analysis is over twenty years old, the identified structural causes for low policy co-ordination have not significantly changed since the study was conducted. It can thus be assumed that the findings still have some relevance. The difficulties of policy-coordination in Germany are confirmed by more recent studies looking into German SDG implementation (Scholz et al. 2016), joint implementation of SDGs, climate adaptation and disaster risk management (Terton 2021) as well as our own excursus on Germany's implementation of the SDGs and climate obligations (Chapter 6.4).

Based on Metcalfe's metric, we can determine whether the integrated implementation of international policy agendas is shallow or deep coordination, includes communication and consultation or joint decision-making and arbitration.

An evaluation may address the question of what **level of policy integration** is **necessary to achieve the desired results** – in our case: the transformative change required by the 2030 Agenda and the Paris Agreement. Metcalfe argues that the need for coordination is higher when the policy domains or issues addressed by different administrative entities are highly interlinked, as compared to cases of low interdependence (Metcalfe 1994, p. 279). With regard to our international policy agendas, this implies: where interlinkages are stronger, 'deeper' policy coordination and more integrated implementation are required to achieve satisfying outcomes. The level of integration (based on Metcalfe's metric) can thus be linked with the scales for **policy interactions,** as developed by Nilsson et al. (2018) and as laid out in Chapter 2.1 above. The scale ranges from +3 ("indivisible interaction", where achievement of one objective automatically delivers progress on another), via +2, +1, 0, -1, -2 to -3 ("cancelling interaction", achievement of one objective automatically leads to a negative impact on another). In general, the higher the negative value – i.e., the higher the potential for severe trade-offs – the higher the need for deep co-ordination. The same can, but need not necessarily, hold true for positive values / synergies. When objectives and specifically their implementation policies are synergetic anyway, no deep co-ordination is required. At the same time, the level of integration depends upon the understanding of policy integration, potential integration objectives (e.g. reducing poverty and enabling food security) and integration demands according to integration focus (e.g. sector, policy field), actors (e.g. government, non-government) and specific national/local circumstances (e.g. determined by political system and context, routines and traditions and cognitive predispositions). Considering these specific facets of context conditions can significantly enhance processes of integration through enabling a potential prioritization of integration.

It is important to keep in mind that the **design of implementation measures** is crucial for the effect of interactions at the impact level (Wolff et al. 2016). Take the above example of a 'counteracting' (score -2) interaction – 'Boosting consumption for growth can counteract waste reduction and climate mitigation': If implementation measures are designed in a way so that they decouple economic growth in absolute terms from resource and energy consumption, or if the consumed energy is from renewable sources, the interaction may in fact be 'consistent'

(score 0). The goal operationalization and manner of implementation profoundly affects whether and to what degree specific policy goals/ targets are consistent or synergetic.

**Formal characteristics** of the policy agendas in question can have effects on their interaction. For instance, the legal nature of the policy agendas differs: whereas the Paris Agreement and the CBD are legally binding treaties, the same does not hold for the 2030 Agenda and the Sendai Framework. While main provisions of the Paris Agreement and CBD are nevertheless in actual effect voluntary, the political clout at least behind the Paris targets is greater than that of the voluntary agendas. The time frame for the 2030 Agenda, Paris Agreement and Sendai Framework is 2015-2030, while the CBD's Achi Targets end in 2020 and the new global framework will only begin in 2021 (to 2030).

On a final note, in the case of **transformative policy agendas**, realizing the (interacting) agenda objectives likely leads to complex interconnected feedback loops as well as nonlinear cause-effect relationships with lengthy-time lags between causes and effects. It is hence more difficult to orchestrate implementation. A monitoring and adaptive management of outcomes (including unexpected, counterintuitive ones) should accompany integrated implementation.

## 2.8 Interim summary and conclusions

In this Chapter 2, we introduced some conceptual aspects to approach the study of policy integration and the post-2015 agendas. Integrating the implementation of different international policy agendas is a question of integrated policy-making. While there is **little self-standing literature on "integrated implementation"**, a **wide literature exists on integrated policy-making and policy integration**. This literature shows that there are **manifold understandings** of what policy integration can mean. Based on different understandings, the objects and processes of policy integration and evaluation differ. We briefly revisited some of the related understandings and concepts.

Laying out these different concepts matters, because they often correspond with **different integration logics** and carry different implications for political practice. Actors engaged in policy integration often have different understandings of what policy integration entails and can be a significant barrier for integration processes. Building a **common understanding** of policy integration is key to the integration process. Integrated implementation is a sub-form of policy integration in the context of implementing international policies and agendas.

We subsequently showed how interactions between policy agendas lead to the need for policy integration. Such interactions can occur at the level of goals, implementation measures and impacts. They may be synergetic or conflictive and be of different strengths; an existing metric classifies interactions from a mutually reinforcing +3 score to an "indivisible" and conflicting -3 score. We then examined the evolution of policy integration research and practice. The subsequent sections briefly laid out how studies on integration developed as part of overlapping, but different policy fields (environmental protection and sustainable development, climate policy and to a limited extent disaster risk reduction). The evolution of policy integration enhances the understanding of **different integration logics and foci**. Against the background of increasingly complex politics and demands for transformation, environmental and climate policy integration have become rapidly expanding fields of research and practice, even though practical success is limited. **Various entry points** exist for analyzing – as well as shaping – policy integration: the issues and administrative levels involved, the output of integration and the governance mechanisms employed, dimensions of policy-making (policy, politics, polity) and phases of the policy cycle. There are clear benefits for integrating the implementation of international agendas such as an increase or effectiveness and efficiency. However, there are

also **costs** involved (e.g. overburdening of the administration, insufficient public acceptance) and **obstacles** as well as **limitations** of what policy integration can achieve.

While policy integration may cause (transaction) costs and insufficient acceptance, it is rewarded by greater effectiveness and efficiency. The metric by Metcalfe for evaluating integration can help us to assess the depth of integration in the empirical parts of this study.

# 3 Approaches and practices for an integrated implementation of policy agendas: Results of an empirical screening

In the following, we present findings of a comprehensive screening of country reports and relevant literature, which describes approaches developed by countries for the integrated implementation of at least climate protection and sustainability goals. The adaptation and disaster risk reduction agendas – at least according to the findings of our screening – play no discernible role in this. The approaches can be categorized as cognitive and analytical capacity building, institutional coordination, and joint strategy development (cf. Chapter 2.4).

## 3.1 Method and document selection

Documents that were created in the context of selected UN processes or submitted by UN member states and other actors were evaluated with regard to the question of **which approaches can serve to implement the 2030 Agenda and the Paris Agreement**. One focus was on climate policy measures that also promise benefits for the achievement of other SDGs – beyond SDG 13 (so-called "sustainable development co-benefits"). The texts were also screened for SDG implementation measures with co-benefits for climate protection, climate adaptation or disaster risk management. Finally, it was examined whether the documents propose international mechanisms that affect the coordination between the review and ambition processes of the 2030 Agenda, the Paris Agreement and the Sendai Framework; however, no suggestions could be identified in this regard.

The following documents were considered in the screening:

- Higher-Level Political Forum on Sustainable Development (HLPF) meetings in 2019/2020:
  - HLPF meeting under the umbrella of ECOSOC, 9.-18. July 2019 in New York (in-depth review of SDG 13, among others)[9]
  - HLPF meeting under the umbrella of the UN General Assembly ("SDG Summit"), 24.-25. September 2019 in New York[10]
  - HLPF meeting under the umbrella of ECOSOC, 7.-16. July 2020 in New York

  Documents from the UN, the UN regions and important stakeholders from science and civil society, which were created in the context of the events, were taken into account. This included:
  - English-language Voluntary National Reviews (VNRs) with focus on the years 2019/2020, but with reference to other promising VNRs as of 2016
  - Other submissions from governmental and non-governmental actors that seemed pertinent to our question

[9] https://sustainabledevelopment.un.org/hlpf/2020#docs, https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjyqbL28PHqAhWMsaQKHXmjDLIQFjAAegQIARAB&url=https%3A%2F%2Fsustainabledevelopment.un.org%2Fcontent%2Fdocuments%2F26440NGO_Major_Group.pdf&usg=AOvVaw3WC80uCDd2m05ktd5u8sXa

[10] https://sustainabledevelopment.un.org/hlpf/2019#docs; https://sustainabledevelopment.un.org/hlpf/2019#inputs

- Other UN meetings:
  - "UN Climate and SDGs Synergy Conference", Copenhagen, April 2019
  - UN Climate Action Summit 2019, September 23, 2019 in New York [11]
- Reports from UN authorities, e.g. the "Climate Promise Review" by UNDP (2020), but also global assessments such as the "Global Environmental Outlook 6" (GEO-6)
- Databases: SDG 13-related entries in the database on the SDG Acceleration Actions[12] (part of the SDG Knowledge Platform (with focus on SDG 13), the SDG Partnerships Platform[13] and in the portal of the UNFCCC Global Climate Action Network (NAZCA). The focus was on entries that seemed widely applicable and scalable.
- Thematically relevant reports from development cooperation organizations (Bouyé et al. 2018; SIDA 2017) and international organizations (UNFCCC Secretariat 2017; UN EOSG und UNFCCC 2017), Nexus Tools (SDG Climate Action Nexus tool, SCAN-tool[14], the NDC-SDG Connections overview[15]) and grey/scientific literature.

The documents were researched via the event websites.[16] Additionally, a keyword-based search on the internet was made.[17] Documents were then screened for their relevance in relation to the research question.

The documents in the data corpus were evaluated with regard to relevant text passages. Additionally, the identified approaches were **clustered** into the following entry points: creation of cognitive and analytical capacities (Chapter 3.2); institutional coordination (Chapter 3.3); and joint strategy development (Chapter 3.4). The latter includes a) the alignment ('by design') of SDG implementation and climate action, nature protection and disaster risk reduction and b) the development of policies with inherent co-benefits.

## 3.2 Creation of cognitive and analytical capacities

Our data shows that policymakers promote the creation (or strengthening) of cognitive and analytic capacities for dealing with policy interactions, above all, through coherence analysis and integrated monitoring. In an early stage of policy-making, the '**ex ante' assessment of policy coherence** can help identify where actual or potential trade-offs and synergies exist between the national level plans for implementing two or more international agendas (prior to their implementation). Such assessments typically take the form of reviews of policy alignment[18] and of budgetary alignment, which can form the basis for deciding which trade-offs should be tackled

[11] https://www.un.org/en/climatechange/un-climate-summit-2019.shtml, https://www.un.org/en/climatechange/climate-action-areas.shtml

[12] https://sustainabledevelopment.un.org/sdgactions

[13] https://sustainabledevelopment.un.org/partnership/browse/

[14] https://www.transparency-partnership.net/documents-tools/sdg-climate-action-nexus-tool-scan-tool

[15] https://klimalog.die-gdi.de/ndc-sdg/

[16] https://sustainabledevelopment.un.org/hlpf/2019#docs; https://sustainabledevelopment.un.org/hlpf/2019#inputs; https://sustainabledevelopment.un.org/hlpf/2019#vnrs; https://sustainabledevelopment.un.org/hlpf/2019#labs; https://www.un.org/en/climatechange/un-climate-summit-2019.shtml; https://sustainabledevelopment.un.org/hlpf/2020#docs; https://sustainabledevelopment.un.org/hlpf/2020#vnrs

[17] For the keyword search, we used the following keywords: Paris Agreement, climate change, adaption (to climate change), Sendai Framework, disaster, resilien* [t, ce], Convention on Biological Diversity (CBD), biodiversity, Global Framework, synerg* [y, ies], trade-off* [s], co-benefit* [s], integrat* [ing, ed, ion], holistic* [ally], joint* [ly], link* [ing, ed, age], inter* [-dependent, linkage, linking, linked, woven, connection, connected, action, actions, interacting], nexus.

[18] This includes a review of policy alignment with fiscal policies (which we separate from state budgets, cf. Chapter 3.2.2.2).

or which synergies will be tapped. When at least one of the agendas has already been implemented at national level, an 'accompanying' or 'ex post' **evaluation**[19] can give indications where the implementation efforts should be re-adjusted.

**Integrated monitoring** is the indicator-based collection of data related to the implementation of policy agendas and which pays attention to different thematic areas and their interlinkages. Monitoring enables to react flexibly if the implementation of complex agendas has created adjustments in the behavior of target groups or other non-expected effects that impede the agendas' implementation.

By **integrated reporting** we mean the integrated representation of a country's performance in terms of more than one policy agenda, often with reference to (integrated) monitoring data. We focus on integrated reporting under the 2030 Agenda (Voluntary National Reports) and the Paris Agreement (Enhanced Transparency Framework, UNFCCC Decision 18/CMA.1).

In our analysis we found indications of the following more specific approaches: coherence analysis of implementation policies (policy alignment), coherence analysis of funding programs (financial alignment) and integrated monitoring and evaluation.

### 3.2.1 Coherence analysis: (ex ante) Review of policy alignment

Coherence analyses can take the form of reviews of policy alignment. The identified reviews were carried out ex ante. A number of technical guidelines and 'nexus tools' has been developed that support respective analyses (cf. box).

**Guidelines and tools supporting coherence analysis**

- Examples of **technical guidelines**: CEPA strategy guidance note on Promotion of coherent policy-making (UN DESA und CEPA 2021); OECD 2017/ 2018/ 2019: "Policy Coherence for Sustainable Development"; OECD 2021: "Building a coherent response for a sustainable post-COVID-19 recovery"; NAP-SDG iFrame of the UNFCCC, Sustainable Development Guidance, SDG Accelerator and Bottleneck Assessment Tool (ABA), Rapid Integration Assessment (RIA), E-Handbook on Sustainable Development Goals, NAMA Sustainable Development Evaluation Tool, Guidance for NAMA Design in the context of NDCs: A Tool to Realize GHG Mitigation Under NDCs, Mainstreaming, Acceleration, Policy Support (MAPS) Practical; UNDP/UNEP (2020) guidance on "Enhancing NDCs through Circular Economy"; chapter on SDG alignment in UNEP DTU / UNFCCC (2020): Implementing nationally determined contributions (NDCs); WWF, UNEP, EAT & Climate Focus (2020), Enhancing Nationally Determined Contributions (NDCs) for Food Systems
- Tools for **integrated modelling**: ICES (Inter-temporal Computable Equilibrium System), SDG Local and Urban Governance Dashboard (LOGOD), DesInventar (Disaster Information Management System) Sendai, Integrated Sustainable Development Goals (iSDGs) Model, UNDP Climate Action Impact (CLIP) Tool

[19] Evaluations are assessments which are carried out while a program is being carried (accompanying evaluation) out or afterwards (ex post evaluation) and are used to assess the effects that have actually occurred (including side effects).

#### 3.2.1.1 Example: Impact assessment of NDCs/ planned climate action on SDG implementation (i.a. Mexico, Indonesia, Kenia)

Along with **Indonesia**, **Kenya** is one of the few countries that takes the SDGs into account when selecting and formulating national NDCs (Bouyé et al. 2018). The Climate Change Department of the Kenyan Ministry of Environment and Forestry carried out an SDG impact analysis of the proposed measures of the National Climate Change Action Plan (NCCAP) (2018-2022). This analysis helped capture SDG-climate synergies and identify opportunities for low-carbon development in the country.

#### 3.2.1.2 Example: Impact Assessment of SDGs on national/subnational priorities, for instance, in line with the "Rapid Integrated Assessment" (RIA) method (i.a. Bosnia and Herzegovina)

In addition to countries such as **Guyana, Iraq** and **Kyrgyzstan**, **Bosnia and Herzegovina** used the Rapid Integrated Assessment (RIA) tool developed by the UN. In the form of a study, the RIA supports countries in including the SDGs in their planning on all levels of government and in capturing their relevance with the country-specific priorities (Bosnia and Herzegovina 2019). A total of 69 documents were examined by the SDG working group in order to determine the relationships and extent of correspondence between country strategies and action plans with the SDGs. This study mapped the existing political landscape of the country at different administrative levels and provided recommendations on the measures required for Bosnia and Herzegovina to incorporate the SDGs adapted to the country into government policy on all administrative levels. The documents reviewed by the RIA show that the country's strategies, programs and action plans incorporate all 17 goals of the 2030 Agenda. While some SDGs, such as SDG 8, are addressed extensively, the analysis also records which goals need to be addressed more intensively (e.g. SDG 5). The RIA identified additional bottlenecks in the methodology for strategic planning on all levels of government, as well as incomplete budgeting and monitoring and evaluation of strategy implementation. It also emerged that there was a lack of horizontal and vertical coordination in the various policy areas, as well as the involvement of civil society and the private sector in implementation and monitoring.

#### 3.2.1.3 Example: Sustainability impact assessment of draft legislation (Germany)

In **Germany**, the potential impact of bills and ordinances proposed by the government is assessed against the goals and indicators of the SDGs, the principles for sustainable development and other references to the individual SDGs (Bundesregierung 2021, p. 104). The so-called "Sustainability Impact Assessments" are then checked for plausibility by the parliamentary advisory board for sustainable development. In 2018, to facilitate the implementation of the assessment and improve its quality, an IT-supported tool (electronic sustainability impact assessment, eNAP) was developed for ministries to use (ibid, p. 104-105).

### 3.2.2 Integrated monitoring, reporting and evaluation

Monitoring, reporting and evaluation of the SDG implementation across its diverse thematic fields is a first step; the next (much rarer) step is the integration of monitoring, reporting and evaluation of SDG implementation with *other* agendas.

#### 3.2.2.1 Example: (Ex post) Review of budgetary alignment & reporting to national parliament

In the national context, some countries require their administration to report on the spending related to their sustainable development or climate activities, so that the budgetary alignment with these agendas can be reviewed

**Sustainability/SDG reporting, partly within national budget procedures (Finland, Norway, German pilot project)**

Since 2017, the government of **Finland** requires its line ministries to annually report on their policies and measures implementing the 2030 Agenda as part of the government's annual report to the national parliament. While the Finnish government judges these annual reports as 'rather descriptive and entail[ing] only little quantitative measures', the reports are assessed to 'have given support to the sustainable development coordinators of each line Ministry and legitimized their work for the 2030 Agenda. In particular, the Reports have been pivotal in facilitating the dialogue between the Government and the Parliament' (Prime Minister's Office of Finland 2020).

In its strategy for the 2030 Agenda implementation, **Norway** has committed its ministries to annually report on their follow-up on the SDGs in their budget proposals. The Ministry of Finance collates the reports and submits a summary within its national budget white paper to the national parliament before the parliament approves the annual national budget (Norway 2016).

**Germany** is planning to carry out a pilot project to examine the possibilities for linking the SDGs as well as the goals and indicators of the German Sustainability Strategy with the federal budget process (Bundesregierung 2021, p. 105).

**Climate/NDC reporting in national budget procedures (Fiji, Norway)**

**Fiji**'s 'Climate Public Expenditure and Institutions Review' (CPEIR) (2015) examines how public and private spending related to climate change and disaster management are integrated into national budget processes and how these processes can be improved (Republic of Fiji 2019).

In its 2017 'Climate Protection Act', **Norway** introduced the same procedure for ministries to annually report on their climate policy follow up as it had introduced earlier for SDG (see previous section); the reports are linked to the parliament's approval of the national budget (Bouyé et al. 2018). Climate and SDG reporting to the parliament do not seem to be linked with each other.

#### 3.2.2.2 Example: Joint NDC and SDG reporting vis-à-vis the UN (international and non-governmental organizations)

In 2019, the UN "Global Conference on Strengthening Synergies between the Paris Agreement on Climate Change and the 2030 Agenda for Sustainable Development" (UN DESA; United Nations Climate Change 2019) recommended that 'At the national level, the consultative process and institutional responsibilities for information collection and synthesis for the voluntary national reviews (VNRs), biennial update reports (BURs) and national communications (NCs) are recommended to be unified. Guidelines for VNRs should be conducive to highlighting institutional synergies and trade-offs between the SDGs and climate action' (ibid, 9-10). To date, no such templates exist.

Non-governmental actors provide some transparency regarding what is reported in NDCs and SDGs. Examples are the World Resources Institute's web-based "NDC-SDG linkage" database[20] or the "NDC-SDG Connections" Website by DIE and SEI.[21]

#### 3.2.2.3 Example: Ex post evaluation of ministries' activities on sustainable development (Finland)

**Finland** has mandated its National Audit Office (NAOF) to audit the government's sustainable development efforts as part of the country's four-year monitoring and evaluation cycle for the

[20] https://www.climatewatchdata.org/ndcs-sdg

[21] https://klimalog.die-gdi.de/ndc-sdg/

implementation of the 2030 Agenda. The NAOF specifically monitors the country's long-term sustainable development (Prime Minister's Office of Finland 2020). In 2019, the NAOF published the first auditor's report on the country's national sustainable development management model. According to the report, the importance of sustainable development increased in all line ministries compared to the years before. Nevertheless, the report criticizes the weak agreement and coordination of sectoral policy planning and the 2030 Agenda. The NOAF recommends that ministries analyse and review their policies more systematically with regard to sustainability.

#### 3.2.2.4 Example: Ex post evaluation of NDC effects on SDG implementation (Mexico)

**Mexico** is one of the few countries that has carried out an assessment of the effects of existing NDCs on the national implementation of the 2030 Agenda (Bouyé et al. 2018; Mexico 2018; UN DESA 2019). The aim of this ex-post evaluation was to identify and generate opportunities for an integrated approach of the national NDCs and SDGs. The study included, among other things, a) an illustration of the overlap of the NDCs and SDGs, in particular the most common co-benefits of climate measures, b) the identification of the institutions that are responsible for the policy areas and in which most of the co-benefits were located, c) conducting qualitative interviews with decision-makers from these institutions and other stakeholders (e.g. civil society) about the promotion of synergies for an integrative NDC-SDG implementation, and d) creating a **'multi-criteria analysis tool' in order to prioritize NDC-measures based on their SDG benefits**. To achieve this, NDC measures are weighted with different degrees of importance according to their impact on co-benefits. This weighting of the co-benefits is the result from discussions with various stakeholders, such as experts from government, private and civil society, and science.

The results of this study were discussed in an inter-ministerial workshop. The analysis shows that the greatest synergies were found in the agriculture, land use and forestry sectors. NDC measures with the greatest benefit have been identified as "development accelerators". Above all, this example shows how an active exchange between line ministries creates understanding and acceptance in the government for the interrelationships between the two agendas.

## 3.3 Institutional coordination between SDGs and Paris Agreement implementation

There are diverse forms of institutional coordination in the domestic implementation of international agendas. They range from high-level entities overseeing and coordinating implementation processes, cross-ministerial structures (e.g. inter-departmental and inter-administration committees, collaborative units, task forces) to the involvement of national parliaments, other levels of administration (vertical coordination) and non-state actors.

Note that institutional coordination addresses the *process* of policy-making, not its outputs (policies). It is assumed, however, that coordinating the process indirectly helps integrate its outputs (here: the implementation of international agendas).

### 3.3.1 High-level entity overseeing and coordinating implementation processes

A common form of institutional coordination is to centralize responsibility for overseeing and coordinating the parallel implementation processes in a high-level entity (e.g. prime minister's office, chancellery), rather than giving it to individual or several ministries. In the documents we reviewed, we found more indications of such coordination for the SDG implementation than for the Paris Agreement implementation (though this may also be related to focus on screening VNRs).

For example, since the adoption of the 2030 Agenda, there has been an inter-ministerial committee in **Bangladesh** for the coordination and implementation of the SDGs at the level of the Prime Minister's office (Government of the People's Republic of Bangladesh 2020). While the Ministry of Planning leads the process of SDG implementation, an "SDGs Implementation and Review Committee" has been formed which is made up of secretaries from 20 ministries. It is headed by a Principal Coordinator – a position created by the Prime Minister's Office (SIDA 2017; Bouyé et al. 2018).

In **Japan**, too, the implementation of the 2030 agenda is being guided by the prime minister. The "SDG Promotion Headquarters", a body that includes all ministers and is headed by the Prime Minister, has existed since 2016 (Japan 2017). The committee aims to network all relevant ministries and government agencies to support and monitor the implementation of the SDGs.

In **Finland**, too, the main responsibility for implementing the 2030 Agenda also rests with the country's prime minister (Sida 2017). The prime minister oversees the "Commission on Sustainable Development", the most important body for the implementation of the SDGs. It follows a hybrid model that brings high-level political actors together with civil society. Among other things, the committee consists of representatives from all ministries, parliament, business, trade unions, civil society, environmental and social organizations, as well as research institutes.

In **Colombia**, following the adoption of the 2030 Agenda, a "High-Level Interinstitutional Commission for an effective implementation of the Post 2015 Development Agenda and the SDGs" was set up (UN DESA 2021). While the entire government is represented at ministerial level, the commission is guided by the national planning ministry. Ultimately, however, the President's Office has all control over the Commission. The Commission's tasks are to monitor, track and evaluate the implementation of the SDGs. In addition, it should network the line ministries. In cooperation with the "Directorate of Evaluation and Monitoring of Public Policies from the National Planning Department", the strategy for implementing the SDGs in Colombia was adopted in 2018. This defines the national goals for the 2030 Agenda and their strategies.

In **Germany**, sustainability policy is coordinated by the Federal Chancellery, which chairs the State Secretaries' Committee for Sustainable Development. In this committee, secretaries from all federal ministries jointly decide on sustainable development policies. At the same time, the committee acts as a contact for the federal states and municipal umbrella organizations, whose representatives can take part in the meetings. For climate policy, a "Climate Cabinet" exists (since 2019) which consists of the Chancellor, the head of the Chancellor's Office and six federal ministers (for Environment, Finance, Economy, Construction, Transport and Agriculture). Hence, high-level coordination of climate policy is at an even higher level (ministers) than that of sustainable development policy (state secretaries) (Bundesregierung 2021, p. 17-18).

**Colombia**, **Madagascar**, and **Sierra Leone** also tackle the challenge of integrated SDG implementation through coordination committees at the level of the office of the head of government.

### 3.3.2 Cross-ministerial structures coordinating ministries across SDGs

A more decentral form of institutional coordination is cross-ministerial structures serving to coordinate ministries across diverse sustainability areas (e.g. SDGs).

#### 3.3.2.1 Example: Inter-ministerial SDG working group (i.a. Bangladesh, Denmark, Germany)

Some countries have cross-departmental working groups with the aim of effectively implementing the SDGs. As reported in section 4.2.1., there is an inter-ministerial "SDGs Implementation and Review Committee" in **Bangladesh** in which 20 ministries work closely

together to facilitate the implementation of an SDG action plan (Government of the People's Republic of Bangladesh 2020). While overall implementation is led by the Planning Ministry, co-lead ministries and contributing ministries have been assigned to each SDG (SIDA 2017).

Similar to Bangladesh, **Denmark** has an inter-ministerial SDG working group (UNEP 2019). This is coordinated by the Ministry of Finance. In addition to Bangladesh and Denmark, an inter-ministerial committee is also responsible for implementing the SDGs in **Romania** (UN DESA 2019).

In **Germany**, the "Interministerial Working Group on Sustainable Development" (IMAG NE) supports the State Secretaries' Committee for Sustainable Development (Terton 2021). The IMAG NE consists of representatives from each individual federal ministry. The working group acts as a background structure for the State Secretaries' Committee.

#### 3.3.2.2 Example: SDG or green economy focal points in all ministries which address SDGs and climate actions (i.a. Finland, Ethiopia)

In addition to inter-ministerial SDG working groups, SDG or Green Economy Focal Points in all government ministries are also striving for an integrated implementation of the climate and / or 2030 Agenda. To guarantee the exchange between ministries, focal points can serve as resource and liaison persons in order to coordinate and promote an integrated implementation of the two agendas (Bouyé et al. 2018). For example, SDG focal points in Finland and Ethiopia ensure that sector plans and strategies are adapted to the 2030 Agenda.

In **Finland**, the "Inter-Ministerial Coordination Network" consists of SDG focal points from all line ministries. It is the main supporting body for the coordination secretariat of the Prime Minister's Office (Prime Minister's Office of Finland 2020). The network aims to anchor the SDGs in all ministries and create and guarantee a balance between economic, social, and ecological sustainability. In addition, the coordination network works beyond the government's tenure. The aim is to create an 'institutional memory' and to maintain a certain degree of continuity in policies and measures.

In **Ethiopia**, both agendas are brought together through focal points in all ministries, the so-called Ethiopian Climate-Resilient Green Economy units (Bouyé et al. 2018). However, liaison officers at the respective focal points often lack the capacities, such as adequate mandates and staff, to carry out political planning. In general, however, Bouyé at al. (2018) criticize the silo approach of many countries regarding the joint implementation of the SDG and climate agenda. They criticize missed opportunities for policy efficiency and coherence and the lack of exchange between ministries and/or focal points.

### 3.3.3 Alignment of planning cycles

A further form of institutional coordination involves the alignment of planning cycles between different implementation strategies.

An example is provided by Kenya. The government aligned its planning cycles to reach the goals and strategies outlined in its National Development Plan, NDC, and national SDG action plans. This is achieved 'through a combination of both top-down and bottom-up approaches' (SIDA 2017).

### 3.3.4 Involvement of other administrative levels (vertical coordination)

Integrated implementation is also promoted through improved ('vertical') coordination between different geographic-administrative levels, notably federal, state/regional and municipal levels.

#### 3.3.4.1 Example: Government coordinates with local authorities to integrate SDGs and climate agenda into local planning and budgeting (i.a. Colombia)

**Colombia** uses vertical coordination to implement both agendas down to the local level (Bouyé et al. 2018). In coordination between the government and local authorities, the SDGs and the Paris Agreement are integrated into local planning and budgeting. This NDC localization process is premised on an SDG alignment analysis of development plans from 2016 to 2019. The results showed that about one third of these plans do not address the country's top national climate change priorities (SDGs 7, 12, 13 and 15). In addition, through the 'National Climate Change System', Colombia has divided the country into nine regional nodes. This is to promote vertical (and horizontal) policy coherence in relation to the NDCs and SDGs. After the country has defined targets at the national level, these are 'divided' and fed in at the local level. The government's aim is to achieve appropriate burden sharing and uniform and local integration. However, the local context as well as the needs and capacities of a region are considered.

Furthermore, the government encourages the development of local development plans with an SDG focus (Phillips, Heilmann, Reitzenstein & Palmer 2021). In this process, an online toolkit developed by the National Planning Agency (DNP) aims to provide technical support to local governments in the formulation process. In total, 32 departments and 31 capitals have adopted local development plans with SDG targets. Colombia's localized, integrated approach offers potential for both agendas to be implemented more efficiently and for their synergies to be harnessed.

#### 3.3.4.2 Example: Regional network to facilitate NDC implementation (i.a. Colombia)

Colombia has also established a network of "Regional Climate Change Nodes", which forms part of its climate governance framework, Sistema Nacional de Cambio Climático (SISCLIMA). The regional nodes, which include representatives from municipalities and regions as well as non-state actors, help to coordinate and facilitate the country's NDC (Lydén und Deutschmeyer 2021). They are reported to have increased regional ownership of national strategies, with subnational actors applying the NDC to their local contexts (ibid).

#### 3.3.4.3 Example: National body for social dialogue involves local authorities (i.a. France)

**France** also sees the involvement of local authorities as key actors in linking the implementation of both agendas at the local level. The French National Council for the Ecological Transition involves local authorities in the national coordination of both agendas (Bouyé et al. 2018). The National Council consists of representatives from cities, trade unions, business, NGOs, associations, and parliament. It discusses policies on climate change, energy, sustainable development, biodiversity, and corporate social and environmental responsibility. In recent years, the National Council has been particularly helpful in promoting integrated approaches to climate change, air pollution and mobility.

### 3.3.5 Involvement of national parliaments

National parliaments have important legislative, budgetary, electoral/representative and control functions. In the implementation of international policy agendas, their role is limited though: sustainable development strategies, NDCs, National Adaptation Plans are generally formulated by governments and their administration rather than by parliaments. However, in some countries, national parliaments are nevertheless included in the cross-thematic coordination structures serving to implement the SDGs.

#### 3.3.5.1 Example: Involvement of national parliaments in the institutional framework for implementing the SDGs (i.a. Egypt, Finland, Germany)

In some countries, the national parliament is recognized in the institutional framework to implement sustainable development

**Egypt's** parliament monitors the implementation of the country's sustainable development strategy's objectives, targets, programs and projects against a set of key performance indicators.

As describes above, the government of **Finland** requires its line ministries since 2017 to annually report on their policies and measures implementing the 2030 Agenda as part of the government's annual report to the national parliament.

**Germany's** Parliamentary Advisory Council on Sustainable Development in 2019 held a public discussion on the role of parliaments in implementing the SDGs. It also published a Committee paper (PBnE 2019) that advocates an intensive parliamentary monitoring of international sustainability policy. The paper also calls for an overarching EU strategy for European internal and external relations on sustainable development that fulfils both the commitments to the United Nations' 2030 Agenda for Sustainable Development and the ratified Paris Climate Agreement.

#### 3.3.5.2 Example: Regular SDG and NDC progress reports to national parliaments

In **Finland** and **Sweden**, obligations have been introduced that the government regularly reports to the parliament on SDG-NDC policy alignment (2015 Finnish Climate Change Act, Sweden's Policy for Global Development, cf. Bouyé et al. 2019).

#### 3.3.5.3 Example: Parliamentary committees following implementation of international agendas

In some countries, parliamentary committees cover sustainable development, environment and/ or climate change and follow the respective implementation processes (e.g. **South Korea**'s National Assembly UN SDG Forum, cf. Bouyé et al. 2018).

### 3.3.6 Involvement of non-state actors

Various examples exist of non-state actors that are involved in the implementation of the SDG and/ or of the Paris Agreement (ideally: combined). This involvement is typically of a consultative nature.

#### 3.3.6.1 Example: Government consults with stakeholders in SDG implementation (i.a. Bangladesh, Norway Germany)

**Bangladesh** is an example for an 'all of society' where civil society, development partners, enterprises and the media are consulted in the SDG implementation process and the formulation of a national Action Plan (SIDA 2017).

**Norway** uses three channels to receive feedback on its SDG implementation progress (Norway 2021): civil society feedback via the Norwegian Forum for Development and Environment (ForUM, ca. 50 development, environment, peace and human rights organizations; business feedback via the UN Global Compact Norway; and feedback from the education and academic sector via SDG Norway.

**Germany**, too, uses various pathways to coordinate with stakeholders both on domestic SDG implementation and on international-level activities related to the SDGs, such as preparing HLPF

meetings and the VNR.[22] To a lesser extent, civil society and other non-state stakeholders are involved in the development of national climate policies.[23] Overall, the involvement of stakeholders into the SDG implementation (through the National Sustainability Strategy) and into the climate policy process are largely independent from each other.

#### 3.3.6.2 Example: Multi-stakeholder advisory body deliberates on an integrated policy agenda (i.a. France)

In **France**, the National Council on the Ecological Transition constitutes a multi-stakeholder advisory body which includes representatives of the legislative (parliament), administration (cities) as well as civil society (business, unions, associations, NGOs). It discusses a genuinely integrated policy agenda, including climate, energy, sustainable development, biodiversity, and corporate responsibility (Bouyé et al. 2018).

## 3.4 Joint strategy development: Aligning climate action and SDG implementation

By the "joint strategy development" we mean that in the development of a strategy or policy, concerns from other policy areas are taken up. Unlike institutional coordination, the development of joint strategies or policies directly addresses substantive *outcomes*, not the *process* of politics.

In the following subsections, we differentiate two approaches to joint strategy development:

- mainstreaming (integration 'by design') of sustainable development, climate or DRR concerns into different policy fields, including finance and budget programs on the one hand, and
- the use of (inter-/sectoral) policies which have inherent co-benefits for each other on the other (e.g. "nature-based solutions" for mitigating climate change are inherently beneficial for both the climate and biodiversity).

### 3.4.1 Mainstreaming (integrating 'by design') climate and sustainable development concerns into different policy fields and finance

The alignment of climate action and SDG implementation can be more encompassing / holistic (Chapters 3.4.1.1-3.4.1.5) or more specific/ targeted (Chapter 3.4.1.6). In the first case, the aim is to integrate political agendas (SDGs, climate) in their entirety; in the second case, only parts of these agendas are attempted to be integrated (e.g. flanking environmental policies by social balancing measures or gender-mainstreaming climate policies).

[22] National HLPF conferences (since 2019) annually serve to prepare for the UN HLPF. In addition, the Federal Ministry for Economic Cooperation and Development and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety regularly organise the "Dialogue Forum 2030", an exchange on core issues of the 2030 Agenda. More nationally oriented, a "Dialogue Group" of 15 civil society organizations and selected experts prepare inputs into the meetings of the State Secretaries' Committee for Sustainable Development (since 2018). The "Sustainability Forum" promotes a broader exchange between the Federal Government and actors from society, business, science and politics on the status and future of the implementation of the SDS and the 2030 Agenda (since 2017).

[23] Developing the National Climate Protection Plan 2050, the Federal Ministry of the Environment took into account the proposals from a broad dialogue with federal states, municipalities, stakeholders as well as citizens (which, in 2015, had jointly developed proposals for climate protection measures till 2030). Civil society was also involved in developing the Action Plan on Adaptation to Climate Change (though less so with regard to the original National Adaptation Strategy).

#### 3.4.1.1 Example: Recognizing or prioritizing SDGs / SDG co-benefits in the development and implementation of mitigation and adaptation policies (including NDCs) (i.a. Bangladesh, Indonesia, Colombia, Mexico)

Linking the NDCs to the SDGs has the advantage of illustrating the benefits of climate action (Bouyé et al. 2018). With regard to line ministries, this can in turn lead to an increased willingness to implement climate action. For example, in countries such as **Bangladesh** and **Indonesia**, NDC implementation takes place within the SDG framework. The SDGs are thus used as a reference point for the NDCs (Bouyé et al. 2018).

**Colombia**, too, has taken efforts to establish synergies with the 2030 Agenda when updating its NDC (Gobierno de Colombia 2020). The NDC integrates cross-cutting concerns ranging from poverty eradication and food security via gender equality to the protection of biodiversity. The country has started to examine the effects of implementing mitigation and adaptation measures.

**Mexico** commissioned an assessment of its NDC to prepare the prioritization of mitigation and adaptation action with SDG co-benefits. In cooperation with the Office of the President, the Ministry of Environment and Natural Resources (SEMARNAT) and GIZ, a study was conducted that analyzed the co-benefits of Mexico's NDCs to identify how the 2030 Agenda and the Paris Agreement can be most effectively implemented in Mexico (GIZ 2018). All 169 SDG targets were analyzed regarding possible linkages to climate mitigation and adaptation actions. The 64 SDG targets related to climate mitigation and adaptation were then linked to their potential co-benefits. SDGs with the most co-benefits included SDG 11 (sustainable cities and communities), SDG 12 (responsible production and consumption), SDG 6 (clean water and sanitation) and SDG 7 (renewable energy). Furthermore, the results show that more than a third (38%) of SDG targets contribute to mitigating GHG emissions and/or adapting to the impacts of climate change. In line with experiences and case studies from other countries, this study confirms that mitigation and adaptation measures can generate co-benefit'. Mexico's strategy for implementing the two agendas is based on these findings.

#### 3.4.1.2 Example: Mainstreaming SDGs in ministries' annual business plans and budgets (i.a. Bangladesh, Finland, Ghana)

In **Bangladesh**, budget guidelines are set for the climate and 2030 Agenda (Bouyé et al. 2018). After the 2012 Climate Public Expenditure and Institutional Review revealed that ministries were not mainstreaming their climate actions into their budget plans and performance frameworks, the Ministry of Finance and the Poverty Environment and Climate Mainstreaming Project of the Planning Commission developed a climate fiscal framework in 2014. This recommends that the 6 thematic areas and 44 programs identified in the Climate Change Strategy and Action Plan (CCSAP) be included in the budget call guidelines of the respective ministries. The Planning Commission has subsequently revised the annual development program guidelines to call for climate mainstreaming in the ministries' budget.

**Finland** aims at incorporating sustainable development as an integral part of the national budget drafting process. In 2018, ministries for the first time were required to include information on their measures on sustainable development and the SDGs in the proposal for the national budget. Ministries also had to outline the key changes in the relevant appropriations in the budget proposal. In the 2019 budget proposal, this sectoral perspective was complemented by an integrated new section on 'Sustainable development' in the General Strategy and Outlook chapter. Linking the SDG and climate agendas, the section discussed taxes and harmful subsidies included in the budget proposal which are relevant to the carbon neutrality target (Prime Minister's Office of Finland 2020).

The government of **Ghana** is in the process of developing a National Adaptation Plan (NAP) to strengthen the country's resilience to the impacts of climate change (Phillips et al. 2021). This will include projections up to 2080, which will also be used in the development of other plans/measures. For example, the climate projections will be used to 'climate-proof' investments in the future.

#### 3.4.1.3 Example: Mainstreaming climate change into disaster risk management (i.a. Caribbean states

In a project supported by Austria, the Caribbean Disaster Emergency Management Agency aims at strengthening national-, regional- and community-level capacity for the management and coordinated response to natural and technological hazards, including the effects of climate change (UNFCCC Secretariat 2017). The sectoral focus is on tourism.

#### 3.4.1.4 Example: Setting climate and SDG targets for budgets (i.a. EU, Indonesia)

Countries also set spending targets in which a budget target is defined for SDG and NDC-relevant priorities or the increase in expenditure required to achieve a certain target.

For example, in its European Green Deal, the **European Union** has committed to mobilize 25% of its long-term budget (2021-2027) for climate and environmental objectives through several EU programs. This amounts to a sum of 503 billion Euro that the European Green Deal Investment Plan will provide.[24]

In **Indonesia**, the 'Green Planning and Budget Strategy' calls for a 100 percent increase in public and private investments for top relevant NDC and SDG priorities by 2020. These include forest protection and peat remediation, irrigation, energy efficiency and renewable energies as well as the social responsibility of companies (Bouyé et al. 2018).

#### 3.4.1.5 Example: Aligning climate and social priorities within wider integrative policy frameworks and strategies (Sweden, Mongolia, Wales etc.)

In some cases, climate priorities and SDGs are aligned within wider integrative policy frameworks and strategies at the domestic level.

**Sweden** has formulated a high-level policy goal on becoming the 'world's first fossil-free welfare state' and hence a prosperous, inclusive and equal society without greenhouse gas emissions. The goal is underpinned by a climate policy framework, consisting of climate targets (including net-zero emissions by 2045, afterwards negative emissions), a climate act and a climate policy council).[25]

In implementing **Mongolia's** National Green Development Policy (NGDP) of 2014, the focus is on linking the energy, public building and water sectors (which are relevant for green growth) with the Mongolian NDC (which prioritizes energy, transport and industry for GHG emissions reduction and water as a priority for adaptation) and the SDGs (SDGs 6, 7, 9, 11).

In **Wales**, a 'Well-being of Future Generations Act' 2015 requires that Public Services Boards (PSBs) 'to improve the economic, social, environmental and cultural well-being of its area by developing a Well-being Plan, and each plan must be informed by a Well-being Assessment.' PSBs, which include representatives of public bodies such as local authorities, Health Boards, Fire and Rescue and Natural Resources Wales, need to take the latest Climate Change Risk

[24] https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_24

[25] https://sustainabledevelopment.un.org/partnership/?p=33918

Assessment into account when developing their Well-being Assessments (HM Government 2019).

#### 3.4.1.6 Example: Social flanking and gender mainstreaming of environmental action or disaster risk reduction (France, Kenya, Peru)

The **French** Ministry of Inclusive Ecological Transition announced a climate solidarity package to socially flank the national climate policy (Bouyé et al. 2018). Part of this package are measures that provide financial aid for socially disadvantaged households. This includes financial bonuses for energy-efficient renovation measures and the purchase of electric cars. In addition, the Climate Solidarity Pact includes allowances to cushion the social impact of a carbon tax / $CO_2$ tax.

The **Kenyan** climate law (2016) requires that access to climate finance (specifically: money from the national climate fund) must be gender-appropriate and inter-generationally just (Bouyé et al. 2018). Under the banner of sustainable development, institutions are obliged to guarantee justice and social inclusion in the distribution of effort, costs, and benefits of measures.

In **Peru**, a dedicated gender and climate action plan was developed jointly by the Ministry of the Environment and the Ministry for Women and Vulnerable Groups (Bouyé et al. 2018). The action plan assesses the vulnerability of women to climate change and formulates gender-specific measures for all relevant NDC sectors.

### 3.4.2 Designing (inter-/sectoral) policies with inherent co-benefits

While sectoral policies can be intentionally designed to integrate other policy concerns ('mainstreaming' cf. Chapter 3.4), joint strategy development can also make use of policies that *inherently* include co-benefits for such other concerns. As the design of the respective measures can still make a difference regarding the strength of co-benefits, it is difficult to draw a clear distinction towards 'integration by design'.

In 2017, an analysis of 148 developing country NDCs revealed many co-benefit policies between NDC mitigation and adaptation actions and the SDGs. This concerned, notably, clean energy (99% of developing country NDCs), land use, land use change and forestry (65.5%), transport (60%), waste management (66%) and the mitigation aspects of agriculture (65%) (SIDA 2017, quoting UN EOSG & UNFCCC 2017).

In the following, examples of such co-benefit policies are given (e.g. IPCC 2019, B.1.1).

#### 3.4.2.1 Example: Nature-based solutions in climate mitigation

Nature-based solutions can restore natural landscapes (SDG 15) while helping to store carbon (SDG 13); in many cases, they are also pro-poor (SDG 1).

#### 3.4.2.2 Example: Climate adaptation

Measures for climate adaptation (SDG 13.1) and wider disaster risk reduction (SDG 11.B) support healthy lives (SDG 3), reduce the number of deaths and of people affected by disasters (SDG 11.5), protect the world's cultural and natural heritage (SDG 11.4) and protect terrestrial ecosystems (SDG 15).

#### 3.4.2.3 Example: Ecosystem-based adaptation

Ecosystem-based adaptation policies have co-benefits for climate adaptation (SDG 13.1), biodiversity (SDG 15, CBD implementation) and health (SDG 3).

#### 3.4.2.4 Example: Ecosystem-based approaches in agriculture

Ecosystem-based approaches in agriculture can promote food security (SDG 2), preserve soils (SDG 15.3) and biodiversity (SDG 15, CBD), watercourses (SDG 6.3) and biodiversity (SDG 15, 16), close nitrogen and carbon cycles while increasing productivity (SDG 2) and reducing impacts on human health (SDG 3.9). An example are sustainable soil management practices (e.g. agroecology, agroforestry, organic and conservation agriculture, landscape management, etc.) which foster food security (SDG 2) as well as soil carbon storage (Art. 13.2).

#### 3.4.2.5 Example: Land-rights for indigenous communities

The allocation of land-rights to indigenous communities and enforcement of such rights reduces poverty (SDG 1), reduces inequalities (SDG 10), supports sustainable forest management (SDG 15) as well as climate mitigation and adaptation (SDG 13).

#### 3.4.2.6 Example: Urban farming and agriculture

Urban farming increases access to food in cities (SDG 12.3), strengthens cities' resilience (SDG 11) and contributes to sustainably using underutilized lands.

#### 3.4.2.7 Example: Reducing food loss & waste

Reducing food loss and waste enhances food security (SDG 12.3) and reduces greenhouse gas emissions (SDG 13).

#### 3.4.2.8 Example: Just Transition policies

Just Transition policies buffer the phasing out of emission-intensive industries (SDG 13) through creation of decent and quality jobs ideally in green industries (SDG 8), education and vocational training (SDG 4), and social protection (SDG 1).

#### 3.4.2.9 Example: Improving public transport

Improving public transport reduces GHG emissions (SDG 13) as well as pollution and road accidents (SDG 3), supports vulnerable groups (SDG 11.2) and ultimately makes cities more inclusive and sustainable (SDG 11).

#### 3.4.2.10 Example: Improving resource efficiency & circular economy

Improving resource efficiency & circular economy (SDG 11.4) reduces pollution (SDG 3.9, 6.3) and in many cases energy consumption, thus contributing to climate change mitigation (SDG 13.2). It also reduces land-degradation (SDG 153, 2.4) and helps conserving biodiversity (SDG 14, 15). It can create new jobs, thus contributing to the achievement of full and productive employment (SDG 8.5).

#### 3.4.2.11 Example: Reducing (air, water, soil etc.) pollution and protecting ecosystems

Environmental and nature protection policies have positive impacts on health goals. For instance, reducing the use of hazardous chemicals and of air, water or soil pollution (SDG 12.4), including in cities (SDG 11.5) helps to reduce the number of related deaths and illnesses (SDG 3.9). Conserving, restoring and sustainably using freshwater ecosystems and their services (SDG 15.1) and reducing degradation of natural habitats (SDG 15.5) contributes to combating waterborne diseases and other communicable diseases (SDG 3.2) and to promoting mental health and well-being (SDG 3.4).

#### 3.4.2.12 Example: Education

Increasing vocational and engineering skills (SDG 4) can help developing and diffusing climate-friendly technologies, thus mitigating climate change (SDG 13).

## 3.5 Interim summary and conclusions

The document and literature analysis yielded rich results on the attempts of governments to better integrate the implementation of the SDGs and the Paris Agreement. In the following, we discuss these results. Beforehand, two caveats are in order: Firstly, the screening covers only a selection of actually implemented approaches and practices, so that attempts at generalisation need to be treated with caution. Secondly, many of the findings related to integrated implementation of the SDGs alone. However, as the SDGs encompass climate-goals on mitigation and adaptation (SDG 13), this implicitly covers the implementation of international climate commitments as formalized in the Paris Agreement.

**What has been achieved, what are gaps and deficits?**

Looking **thematically** at the concerned agendas and issues, many documents we screened pointedly to integrative mechanisms for implementing (only) the 2030 Agenda across governmental departments and levels. In some cases, SDG implementation was coupled with implementation of the Paris Agreement's climate mitigation obligations. The implementation of the Paris Agreement's provisions on climate adaptation and of the Sendai Framework are less integrated both with SDG implementation and with other policies in general.

We could identify efforts aimed at creating the **cognitive and analytical capacities** for policy integration (Chapter 3.1); institutional coordination (Chapter 3.2); and the joint strategy development (Chapter 3.3). In the first case – **capacities** – the focus seems on (ex ante) coherence analysis and integrated monitoring while we found less evidence of (ex post) evaluations and integrated reporting. In the second case – **institutional coordination** –, we found evidence both of high-level and cross-ministerial structures for coordinating SDG implementation and, to a minor extent, for implementing the Paris Agreement.[26] An explicit linkage between SDG and PA implementation structures could not be identified, though an integrative SDG implementation of course includes climate policy. The practice of aligning planning cycles was rarely observed. We found a number of instances where the (federal) government involved other administrative levels (regions, municipalities) and national parliaments in the SDG or climate agenda implementation, though both approaches still seem relatively rare. A diversity of structures exists to involve non-state actors. When it comes to **joint strategy development**, i.e. the material alignment of climate action and SDG implementation, this occurs both by designing sectoral policies to integrate other concerns and by using policies with inherent co-benefits for other goals. The differentiation between the two approaches can be blurry at times. In the first case ('integrating by design'), we find countries that explicitly recognize or even prioritize SDGs and SDG co-benefits in the development and implementation of climate policies (both mitigation and adaptation policies) as well as countries that mainstream SDGs in ministries' annual business plans and budgets. Other countries set explicit budget targets for the implementation of climate action and SDGs. A broader approach is the alignment of climate and social priorities within wider integrative policy frameworks and strategies, for instance on green growth. A narrower approach is the targeted social flanking or gender mainstreaming of environmental action or disaster risk reduction. Finally, a range of policies are employed that have inherent co-benefits, such as nature-based climate mitigation,

[26] The fact that we found lesser information on PA implementation structures may be related to the selection of documents screened and a focus on VNRs.

ecosystem-based adaptation, urban farming, reduction of food ware, just transition policies or an improvement of public transport and resource efficiency.

Two further approaches that the literature on policy integration suggests being necessary – a normative framework on integrated implementation and the political will to implement it – were more difficult to identify. **Normative frameworks** range from constitutional and legal provisions to explicit strategies for jointly implementing the diverse policy concerns. The documents we screened did not include references to such frameworks, though strategies may be implicit in some of the examples of policy integration (e.g. underpinning the mainstreaming of SDGs in ministries' annual business plans or budgets, cf. Chapter 3.4.1.2). Overall, the widespread absence of normative frameworks that cover the multitude of policy concerns inherent in the 2030 Agenda can count as a gap. A document analysis is less conducive to uncovering evidence of (lacking) **political will**. We therefore cannot make statements on the extent to which the efforts are supported (or not) by political will. It is obvious from the literature, however, that political leadership is an indispensable for achieving deep policy integration.

What else has been achieved, when looking at other **entry points of integrated implementation**? We find that, along the dimensions of **policy, politics and polity**, our sample of identified practices exhibits a focus on approaches related to **policy** (in the form of joint strategy development) and **polity** (in the shape of institutional coordination and capacity building). Politics-related aspects of integrated implementation (e.g. degrees of interest alignment) are implicit in institutional coordination approaches, though they may depend more on the actual practices and cultures of coordination than the institutional forms themselves.

Looking at policy integration along the **policy cycle,** most of the identified approaches are related to **policy formulation** and **policy implementation**, rather than to the phase of evaluation and monitoring. Most practices to create cognitive and analytical capacities support the development of new policies, as do a range of practices of institutional coordination. The phase of policy implementation is addressed in practices aimed at policy integration and a range of institutional coordination practices. Relatively few of the identified practices aimed at creating cognitive and analytical capacities relate to the phase of monitoring, reporting or evaluation of already implemented policies. This may point to a deficit, as the potential of monitoring, reporting and evaluation for integrating implementation seems to remain untapped.

In terms of **outputs** of policy integration, we find as diverse products as impact assessments and evaluation studies, annual policy or budget reports, horizontal and vertical coordination structures, coordinator positions, inclusion of non-governmental actors, (comprehensively or partially) integrated strategies/policies and budgets, and policies with inherent co-benefits.

Concerning the **governance mechanism** used in integrated implementation, a number of approaches draw on knowledge (e.g. coherence analysis, monitoring, reporting, evaluation; consultative forms of stakeholder involvement etc.); others on participation and competences (cross-ministerial coordination; involvement of other administrative levels and national parliaments). Only few approaches draw on leadership (high-level entities overseeing/coordinating implementation) or money (mainstreaming sustainability concerns into budgets, setting climate/SDG targets for budgets).

A final gap in the debate seems that, to our best knowledge, the documents we screened did not propose an *international level* mechanisms for integrating the agendas' implementation (e.g. coordinating the reporting and review mechanisms of the 2030 Agenda and the Paris Agreement).

Finally, we would like to address the question of "what has been achieved" with regard to the **depth of integration**. On the basis of the available data, it is difficult to assess what level of integration has actually been achieved in the selected examples. We can, however, make some informed assumptions:

- Methods to create **cognitive and analytical capacities** typically support avoiding contradictions (level L4); achieving higher levels of integration will thus profit from application of respective methods.
- Forms of **institutional coordination** can support a broad variety of integration levels, from level L2 through to level L9. Much depends on the **actual practices and cultures of cooperation**, beyond the institutional forms proper. The observed approaches to integrate the implementation of the SDGs and Paris Agreement usually lead (at best) to an avoidance of contradictions (level 4 of Metcalfe's metric, cf. above). Interdepartmental sustainability strategies, too, typically do not involve a genuine search for consensus, common parameters or priorities, but are often based rather on the line-up of political projects that were planned. Generally, political actors have incentives to tap into co-benefits in order to find majorities for political projects. However, when conflicting goals are involved, decisions in the political process are usually avoided and resolved through "**negative coordination**". In central areas of sustainability policy, such as food, mobility, nitrogen discharges and or biodiversity protection, policy-makers are far from defining common parameters and priorities applying to all policy areas, and it is even difficult to reach a consensus on concrete measures. Only recently, this has been exemplified in the reform of the European Common Agricultural Policy – which largely followed a sectoral logic rather than considering cross-cutting sustainability goals.
- **Joint strategy development** requires integration level L4 or higher. To date, however, joint strategies can at best be identified for the field of climate mitigation (not, however, for adaptation or other SDG areas): climate mitigation targets are broken down for the various sectors and departments. However, the example of climate mitigation also shows that once targets have been agreed, they tend to be diluted or called into question during implementation. Integrated policy and cross-cutting tasks require a robust institutionalization going beyond the avoidance of contradictions.

The achievement of a moderate level of integration (Level 4 or 5) seems realistic for many instances of integrated implementation. This means inconsistencies are avoided, but the implementation remains in separate processes and responsibilities, and genuine synergies remain untapped. This, however, is not sufficient for promoting transformative change. In the following Chapter 4, we therefore explore how the achievement of deeper policy integration (levels L5 and higher) could be promoted through impulses from beyond the mechanisms for policy integration.

# 4 Potential drivers for deepened policy integration

The benefits and rewards of integrated policy-making do not automatically lead to effective policy integration. The mere existence of mechanisms, instruments and processes for integrated policy-making is not an indication of their use (Jacob, Volkery, and Lenschow 2010). Also, it is possible that such approaches are not effectively used and the institutionalized division of labour between departments and policy levels are rather used to pursue competing concerns. By reference to competencies, policy integration mechanisms are often left unused or applied only symbolically. We assume that different **policy integration mechanisms, processes, and instruments are a necessary condition, but in themselves not sufficient to ensure an adequate 'depth' or policy integration**. Rather, their use needs to be incentivized and their application and implementation in the day-to-day work of departments needs to be guided, so that higher levels (L5 -L9) of policy integration can be achieved.

How can we ensure that governments are actually driven to promote policy integration? The literature on (environmental) policy integration regularly refers to **political leadership** as a prerequisite and **driver of policy integration**. This implies that high-level government bodies and political leaders take ownership of and drive integration concerns. In other contexts, **science** can drive the integration of policy concerns, as can **citizens** in the context of **deliberative processes** or **(financial) market actors** concerned with obtaining a consistent and long-term framework from politics. These four potential drivers of policy integration are consistent (and slightly overlap) with the "levers" that the Global Sustainable Development Report 2019 has identified as supporting transformations towards sustainable development (which are: governance; economy and finance; individual and collective action; science and technology) (IGS 2019).

Strengthening the drivers of policy integration and addressing some of the integration challenges by giving the respective actors an appropriate role in the policy process should, we argue, be central to promoting policy integration.

## 4.1 High-level political leadership: Commitment to integrative implementation

Literature on environmental policy integration points out the need for environmental and sustainability concerns to be brought into the political process by political leaders applying political commitment and will to it (Jordan und Lenschow 2010; Dupont und Oberthür 2012). More generally, (good) leadership is held to matter for mobilizing commitment to organizational innovation and through stimulation enhance holistic governance (Perri et al. 2002: 105). With regard to the integration of conflicting policy goals, the political courage to tackle the trade-offs between these goals (e.g. mitigating climate change in the housing sector vs. avoiding undue burdens on low-income households) is crucial.

Relevant political actors whose leadership and will is required include the heads of government, the leaders of the political parties that make up the governments or the government factions in parliaments. These leaders can be expected to set common parameters or priorities, which in turn are implemented in political processes. However, leaders can also imply different lead ministries.

Cross-cutting tasks such as sustainability can be particularly attractive for the administrations of heads of government (e.g. Prime Minister's Office, Federal Chancellery) because responsibility for these issues enables them to exert control and influence over the activities of line ministries. This is why the responsibility for better regulation, for example, is assigned to the heads of

governments where, in some countries, the responsibility for sustainable development lies, too. At the same time, in many countries the competences of the centers of government are constitutionally limited vis-à-vis line ministries. As a result, integration is not imposed by hierarchy, but rather negotiated between departments. A few departments have an own role of coordinating government action, typically including finance, justice or foreign affairs. High-level government entities can also take on a coordination role by appropriating responsibilities in central issues, thereby advancing the development of integrated policy approaches. In Germany, for example, this plays a role in sustainability policy; the Chancellery coordinates the Climate Cabinet as well as 'better regulation' issues and reducing bureaucratic costs.

There are, however, different ways to define criteria for political leadership depending on context. Beyond the importance of high-level political ownership for policy integration, analysts emphasize the need for co-responsibility among institutions in contrast to sole responsibility (GIZ 2018). Therefore, it is not recommended to place a single ministry in charge of leadership but instead to enhance regular coordination among different lead institutions to ensure consistency and synergy among different priorities and strategies (ibid. 20f.).

In the context of policy integration related to SDGs, it was found that the careful choice of ministries to lead the process plays a distinctive role for an integrated implementation (Breuer et al. 2019). In the examined cases, the "usual suspects" were ministries of foreign affairs and environmental ministries that are in the lead of SDG implementation. Because environmental ministries in many countries belong to the "weaker" ministries (also see Breuer et al. 2019, 28), guaranteeing high-level political leadership from non-usual suspects, such as financial ministries or ministries of health can drive integrated implementation. Further, it appears that anchoring the international agenda to the national level and interlinking it with domestic demands promotes integrated implementation.

Some guiding questions to promote policy integration with a view to examining political leadership can be found in Annex B.

## 4.2 Self-commitment to citizen participation and deliberative processes

Another group of actors that can provide impetus for integrated policy approaches are citizens, if they are enabled to help shape policy. Appropriate procedures were introduced and tested at the municipal level in the past decades. Increasingly, national governments are also using civic participation and deliberation to generate momentum in political processes.

Deliberative approaches can be expanded, and new forms of participation tried out. The Irish Constitutional Convention (2012-2014) is an example that inspires sustainability policy (e.g. the French Citizen Convention for Climate): beyond consultation, participation can be designed in a way that key topics are discussed and decided upon in citizen juries. The random selection of their participants contributes to a non-hierarchical discourse.

In the constant quest for deliberative democracy, participation-based formats such as citizen juries or citizen dialogues have flourished as of late. They are considered "one of the most innovative methods of fostering citizen participation in government" (OECD 2020: 116). Deliberative formats differ quite distinctively from each other in terms of length, resources that went into the planning, implementation and evaluation, degree of high-level political support, range of people involved and ultimately: the outcome.

Whereas some formats seek to co-creatively develop policy through a wide range of different actors, other approaches can be considered alibi events, seeking to legitimize ready-made political decisions. In the context of policy-making, the goal of deliberation is not just to gain new

ideas, or legitimize certain policy choices but to ultimately lead to better policy outcomes based upon shared ownership over the process between decisionmakers and citizens. In that sense, deliberation can serve manifold purposes ranging from improving decision-making and policy effectiveness, to legitimizing political institutions, enhancing trust in public decisions, activating political culture and empowering citizens, and thereby ultimately counteracting polarization and disinformation (also see OECD 2020).

The demand for deliberative forms of participation is not new. Around the 2000s, an array of different studies provided insights on deliberative democratic evaluation (e.g. House and Hower 2000). In light of the recent run on different forms of citizen deliberation, research strands have begun to (re-)assess the effect of deliberative democratic processes and explore their potential for transformations (e.g. Alcantaré et al. 2014; Oppold 2016).

Several criteria are outlined for good practices of deliberate processes.[27] One core criterion regards the question of inclusion, notably granting all major stakeholders equal and fair access and actively engaging them in all phases of the policy cycle (House and Howe 2000; OECD 2017, 2020). Most forms are intended to be representative, i.e. a microcosm of the general public (OECD 2020).

Deliberation has been criticized for the (time, money) costs that go into the planning process and for processes of social selection, as people who are less educated or simply lack time are often underrepresented (Schmidt 2010). As a result, the recent OECD good practice guide (2020) on deliberative processes emphasizes the importance of encouragement and support through e.g. renumeration, expenses and/or providing childcare/eldercare. Other outlined good practice principles are purpose, accountability, transparency, information, group deliberation, time, integrity, privacy and evaluation (for a complete list see OECD 2020: 118 ff.). There are also general limitations of citizen deliberation (e.g. Rosenberg 2007). These persist, for instance, in the ad-hoc nature of most deliberative exercises, project-focused and theme-related deliberation, preventing greater complexity of public decision-making, limits to institutionalization, or not every topic being fit for deliberation (OECD 2020). Further aspects include assumptions related to the cognitive abilities of individuals, and their capacity to for rational, reasonable engagement with others (Rose 2007, Schmidt 2010).

Some guiding questions to promote policy integration with a view to examining the self-commitment to citizen participation can be found in Annex B.

## 4.3 Self-commitment to science

Policy integration can also be driven by strong impulses from science and research. Most notably, the climate agenda has been and continues to be driven primarily by science: With the IPCC at international level and corresponding scientific institutions in many countries, reference points have been created against which policy is to be measured. The parameters for climate policy (e.g. limiting warming to 1.5°C, emission budgets, reduction targets and pathways) are based on findings and suggestions by science.

Governments regularly bind themselves to the findings and advice of science. This taps into a key source of legitimacy. For science to play an appropriate role, processes and institutions are developed and mandated. There is a long tradition of setting up advisory bodies, such as the German Advisory Council on the Environment or the German Advisory Council on Global Change. Assessment processes are used internationally - many global environmental agreements provide for such processes: The state of knowledge is compiled and assessed with regard to the

[27] For a most recent overview of evidence-based good practice principles see OECD (2020).

respective policy agendas, sometimes linked to modelling and scenario processes. Corresponding processes are also increasingly being established at regional (EU, OECD) or national level. National science academies are used in many countries to assess the state of knowledge on specific issues and to derive policy recommendations. Last but not least, ad-hoc commissions are also established on specific issues, e.g. the Ethics Commission for a Safe Energy Supply, which was established after the Fukushima nuclear accident in 2011. This example also points out that the transition between scientific advice and the social representation of interests is fluid: In the Sustainability Council or in the Commission for Growth, Structural Change and Employment, both science and representatives of societal interests were or are represented. However, all examples have in common that they involve and mandate persons or institutions that generate resonance in the public and thus put topics on the agenda. To the extent that these address cross-cutting issues – the examples of the environment, sustainability, nuclear phase-out or coal are all issues that suggest integrated approaches –, pressure is created on governmental departments to act on these issues and to develop integrated policies.

## 4.4 Sustainable Finance

Another group of actors that can generate demand for integrated policies are financial market actors. If they want to invest in a climate-friendly and sustainability-oriented way, they depend on a policy framework that supports this and provides a fair investment as well as business environment. This includes long-term and reliable policy targets and measures to direct investment by private financial market actors towards more sustainable activities; as well as adjustments to public lending and investment (or divestment) policies. A sustainability orientation of investors, in turn, is an essential lever to motivate companies to become active in more sustainable, climate-friendly business fields and to account for risks related to climate change and disasters. From the point of view of financial market actors wishing to invest in relevant fields, and from the perspective of 'real economy' companies wishing to accordingly adjust their operations, an integrated policy is desirable.

With the "EU Taxonomy", the EU has developed an evaluation system that is intended to steer finance in this direction (European Commission 2020). The Taxonomy so far provides detailed assessment criteria for climate mitigation and climate adaptation. However, following an integrative approach, criteria for four other environmental issue areas included in the 2030 Agenda are being or will be developed in the future, namely for the sustainable use and protection of water (SDG 6) and marine resources (SDG 14), the transition to a circular economy (SDG target 11.6, SDG 12), pollution prevention and control (SDG targets 3.9, 6.3), the protection and restoration of biodiversity and ecosystems (SDG 14, 15). While the Taxonomy does not explicitly cover disaster risk management and considers social aspects (e.g. related to SDG 1, 3, 5) only in the form of minimum safeguards, it does provide a lever for an integrated implementation of the Paris Agreement, 2030 Agenda and potentially (in the future) further agendas such as the Sendai Framework. Other measures and instruments to promote sustainable finance envisaged by or suggested to policy-makers (SFB 2021; Federal Government 2021; Bundesregierung 2021) can also be used to promote the compatibility of finance and investment flows with the three agendas, taking into account the need of investors and companies for integrated frameworks rather than juxtaposed agendas.

## 4.5 Interim summary and conclusions

In Chapter 4, we suggested four potential drivers to deepen policy integration and promote transformative change: political leadership, citizen participation and deliberative processes, strong impulses from science and research, as well as sustainable finance. These drivers are

interlinked with each another: political leadership can arise from knowledge-based or deliberative processes and in turn can make them possible. Importantly, the drivers are not intended to replace the integrative approaches sketched above, but rather are supportive to them. While integrative processes seem indispensable for implementation of overlapping agendas as well as for transformative change, they need strong impulses to contribute effectively to implementing climate goals and the sustainability agenda. In addition, such drivers could help preventing a dilution of integration and possibly even encourage innovation in administrative processes to avoid overburdening of administrations.

# 5 In-depth analysis of approaches for an integrated implementation of international policy agendas

In this chapter, we select and analyze in greater depth good practice examples for the integrated implementation of the 2030 Agenda and the Paris Agreement, zooming in on 15 countries.

## 5.1 Method for selecting countries and approaches for in-depth analysis

We first present the methods we used to narrow down a list of countries or subnational-level entities considered as "good practices" regarding their subnational/national climate and/or sustainability policy performance. The selected examples of good practice are considered in the further analysis. The process of identifying these instances is based on a two-step procedure containing each a research and a selection step. The first step aims at detecting good practices based on available performance indices and performance databases and compiling an unfiltered list of results. To that end, we browsed databases and conducted a document review. This list was reduced to a selection of examples using specific criteria. In the second step, we reviewed the remaining good practices and conducted a second prioritization. The resulting list comprises the selected good practices for the actual analysis.

### 5.1.1 First step: Review of datasets

We first gathered good practices from different datasets on sustainability and climate policy, which are presented in the following. Our aim was to identify "good practices" as stated or ranked within these datasets. However, with exception of the SCAN database, which explicitly lists entries of good practice, the indices do not adopt the notion of "good practice". Therefore, we equated the respective highest-rated ranks of the indices with good practices and included them in our good practice list.

The first database that we examined is the **SDG Climate Action Nexus (SCAN) Tool's Good Practice Database (GPD)**. The SCAN-Tool's GPD aims to "provide high-level guidance on how climate actions can impact achievement of the SDGs"[28]. The GPD is a joint database developed through the Partnership on Transparency in the Paris Agreement, an initiative put forward by South Africa, South Korea and Germany in 2010 with the goal of improving transparency in climate policy processes and catalyzing the implementation of Nationally Determined Contributions[4], the IKI NDC Support Cluster, the UNDP NDC Support Programme, the LEDS Global Partnership, and the NDC Partnership Support Unit. Since the database applies a climate policy lens, it was searched through for records containing the key word "SDG". The results were screened and appropriate good practices concerning specifically an interlinkage of climate and sustainability policy were chosen. This led to the selection of four good practices, three of which are located at the national level, and one at city level. However, it does not get clear on the foundation of which criteria the database determines the listed good practices as such.

The **Sustainable Development Report by the Bertelsmann Foundation and the Sustainable Development Solutions Network** evaluates countries' SDG achievement, but does neither rank them nor does it contain systematic information about good practices or the interlinkage of sustainability and climate policy. However, it does not only evaluate SDG-achievement but estimates if countries are about to achieve an SDG up to 2030 if maintaining the current pace of their activities. Consequently, it can be implied that countries that still have not achieved SDG-13 but will achieve it up to 2030 on account of their policy activities can be considered as having a

[28] https://transparency-partnership.net/publications-tools/sdg-climate-action-nexus-tool-scan-tool

strong and ambitious climate policy. We recorded those countries as strong "trend performers". That comprises 15 countries tagged with a yellow mark in the report standing for "challenges remain", and one country tagged with a red mark meaning "major challenges remain".

The **Climate Change Performance Index** (CCPI) is run by the German non-governmental Organization (NGO) Germanwatch and focuses on countries' climate performance. One major caveat of the data is, that it does not assess global government efforts but only 57 countries and the EU. It consists of four categories one of which is "climate policy". It is disaggregated into "national climate policy performance" and "international climate policy performance", the former category of which was examined for those countries being rated as "high". That concerns twelve countries.

The **Sustainable Governance Indicators** (SGI) evaluate 41 OECD and EU countries' "Policy performance" examining the categories "economic policies", "social policies", and "environmental policies"; "Democracy" examining the category "quality of democracy"; and "Governance" examining the categories "executive capacity" and "executive accountability". The categories themselves are subdivided into criteria. We listed the 15 highest-rated ranks for the category "environmental policies" within the indicator "Policy Performance", and the indicator "Governance".

The **Notre Dame Global Adaptation Index** (ND-GAIN) Country Index measures countries' adaptation performance as a result of their vulnerability to climate disruptions and their readiness to leverage private and public sector investment for adaptive actions. Since the latter can be interpreted as a question of appropriate climate adaptation policy, the 15 highest-rated ranks of this category were selected in addition to the 15 highest-rated "overall-performers".

The **CAIT Data Explorer** run by the World Resources Institute (WRI) has been exploring linkages between the NDCs and SDGs. The study was carried out in 2016 and examines the degree of alignment between the (I)NDCs and the 169 targets of the 2030 Sustainable Development Agenda and mapped them geographically (Northrop et al. 2016). Because the study was only based on NDCs of 2016 and seems to be outdated, the findings were not considered as part of the screening process.

Table 3 summarizes the name and focus of the databases, our key words and selection criteria to put a country on the preliminary good practice list, and the databases' definition of good practice and/or country ranking.

**Table 3: Overview of analyzed databases, focus of database, key words used for search, database definition of good practice**

| Name | Focus | Key word/ selection criteria | How does the index determinate good practice/rank? | Source |
|---|---|---|---|---|
| SDG Climate Action Nexus Tool (SCAN) Good Practice Database | Climate policy | Search key "SDG", good practices with NDC-SDG-interlinkage focused activities | No information found on the determination of good practice | https://ndcpartnership.org/toolbox/good-practice-database |
| Bertelsmann/SDSD: Sustainable Development Report (2020) | SDG achievement | Countries having not yet achieved SDG-13, but are about to do so by 2030 if maintaining current policy activities | Using historic data from official agencies and scientific studies, the indicator depicts the estimation of a country's progress towards achieving an SDG and the likelihood of it achieving the goal by 2030 maintaining this pace. Four indicators were considered in order to evaluate the progress towards achievement of SDG-13(a) Energy-related $CO_2$ emissions ($tCO_2$/capita) – reference year 2017; (b) $CO_2$ emissions embodied in imports ($tCO_2$/capita) – reference year 2015; (c) $CO_2$ emissions embodied in fossil fuel exports (kg/capita) – reference year 2019; (d) Effective carbon rate (EUR/$tCO_2$) – reference year 2016 | https://s3.amazonaws.com/sustainabledevelopment.report/2020/2020_sustainable_development_report.pdf |
| Germanwatch CCPI (2019) | Climate policy performance | Countries holding a „high" rank for "Climate Policy"-"National Climate Policy Performance" | The index category "climate policy" reflects a comprehensive performance rating conducted annually by experts from non-governmental organizations from the respective country. They answer a questionnaire on their government's action regarding several climate and environmental policy fields. Furthermore, the indicator considers experts' assessment of a country's ambition level outlined in its NDC and its state of progress, as well as the country's performance on the multilateral stage. | https://germanwatch.org/sites/default/files/Background%20and%20Methodology%20CCPI%202019_1.pdf |
| Sustainable Governance Index Indicators (SGI) 2019 | Environmental governance | The 15 highest-rated countries in the categories „policy performance"- | The rating is derived from a qualitative assessment (questionnaire) by experts and quantitative data from official sources. The questionnaire underpinning the category "environmental policy" specifies two guiding questions: a. "How effectively does environmental policy in your country protect and preserve the sustainability of natural resources and environmental | https://www.sgi-network.org/2020/Policy_Performance/E |

| Name | Focus | Key word/ selection criteria | How does the index determinate good practice/rank? | Source |
|---|---|---|---|---|
| | | "environmental policy", and "governance" | quality?" b. "To what extent does the government actively contribute to the design and advancement of global environmental protection regimes?" The questionnaire underpinning the category "executive capacity" and the questionnaire underpinning the category "executive accountability" of the indicator "governance" are too comprehensive to be outlined here. Their guiding questions and sub-questions can be viewed here. | nvironmental Policies/Environment/Environmental Policy |
| Country Index, Notre Dame Global Adaptation Initiative | Climate adaptation | The 15 highest-rated countries in the category "readiness", and in the overall-rating | Readiness "measures a country's ability to leverage investments and convert them to adaptation actions. ND-GAIN measures overall readiness by considering three components – economic readiness, governance readiness and social readiness." The economic readiness "captures the ability of a country's business environment to accept investment that could be applied to adaptation that reduces vulnerability (reduces sensitivity and improves adaptive capacity)." The governance readiness "captures the institutional factors that enhance application of investment for adaptation." The social readiness "captures the factors such as social inequality, ICT infrastructure, education and innovation that enhance the mobility of investment and promote adaptation actions." | https://gain.nd.edu/our-work/country-index/methodology/ |

### 5.1.2 Second step: Document Review

To supplement the instances of good practices detected so far, we reviewed documents on good practices with a focus on climate and sustainability policy interlinkage in a second step. Using pertinent browsers and key terms, we examined sources such as analytical or assessment reports, guides and conference papers from international governmental agencies, non-governmental networks, and initiatives. The following documents were reviewed:

- meta-analysis of VRNs by the SDG-reviewing and -monitoring transnational multi-stakeholder network Partners for Review (Oosterhof 2019)
- analysis of good practices of NDC-SDG-interlinkage by the German aid agency GIZ and the World Resource Institute (Bouyé et al. 2018)
- results from the analysis of the NDC Partnership Good Practice Database[29]
- UNDP report containing case studies on NDC-SDG-alignment (UNDP 2017)
- UNDP background paper on synergies between the Paris Agreement and the Agenda 2030 (O'Connor & Bouyé 2019)
- report by The Energy and Resource Institute (teri) evaluating the SDG footprint of Asian countries (TERI 2017)
- report by the same institution doing so for African countries (TERI 2019)
- guide to NDC-implementation by the Swedish aid agency SIDA containing case studies (SIDA 2017)
- working paper on NDC-SDG-linkage by Ambition to Action containing case studies (van Tilburg et al. 2018)
- conference summary of Global Conference on Strengthening Synergies between The Paris Agreement on Climate Change and The 2030 Agenda for Sustainable Development, Maximizing Co-benefits by Linking Implementation of the Sustainable Development Goals and Climate Action (UN DESA & UNCC 2019)
- detailed study on SDG-related co-benefits from NDC activities in Mexico by the Mexican government and GIZ (GIZ 2018)

These sources were scanned for good practices to be added to the preliminary good practices list. As part of this analysis, we did so regardless of the explanatory scope the respective good practice receives in the underlying source. Applying the so far mentioned methods, the stocktaking resulted in a list with 72 records of good practices.

### 5.1.3 Third step: Selection process

In the first step of the selection process, we aimed at narrowing down the list of 72 entries (good practice examples) to a maximum of twenty-five entries. With respect to the subsequent analysis, we wanted to prioritize good practices with a higher information availability. Therefore, we transferred the good practices list into a table with columns containing the following information to be checked off per entry:

[29] https://ndcpartnership.org/good-practice-database

- whether the entry occurs among the good practices identified in the datasets;
- whether an entry identified as a good practice in the datasets occurs additionally in the reviewed documents;
- whether an entry occurring in the reviewed documents is specifically highlighted as a good practice there; and
- whether the entry occurs more often than three times in the documents reviewed and the number of occurrences.

Evaluating the table, we selected twenty-one cases of good practices at the national level and two good practices at the city level for further analysis.

To finalize the good practices list, we further reviewed the selected national-level good practices in terms of their importance in German co-operation. Firstly, we checked if the respective country is part of the partnerships confirmed or established by the German Federal Ministry for Economic Cooperation and Development in the context of its "reform concept 2030"[30], or part of the partnerships established by the ministry in the context of its "initiative programme 2030 Agenda"[31]. Secondly, we conducted an internet research using pertinent key words to find further partnership initiatives with Germany in the area of sustainability and/or climate policy. As a result, we detected another nine partnership alliances and initiatives. Consequently, we checked if the pre-selected countries have a membership status in these initiatives. Lastly, we counted the number of partnership alliances which each country is a member of, whereby it needs to be mentioned, that two of the partnership initiatives were half-weighted, the one due to inactivity, and the other because Germany is not a member of it, but the European Union is. We selected the countries that are a member in four or more joint partnership initiatives, narrowing down the good practices list to 15 country-level good practices and two city-level good practices.

## 5.2 Description of integrated approaches in good practice countries

This section enumerates the identified 15 good practice countries following the method outlined above and briefly lays out, in which terms they are considered "good practices". Therefore, we classify their approaches into the following integration types:

- **1: Creation of cognitive and analytical competencies:** ex ante and ex post policy monitoring, evaluation and knowledge management as well as concurrent (indicator-based) analysis that pays attention to different thematic areas and their interlinkages;
- **2: Institutional coordination:** inter-departmental and inter-administration committees, collaborative units, task forces etc. The approach addresses the process, not substantive outcomes of politics. It includes:
  - a) Coordination within **governmental agencies and bodies**.
  - b) Coordination **between governmental and non-governmental actors**, e.g. private-public partnerships, participation of community organizations.

[30] https://www.bmz.de/resource/blob/24906/edf8e270745a32c82fe40aa42edc3ec6/sMaterialie510_BMZ2030_Reformkonzept.pdf

[31] https://www.giz.de/de/downloads/giz2019-de-Nachhaltig%20in%20die%20Zukunft-Das%20Initiativprogramm%20Agenda%202030.pdf

- **3: Joint strategy development**: Aligning climate action (NDCs) & SDG implementation, and vice versa; the approach focuses on outcomes, not the process of politics.
  - a) Mainstreaming **(integrating 'by design')** climate and sustainability concerns in various domains of policy making, including finances.
  - b) **Using (inter/sectoral) policies with inherent co-benefits**: implementation of sectoral or inter-sectoral policies that per se include co-benefit for other sectors.

The findings are presented in Table 4. The table only summarizes the examined policy integration actions' assignment to the integration types. A full account of the good practice cases' integration measures is presented in Appendix A.

The data in Table 4 and Appendix A has certain limitations:

- The examined data sets and documents often regard aspiration and early stages of governmental planning, but information on the actual state of implementation often remains unclear.
- As per project requirements, the list includes countries, that have an existing cooperation with Germany. Since Germany cooperates with almost every country in some way, we focused on bilateral economic development and climate change policy cooperation.
- The examined documents in most cases do not specify or make transparent why certain countries were selected and to what extent they are considered good practice. We tried to address this limitation by setting up a separate table, which makes the definitions and scoring methodology of the data sets transparent (see Table 3). However, in some cases, information on this was also limited.
- The reviewed documents often only considered a selection of countries and provided insufficient information on the selection process. As a result, they must be treated with caution as other countries, such as Norway or Canada, were implemented policy integration may be more advance did not make the list.
- In addition to the outlined documents reviewed (see Chapter 5.1.2), we included selected pieces of secondary literature for a rough assessment on integration clusters.
- The reviewed documents are also characterized by data gaps, for instance, there was a lack of information on integrated data monitoring and evaluation for Costa Rica. However, we have reason to assume, that all of these clusters can be found in the list of pre-selected countries. Therefore, a next step would be to fill these gaps through the consultation of secondary literature and further sources.

Therefore, the list as well as the case sheets in the appendix must be considered non-exhaustive. Our preliminary observations lead us to believe, that, despite the fact that the examined countries stand out in comparison to other countries, they still have implementation deficits and that existing approaches are not innovative enough. Therefore, the subsequent chapter examines select examples of practices in these 15 countries which we believe to have potential for deepened integration.

**Table 4: Examples of good policy integration practice and the types of their policy action**

| Country | Creation of cognitive and analytical capacities | Institutional coordination | | Joint strategy development | |
|---|---|---|---|---|---|
| | | with governmental actors | with non-governmental actors | mainstreaming 'by design' | using sectoral co-benefits |
| #1 Bangladesh | x | x | x | x | |
| #2 Colombia | x | x | | x | x |
| #3 Costa Rica | x | | | | x |
| #4 Finland | x | x | x | x | |
| #5 France | x | | x | x | x |
| #6 India | | | | x | |
| #7 Indonesia | x | x | x | x | |
| #8 Japan | | x | x | x | x |
| #9 Jordan | x | x | x | x | x |
| #10 Kenya | x | x | x | x | x |
| #11 Korea | x | x | x | | |
| #12 Mexico | x | x | x | x | |
| #13 Mongolia | x | x | | x | x |
| #14 Netherlands | x | | x | x | x |
| #15 Philippines | x | | | x | |

## 5.3 Pre-selection of countries for detailed analysis

When examining the above countries and their approaches of policy integration, certain countries stand out regarding their different take on certain types of policy integration. The following chapter section briefly presents their approaches and suggests certain drivers, that may have played a role. This list is non-exhaustive, and more countries are interesting candidates for further analysis. The preliminary findings suggest that time plays a role for the state of policy integration along the policy cycle (planned vis-à-vis implemented efforts) but due to scope this was not examined in greater detail.

Table 4 pointed out which countries were identified as part of our review and as examples for good policy integration practice, and in which area (creation of cognitive and analytical capacities; institutional coordination; joint strategic development) their reviewed policy actions take place. Appendix A explicates the respective underlying policy actions. The incentive of this chapter section is to examine some outstanding approaches in every of the determined areas. To this end, we reconsidered the underlying data basis of the identified countries for each type of policy action with respect to the following aspects: (a) which policy actions are best documented in the data basis; (b) comparing the data material of the identified countries for each policy actions type: which policy actions prove most advanced, most elaborated and/or most successful? This resulted in the determination of one outstanding example for the creation of cognitive and analytical capacities (Costa Rica), and respectively two outstanding cases for

institutional coordination at governmental level (Mexico and Japan), institutional coordination with non-governmental actors (Kenya and France), and joint strategy development (Bangladesh and Mongolia). These cases will be illustrated in detail below. Additionally, we suggest certain drivers that may have played a pivotal role in establishing the approaches outlined.

### 5.3.1 Standing out for the creation of cognitive and analytical capacities: Costa Rica

Costa Rica was chosen as an exemplary case that stands out in terms of the creation of cognitive and analytical capacities, notably the governmental coordination for integrated data and monitoring. Our preliminary analysis suggests that there are multiple other cases that have either implemented or are planning to implement innovative types of integrated data monitoring and evaluation. For the planning phase, this includes Colombia and regarding implementation Kenya and the Philippines.

#### 5.3.1.1 Costa Rica

*How is the creation of cognitive and analytical capacities happening?*

Costa Rica has been an exemplary candidate for integrated data monitoring and evaluation, which includes mapping of synergies between the NDCs and SDGs and identifying progress on SDGs within a registry of adaptation and mitigation actions. This was done through the creation of SINAMECC (Sistema Nacional de Métrica de Cambio Climático), a National Climate Change Metrics System. SINAMECC is an open-source software and can be considered a platform that integrates the monitoring and reporting to highlight the interaction between climate change and the development agenda. Further goals of the platform were to standardize concepts and reporting data and thereby make reporting more efficient (Morales 2020). The platform has been described as "an MRV of MRVs" (ibid.). The underlying aims of the platform are to improve evidence-based decision-making, saving resources and improving South-South cooperation.[32]

The platform delivers different interpretations of data to analyze potential synergies between the agendas and offers interactive visualizations of the targets and actions between climate policy and SDGs such as an overview of NDC goals with the most SDG interactions.

Further analytic examples include a relationship mapping between NDC targets and SDGs, which analyze different reinforcing effects and positive relations as well as limited, counteracting and cancelling effects.

The lead actors for the establishment are the Ministry of Atmosphere and Energy (MINAE) in cooperation with the Ministry of Planning and Economic Policy (MIDEPLAN) and the National Institute of Statistics and Censuses (INEC) in addition to the National Meteorological Institute, Foreign partners include amongst others UNEP, UNDP and the GIZ. As part of the platform, adaptation, mitigation and climate finance are the three main functional areas, for which SDGs are analyzed as transversal co-benefits.

The data also serves to update Costa Rica's NDC and climate action registry to increase policy ambition. The platform fundamentally informs future governmental target setting related to change and has helped to systematize how information is collected, between different governmental agencies.

*Why is it happening that way? What is the driver?*

[32] For a full description of the platform, its aims and list of partners see: "SINAMECC," last accessed May 26, 2021 via: https://climateactiontransparency.org/icat-toolbox/sinamecc/.

As chapter four laid out, good leadership matters in mobilizing commitment and organizational innovations (also see Perri et al. 2002). Costa Rica has long been considered a leader in sustainability and an early pioneer of mainstreaming sustainable development into the National Sustainable Development Plan (BS 2013). Compared to its neighbors with a similar geographical and geopolitical context, Costa Rica was one of the early examples of "courageous decisions made at the highest level of government," (ibid. 81). As a result, it set an early example that was followed by Mexico and Ecuador which went on to establish similar systems that are comparable to Costa Rica's innovative Payment for Ecosystem Services scheme (ibid.). The Ministry for the Environment and Energy published the Conservation Strategy for Sustainable Development as early as 1990 and provided a solid foundation for subsequent policies and legislation. The actions and holistic visions of development by different Costa Rican leaders and decisionmakers are considered to have made a difference for Costa Rica's path.

In addition to leadership at high government level, south-south cooperation and triangular cooperation has been considered to play a significant role for achieving the SDGs and advancing the implementation for NDCs and NAPAs (UNFCCC 2018).

*Effects and implications*

Costa Rica started by focusing on building a technological platform. For that, it relied on scientific advice and applied the framework as developed by the Stockholm Environmental Institute (SEI). The platform is signified by a strong procedural design and cooperation that was set up with different ministries but was also considered one of the hardest challenges, based on the different languages the ministries spoke in terms of their sectoral backgrounds and different interests (Morales 2020). At the beginning of the process, involved stakeholders had different understandings of the objectives of integration. Further, integration was strongly approached from a climate change perspective, which ultimately hampered the thinking from an SDG perspective. Non-climate stakeholders were too late integrated in the planning process. Further factors, that hampered the process, was the lengthy time (5+ years) it took to build the platform.

### 5.3.2 Standing out for institutional coordination (procedural policy integration at government-level) (2a): Mexico and Japan

In the following, two different examples for procedural integration are presented. These include procedural integration within governmental structures (i.e., institutional coordination) in Japan and across different levels of governance in Mexico. Based on our preliminary analysis, further potential candidates for a deepened examination of procedural policy integration are: Colombia, Indonesia and Bangladesh.

#### 5.3.2.1 Mexico

*How is procedural policy integration happening?*

Mexico is considered to be a good practice concerning the collaboration of lead institutions to foster synergies between annual work plans, and SDG-NDC mainstreaming strategies in planning and finance. In February 2017, the Office of the President of Mexico being in charge of the 2030 Agenda agreed on close cooperation with the Ministry of Environmental and Natural Resources (SEMARNAT) and the National Institute of Ecology and Climate Change, which are jointly responsible for implementing the NDC. The institutional coordination is exercised through consultations in determining the annual work programs of the Inter-Ministerial Commission for Climate Change (CICC) and the National Council for the 2030 Agenda. Since 2017, the National Council for the 2030 Agenda is the main implementation body. It is a multi-stakeholder body chaired by the President. The CICC among other inter-ministerial commissions advancing the

national development plan is assigned by the president to mainstream the SDGs in their activities. Furthermore, the President's Office regularly initiates working groups under the CICC to discuss SDG-NDC linkages and strategies to build synergies and co-benefits. "Overlapping memberships and similar high-level participation have facilitated the understanding and ownership of this objective of greater consistency: Fourteen ministries are represented at the secretary level in both the National Council for the 2030 Agenda and the CICC," (Bouyé et al. 2018).

With regards to vertical policy coordination, the Office of the Presidency has keenly supported the foundation of local SDG committees. The President's Office and the Conference of Governors supervise the evolvement of local implementation plans and ensures alignment with national priorities (Bouyé et al. 2018; UCLG 2020). These bodies will foster coherence of local development plans and regulations with the national strategy for the 2030 Agenda federal climate-change programs (Bouyé et al. 2018). "Additionally, local governments are in the process of establishing their own mechanisms to follow up on the implementation of the 2030 Agenda" (GIZ 2018).

*Why is it happening that way? What is the driver?*

The case of Mexico indicates strong leadership to be a main driver for policy integration. This becomes evident from the pivotal organizational and strategic role of the President's Office prioritizing the coherence of both agendas and setting institutional structures to put that into practice. This is also supported by providing resources through a budgetary alignment exercise carried out in 2017 by the President's Office and the Ministry of Finance and Public Credit (SHCP). In this exercise different SDG targets were assigned budgetary programs contributing to them. "This exercise informed the process to elaborate the 2018 Federal Expenditures Budget (PEF), and should be taken into account for subsequent budgeting processes, in order to guarantee that the PEF is an effective means of implementation for the achievement of the SDGs" (GIZ 2018). Evenly, legislative and strategic efforts contribute to promoting policy integration. Especially Mexico's Planning Law and Climate Change Act, which were both revised in the last years, are considered supportive leading policy tools reflecting high-level political commitment (International Partnership on Mitigation and MRV 2015; Bouyé et al. 2018).

#### 5.3.2.2 Japan

*How is procedural integration happening?*

Japan is an example of policy integration within high-level government structures. The institutional process for SDG and NDC implementation in Japan is considered to be well-integrated, signified by an involvement of all the ministries and agencies in the SDG and NDC implementation process – they continuously cooperate and report on progress to the Cabinet Office and Cabinet Secretariat (UN 2019). Both processes are led by the same governmental entity, which is the Global Warming Prevention Headquarters (GWPH) inside the Cabinet and chaired by the Prime Minister. The GWPH was established in 1997 with the aim of implementing the Kyoto Protocol and includes representatives from all ministries. As a result, the SDGs have been approached through a climate lens. Aside from the Prime Minister and the Chief Cabinet Secretary as Chiefs of the Headquarters, the GWPH, included non-usual suspects in the planning right from the beginning: together with the Minister of the Environment, the Minister of Economy, Trade and Industry act as deputy chiefs. All other Ministers of State are included as full members.[33] The government of Japan has developed separate visionary plans for the

[33] See "Establishment of the Global Warming Prevention Headquarters," provisional translation last accessed June 9, 2021, via: https://japan.kantei.go.jp/policy/ondanka/konkyo_e.html.

implementation of the SDGs and NDC in addition to other national strategies such as the Fundamental Plan for Establishing a Sound Material-Cycle Society, the National Biodiversity Strategy of Japan 2012–2020 and the Plan for Global Warming Countermeasures (UN 2019). These together are said to provide the platform for institutional integration of the two agendas at the top level of government (ibid).

*Why is it happening that way? What is the driver?*

Japan offers a good example of procedural integration that is driven by the top level of decision-making. The country has had significant interests in exerting political leadership at the global governance level (Schreurs 2009, Sofer 2016). Domestically, increasing Japanese leadership was discussed in the context of the then main opposition party, the Democratic Party of Japan, which was a key player in Japanese domestic politics from 1998 to 2016 and pledged to triple Japan's emissions reduction target (Sofer 2016). In that sense, Japan was characterized by a one-party political system, with the Liberal Democratic Party playing a central role in combination with competing policy networks and dominant players from the business sector (Peng Er 2010). Unsurprisingly, policy integration has had a strong focus early on in terms of integrating environmental and economic concerns with strong leadership on energy efficiency and energy security.

However, despite Japan' progressive engagement through high-level political leadership for policy integration, the engagement of the broader public and more reflexive government structures marks a major concern, that has been re-emphasized in the environmental context recently (Ohta 2020). Overall, Japan is contested case of leadership when it comes to climate and environmental concerns (also see De Wit 2020).

### 5.3.3 Standing out for institutional coordination (procedural policy integration with non-governmental actors (2b): Kenya & France

Kenya and France were selected for further analysis because they present two different approaches of procedural integration regarding the inclusion of non-governmental actors. Whereas Kenya has focused on including civil society organizations through a very formalized process that was backed by the Climate Change Act, which established a Climate Change Council and stipulated the inclusion of different non-state actors.

Further potential candidates for deepened analysis are Finland, Indonesia and Mexico.

#### 5.3.3.1 Kenya

*How is procedural policy integration happening?*

The SDGs Kenya Forum is an initiative succeeding the endeavors of Kenya's Civil Society Reference Group on the UN post-2015 Development Agenda and the reference group led by the Global Climate Adaptation Partnership, who engaged with the government in the process of negotiating the 2030 Agenda and the Paris Agreement (Bouyé et al. 2018). As it outlines on its website: "The SDGs Kenya Forum, since its adoption in 2016 March, has continued to mobilize and convene Civil Society Organizations (CSOs) for joint action towards sustainable development. As current co-chair of the Interagency Technical Working Committee (chaired by the State Department of Planning, National Treasury), the highest SDGs Coordinating Organ in Kenya, the SDGs Forum continues to ensure that civil society organizations' voices and perspectives shape the SDGs agenda in Kenya." Since 2017, civil society organizations have been submitting progress reports to inform Kenya's VNR (sdgkenyaforum.org). The SDG forum stands out in that it brings together climate and sustainable development actors, thereby promoting a bottom-up and joined approach (also see GIZ 2018).

"The forum gathers about 100 Kenyan NGOs working on a wide range of sustainable development issues, including climate change, to build a common vision and engage with the government in a coordinated manner. The forum's coordinators acknowledge that more work has to be done to demystify the climate agenda, which seems overly technical to NGOs not directly involved in climate negotiations and NDC implementation. The forum holds workshops to spur its member organizations to move out of their silos and connect the dots among the human rights, security, development, and climate agendas. It has conducted capacity-building activities to mainstream the LNB [leaving no one behind] principle in the operations of all its members and has organized local community dialogues to identify and consult with the most marginalized groups. The secretariat to the forum has also promoted an overall vision in engaging with the government. The secretariat assessed the alignment of the country's Medium-Term Plan with the SDGs and African 2063 Strategy (the shared strategic framework for inclusive and sustainable growth in Africa), made recommendations to the African Union's green economy strategy, and provided inputs to Kenya's 2016 VNR. The secretariat has also conducted awareness-raising activities for subnational parliaments at the county level on appropriate budget allocations for the SDGs and for NDC implementation" (Bouyé et al. 2018).

Furthermore, Kenya's Climate Change Act prescribed the establishment of a Climate Change Council whose members shall i.a. include "a representative of the private sector nominated by the body representing the largest number of institutions in the private sector; a representative of the Civil Society nominated by the most representative registered national umbrella association of civil societies working on climate change; a representative of the marginalised community […]; a representative of the academia nominated by the Commission for University Education" (National Council for Law Reporting 2016). The Council is required to publish a public engagement strategy annually. Furthermore, the Climate Change Act indicates that public consultation "in a manner that ensures the public contribution makes an impact on the threshold of decision making" is also an obligation for the formulation of a National Climate Change Action Plan and all further climate policy actions (National Council for Law Reporting 2016).

*Why is it happening that way? What is the driver?*

The outlined case of Kenya constitutes a significant example for deliberation being a main driver for linking development and climate change. The SDGs Kenya Forum shows how a strong civil society can promote policy integration through an institutionalized procedural inclusion into development and climate change policy formulation. The forum does so by occupying a twofold function. On the one hand, it operates coordinating and moderating in the context of encounter of a vast range of actors. It enables the exchange of knowledge and skills in an out-of-the-box cross-bonding approach. On the other hand, it actively inserts the outcomes into national policy. The forum is a good example for a well-included, broadly representative, institutionalized non-governmental body.

#### 5.3.3.2 France

*How is procedural policy integration and happening?*

Procedural policy integration has been occurring through the inclusion of a range of different actors from cities, unions, business, NGOs, associations, and the parliament as part of the National Council on the Ecological Transition (GIZ 2018). Consultations across government and different interest groups have played an important role for the formulation of a climate-smart agriculture strategy in the France's Law for the Future of Agriculture, Food and Forests (LFAFFF).

*Why is it happening that way? What is the driver?*

Aside from high-level leadership and political support by the advisory National Council on the Ecological Transition and French president Emmanuel Macron, science-based advice and high-level commitment to active deliberation have significantly influenced the contextual environment of France. Here, the active involvement of civil society has been going beyond processes of consultation but also engaged in deliberation, as represented in France's most recent climate citizen assembly (French Convention Citoyenne pour le Climat, CCC). The CCC was held between 2019 and 2020 and consisted of eight different sessions. Compared to other citizen juries and representative citizen deliberations, the French example stands out in terms of resources invested into the planning, lengthy period of the entire process and setting up a mini-public that represents members from all parts of society. The CCC involved the National Center for Scientific Research and was France's first citizen jury consisting of 150 people that were all drawn by lot, starting from the age 16. These 150 people learned about debate and were divided into different working groups which from time to time met with different experts to inform the process. The origins of the movement are said to rest in the deliberative democracy movement and the green movement against the background of the Yellow Vest protests against the carbon tax. This specific circumstance led to a wave of unstructured protests in 2018 demanding more direct democracy. The French Economic, Social and Environmental Council (Conseil économique, social et environnemental, CESE) ended up being tasked with setting up the citizen jury to meet this demand and ultimately building social support for climate measures.

Since the CCC was set up and implemented with representativity and co-construction as an original feature that were divided across thematic groups to vote on a block of measures. This process was constantly informed by academic consultants, experts and fact checkers. The CCC ended up approving 149 measures. Despite some frustrations over the process in terms of the Macron administration being the ultimate entity in charge for the selection of proposals that were to be implemented half of the proposals are currently in the process of being implemented at various levels. Interestingly, after the mandate had ended members of the CCC were given the possibility to remain in discussions with civil servants of government and have done so.

*Effects and implications*

The French citizen assembly has been criticized for lacking revolutionary potential by being mainly consensus-based. Aside from fostering self-organization of citizens, assembly members tended to counterbalance each other, therefore coming up with an agreeable pathway. Challenges that were pointed out in the process, was the ongoing political struggles between the Convention, different governments and political camps. Right-wing camps had initially claimed that these citizens of the assembly cannot be trusted, because they are left-wing activists, whereas left-wing camps had claimed the process cannot be trusted initially because of the inclusion of President Macron. In setting up the CCC significant time needed to be spent on building trust in the process and citizens' output. In the end, the outcome was that half of the proposals were dropped and some media outlets questioning, if the French citizen assembly constitutes a failed experiment (e.g. see DW 2021)

Therefore, an important question to consider is the conditions under which citizen juries can deepen policy integration through impacting the contextual environment of the country. Certain benefits of citizen juries for policy integration stand out in that they offer more holistic forms of governance through taking into consideration the very demands of different parts of society. At the same time, decisions more legitimate and experience greater acceptance because they were co-created through different societal actors.

### 5.3.4 Standing out for joint strategy development (3a/3b): Bangladesh & Mongolia

The following two countries were examined in detail because they present different examples of focal integration. Further potential candidates for joint policy integration through integrated goal-setting and co-benefits are Colombia and Kenya.

#### 5.3.4.1 Bangladesh

*How is joint strategy development happening?*

Bangladesh has been exploring integration and SDG-NDC alignment at the poverty-environment-climate-disaster nexus. The country has approached policy integration in terms of joint target setting and exploration of co-benefits strongly from a focus of climate change adaptation, emphasizing how the implementation of SDGs will be strongly affected by climate impact (ICCCAD 2017). Bangladesh's exceptional climate vulnerability is considered the specific context factor, which has informed most of the planning, e.g. by exploring how climate variability intersects with poverty in terms of projections related to the reduction of long-term rice production and food security concerns. Because of that and in contrast to other countries, Bangladesh has placed a focal interest of thematic mainstreaming on climate adaptation. Thereby, it has often explored the social dimensions, e.g. by looking at persons and populations affected for instance in terms of climate sensitive disasters affecting critical infrastructure such as education and resulting in heightened vulnerability of children and primary schools (ICCCAD 2017: 1).

Against the background of increasing food security concerns and occurrence of extreme heat event, the country has been cherished for having a "transformative agricultural strategy" that is signified by a high level of integrated solutions and policy mainstreaming in both directions (GIZ 2018). The main actor is the Ministry of Environment and Forest in charge of overseeing NDC implementation together with the Planning Commission that is in charge of including climate goals as part of the SDGs and sectoral policies. Further actors include the International Centre for Climate Change and Development (ICCCAD), a partner organization of the Citizen's Platform for SDGs, Bangladesh.

For Bangladesh, climate-related planning is embedded in the SDG process and placed under the SDG framework. In addition to its focus on poverty and agriculture, Bangladesh has placed a strong focus on SDG 15, with reference to mitigation actions for afforestation and reforestation. This has been occurring in addition to exploring SDG-related interlinkages as part of the country's NDC (for detailed information see Table 4). Further, Bangladesh has recently been exploring the importance of "loss and damage", as stipulated under the Paris Agreement for its policy integration processes.

*Why is it happening that way? What is the driver?*

Aside from Bangladesh's long-term experience with climate vulnerability, adaptation and disaster risk reduction, the citizen platform for SDGs has been an important civil society-based driver pushing the implementation of the 2030 Agenda and fostering policy integration through this perspective. The platform was formally launched in 2016 and is based on a participatory and multistakeholder-approach, including 63 partner organizations from across the country (ICCCAD 2018). In total, the platform has 124 partner organizations, ranging from local Bangladesh NGOs such as the Dhaka based NGO Action for Social Development, leading international humanitarian organizations such as CARE, or Oxfam, or national University

organizations.[34] The platform is a vivid advocate for integrated SDG responses and solutions, incorporating concerns of marginalized communities and efficient social protection. In the governmental process of prioritization of 40 out of 241 SGD targets and better localizing the SDGs, the platform has pushed its main motto to "leave no one behind" and firmly embedded the perspective of marginalized communities.[35] The platform considers the engagement of diverse voices of different societal sectors, which are key for localizing SDG processes and effectively delivering related public services (see CPfCC).

Eight members comprise the core group of the platform and are characterized by their diverse expertise and professional backgrounds, ranging from the executive director of Transparency International Bangladesh, former advisors to different governmental ministries, such as the Caretaker Government of Bangladesh, or the Ministry of Primary and Mass Education and other national bodies. Further, the core team has expertise related to different organizations including the Centre for Policy Dialogue, NGOs and civil society organizations. They appear to share a deep commitment to strengthening participatory and social engagement processes against the background of the SDG delivery process. This is also reflected in the "Convenors Message" of the platform, which stresses the need for "getting the 'demand' right" regarding the 2030 Agenda for Sustainable Development through the participation of "all stakeholders" to enable an "effective and timely delivery of the SDGs in Bangladesh". The platform was set up against the background of disappointment over the lack of adequate accountability mechanisms in the context of the Millennium Development Goals and the desire to "get it right" this time in case of the SDGs.[36]

#### 5.3.4.2 Mongolia

*How is joint strategy development happening?*

Mongolia's economic development is highly dependent on resource extraction. In combination with a high climate change vulnerability, this renders development-climate change policy integration quite urgent. Thus, green growth policy in line with development goals has received great attention by the Mongolian Government since the late 2000s. In 2014, Mongolia adopted its National Green Development Policy (NGDP) as a key synergetic document. It mainstreams the SDGs through the development policy outlined in Mongolia's Sustainable Development Vision 2030 and the Sustainable Development Outlook of Mongolia. Interlinkages with climate change policy set in the NGDP informed the formulation of Mongolia's NDC. The NGDP sets out five strategic principles and six strategic objectives, pointing toward sustainable economic growth, ecosystem preservation, and green investments (Ministry of Environment, Green Development and Tourism w.d.). The Ministry of Environment and Tourism prepared an action plan for implementation in collaboration with various stakeholders, which was approved by the Government in 2016. The National Statistical Office in cooperation with the UN Partnership for Action on Green Economy prepared 14 NGDP indicators and 108 output-level indicators aligned with the SDG indicators to monitor the NGDP implementation.

"The cross-cutting and synergistic approach taken by Mongolia through the formulation of these policies creates an innovative development model that ensures the improved well-being and prosperity of Mongolian citizens through a sustainable path. This effort safeguards the sustainability of ecosystem services as well, increasing the effective consumption of natural

[34] For a full list of partners see "Partner Organisations", last retrieved June 8, 2021 via the Citizen Platform for Climate Change Bangladesh, at: https://bdplatform4sdgs.net/partners/.

[35] Also see "The government has prioritised 40 targets for Bangladesh out of the 241 SDG targets" last retrieved June 8, 2021 via the Citizen Platform for Climate Change Bangladesh https://bdplatform4sdgs.net/localising-the-sdgs-in-bangladesh-from-social-audit-to-social-contract/

[36] For the full speech, see "Convenors Message" last retrieved June 8, 2021 via the Citizen Platform for Climate Change Bangladesh, at: https://bdplatform4sdgs.net/convenors-message/.

resources and ensuring economic growth that is inclusive and environmentally sound. Consequently, it sets an exemplary precedent in how a well-designed national policy can contribute to the achievement of both NDC and SDGs while addressing all the three pillars of sustainable development i.e. social, environmental and economic development" (Transparency Partnership 2019b; SIDA 2017).

*Why is it happening that way? What is the driver?*

In the case of Mongolia, finance can be assumed to be a key driver for linking climate change and development concerns. Mongolia's NGDP focuses on economic growth in the first place and how growth can be promoted in an environmentally and socially sustainable way. Questions around establishing sustainable economic growth and sustainable financing structures are at the center. This becomes evident, for example, from the problem-framing depicted in the NGDP's reasoning: "Mongolia is facing numerous challenges, including poverty, un-equal income distribution, a natural resource-based economic structure, the inefficient and wasteful consumption of energy and other resources, obsolete technology and techniques and a vulnerability to climate change. Thus, Mongolia needs to change the current "Grow first and Clean-it up later" approach in order to improve the quality of living conditions for its people by building inclusive economic growth, and by increasing productivity based on the development of environmentally friendly, effective non-waste production," (Mongolia w.d.). Clearly, climate change-sensitive development policy action is geared toward enhancing productivity levels through attracting sustainable business, tapping new markets and setting incentives for companies to create value in a sustainable manner.

Mongolia has elaborated a diversified financing strategy to meet the estimated 6.96 billion USD demand arising from the NGDP through its Sustainable Finance Initiative, the Mongolian Green Finance Corporation, and the collaboration with the UN Partnership for Action on Green Economy. Mongolia thus seeks to create a sufficient economic environment for green investments in various sectors, and green jobs (Ministry of Environment and Tourism 2019).

## 5.4 Interim summary and conclusions

We presented 15 countries that stand out for their integrated implementation of both the climate and sustainability agendas. Due to scope, we focused the detailed empirical analysis on the integration of the SDGs and Paris Agreement. The limited amount of literature related to the integration of DRR in other policies and of other concerns in DRR suggests that integration processes here are not significantly advanced.

The identified countries are all engaged in different types of policy integration along the lines of integrated monitoring and evaluation, different forms of procedural integration (this includes horizontal as well as vertical integration across sectors, government bodies and hierarchies and more rarely non-governmental actors) and target alignment. Our preliminary analysis suggests that some of these practices are exemplary in terms of their potential for deepened integration. We selected some of these practices for a deepened analysis of drivers. Costa Rica is an example of an elaborate scheme of integrated data monitoring and evaluation. We suggest that leadership at high-level of government is one driver, that might have led to strengthened engagement with policy integration. Following the Costa Rica example, other countries stand out as well and were examined.

The case studies also demonstrate: the mechanisms, instruments, and processes for integration are a necessary, but not a sufficient condition for integrated policy-making. In addition, political leadership is needed to prioritize the underlying agenda. Political leadership by the heads of

governments and states is, however, a rare resource. We explored additional sources to provide leadership and a demand for integrated policy-making (drivers of integration).

# 6 Transferability of integrated approaches

Based upon our empirical analysis, we generally assume that certain factors (positively) influence the transferability and implementation of deepened policy integration. In this chapter, we want to briefly lay out what criteria need to be considered when transferring them to other countries (chapter 6.1) and Germany (chapter 6.2). The following chapter (6.1) briefly looks at potential influencing factors that need to be considered and draws upon from insights of the policy transfer literature and the enabling and constraining factors that were outlined in chapter section 2.5. One major finding of this chapter is, that policy transfer is deeply context specific and thus requires the consideration of integration needs. The chapter thereafter (6.2) draws preliminary hypotheses for the concrete transfer of integration tools and drivers to Germany. Because we did not conduct an analysis of integration demands, gaps and limitations in Germany, this chapter must be considered work in progress and formulates preliminary hypotheses upon which potential next steps for research and integration practice can follow. Next, we provide an excursus on processes of implementing the SDGs and Paris Agreement in Germany (Chapter 6.3). An interim summary and conclusions end this chapter (Chapter 6.4).

## 6.1 Factors influencing policy transfer[37]

Some countries introduce policies and political institutions earlier than others, and a widespread phenomenon is the adoption of these examples from pioneers by other countries. If such diffusion processes are actively initiated and supported, then we can speak of policy transfer. Which of the objects considered so far can be considered for transfer?

Firstly, a country can adopt the **agenda of integrated implementation**, based on the examples of others. This would mean adopting similar views of problems and the goals. Second, the **tools and processes for integration** are candidates for transfer. Third, while the drivers for integrated implementation (elaborated in this paper: leadership, deliberation, finance, and science) may differ, the **policy processes of drivers are transferable.**

Altogether, policy transfer is a complex, recursive and iterative learning process in which various influencing factors act simultaneously. In this process, the influencing factors can neither conceptually nor analytically be sharply distinguished from one another. Rather, different factors of policy transfer processes are closely interwoven and path-dependent. Many influencing factors have to be reconciled: Objects of transfer and integration, transfer mechanisms, contexts and capacities, and temporal aspects. Actors, who often have different roles, capacities, and interests, must also be considered. For example, the combination of the characteristics of an object and how it corresponds to the socio-political, cultural or economic context of the target country can be relevant for transfer success (target country compatibility). The following section will briefly lay out broader factors that need to be considered when engaging in transfer. These are:

### 6.1.1 Objects of transfer and integration tools

When transferring policy goals and integration tools, it must be taken into account that goals and tools are also context-dependent and must be adapted to the respective initial situations, i.e.

[37] The text on the influencing factors was translated from Teebken, J.; Jacob, K.; Heyen, D. A.; Wolff, F.; Kalt, G., Bauknecht, D.; Prakash, S. (forthcoming): Identifizierung und Systematisierung von Einflussfaktoren auf Umweltpolitiktransfer. Kenntnisstand der Forschung zu (Umwelt-)Politiktransfer mit Bezügen zur Transformationsforschung. German Environment Agency, FKZ 3 717 18 101 2.

they must be adequate. Ideally, policy goals and integration tools are formulated "smart" (specific, measurable, achievable, relevant and timed) in the target country.

When transferring integration tools, policy instruments and instrument bundles, it is important to back them up with sufficient knowledge, to consider target country motives and to check in advance the socio-cultural, political and, if necessary, legal appropriateness of an instrument or instrument bundle in the target country, as well as to prevent time shortages.

### 6.1.2 Transfer mechanisms

The central research question in relation to transfer mechanisms is: How did or can the transfer take place? Transfer mechanisms in the narrow sense refer to the type of transfer and/or adoption mechanisms in the transfer process. Policy learning is also located at the end of the spectrum in this context. Combinations of different mechanisms are particularly promising transfer mechanisms and transfer routes. Voluntary, semi-voluntary as well as forced forms of transfer are often set as superordinate categories that can be further differentiated.

We have not looked at transfer mechanisms in the context of policy integration. The policy transfer literature provides examples of forced transfers for example, in the context of conditional financing programs or accession to trade agreements or regional economic entities. The obligatory adoption of the EU Acquis Communautaire in the context of the EU enlargement processes is discussed in the environmental context as semi-voluntary or forced transfers (Tews 2001, Busch and Jörgens 2007, see also Chapter 5.2). Transnational communication, the interstate exchange of ideas and the intrinsically motivated adoption of policies to solve one's own policy problems, as a result of dissatisfaction with existing policies, or as a consequence of processes of globalization, are treated as voluntary transfers (Rose 1991, Dolowitz and Marsh 1996, Stone 1999). Literature on voluntary forms of transfer overlaps strongly with studies on policy learning (cf. Rose 1991, 1993). A basic assumption is that policy transfer can be voluntary or forced, while policy learning is voluntary (Dolowitz and Marsh 1996, Benson 2009, Benson and Jordan 2011). Thus, mechanisms of voluntary mutual learning can be combined with semi-voluntary mechanisms. The latter arise, for example, in the context of voluntary commitments (e.g. when adopting the EU Acquis Communautaire) or in the case of increased international problem pressure (e.g. Chernobyl, Fukushima).

Overall, the empirical literature is critical of the long-term success of forced transfers. However, this does not necessarily mean that failure is imminent, but that a mechanism of forced transfer should possibly be supplemented with other mechanisms. In addition to intergovernmental transfer, policy learning through international organizations, expert networks and epistemic communities can also be understood as a mechanism. However, the success of transfer mechanisms also depends on the subject matter itself, the context, capacities as well as the motives of the target country. It is important to consider the experience of the target country and to allow sufficient space for ownership and sovereignty.

### 6.1.3 Contexts, capacities, motives & actor constellations

It is central to successful transfer to conduct a comprehensive analysis of the contexts in the target country, including capacities, actors, actor constellations and motives, and the socio-technical systems there. If institutional, technical-economic, cultural and natural conditions are systematically analyzed, the chances of an effective and problem-appropriate transfer are improved. Important guiding questions include:

- What are the socio-cultural contexts and political traditions that can influence the motivations of the target country?

- Which narratives shape the political discourse and can be linked to it?
- Which actors and constellations (governmental and non-governmental) play a special role in the governance of environmental policy and should be given special consideration for the transfer?
- In what form are capacities (e.g. financial, personnel) available in the target country for integration and/or can they be expanded through what kind of actor constellations that should be included for integration?
- The success of the transfer in terms of integration tools or institutions for coordination also depends on the previous mix of instruments (context) in integration tools in the target country as well as on the narratives with which the object corresponds and which narratives are dominant in the target country. If a country is used to regulatory governance processes, a regulatory instrument may be more successful than a persuasive instrument.
- The narratives around policy transfer and policy integration should take into account the political priorities and guiding principles of the target countries – e.g. emphasizing economic or social co-benefits instead of (only) ecological benefits.
- Policy transfer could benefit from the socio-technical system understanding of transition research by better understanding the (energy, transport or other) system in the target country and the differences to the system in the source country that can affect the applicability and success of a policy instrument.
- Capacity building of local administrative actors plays an important role. Therefore, not only material resources but also human resources should be promoted. Peer-to-peer programs such as Twinning can also contribute well to this.
- Policy transfer could benefit from looking not only at established (national) regime actors and structures, but also at niche actors/innovators and niche developments with great transformation potential for sustainable development in the target country and examining the extent to which they can be enabled, "protected" and strengthened with the help of policy transfer (similar to the effect of the Renewable Energy Sources Act on the former renewable energy niche).
- When looking for supporters of policy transfer in the target country, actors outside the respective policy areas that are involved in integration and with whom common interests can be found must also be taken into account.

### 6.1.4 Time

Different aspects of time play a role when transferring policies. These relate to specific moments in time, that are especially ripe for policy transfer (windows of opportunity), as well as the endurance of cooperation or speed of transfer:

- **Windows of opportunity:** Windows of opportunity (e.g. abrupt international events such as Chernobyl, Fukushima; regular events such as elections, UN conferences) or processes (diffusion of environmental policy innovations) exert an influence on the framework conditions of a target country and can ensure that there is increased problem pressure and willingness to change in the target country. In order to be able to benefit from them, corresponding windows of opportunity would have to be thought through at an early stage, ideally before they arise and appropriate responses prepared.

- **Long-term cooperation and consolidation of consulting projects** strengthens trust between partners and promises more profound transfer results in the target country.
- **Speed of transfer:** While changes that are too fast can overwhelm people, to which they react with fears and resistance, processes that are too slow can "wear them down". The policy transfer process should therefore be designed to be object- and context-specific. The extent to which an appropriate time frame can be implemented may be beyond the scope of planning, but it is important to consider this.

### 6.1.5 Project design and management, communication and performance review

- **Demand orientation**: Policy transfer and integration must be linked to the problems and (political) priorities in the target country in order to enable the "ownership" of the actors there. In the preparation of policy transfer, partner country representatives should be involved in the analysis of framework conditions and relevant stakeholders, ideally not only from the national government level, but also from the business community, civil society, academia, regional and local government, etc. Cooperation with partner country representatives is also essential for the implementation of policy transfer in order to integrate local expertise and build ownership. Such cooperation systems are considered successful if the cooperation partners agree on a common strategy for achieving the negotiated goals.
- Transfer projects related to policy integration should **link** up with ongoing policy processes and debates in the target country. Transformation processes in the target country can also be taken up and be used for transfer projects.
- Conscious **communication**, including sensitive 'wording' of transfer goals is recommended.
- The analyses and scenarios on which policy transfer is based should at least be developed by research **institutions in the target country**, as this opens up important local knowledge and increases credibility and trust in the target country. Capacities and resources in the target country are correspondingly important in order to be able to pursue topics independently.
- **Cooperation** (coordination of content, pooling of resources) between "**donor countries**" and between actors (especially different ministries/authorities) within a "donor country" can be improved in many cases.
- For meaningful **monitoring** of progress and success, it is essential to find clear indicators before project start and to define them. Concrete transfer successes are often only observable after years. Monitoring should be used throughout the project to stimulate learning processes within the consulting and transfer projects.

For successful **policy integration**, specific aspects need to be considered:

- **Building a common understanding** of what should be integrated, as different integration logics can severely impede the integration process. This is in line with determining objects of transfer co-creatively with different actors that are to be involved in the integration and transfer process. For instance, a joint workshop at the beginning of the integration process is helpful to exchange over integration priorities and demands. This is also helpful to: avoid incoherence between policy goals and incoherence in terms of vertical coordination and managing conflicts between different actors

- In line with the enabling factors laid out in chapter 2.5 and transfer influencing factors, **potential prioritizations must be context specific**, considering the specific challenges of a country and political jurisdiction but also ongoing strategic processes (e.g. Bangladesh being significantly and drastically impacted by climate change already). In terms of the political system, this concerns:
  - Being aware of institutional restrictions in terms of lacking staff to coordinate different ministries
  - The way political administrations operate under New Public Management reforms
- Considering aspects of time:
  - What is a good moment for integration and transfer? (E.g. windows of opportunity in terms of an upcoming high-level political forum)
  - Depending upon the integration goal, determining what is an adequate length
  - Early integration of different actors in the process (e.g. Climate and SDG actors, to build a shared understanding and align interests)
- Addressing external factors that may impact policy integration due to competing policy agendas or interest, e.g. Covid-19, resulting in a lack of resources
- Considering mechanisms for the evaluation of the degree of integration

## 6.2 Influencing factors for the implementation of integration drivers

When examining how distinctive drivers for policy integration (in short: "integration drivers") can be implemented and/or how lessons from other countries on these drivers can be learned from, several aspects should be considered.

For enabling **high-level political leadership** for the integrated implementation of policy agendas, the incorporation of 'unusual suspects' has been argued to be a key factor for deepened integration implementation (see Chapter 2). This means to explore early on which other non-environmental and/or non-climate actors should be part of the process. Japan has been discussed as a country that stands out with procedural integration and high-level commitment to leadership on certain aspects of policy integration (i.e., energy and climate policy). In line with the previous chapter section, strengthening a government's self-commitment to integrated implementation is a highly context-specific endeavor and depends on the political system of the country. An analysis of the actor landscape and organizational structure of government may provide fruitful for understanding the landscape in which commitment to political leadership takes place and identifying first points of reference.

The early inclusion of unusual suspects goes beyond considering other lead ministries and extends to non-state actors. With regard to the **self-commitment to deliberation**, the following aspects could be considered:

- Acknowledging that deliberation is a lengthy and resource-intensive process, and alternate resources and actors to be involved in the planning process must be considered early on. In addition, high-level political support can further strengthen deliberative processes
- Building trust with different political camps and involved groups is an important component coupled with context conditions such as populism and lack of trust

- Considering the limitations of what deliberation can achieve is key for managing expectations, articulating clear, transparent principles on the process and outcome, which actors of government are to be involved, how they will end up using the results, etc.
- Being aware of dominant actor interests and lobby groups and how to abate one-sided deliberative processes

When it comes to the role that **involvement of science** can play for processes of policy integration, it is again important to be aware of the contextual conditions against which policy integration is likely to occur. This includes the knowledge landscape in terms of potential partners for cooperation such as universities or advisory institutions such as NGOs, think tanks or alliances for citizen participation involved in environmental and climate issues. Context factors however also include larger socio-political trends such as climate skepticism and the evolution of climate sceptic think tanks that may impact the knowledge environment and also public acceptance of deliberative processes related to environmental issues, e.g. through spreading disinformation.

With regard to **sustainable finance**, it is key to identify and involve key players: (possibly state-owned) investment banks, rating agencies and institutional investors to develop criteria that would fit into their business models. A transparent process, involving stakeholders also from civil society and possibly science helps to avoid that private interests capture the process. Enabling and constraining factors for the transfer of integration tools, benchmarks and drivers to Germany

What concrete approaches to action can be transferred to Germany? This study examined innovative approaches to integrated policy in other countries but did not analyze the need for integration in Germany. Therefore, in the following, rather theses are formulated for discussion. The contextualization for Germany would be a further step.

### 6.2.1 Context conditions

In Germany, the implementation processes for the climate agenda and the sustainability agenda seem to be parallel: climate adaptation, climate change mitigation and sustainability each have their own strategy processes and related institutions for participation, implementation, monitoring, evaluation and updating. Responsibilities are distributed: Adaptation to climate change is largely driven by the Ministry of the Environment. The BMU is also the lead agency for the climate change mitigation agenda, but in addition, with the Climate Cabinet headed by the Chancellor's Office, a further - albeit not formalized - structure has been created that unites the ministries named in the Climate Protection Act. The Chancellor's Office is responsible for sustainability. In terms of content, there are occasional references; for example, the climate protection goals are part of the sustainability strategy. However, the strategy processes are not integrated; instead, the procedures are essentially aimed at ensuring consistency. In the sense of Metcalfe's benchmarks for integration, the relationship between the three strategy processes would therefore be on a level 4 at best. Although they are joint strategies of the federal government, or even national strategies due to the involvement of the parliament and the states, the responsibilities are clearly delimited in each case.

Several further hypotheses relate to the empirically informed literature on enabling factors for integration. Here the strong degrees of decentralization, bureaucratic routines and hierarchies are outlined to influence the policy transfer of integration tools. Examining these in a first step for Germany would provide additional insights of potential constraining factors and how to overcome them.

### 6.2.2 Next steps for integrated implementation

For Germany, therefore, a transfer of the agenda and the goal of integrated implementation would be a first step. A first step would be to **examine the interfaces** between the strategy processes implementing the 2030 Agenda and the Paris Agreement and to systematically investigate synergies and possible conflicts of objectives. A very preliminary stocktaking of hot these strategy processes are coupled is provided in the below excursus (Chapter 6.3).

The second step for Germany could be to systematically exploit the **drivers for integrated implementation**. For example, the mandate for the Citizens' Council could be formulated accordingly so that sustainability goals should be a guiding principle in the development of policy proposals. Above all, however, the German government should commit itself to the initiative, which has so far been supported by civil society organizations and make it clear that the proposals developed there will be taken seriously. With regard to science as a driver, an assessment process could be initiated that examines the interrelationship of the agendas in a solution-oriented manner - here, too, it would be important for the federal government to commit itself to taking the findings seriously and taking them into account in the further development of policy. For financial policy, this could mean that sustainable finance is systematically developed with regard to the three agendas. Finally, the use of the drivers would also have to be reflected in leadership – a future head of government would ideally embrace and advance the cause of integrated implementation. In terms of mechanisms and processes, aspects of vertical integration across different governance level including the stronger inclusion of private actors appears to be particularly relevant for Germany.

## 6.3 Excursus: Processes of implementing the SDGs and Paris Agreement only loosely coupled in Germany

In the following, we show that within Germany, joint strategy development and mainstreaming of sustainable development and climate policies are still only loosely coupled.

### 6.3.1 Implementation of the 2030 Agenda

In Germany, the implementation of the SDGs is embedded within an elaborate network of institutional structures.

**Central government coordination:** The Federal Chancellery is lead agency for sustainable development and thus for the German Sustainable Development Strategy (SDS). The chancellery regularly organizes updates of the SDS, including stakeholders and citizens. All government departments have a primary responsibility for their own contributions to implement the 2030 Agenda in their respective policy fields. Each ministry has a high-level coordinator for sustainable development, and each ministry publishes a departmental report once per legislative period outlining how the ministry's policies contribute to the implementation of the 2030 Agenda. The Federal Ministry for Economic Cooperation and Development and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety share the responsibility for accompanying the 2030 Agenda at international level. The State Secretaries' Committee (SSC) for Sustainable Development (chaired by the Head of the Federal Chancellery) steers the implementation and can invite experts and stakeholders to their meetings (so called "Dialogue Group"). As of 2021, the SSC is to annually report to the Federal Cabinet on its activities.

**Involvement of national parliament**: The Parliamentary Advisory Council on Sustainable Development raises sustainable development concerns in parliament and formally reviews

whether the sustainability impact assessment of draft legislation of the government has been conducted in a plausible manner.

**Involvement of other administrative levels**: The federal and state governments coordinate in the Federal/State Working Group on Climate, Energy, Mobility - Sustainability (BLAG KliNa)[38]. It accompanies the implementation of national and European climate mitigation and adaptation, energy policy as well as sustainable development. At the so-called 'Federal-state exchange of experience', the federal and state levels regularly discuss their sustainability activities. To date, eleven federal states have own sustainability strategies or are developing one.

**Involvement of civil society**: The Federal Government includes civil society, business and science in the process of developing the German Sustainability Strategy and in the preparation of international-level activities related to SDG implementation. National HLPF conferences (since 2019) annually serves to prepare for the UN HLPF. In addition, the Federal Ministry for Economic Cooperation and Development and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety regularly invite participants to the "Dialogue Forum Agenda 2030", an exchange on core issues of the 2030 Agenda. More nationally oriented, a "Dialogue Group" of 15 civil society organizations and selected experts prepare inputs into the meetings of the State Secretaries' Committee for Sustainable Development (since 2018). The "Sustainability Forum" promotes a broader exchange between the Federal Government and actors from society, business, science and politics on the status and future of the implementation of the SDS and the 2030 Agenda (since 2017). The most recent update of the Sustainable Development Strategy recognizes the central role of social stakeholders for implementing the strategy (and thus the SDGs) and declares it a "Joint Effort for Sustainability" ("Gemeinschaftswerk") (Bundesregierung 2021, p. 126).

**Involvement of science**: The German Council for Sustainable Development (RNE) advises the federal Government on sustainability policy and also carries out own projects to advance sustainability in practice. In addition, it provides impetus for political and social dialogue. Presently, it is responsible for developing, jointly with stakeholders, a 'community project' within the "Joint Effort for Sustainability" initiative (ibid). The German Advisory Council on Global Change (WBGU) analyses global environmental and development problems, evaluates research on globally sustainable development, provides early warning of new problem areas, evaluates global sustainability policy, and makes recommendations for action and research. In addition, the broader science-policy network "Science Platform 2030" provides inputs into the implementation of the national sustainability strategy.

### 6.3.2 Implementation of the Paris Agreement

With regard to climate policy and the formulation of its NDC (part of the EU's NDC), a parallel institutional structure exists which is relatively independent from the one for implementing the SDGs:

**Central government coordination**: The Federal Environmental Ministry leads policy-making on climate mitigation and adaptation. They prepare federal legislation such as the Federal Climate Protection Act, the Act to implement the 2030 Climate Protection Program in tax law and the Fuel Emissions Trading Act. They also lead on the National Climate Protection Plan 2050 (adopted 2016) which represents a long-term low greenhouse gas emission development strategy under the UNFCCC (submitted in 2016). The Plan has been developed and will be regularly monitored and updated on the basis of a broad dialogue involving the Federal States, local communities, civil society, business actors as well as citizens. The Ministry was also

[38] BLAG KliNa is a working body of the Conference of Environment Ministers (UMK).

responsible for developing the National Adaptation Strategy which is regularly monitored and updated. Finally, the Environmental Ministry represents the government in the EU negotiations on an EU NDC (update submitted in December 2020) as well as in the UNFCCC negotiations.

Other line ministries are responsible for implementing sectoral climate protection measures (e.g. in the agricultural, transport, energy sectors) falling into their remit in order to achieve the sectoral emission reduction targets (§ 4 IV 1 Federal Climate Protection Act).

The Climate Cabinet was established in 2019 at the ministerial level to coordinate the work of the government on climate protection. The committee includes the Federal Chancellor, six federal ministers (Environment, Finance, Economy, Construction, Transport, Agriculture), the head of the Chancellor's Office and the Government Spokesman.

With regard to adaptation, an "Interministerial Working Group on Adaptation to Climate Change" was established (2009) which coordinates different ministries under the chairmanship of the Federal Ministry for the Environment.

**Involvement of parliament**: The Parliament with its Committee on the Environment, Nature Conservation and Nuclear Safety and including its second chamber (Bundesrat) decides on legislative measures (as mentioned above).

**Involvement of other administrative levels**: The federal and state governments coordinate in the Federal/State Working Group on Climate, Energy, Mobility - Sustainability (BLAG KliNa). Among others, it accompanies the implementation of national and European climate mitigation and adaptation.

**Involvement of civil society**: Developing the National Climate Protection Plan 2050, the Federal Ministry of the Environment took into account the proposals from a broad dialogue with federal states, municipalities, stakeholders as well as citizens (which, in 2015, had jointly developed proposals for climate protection measures till 2030). Civil society was also involved in developing the Action Plan on Adaptation to Climate Change (though less so with regard to the original National Adaptation Strategy).

**Involvement of science**: Since October 2020, an Expert Council on Climate Issues supports the Federal Government in the application of the Federal Climate Protection Act. The Climate Protection Science Platform provides expertise for the implementation and further development of the National Climate Protection Plan 2050.

### 6.3.3 Integration and perspectives

In Germany, a number of the boxes seem to be ticked when it comes to practices of integrated policy-making. This holds, at least, for **institutional coordination**, where the government employs high-level and ministry-level coordination, horizontal and vertical coordination, involves the parliament and non-state actors. Similarly, the government has been aiming to create the **cognitive and analytical capacities** for policy integration for several years, notably through an ex ante sustainability impact assessment of draft legislation. However, there are hardly any mechanisms in place for integrated monitoring, reporting and evaluation. Also, when it comes to the **joint development of strategies**, we can observe a relatively separate implementation of the post-2015 agendas. The strategies for adaptation, climate protection and sustainable development are distinct, each with its own processes and institutions. There is no institutional interlinkage through which climate actions are subjected to a sustainability-proofing, or the SDS to a climate-proofing. As a consequence, there is no systematic consideration of the SDGs in climate policy development. While the climate targets are taken up in the German Sustainable Development Strategy and its updates, integration does not go

beyond this formal act. Interesting new approaches such as an SDG- or climate-mainstreaming of the national budget are not yet in use though they are about to be piloted. It was not within the scope of this study to assess the level of actual policy integration in Germany, and a systematic assessment of Germany's existing integration efforts, needs, and capacities would help to gain a clearer picture in this regard. On the basis of such an assessment, the government should explore options and pathways for deeper integration. Gaps which our preliminary analysis identified could partly be filled by approaches from other countries. The following aspects might be interesting to explore:

- **Strengthening analytical capacities**: To date, no mechanisms exist for evaluating the agenda's (integrated) implementation. This could be introduced, ideally with inclusion of the parliament.
- **Institutional coordination**: A systematic assessment of Germany's existing integration efforts, needs and capacities could be commissioned, ideally by the Federal Chancellery and involving the State Secretary's Committee as well as the Climate Cabinet. The whole group of actors should be involved in a high-level political process, guided by the Chancellor, of determining the required level of integration (in accordance with Metcalfe 1994) and searching for new forms of living up to this level of integration. Another approach would be the creation of room for policy learning and exchange between different policy sectors, government entities and levels of hierarchy (setting up formats for interorganizational learning, e.g. 6-month workshop programs ("Weiterbildungsprogramme"), supported by higher hierarchies (level of heads of departments/ Abteilungsleitung). Ways could be explored of better integrating municipalities into the SDG and NDC implementation processes. Finally, a "get-together" of the sustainability and climate communities could strengthen/ build a joint understanding, supported by the use of existing tools and good guidance from integration/tool experts; discussions need to be topic-specific rather than too general.
- **Policy integration 'by design'**: Options here include: Building a common understanding of potential synergies and trade-offs; mainstreaming SDG-"requirements" into climate policy and programs, including the National, European and International Climate Initiative; mainstreaming climate requirements into other SDG implementation policies, including social and economic policies; introducing the SDG- and climate-proofing of budgets, taking into account the Finnish and Norwegian models.
- **Policy integration by use of co-benefit approaches**: Policymakers from across various ministries should be involved to identify co-benefit approaches for NDC and SDG implementation.

**Strengthening the identified integration drivers**: At the outset, it is necessary to organize leadership commitment, e.g. exploring the opportunities for mandating the Chancellors office to oversee the integrated implementation of the agendas. Coalition agreements and party manifestos could be benchmarked against the requirements of an integrated implementation. With regard to civic participation and deliberation, high-level political support and resources would need to be secured to set up deliberative formats on implementing the 2030 Agenda and the Paris Agreement (including at municipal level). At the national level, a regular, high-level integrated scientific assessment on the state of the implementation of the three agendas could be established, including a commitment of political leaders to provide a substantive answer to the findings of such assessment. Finally, setting up a high-level forum of financial industries could be used to develop recommendations for an integration of the agendas.

## 6.4 Interim summary and conclusions

With regard to the transferability of approaches, we outlined several influencing factors that should be considered when transferring integration tools and drivers to other countries. Mainly derived from the policy transfer literature, these factors include:

- objects of transfer and integration tools
- transfer mechanisms
- contexts, capacities, motives & actor constellations

These broader influencing factors interact at multiple scales. In order to determine, which tools and drivers should be transferred, an analysis of specific context factors such as integration needs and policy architecture as well as priorities is needed first. Further, we assume that the different integration tools and drivers interact in their own way with the influencing factors. Specifying the integration needs and capacities of a country is the first step and basis for systematically determining how the specific needs and capacities interact with the influencing factors in a second step. From Germany's point of view, two perspectives on policy transfer of integrated implementation can be taken: policy transfer from Germany to other countries, e.g. in the context of development cooperation, and policy transfer from other countries to Germany.

Several factors influence the transfer of integration drivers. For instance, in terms of enabling high-level political leadership for integrated implementation, the incorporation of unusual suspects may enhance deepened integration implementation. We also presented potential enabling and constraining factors for the transfer of integration tools, benchmarks and drivers to Germany, and identified possible next steps. One major finding of this chapter is that policy transfer is deeply context-specific and thus requires the consideration of integration needs.

While we could not, within the limits of this study, conduct an analysis of integration demands, gaps and limitations in Germany, we briefly described the processes of implementing the SDGs and Paris Agreement in Germany. In both cases, central government coordination, the current involvement of parliament; other administrative levels; civil society and of science play a role. However, both processes are only loosely coupled.

# 7 Conclusions

All three post-2015 agendas – the 2030 Agenda for Sustainable Development, the Paris Agreement and the Sendai Framework for Disaster Risk Reduction – if taken seriously, require far-reaching changes in societies and economies. This is referred to as "**transformative change**" in the policy discourses associated with these agendas. The study at hand addresses the question of **whether and how the three post-2015 agendas can and should be implemented in an integrated way**, to enhance their effectiveness and thus to better contribute to transformative change. We first drew on the literature on policy integration and used findings for identifying and measuring deeper integration. We then looked at international examples, both through a 'broad' screening of international policy documents and a 'deep' review of selected country cases.

So far, the **post-2015 agendas have been implemented** in most countries **in a rather disconnected manner**, each within the framework of its own strategies and implementation processes. Thus, the actors, departments, sectors and levels addressed by the respective integration agendas face different difficulties. These concerns vary not only in terms of the actors and institutions from which they emanate, but also in terms of the timing and, where applicable, the material content and objectives.

However, our analyses show that **integrated implementation is possible**: Numerous procedural and institutional innovations have been developed for this purpose. The empirical material pointed to evidence that at least climate change **mitigation** and sustainability policies are integrated to varying degrees in some countries. We found limited evidence of an integration of climate change **adaptation** strategies or DRR with both, SDG and climate mitigation policies in the documents reviewed (an exception is Bangladesh, and further examples may exist but were not covered by our screening). While not in the immediate focus of our research, we also looked for evidence of integrating biodiversity concerns (resulting from the implementation of the UN Convention on Biological Diversity), and likewise found little evidence that this concern is integrated with both sustainability and climate policies. Also, vertical integration lags behind horizontal integration. However, there is an obvious trend towards integrated implementation. This trend is not limited to countries which have already positioned themselves as pioneers of policy integration (in general) but is also taking place in countries of the Global South. This can possibly be attributed to the fact that these countries are particularly affected by scarce administrative resources. Also, these countries are less trapped in long-established paths of environmental or sustainability policy, and are more likely to find room for policy innovation.

Insofar as the sustainability agenda takes up climate protection goals, **coherence** can generally be expected. However, problems arise when climate policy impacts negatively on other sustainability goals and issue areas such as the protection of biodiversity, social equity etc. In some cases, conflicts and **trade-offs** become apparent, for example between nature conservation and the development of renewable energies. Transformative change, however, is not possible by realizing win-win options alone but requires that such trade-offs are tackled.

In the case of such societal transformations, **lacking coordination** in implementing the agendas is associated with **risks**: transformations can create new path dependencies with long-term effects. If different pathways are conceivable for transformations towards sustainability, climate mitigation and adaptation, and these pathways are (partly) incompatible with each other, than the transformation processes will keep impeding each other. Moreover, competing visions of a desirable future are less effective than a common, societally anchored vision.

It does **not** seem absolutely necessary to **prioritize** between the **agendas** – in the sense of, for example, making the SDG implementation the umbrella process for implementing the Paris obligations on mitigation and adaptation. Neither does it seem appropriate to prioritize climate mitigation within the sustainability agenda and to subordinate the other issues and goals to it. The protection of biodiversity or mitigating of problems are equally urgent; the ('indivisible') SDGs are per definition not to be pursued separately and in a non- integrated manner.

Integrating the implementation of complex agendas is **desirable** – despite the difficulties involved – for different reasons: it can increase acceptance, effectiveness, clout and efficiency. Notably, a climate policy that internalizes the concept of Sustainable Development as a whole is likely to enjoy greater societal **acceptance**. For instance, in Germany, the Energy Transition has been criticized on social equity grounds; ensuring that transition policies do not burden low-income households disproportionally enhances their legitimacy and acceptance. The same applies to adaptation measures that also contribute to mitigating climate change, conserving biodiversity or alleviating social inequalities. If the national strategies for sustainable development and the implementation of climate targets were implemented in the same process, both could have **more clout**: Integrating the three agendas is likely to make each agenda itself, as well as all three of them in aggregate, more powerful against status quo interests. This is because an integrated approach is more likely to attract more political attention and leadership. It also increases social acceptance by addressing the concerns of diverse stakeholders. The comprehensive consideration of impacts inherent in integrated implementation is also conducive to enhancing acceptance and political leverage. A sustainability and climate policy that takes a comprehensive view of its impacts and does not just focus on its respective goals, can avoid or reduce undesirable consequences. Integrating the implementation of the agendas also has potential **efficiency benefits**: Up to now, participation, steering, committees, evaluation and updating, etc. have been distributed among different organizations, each acting according to its own logic and requiring resources. Merging them could not only offer advantages in terms of content, but also improving the use of scarce capacities by pooling them. Finally, a major advantage of integrated implementation is the potentially **greater impact on society**: Transformation can only succeed in cooperation with the economy and society; sustainability transformations require innovation, especially social innovation in all fields of action and at all levels. This cannot be imposed or centrally coordinated by the state; at best, politics can give it a framework and direction. A common vision that combines sustainability goals, climate protection, adaptation and disaster risk reduction is likely to be much more effective in **encouraging (social) innovation** and providing a meaningful direction to innovation processes.

Our study underscores earlier findings that the mere establishment of institutions, processes, and actors for policy integration are a **necessary** condition for their use, but **not yet** a **sufficient** one. Strategies remain paper in many countries, and concrete implementation is lacking. The mechanisms for integration are only used if incentives or demand for them are also conveyed. This demand can be mediated by political leadership, by science, civil society, or business and financial markets. Such **drivers for integration** can be actively promoted by policy-makers. It is in their own hands to create the opportunities through which science, civil society and (financial) market actors can push towards an integration of their concerns into policies: they can themselves expand the possibilities of civic participation (e.g. though a national-level citizen's assembly), commission a nation-wide IPCC-like body etc. Of course, it is important that policy-makers subsequently take up the results and decisions produced in these fora and implement them. We have studied how such drivers can be organized – through high-level institutionalization, through scientific assessments, citizens' assemblies or through economic incentives –, at selected examples and for numerous countries. The examples show possibilities

for action, and they are not exhaustive. In addition to the drivers which we identified in the literature, the judiciary (e.g. through court decisions on climate lawsuits) or the general public (e.g. through education, through campaigns in social media, etc.) could drive integrated implementation, too.

Besides the mentioned advantages of integrated implementation, we need to bear in mind the limitations and risks of integration with regard to achieving the agendas' objectives. In particular, integration entails the **risk of dilution** and watering-down, if different objectives (and associated actors) are played off against each other, and if compromise formulas are sought that then lose the effectiveness and legitimacy of the original objectives. In addition, integrated implementation requires considerable **coordination** and **coordination** efforts, especially if dilution is to be avoided. This ties up administrative and political capacities. Finally, integrated implementation, especially if vertical integration and the involvement of society are also sought, is likely to require a corresponding **culture** in the administrations responsible for and affected by it.

Nonetheless, despite these caveats, an integration of these agendas can make sense in order to achieve a **deeper integration** of the respective concerns. Up to now, adaptation to climate change, in many cases also climate mitigation, not to mention the other sustainability goals, have been one among several aspects to be considered in planning, investment or consumption decisions. As a consequence, integration usually succeeds only to the point where mutual *benefits* can be realized. A comprehensive, joint integrated strategy would also address and decide on *conflicting* goals – as is necessary for transformative change.

The three agendas each in their own right necessitate integration into other policy areas and across levels. Even if policy-makers, after weighing the advantages and disadvantages of integrating the implementation of the three agendas (with each other), conclude that a **comprehensive integration** and a merging of implementation processes should not be pursued, the task remains for all three agendas to make their (individual) concerns valid in other policy areas and levels: Climate change adaptation, mitigation, disaster risk reduction and sustainability are equally cross-cutting tasks. Hence, even if rejecting the integration of three processes of implementation with each other, policy-makers will need to integrate the concerns of each individual agenda with transport policy, agriculture, trade policy etc.. This is more familiar and well-known, as it boils down to more '**traditional**' (environmental, social, health etc.) **policy integration**, but it is still both worthwhile and demanding, as scores of literature show. At the same time, imagining policy-making without policy integration is impossible in light of the complex intertwinement of policy agendas. Though policymakers by default are engaged in coordinating practices on a daily basis, becoming aware of the full potentials of integrating these overlapping agendas, and exploring the drivers of integration may help identifying some levers of change.

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# A Appendix: Overview of selected cases of good practice for SDG-Paris Agreement alignment

## #1 Bangladesh

**Sources (dataset rankings and/or qualitative analysis)**

Bouyé et al. 2018; TERI 2017; SIDA 2017

**Characteristics of integration approach/tools**

When it comes to SDG 2.4 and sustainable agricultural development, Bangladesh leads the way in terms of aligning shared responsibilities. In the Planning Ministry's Handbook for the SDGs, the ministries of environment and forest, land, water resources, disaster management and relief, and industries and food are assigned joint responsibility for advancing agricultural development, as aimed in the National Adaptation Programme of Action for a climate-resilient agriculture. The climate-smart agriculture strategy is thoroughly informed by scientific evidence and stakeholder consultations (integrated data and monitoring; institutional coordination at governmental level; using sectoral co-benefits).

Furthermore, the sectoral action plans underpinning the SDG-aligned Seventh Five Year Plan entail climate goals elaborated jointly by the authority for NDC implementation – the Ministry of Environment and Forests – and the body responsible for the SDGs – the Planning Commission (institutional coordination at governmental level). The Five Year Plan itself requires for NDC-SDG alignment as it prescribes "mainstreaming the poverty-environment-climate-disaster nexus in project design, budgeting, and monitoring" (strategic mainstreaming).

Further strategic alignment is underpinned by the SDG handbook, that determines additional targets for mitigation action not quantified in the NDC, and the NDC Implementation Roadmap. The latter is guided by the SDG framework as a key reference and builds a clear connection to non-climate development goals while proposing sound integration of climate targets into the Five Year Plan (strategic mainstreaming).

Climate and development action integration within government bodies is also enforced by the budgeting process. Ministries' budgets are linked to annual SDG and climate monitoring reports they are obliged to conduct "to monitor progress toward sustainable development and climate goals" and line out their future contribution in these terms (integrated data and monitoring; strategic mainstreaming).

As it comes to funding, Bangladesh promotes climate-sensitive development through its National Climate Change Trust Fund that "has been funding mitigation, adaptation, and low-carbon development (…) including activities in water, housing, waste infrastructure (…) and food security, social protection and health" (strategic mainstreaming).

In terms of participation, Bangladesh's International Centre for Climate Change and Development is the correspondent for civil society's input on SDG 13 and links it to NDC implementation (institutional coordination with non-governmental actors).

**Cooperation with Germany**

Partner country BMZ reform concept; partner country BMZ initiative programme Agenda 2030; Climate & Clean Air Coalition; NDC Partnership; Climate Ambition Coalition-Net Zero

**#2 Colombia**

**Sources (dataset rankings and/or qualitative analysis)**

SDSN: yellow mark ("challenges remain" but SDG-13 will be achieved if current action pace is maintained); Bouyé et al. 2018; SIDA 2017; van Tilburg et al. 2018

**Characteristics of integration approach/tools**

Colombia is keen to address the provision of data underpinning climate and sustainability action. As proposed by the Global Partnership for Sustainable Development Data, Colombia established an SDG Data Roadmap that aims at identifying data gaps relevant to climate action and proposes a comprehensive data and monitoring agenda. Furthermore, the Colombia SDG Digital Portal constitutes an interactive tool collection that i.a. allows for tracking SDG implementation and related climate actions (integrated data and monitoring).

Concerning integrated institutional coordination on governmental level, Colombia leads the way with its National Planning Department, the key SDG implementation actor, and the Ministry of Environment and Sustainable Development, in charge of NDC, sharing responsibilities over climate action and simultaneously constituting a "secretariat for both the High-Level InterAgency Commission for implementation of the 2030 Agenda and the Inter-Sectoral Commission for Climate Change". The two agencies cooperate within the SDG and NDC localization process to monitor that nationally relevant SDG priorities and sector targets derived from the NDC are being safeguarded (institutional coordination at governmental level).

Colombia's Green Growth Policy established in 2018 stresses the principle of achieving economic growth and competitiveness in a sustainably aware and conscious way with respect to natural capital use, social inclusion, and climate change (strategic mainstreaming).

The Sustainable Colombia Fund (Colombia Sostenible) launched in 2015 orients its investments toward "the implementation of the SDGs, climate action, and peace-building efforts in rural regions that had been affected by national conflict. Four sub-funds administered by the UN, the World Bank, the EU, and the Inter-American Development Bank support the peace agreement, energy and infrastructures projects, rural development, and climate action in an integrated way" (strategic mainstreaming).

In its NDP 2014-2018, Colombia outlined a cross-sectoral approach to allow policy planners designing SDG targets to integrate all dimensions of sustainability. Consequently, five cross-sectoral strategies and the green growth policy were derived (using sectoral co-benefits).

To name a sector-specific example of aligning sustainability and climate considerations, Colombia began to adjust its low-carbon energy strategies that so far promoted hydropower since water resources are decreasing from climate change. Against this background, energy supply will be diversified, so that water-related conflicts are avoided and energy and water resource security can be granted (using sectoral co-benefits).

**Cooperation with Germany**

partner country BMZ reform concept; partner country BMZ initiative programme Agenda 2030; Climate & Clean Air Coalition; NDC Partnership; Climate Ambition Coalition-Net Zero; XI. Petersberger Climate Dialogue

**#3 Costa Rica**

**Sources (dataset rankings and/or qualitative analysis)**

Entry from SDG Climate Action Nexus Tool (SCAN) Good Practice Database; Transparency Partnership 2019a

**Characteristics of integration approach/tools**

Costa Rica has shown some remarkable efforts when it comes to fostering policy integration through integrated data and monitoring. It specially established an open-source data platform, the National Climate Change Metrics System, the several functions of which serve to analyze e.g. potential synergies between the agendas (interactive and visually) or identify mutual effects of development and climate targets. The platform not only elaborates potential reciprocal impacts, but also informs about SDG progress with regard to climate change adaptation and mitigation. The integrated SDG and NDC data mapping provides an thorough foundation for policy-making and target-setting. It supports policy ambitions, monitoring and reporting through the provision of standardized data (creation of cognitive & analytical competencies).

Costa Rica established sectoral agreements for the reduction of greenhouse gas (GHG) emissions to address national agendas' and the international agendas' ambitions including the SDGs and Paris Agreement. So far, sectoral agreements have been elaborated for the agriculture and livestock, as well as for the transport sector through a highly inter-sectoral and inclusive stakeholder process (using sectoral co-benefits).

**Cooperation with Germany**

partner country BMZ reform concept; Climate & Clean Air Coalition; Carbon Pricing Leadership Coalition; NDC-Partnership; Climate Ambition Coalition – Net Zero; XI. Petersberger Climate Dialogue; High Ambition Coalition

**#4 Finland**

**Sources (dataset rankings and/or qualitative analysis)**

CCPI: "high" rank at "Climate Policy – National Climate Policy Performance"; SGI: among the 15 highest ranks at "Policy performance – environmental policies", and among the 15 highest ranks at "Governance"; ND-GAIN: among the 15 highest ranks at the overall ranking, and among the 15 highest ranks at "readiness"; Bouyé et al. 2018; SIDA 2017; van Tilburg et al. 2018

**Characteristics of integration approach/tools**

In addition to the official SDG targets, Finland conducted an SDG gap analysis aligned i.a. to national climate targets. As a result, climate priorities were identified to be included into the 2030 Agenda implementation plan, such as carbon neutrality (creation of cognitive & analytical competencies; strategic mainstreaming).

Finland's key document for SDG implementation, "Society's Commitments to Sustainable Development: the Finland We Want by 2050", was designed in 2014 as a modernized sustainable development strategy. It proposes "both a long-term 2050 vision and a framework to engage Finnish society in building a carbon-neutral and inclusive society." The National Sustainable Development Commission was in charge of developing the strategy and did so through a highly inclusive process involving several non-governmental stakeholders to agree upon the goals,

amongst others to meet the zero-carbon objective. “Chaired by the prime minister, this commission gathers representatives from 84 different bodies, including all ministries, municipalities and regions, business and labor unions, the Sami indigenous people and the autonomous Aland Islands, the science community, the church, and 49 civil society organizations representing various interests, including the environment, development, sports, youth, consumer, health, education, and immigrants.” The National Sustainable Development Commission shows civil society’s great policy influence in Finland that goes beyond bare advisory functions to an equal voice in decision-making (institutional coordination at governmental level; institutional coordination with non-governmental actors; strategic mainstreaming).

In its Climate and Energy Roadmap 2050 that covers the carbon neutrality objective, Finland considers employment impacts from transforming the power sector and proposes a transition period (using sector co-benefits).

**Cooperation with Germany**

Climate & Clean Air Coalition; Carbon Pricing Leadership Coalition; NDC-Partnership; Climate Ambition Coalition – Net Zero; XI. Petersberger Climate Dialogue; High Ambition Coalition

**#5 France**

**Sources (dataset rankings and/or qualitative analysis)**

CCPI: “high” rank at “Climate Policy – National Climate Policy Performance”; SGI: among the 15 highest ranks at “Policy performance – environmental policies”; Bouyé et al. 2018

**Characteristics of integration approach/tools**

While France has designed deeply integrated strategies for sustainable development, low-carbon, and energy transition, the social impacts of action have been neglected within these. As a result, in its National Ecological Transition Strategy toward Sustainable Development and in other official documents France reviewed forty SDG targets that are related to social aspects and call for more thorough attention. A full assessment of national plans with respect to the SDGs was conducted in 2017 by the government. This process also led to an adjustment of national progress measuring “combining key social, environmental, climate, and economic indicators in 10 new wealth categories” giving more weight to social aspects (integrated data and monitoring; strategic mainstreaming).

Further, through the Ministry of Inclusive Ecological Transition’s Climate Solidarity Package France pays greater attention to climate policy effects on air pollution and especially lower-income households. This programme covers different measures of providing financing to lower-income households allowing them to outcast distributional drawbacks from climate policies and engaging in ecofriendly energy and transport solutions. Additionally, France’s National Strategy for an Ecological Transition links public and quasi-public investment to social and environmental benefits (strategic mainstreaming; using sectoral co-benefits).

Within the agricultural sector, France’s Law for the Future of Agriculture, Food and Forests (LFAFF) following the 2015 Low-Carbon Strategy also highlights the topics of environmental and health protection. LFAFF was developed drawing on science-based expertise and involved a wide-range stakeholder inclusion (creation of cognitive & analytical competencies; institutional coordination with non-governmental actors).

National plans of all kind, including "policies on climate change, energy, sustainable development, biodiversity, and corporate social and environmental responsibilities are all discussed by the advisory National Council on the Ecological Transition." This body consists of a wide range of governmental and non-governmental actors, like representatives from the parliament, urban politics, the corporate site, and diverse civil society organizations (institutional coordination with non-governmental actors).

**Cooperation with Germany**

Clean Energy Ministerial (G20 Energy Transitions Working Group); Climate & Clean Air Coalition; Carbon Pricing Leadership Coalition; NDC-Partnership; Climate Ambition Coalition – Net Zero; Major Economies Forum on Energy and Climate [inactive]; XI. Petersberger Climate Dialogue; High Ambition Coalition; Climate Governance Initiative

**#6 India**

**Sources (dataset rankings and/or qualitative analysis)**

TERI 2017; van Tilburg et al. 2018; UN DESA 2019

**Characteristics of integration approach/tools**

India perfectly exhibits sustainability and climate objective alignment in strategic agendas. Its National Action Plan on Climate Change (NAPCC) explicitly underlines the interlinkage with sustainable development as it follows the principle of protecting the poor and vulnerable throughout climate action though "an inclusive and sustainable development strategy, sensitive to climate change". The NAPCC addresses development impact of the illustrated climate measures at various points. Further, India's NDC builds on the NAPCC and State Action Plans for Climate Change (SAPCCs), and its mitigation and adaptation strategies highlight interlinkages with several SDG targets other than SDG 13. This holds also true for India's environment and climate change framework, the National environment Policy (NEP) established in 2006 that puts an explicit focus on the nexus of environmental concerns and social justice. Development is approached through the concept of sustainable growth and the harnessing of co-benefits from climate action for economic growth (strategic mainstreaming).

**Cooperation with Germany**

partner country BMZ reform concept; partner country BMZ initiative programme Agenda 2030; Clean Energy Ministerial (G20 Energy Transitions Working Group); Climate & Clean Air Coalition; Major Economies Forum on Energy and Climate [inactive]; XI. Petersberger Climate Dialogue

**#7 Indonesia**

**Sources (dataset rankings and/or qualitative analysis)**

SDSN: yellow mark ("challenges remain" but SDG-13 will be achieved if current action pace is maintained); Bouyé et al. 2018; ERI 2017; UN DESA 2019; Gregoria et al. 2017

**Characteristics of integration approach/tools**

Indonesia provides a thorough alignment of development and climate policy in terms of determining indicators and monitoring cross policy-fertilizations. When defining climate actions to be included into the NDC, Indonesia conducted an ex ante assessment of SDG synergies. The

Ministry of National Development planning also ensured for development affects to be considered in further low-carbon development strategies. Aligning climate action with development is regarded as a crucial prerequisite for mainstreaming the NDC. Consequently, climate mitigation monitoring and reporting is undertaken by all relevant ministries and submitted to the Ministry of National Development Planning, the Ministry of Environment and Forestry, and the Ministry of Home Affairs (creation of cognitive & analytical competencies; strategic mainstreaming).

The institutional setting, too, promotes policy integration. In Indonesia, the responsibility for defining, implementing, monitoring, and reporting climate mitigation action is distributed between the respective ministries under the guidance and the supervision of the Ministry of Environment and Forestry. The inter-ministerial coordination is executed on directorate-general and secretary-general level. The respective ministries' climate mitigation plans constitute a salient part of the NDP (institutional coordination at governmental level; strategic mainstreaming).

The elaboration of Indonesia's NDP involved several stakeholders from the government, the parliament, and from civil society. Besides ensuring a wide-range participation, this process was simultaneously used to develop and spread a common understanding of the interrelation of climate policy impacts and national development (institutional coordination with non-governmental actors; strategic mainstreaming).

Moreover, Indonesia's green planning and green financing guidelines foster SDG-NDC aligned action. The Green Planning and Budget Strategy for Indonesia's Sustainable Development 2015-2020 provides public and private investments for actions that comply with the 21 NDC-SDG aligned priorities that were identified by an inter-ministerial team to contribute to a green economy. Additionally, ministerial budgets are linked to their stated intentions to comply with both SDG and the previously mentioned green economy priorities. Furthermore, Indonesia cut its subsidies in fossil fuels and invested the available sums on social programs benefiting vulnerable groups and low-income households (strategic mainstreaming).

**Cooperation with Germany**

partner country BMZ reform concept; partner country BMZ initiative programme Agenda 2030; Clean Energy Ministerial (G20 Energy Transitions Working Group); NDC-Partnership; Major Economies Forum on Energy and Climate [inactive]; XI. Petersberger Climate Dialogue

**#8 Japan**

**Sources (dataset rankings and/or qualitative analysis)**

SGI: among the 15 highest ranks at "Policy Performance – environmental policies"; ND-GAIN: among the 15 highest ranks at the overall ranking; among the 15 highest ranks at "readiness"; Japan is outlined as good example for synergetic institutional integration at the top-level of decision-making (UNDESA and UN Climate Change 2019: 53f.); TERI 2017; UN DESA 2019

**Characteristics of integration approach/tools**

Japan conducts SDG and NDC implementation in a highly integrative manner granted through institutional coordination at high-level. Both SDG and NDC implementation is led by the Global Warming Prevention Headquarters chaired by the Prime Minister and involving representatives from all ministries who constantly cooperate. Consequently, this process generates several innovative strategies for SDG and NDC implementation with outstanding alignment of climate and sustainability concerns. Especially the Sound Material-Cycle Society, the National Biodiversity

Strategy of Japan 2012–2020 and the Plan for Global Warming Countermeasures (institutional cooperation at governmental level; strategic mainstreaming).

Japan delivers a good example for development endeavors enriching procedures of climate action. Japan's VNR places an emphasis on the equal involvement of sub-governmental units, non-governmental organizations, youth representatives and stakeholders from industry into decision-making. This principle is reflected in the elaboration of Japan's Plan for Global Warming Countermeasures that presents mid-term and long-term goals supporting the 2015 NDC. The countermeasures were defined through close cooperation between the national government, local government bodies, business actors, and the civil society as well as the greater public (institutional coordination with non-governmental actors).

Further synergies between SDGs and climate goals can be observed on sectoral level, especially in terms of energy efficiency and climate change mitigation (rather less for climate change adaptation). This holds true for contributing to the development goals on clean energy; industry, innovation and infrastructure; responsible consumption; and partnership on both national and international level. Programs such as the Top Runner Program determining energy efficiency standards for 21 products produced in Japan promote this contribution on national level. On international level, GHGs mitigation is faced as a goal for both international development and climate policy promoted through projects implemented by Japan's International Cooperation Agency (JICA) and the Joint Crediting Mechanism – a system for joint bilateral climate action being enacted with 17 partner countries (using sectoral co-benefits).

**Cooperation with Germany**

Clean Energy Ministerial (G20 Energy Transitions Working Group); Climate & Clean Air Coalition; Carbon Pricing Leadership Coalition; NDC-Partnership; Major Economies Forum on Energy and Climate [inactive]; XI. Petersberger Climate Dialogue

**#9 Jordan**

**Sources (dataset rankings and/or qualitative analysis)**

SDSN: yellow mark ("challenges remain" but SDG-13 will be achieved if current action pace is maintained); TERI 2017; UN DESA 2019

**Characteristics of integration approach/tools**

Jordan's NDC consistently addresses all 17 SDGs, additionally reflected in the notions of "Sustainable development-oriented socioeconomic adaptation" and "Climate Change and Sustainable Development Circumstances in Jordan". In order to implement its NDC based on reliable data evidence, Jordan established a three-tier mechanism to assess data quality. The Department of Statistics and other relevant institutions are in charge of providing a valuable disaggregated data base and condensed information to the ministries responsible for the respective SDG plan implementation (creation of cognitive & analytical competencies; strategic mainstreaming).

In Jordan, the SDG implementation involves several ministries with the Ministry of Planning and International Cooperation being the focal point that oversees monitoring and evaluation as well as SDG integration with climate change policy. The Planning Ministry's directorate "acts as the institutional coordination hub for all climate change activities". Furthermore, the prime minister initiated the establishment of a National Committee on Climate Change whose members include

governmental stakeholders related with climate policy, other ministerial representatives, and stakeholders from civil society and private economy (institutional coordination at governmental level; institutional coordination with non-governmental actors).

Jordan is strongly linking its waste sector policy to climate and development goals, especially its actions on wastewater discharge. This is especially critical for both climate and development issues since Jordan suffers of severe water scarcity, thus contributing to development goals such as securing employment, and providing access to safe drinking water and sanitation (using sectoral co-benefits).

**Cooperation with Germany**

partner country BMZ reform concept; Climate & Clean Air Coalition; NDC-Partnership; Global Green Growth Institute [Partner is not Germany, but the EU]

**#10 Kenya**

**Sources (dataset rankings and/or qualitative analysis)**

Bouyé et al. 2018; SIDA 2017; van Tilburg et al. 2018; UN DESA 2019

**Characteristics of integration approach/tools**

As an integral component of the preparation of Kenya's second National Climate Change Action Plan (NCCAP) 2018-2022 – constituting the NDC implementation plan – the Climate Change Department of Kenya's Ministry of Environment and Forestry conducted an SDG impact assessment. The assessment's purpose is to align climate measures with social equality benefits. It was executed with the aid of international partners and involved climate- and development-related ministerial authorities (creation of cognitive & analytical competencies; institutional cooperation at governmental level).

In a similar way, Kenya is considerably ambitioned to improve development and climate agenda alignment of national and local result-based monitoring frameworks, and of the National and County Integrated Monitoring and Evaluation Systems (NIMES and CIMES) (creation of cognitive & analytical competencies).

The governmental negotiations for the 2030 Agenda and Paris Agreement were thoroughly supported by Kenya's Civil Society Reference Group on the UN post-2015 Development Agenda and the reference group led by the Global Climate Adaptation Partnership. Consequently, after 2015 these initiatives have been consolidated in the SDG Kenya Forum (institutional cooperation with non-governmental actors).

Kenya's 2016 Climate Change Act prescribes for at least one out of the nine National Climate Change Council members to be a representative of a marginalized group. It furthermore requires that national and county governments mainstream climate change effects in their development planning and in turn integrate considerations of sustainable development into climate policy planning (strategic mainstreaming).

Kenya pursues development and climate policy goals alignment in its Green Economy Strategy and Implementation Plan that constitutes a framework for a climate-sensitive development framework (strategic mainstreaming).

In Kenya, SDG focal points in some form are placed in every ministry responsible for overseeing potential synergies of sector policies between SDG targets and climate action. Moreover, some sectors are outstanding in terms of their engagement in aligned policy-making. These include the energy sector as well as the agricultural sector. Regarding energy, the energy strategy relying on hydropower was adapted with respect to social issues arising from water availability and accessibility. Likewise, Kenya's climate-smart agriculture endeavors point towards both social and climate benefits. To this end, the Climate Change Directorate and the authority for SDG implementation cooperate in identifying synergies and inscribing them into polciy (using sectoral co-benefits; institutional cooperation on governmental level).

**Cooperation with Germany**

partner country BMZ reform concept; partner country BMZ initiative programme Agenda 2030; Climate & Clean Air Coalition; NDC-Partnership

**#11 Korea**

**Sources (dataset rankings and/or qualitative analysis)**

ND-GAIN: among the 15 highest ranks at the overall ranking; among the 15 highest ranks at "readiness"; SIDA 2017; van Tilburg et al. 2018; SDG Knowledge Platform 2021

**Characteristics of integration approach/tools**

Korea constitutes a leading example when it comes to transparency and data providing sound evidence for integrated planning and assessment. A comprehensive data base on climate change and sustainable development matters (e.g. land use, agriculture and forestry, economy and employment, environment, health, food security) is publicly available on open data portals. It allows for a sophisticated review of policy linkages, as well as for an estimation of positive and negative cross-agenda impacts (creation of cognitive & analytical competencies).

In 2014, the Korea National Assembly UN SDGs Forum (NSD) was established replacing the Special Committee on Sustainable Development by 43 National Assembly members and the Korea Association for Supporting the SDGs for the UN (ASD). ASD is a non-governmental organization holding an official consultative status. The NSD "is arguably the world's first consultative group of congressional leaders for the SDGs" (SDG Knowledge Platform 2021) (institutional cooperation at governmental level; institutional cooperation with non-governmental actors).

**Cooperation with Germany**

Clean Energy Ministerial (G20 Energy Transitions Working Group); Climate & Clean Air Coalition; Major Economies Forum on Energy and Climate [inactive]; XI. Petersberger Climate Dialogues; Global Green Growth Institute [Partner is not Germany, but the EU]

**#12 Mexico**

**Sources (dataset rankings and/or qualitative analysis)**

Bouyé et al. 2018; SIDA 2017; UN DESA 2019; GIZ 2018; International Partnership on Mitigation and MRV 2015

**Characteristics of integration approach/tools**

Mexico is another example for outstanding data analysis employed in favor of policy integration. On behalf of Mexico's Office of the Presidency and the Ministry of Environment and Natural Resources (SEMARNAT), a study was conducted comprehensively analyzing the potential co-benefits from NDC implementation for SDG achievement. Additionally, impacts on vulnerable groups were assessed when defining climate measures in the NDC as well as in the Mid-Century Strategy (creation of cognitive & analytical competencies).

Mexico engages exemplarily in institutional policy integration. The SDG lead institution – the Office of the President of Mexico – and both the NDC implementation institutions – SEMARNAT and the National Institute of Ecology and Climate Change – have established a close cooperation to assure cross-policy synergies and strategic integration. They do so by jointly informing the working programs of the Inter-Ministerial Commission for Climate Change (CICC) and the National Council for the 2030 Agenda. What is more when it comes to overlapping high-level responsibilities, the CICC's and the Council for the 2030 Agenda's secretariat includes fourteen ministries being represented in both institutions. This completes the President's Office's prescription that institutions engaging in designing national development plans, like the CICC and other inter-ministerial bodies, should mainstream SDG goals. In addition, the President's Office takes part in CICC working groups regularly to ensure SDG-NDC interlinkages (institutional cooperation at governmental level).

As it comes to non-governmental cooperation, the National Council for the 2030 Agenda includes non-governmental organizations engaging in climate and environmental matters. Their competences equal those of state officials (institutional cooperation with non-governmental actors).

Several strategic documents demonstrate a strong alignment of climate and development policy. Firstly, Mexico's 2012 Climate Change Act lists environmental, social, and economic benefits expected from climate adaptation, such as food security and the preservation of natural resources (Article 101), and from mitigation, including improved health, energy efficiency, and mass public transport (Article 102). Besides, Mexico's General Law on Climate Change mandates the prioritization of actions that have the greatest potential for reducing emissions at the lowest cost, and at the same time produce social, environmental and economic benefits. It has been revised in 2017 and 2018 in accordance with the Planning Law to sufficiently include NDP alignment with SDGs and climate goals. Secondly, Mexico's 2013 National Climate Change Strategy prescribes consideration of a remarkable amount of diverse social inequality issues and requires for the prioritization of climate policy measures that ensure social and environmental co-benefits. Thirdly, Mexico's NDC places emphasis on climate action capable of simultaneously strengthening overall social well-being. This holds true for several measures that outline potential co-benefits, especially successfully in the Livestock and Agriculture sector and the Land Use, Land Change and Forestry sector. Finally, Mexico's mid-century strategy for low-carbon development highlights sustainable and inclusive development and social well-being. It also determines long-term targets with salient SDG co-benefits (strategic mainstreaming).

Finally, Mexico supports policy integration through its financing mechanisms. In 2018, the Ministry of Finance assessed the budgeting against the background of the SDGs and climate goals with a Performance Evaluation System methodology. Furthermore, Mexico's low-carbon development strategy built on public and private investments provided by the national Mexican development bank. Lastly, Mexico's Climate Change Fund links investment for climate action to development benefits (strategic mainstreaming).

**Cooperation with Germany**

partner country BMZ reform concept; partner country BMZ initiative agenda 2030; Clean Energy Ministerial (G20 Energy Transitions Working Group); Climate & Clean Air Coalition; Carbon Pricing Leadership Coalition; NDC-Partnership; Climate Ambition Coalition – Net Zero; Major Economies Forum on Energy and Climate [inactive]; XI. Petersberger Climate Dialogue; High Ambition Coalition; Global Green Growth Institute [Partner is not Germany, but the EU]

# B Appendix: Guiding Questions pertaining to potential drivers for deepened policy integration

## B.1 High-level political leadership

When examining political leadership in promoting policy integration and integrated implementation, the following research questions may guide the examination of innovative practices and help to specify to what extent leadership is occurring:

- Which high-level government bodies are taking the lead?
- Is the choice of lead ministries going beyond the usual suspects (e.g. environmental ministries)?
- Who coordinates the process?
- To what extent is the lead ministry sharing responsibilities with other government bodies for an integrated implementation of the Paris Agreement and the 2030 Agenda?
- What leaders in the government, parliament and/ or relevant political parties are committed to policy integration?

## B.2 Self-commitment to citizen participation

To further differentiate, how deliberation/citizen participation can be characterized, potential research questions for examining this driver are:

- **Inclusion**: The participation or deliberation process needs to go beyond consultation-based approaches (participation signified by informing citizens of an outcome or very late inclusion in the process, after governmental actors already exchanged ideas.
  - Who is involved? Does inclusion go beyond the usual suspects?
  - Can citizens take an active agenda-setting role? Is active co-creation and choice of options at the end of the process an implicit element of the deliberation process? (vs. “cherry picking” e.g. in case of the climate jury and the French government).
- Format:
  - At what **stage of the policy cycle** does deliberation occur?
  - Does the deliberative process go beyond consensus-focused outcomes? (E.g. is deliberation signified by strong lobby groups dominating the process, leading to status quo manifestation?)
  - Creating an atmosphere of co-ownership through clearly-guided rules of communication and facilitators
  - On instrumentation: to what extent are different instruments explored (e.g. for constructive disruption, allowing complexity – **e.g. enabling multi-level dialogues** (Alcantaré et al. 2014)?

- Is the format disabling cognitive bias / **enabling experience-based, cognitive diversity**?

► Evidence-based deliberation:

- Is evidence-based deliberation enabled, i.e. providing a sound scientific context to enable informed decisions, e.g. through consulting experts, providing adequate information materials, offering enough room for information sessions

► Degree of institutionalization:

- To what extent are the proposed deliberations ad hoc initiatives or **have become institutionalized** practices?