

**Policy coherence in implementing the Paris Agreement and the Sustainable Development Goals:
lessons from the comparative politics literature**

Zoha Shawoo, Aaron Maltais, Adis Dzebo, Jonathan Pickering

Abstract

The objectives of the Paris Agreement and the Sustainable Development Goals (SDGs) are strongly interconnected, raising questions about how to implement these two agendas coherently, particularly at the national level. Existing literature on policy coherence in relation to climate change and sustainable development focuses primarily on intra-governmental policy processes and institutional interactions in shaping coherence between various agendas and policies. In contrast, the comparative politics literature on sustainable development goes beyond intra-governmental processes to look at broader politics, particularly the role of ideas and interests as complementary explanations to institutional factors in policy change. However, at present, no studies explicitly link these two bodies of literature to hypothesise how the 'three I's' (ideas, institutions and interests) may influence the degree and consequences of policy coherence at different policy stages and at different levels. This paper aims to fill this gap by linking these two literatures together in the context of the Paris Agreement and the 2030 Agenda. It introduces an analytical framework for studying policy coherence and the role of the three I's in influencing policy coherence at different policy stages: policy formulation, policy content and policy implementation. The framework includes not only technical explanations of coherence, but also measures of their application by different actors and institutions, and whose ideas and interests are served by (not) pursuing coherence. Whilst the framework is developed specifically for studying the implementation of climate change and the SDGs, it can also be applied more widely in policy studies. This work will serve as a basis for comparative empirical studies on policy coherence between the two agendas at the national level.

Keywords

policy coherence; comparative politics; climate change; sustainable development; Agenda 2030; Paris Agreement

1. Introduction

Despite less than 10 years remaining to achieve the commitments set out by the 2030 Agenda, no country is on track to meet all 17 Sustainable Development Goals (SDGs). Countries are also far behind in achieving the transformations towards low-carbon and climate-resilient societies as envisioned in the Paris Agreement (UNEP, 2019). Both agendas, adopted in 2015, set out transformative visions for more sustainable societies. The 17 SDGs outline an integrated agenda for just, resilient and equitable development, in line with climate targets. Meanwhile, achieving the goals of the Paris Agreement will require wide-ranging economic and social changes, with potential for both synergies and conflicts with the SDGs (Brandi et al., 2017; Dzebo et al., 2019). The achievement of both agendas depends crucially on national implementation, particularly the extent to which plans for each agenda at the national level are coherent. As such, there is a need to enhance policy coherence, defined as pursuing synergies and addressing conflicts between climate and development goals, in the implementation of both agendas at the national level.

A substantial literature around policy coherence, policy integration and policy coordination in relation to climate change and sustainable development has emerged over the last decade (e.g. Biermann et al, 2009; OECD, 2018; Nilsson and Weitz, 2019; Dzebo et al, 2019), focusing primarily on intra-governmental policy processes and institutional interactions in influencing coherence between various agendas and policies. The notion of ‘policy coherence for development’ (PCD) emerged through advocacy efforts from the EU and the OECD in the early 2000s, aiming to integrate development objectives into national policymaking (Fourie, 2018). Following the adoption of the 2030 Agenda, the concept was merged with sustainable development and instead referred to as ‘policy coherence for sustainable development’ (PCSD). PCSD has been defined as an “approach and policy tool to systematically integrate the social, economic and environmental dimensions of sustainable development at all stages of domestic and international policy making” (OECD, 2018:83), and thus foster synergies and reconcile conflicts across areas of sustainable development policy. As such, it is the subject of much policy guidance and many frameworks, not least following the adoption of the 2030 Agenda, with SDG target 17.14 aiming to “enhance policy coherence for sustainable development”. Conceptually, however, the term ‘policy coherence’ has been widely - and loosely - used in policy and research, referring to a wide variety of understandings; coherence between goals, policy instruments, actors, levels of governance, resources and so on (Carbone, 2008; Collste et al, 2017). Moreover, related terms have been used interchangeably, such as integration, coordination and collaboration, without clear conceptual distinctions (Rogge and Reichardt, 2016). Despite abundant examples of synergies across the SDGs, slow progress in their implementation suggests that the ideal of policy coherence has had limited effect on coherence in practice (GIZ and WRI, 2017; Nilsson and Persson, 2017). For this reason, there is a need to study the *politics* of policy coherence – how it is a politically contested practice whereby actors may behave strategically – and how incoherence may be the normal state of affairs in public policy.

A question also arises around whether coherence is a necessary and/or sufficient condition for ambitious policy, which is of particular concern given the gap between the demanding goals of the Paris Agreement and current levels of greenhouse gas emissions. The policy coherence literature is rich on diagnosed “barriers” to policy coherence (Persson et al, 2018), but frequently they are constrained to circumstances internal to the policy process (e.g. lack of coordination between ministries) rather than traced back to more deep-seated interests, ideas and institutions in society. Hence, a political understanding of policy coherence needs to acknowledge the prioritisation among (sometimes competing) goals, and processes that could result in winners and losers. This calls for studying the application of policy coherence measures by different actors and institutions in different ideological contexts; this includes asking whose interests are served (or not) by pursuing coherence between and across goals. Such critical perspectives on policy coherence have attracted less attention

from scholars and policymakers, who instead focus on ways to enhance coherence rather than on the consequences of different forms and degrees of coherence.

In parallel, the comparative politics literature on sustainable development extends beyond intra-governmental politics to look at broader political factors in influencing change across political systems (Caramani, 2017: 2). These have been characterised, for example, under the dimensions of ideas, institutions and interests. However, at present, no studies explicitly link these two bodies of literature together to hypothesise how ideas, institutions and interests (often referred to as the ‘three I’s’) may act as underlying factors that could explain different levels of policy coherence at different policy stages. The policy coherence literature has also been criticised for emphasizing institutional factors shaping coherence, meaning that less technocratic and more political explanations for coherence are often sidelined (Bocquillon, 2018) In particular, whilst much of the policy coherence literature does include explanatory factors around each of the three I’s, these factors are not explicitly defined and categorised as such, meaning that much of the theory from the comparative politics literature is excluded.

This paper aims to fill this gap by linking these two literatures together in the context of the Paris Agreement and the 2030 Agenda. It introduces an analytical framework for studying policy coherence and the role of the three I’s in influencing policy coherence at different policy stages: policy formulation, policy content and policy implementation. Although this framework is developed specifically for studying the implementation of climate and the SDGs, it can also be applied more widely in policy studies. Importantly, this also provides the novel contribution of how the role of the three I’s differs across different stages of policy.

As such, this paper addresses the following research question:

How can theories of comparative politics help explain varying levels of policy coherence in implementing the 2030 Agenda and the Paris Agreement across governance contexts?

We start with a review of how ideas, institutions and interests are defined and interpreted within the comparative politics literature, with examples illustrating how they play out from the climate change and sustainable development landscape. Based on this, we then present a review of the policy coherence literature from the lens of the three I’s, linking the criteria and explanatory factors for coherence back to each of the three I’s in order to infer their role in dictating coherence at different policy stages. Finally, we present a framework for how this combined theory can be operationalised in the form of criteria and indicators to assess policy coherence at different policy stages, using examples from climate and sustainable development policy.

2. Background: the role of ideas, institutions and interests in climate change and sustainable development

Table 1 summarises the key elements that influence policy coherence under each of the three I’s. Although we acknowledge that there are some overlaps in these elements across the three I’s, for the purposes of this paper we narrowly define these key elements as fitting under each of the three I’s so that the following sections can more robustly flesh out the role that they play in influencing policy coherence at different policy stages.

Table 1 – Summary of key elements in each of the three I’s

<i>Ideas</i>	<i>Institutions</i>	<i>Interests</i>
<ul style="list-style-type: none"> • Problem definition • Framing of problems and solutions • Policy paradigms and discourses • Knowledge and expertise • Societal norms • Values and worldviews 	<ul style="list-style-type: none"> • Procedures, rules, structures and conventions • Laws, regulations and standards • Coordination, consultation and participation mechanisms • Mainstreaming 	<ul style="list-style-type: none"> • Preferences and power held by actors • Broader power dynamics and legitimacy • Distribution of resources, income and wealth

The following subsections elaborate on each of these elements, with examples from the climate change and sustainable development landscape to illustrate how the three I's bring about policy change.

2.1. Ideas

Ideas can be defined as “claims about descriptions of the world, causal relationships, or the normative legitimacy of certain actions” (Parsons, 2002: 48). Ideas can take different forms, including problem definitions, policy paradigms, frames, discourses and knowledge and expertise, shaping underlying values and assumptions about what the world should be (Beland, 2016; Schreuer et al, 2010). According to Pojani and Stead (2014), ideas consist of: (i) norms, which are taken-for-granted values, attitudes, assumptions and identities as held by policymakers; and (ii) programs, which are precise guidelines for solving policy problems based on well-established norms within specific institutions.

The literature indicates several aspects of ideas that may explain how they influence policy. For example, Shearer et al (2016) argue that ideas play a role in shaping agenda setting, policy formulation and implementation by determining how problems are presented as well as what potential solutions are taken up by policymakers. This is prevalent within discourses of ‘dangerous climate change’ and messages around only 12 years remaining for climate action that emerged in the media following the release of the IPCC 1.5 report, increasing pressure on governments to take substantive action (Boykoff and Pearman, 2019). However, this framing of climate change as an ‘emergency’ has also been used to justify controversial climate actions such as geoengineering, which could have other adverse environmental consequences or perverse incentives (Markusson et al, 2014).

While the failure to break out of old norms and ideas and embrace new ones can be a key hindrance to policy change (Campbell, 2002), policy change can also be triggered through new ideas and problem framings (Kern, 2011). In particular, ideas and ideational processes can play a role in opening up policy windows to bring about reform (Kingdon, 1984). For example, prevailing economic ideas around traditional economic growth and market-based policies for development and inequality reduction may compete with ideas around what is considered substantive climate action (Darden, 2009; Purden, 2014). More recently, the COVID-19 pandemic has spurred ideas around ‘green recovery’ and been seen by many as a policy window for societal transformation to bring about change (eg. Johnson et al, 2020).

According to Hay (2004), development trajectories of given regimes or policy paradigms are contingent upon ideational contestation. Contested ideas have historically existed around conceptualisations of sustainable development itself. For example the idea of the ‘three pillars’ of

sustainable development assumes an equivalence across economic, social and environmental factors. In contrast, other ideas see sustainable development as a nested concept, where the economy sits inside society which sits inside ecology, suggesting an implicit prioritisation of goals (Griggs et al, 2013). Similar phenomena are observed within climate change discourses, with studies such as Hulme (2009) arguing that different framings of climate change point to different solutions.

2.2. Institutions

Institutions can be defined as the “procedures, routines, and conventions embedded in the organizational structure of the polity or the economy” (Pojani and Stead, 2014), guiding the behaviour of actors and structuring policymaking (Kern, 2011; Shearer et al, 2016). The literature characterises institutions as being either formal (eg laws, regulations and standards) or informal (eg norms, habits and customs) (Breukers and Wolsink, 2007). For the purposes of this paper, however, we consider informal institutions such as norms and discourses to fall under ideas (see also table 1). It is also important to note that whilst the policy coherence literature holds an institutionalist focus, this comes with a technocratic bias, rather than exploring the political dimensions of institutions, such as how institutions may enable or constrain certain ideas and interests.

Similar to ideas, institutions also play a role in influencing policy in several ways, such as through creating constraints on policy options (Breukers and Wolsink, 2007). Institutions can either constrain or enable political action by state and non-state actors (Schmidt, 2006), and can also constrain or enable certain ideas and discourses through determining which authorities have the standing to address a particular issue and how (Schmidt, 2008). An example of this is detailed by Lijphart (2012), who find that consensus-based democracies, involving a wider set of actors and policy options, generally perform better than majoritarian democracies on environmental policy.

According to Pojani and Stead (2014), institutions influence decision-making through filtering ideas and shaping the interaction of interest groups to provide efficiency, credibility and continuity in policy-making. Similarly, Schirm (2016) argues that institutions play a role in structuring political coordination through putting formal regulations and coordination mechanisms in place, such as through mainstreaming agendas and aligning governance structures. Several examples exist on the role of institutions in integrating climate change policies into national sustainable development strategies (eg Munasinge, 2011; Dzebo et al, 2018). In Mexico, for instance, the mandate to integrate the 2030 Agenda into the country’s national planning system is supported by a recent reform of Mexico’s Planning Law, aiming to also integrate the 2030 Agenda in the design and expenditure of the Federal budget (GIZ, 2018).

2.3. Interests

Interests can be defined as material considerations of specific sectors and actors related to securing economic and political power (Schirm, 2016). Interests also inform the preference and power held by policy actors, with the ability of actors to pursue and attain their interests depending on the distribution of resources and power within a policy domain in addition to their individual capacity and skills (Shearer et al, 2016).

Interests also play a role in influencing policy, particularly through the pursuit of self-interest and inter-group competition (Birkland, 2010). Interests can be advanced through an “institutional agenda”, which is a list of items explicitly up for consideration by decision-makers; interest groups therefore compete to gain and maintain space on this agenda (ibid). In general, more powerful groups are in a

better position to advance their interests, whilst less powerful groups remain underrepresented (Pojani and Stead, 2014). For example, corporatist modes of representation are more common in consensus-based democracies, and pluralist modes of representation are prevalent in majoritarian democracies (Lijphart, 2012). Different modes of representation may have an important effect on the extent to which synergies and conflicts among different interests and groups are managed.

Power is also theorised as depending on resource availability as well as the ability to form coalitions, achieve visibility, persuade the public and media and induce broad-based support for a certain cause; this highlights the need to consider structural constraints on individual agency to advance interests (ibid). A country's natural resource availability may have an important influence on its sustainable development policies. For example, countries with large reserves of fossil fuels also tend to have significant vested interests in the form of fossil fuel industries, which can in turn pose barriers to climate policy (Moe, 2015).

Building on this, material interests are hypothesised as being relatively stable over time and "rational" through their objective of utility maximisation, making them easy to identify (Blyth, 2002) and well established through policy choices that have a clear observable impact on wealth and income (Laird, 2001). On the other hand, Blyth (2002) argues that in situations of uncertainty, actors themselves are not sure what their interests are and so interests need to be explained rather than be used to explain policy and institutional change. For example, public choice literature on bureaucratic politics understands interactions and competition between government ministries as being shaped by their interests, in particular seeking to maximise their departmental budgets (Mueller, 2003). This is evidenced by Pickering et al (2015), who demonstrate how decision-making on climate finance at the national level is ultimately influenced by different government ministries having different interests and specific "missions" that they pursue.

2.4. Policy change through interactions between the three I's

Beyond analysing the three I's as separate entities, there is also a vast literature that studies the interactions between ideas, institutions and interests, and how these interactions in themselves also influence policy change. According to Pojani and Stead (2014), the three I's interact and lead to policy change either through: (i) being independent and mutually exclusive variables that compete to influence policy; (ii) being mutually determining, with any one of the three I's determining the values of the other two in a feedback loop; or (iii) being multicausal, with all three I's mattering simultaneously. This highlights the importance of considering the three I's as being interlinked and interrelated, with feedback loops amongst them influencing one another and influencing policy as a whole.

A substantial theoretical literature elaborates on these interactions. For instance, Beland (2016) argues that institutional variation across country contexts can explain why the ideas of some types of actors are more influential than others. In particular, they emphasise that policy institutions can be considered to be "embedded ideas" that are subject to constant reinterpretation, meaning that studying these ideas is crucial for understanding the evolution of policy (ibid). In addition, Hay (2004) brings forth the notion that ideas that make interests "actionable", with actors expressing their interests through their ideas, which influences their behaviour within a policy landscape. Similarly, Schirm (2016) argues that practices "connect ideas with general societal interests and may be codified in institutions or derive from existing institutions". As such, interdependencies between the three I's are expected to exist when influencing policy and governmental positions. Building on this, Shearer et

al (2016) argue that changes in policy networks and the relationship between actors are also associated with changes in ideas, institutions and interests.

More generally, Reitan (1998) argues that although ideas contribute to the understanding of policy development, institutional and interest-based explanations are more relevant in explaining the observed degree of success in policy implementation. According to Schirm (2016), interests are dominant in influencing policy if governance decisions are based around cost-benefit analyses, whereas ideas dominate when it comes to more fundamental questions of the role of politics in steering the economy as a whole. In addition, institutions are considered to be underpinned by ideas and interests as underlying causes; however, once created, institutions can also influence societal ideas and interests and thereby shape governmental preferences indirectly (ibid).

Substantial empirical evidence also exists for the relative importance of ideas, institutions and interests in collectively dictating policy change within different contexts. For example, Kern (2011) assesses system innovations towards sustainability in the UK and the Netherlands and finds that interest-based explanations alone are unable to account for the shape of policy initiatives or the dynamic processes leading to policy outputs; in addition, it is also necessary to consider how the perceived interests of actors “interact with discursive and institutional factors”, particularly when giving credibility and legitimacy to some views more than others and influencing the perceptions of interests. Furthermore, the author notes that in both case study countries there are institutional constraints being imposed due to difficulties of fitting new policies and initiatives within existing institutional rules (ibid).

Furthermore, Schirm (2016) looks at three case studies in Germany and find that societal interests or ideas that are relevant for governmental positions are “either informed by domestic institutions or do not oppose them”. This demonstrates the limitations of purely institutional, interest-based or ideational explanations of government preferences, highlighting the need to consider all three variables in an interrelated manner (ibid).

Overall, the comparative politics literature clearly highlights that ideas, institutions and interests have different relative importance within different contexts and all interact to influence one another. Traditionally technocratic and institutional understandings of coherence have resulted in static and depoliticized understandings of the concept that fail to consider questions of whether an entirely coherent political system is possible or even desirable, whether coherence may eliminate necessary conflict and tradeoffs, and for whom a system can be considered coherent (Bocquillon, 2018). Importantly, the meaning of what counts as policy coherence is in itself politically contingent, and dictated by whose interests or ideas are served through coherence (Kurze and Lenschow, 2016). As such, there is a need to consider all three I’s in an interrelated and interlinked manner when assessing their role in influencing policy changes and outcomes. The next section introduces an analytical framework that incorporates how the 3 I’s (and their interaction) play a role in influencing the degree of policy *coherence* observed at different policy stages.

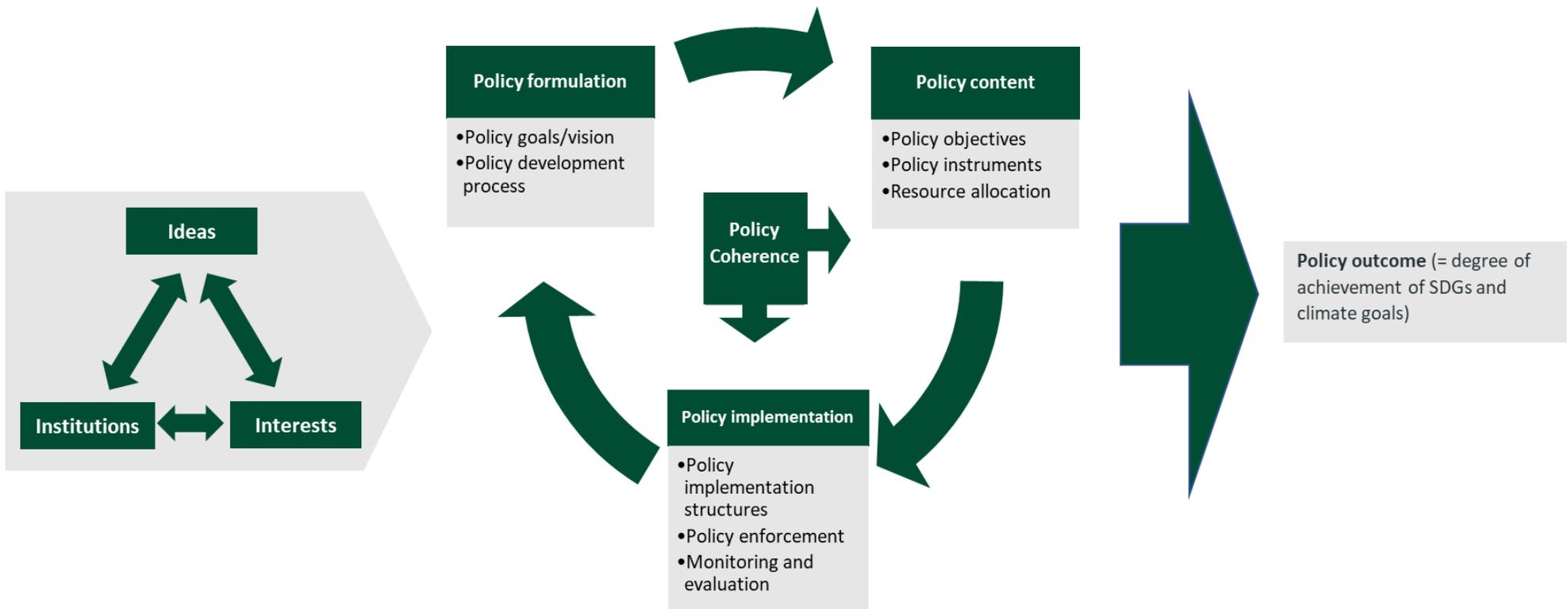


Figure 1 – Analytical framework

3. Analytical framework: policy coherence and the three I's

Figure 1 demonstrates how the three I's are conceptualised for the purposes of our study. Our assumption is that the three I's serve as *underlying explanatory factors* that play a role in influencing the level of policy coherence observed across different policy stages (policy formulation, policy output and policy implementation). The level of coherence observed at different policy stages is expected to be a major factor influencing the extent to which effective policy outcomes relating to the 2030 Agenda and the Paris Agreement are achieved. Section 4 elaborates further on how these policy stages are defined.

Although a simplified version of the typical policy cycle has been adopted here, key findings would apply even if the policy cycle was separated out into a larger number of stages. We also recognize that a number of feedback loops exist within this framework. For example, the three I's may themselves independently affect policy outcomes, irrespective of policy coherence. Policy outcomes may in turn also shape and influence the three I's, such as by influencing what ideas are upheld or whose interests are served. For the purposes of this paper, however, we opt to utilise a simplified model that assumes a degree of linearity. As societies are characterised by "dynamic complexity" (Flood, 2002: 13-14; Linnér and Wibeck, 2019) - where effects over time of the interrelatedness are elusive and where short term and long term effects differ and the interlinkages in one place creates ripple effect for other contexts - we take a simplified view of these interactions for analytical purposes.

In the following subsections, the policy coherence literature is reviewed from the lens of the three I's, with explanatory factors for coherence related back to ideas, institutions and interests across the different policy stages. By doing so, this paper broadens the institutions-based explanations that dominate the policy coherence literature to also explicitly extract factors relating to ideas and interests.

3.1. Policy formulation

3.1.1. Ideas

As stated in table 1, problem definition is a key arena through which ideas express themselves. Therefore, one way in which ideas can influence the level of policy coherence in the policy formulation stage is through dictating how problems are defined and what overall goals and visions are put in place. For instance, Knoll (2014) argue that the Policy Coherence for Development (PCD) framework proposed by the OECD ignores the fact that there are disagreements on what more "coherent" policies actually entail, with different views that multiply at the global level. Problem definition, as well as values and worldviews more broadly, can also influence how issues and knowledge are interpreted and used at the policy formulation stage (Nilsson and Weitz, 2019). This could obstruct policy coherence particularly if different government ministries and departments hold different values, worldviews and areas of prioritization (Kingdon et al, 2002; Pickering et al, 2015).

Building on this, Kurze and Lenschow (2018) emphasise that "a focus on shifting problem definitions adds depth to the analysis of policy coherence as it allows us to problematise the standard on which the judgement of coherence is based". Lenschow et al (2018) also include problem definition as part of their analytical framework to add an ideational focus when studying policy coherence, arguing that "the social construction of policy problems adds depth to the analysis of policy coherence, revealing its contingent nature". As such, the authors suggest that widely shared notions of policy coherence and corresponding policy goals could disguise or suppress other potential meanings, thereby

marginalising other policy options which could be considered more coherent from other perspectives (ibid). This demonstrates the inherent subjectivity of policy coherence, ultimately depending on both the actors considered and prevalent norms.

According to Bocquillon (2018), what constitutes a “coherent policy” always depends on the beholder’s perspective, with different actors across policy domains having different visions of what an efficient and legitimate policy might be, thereby influencing coherence at the policy formulation stage. For example, ideas can dictate what policy instruments and objectives are included in the design and formulation of policies. Howlett et al (2017) argue that tools and instruments for facilitating coherence from different political eras often get “layered” on top of one another based on ideological preferences, without rational consideration of matching overall policy means with objectives and thereby resulting in inconsistencies and incoherence.

3.1.2. Institutions

The role of institutions in influencing policy coherence at the formulation stage primarily comes across through the degree of formalised interaction mechanisms between relevant actors when formulating policies. As such, increased institutional and cross-ministerial coordination is posed as a key solution within much of the policy coherence literature (eg England et al, 2018). For example, Fourie (2018) look at policy coherence for development in South Africa and recommends using and improving existing institutional structures and processes as well as stimulating cooperation across government departments as key priorities for enhancing policy coherence.

In contrast, lack of cross-institutional collaboration risks creating ineffective policy outcomes. For example, Azizi et al. (2019) show that institutional isolation creates less effective global institutions in terms of coherent integration of multilateral environmental agreements. As such, the authors argue that there is a need to thoroughly identify overlapping themes across multilateral environmental agreements and develop better strategies for cross institutional cooperation and coordination

3.1.3. Interests

Given that political systems are characterised by conflict, competition for resources and struggles between different interest groups; coherence and integration at the policy formulation stage would therefore require modifying the incentives and power balances between actors in the system (Nilsson and Weitz, 2019).

Interests can also affect how goals and visions are set out at the formulation stage. For example, Lenschow et al (2018) argue that “policy coherence is less likely in cases involving a larger number of affected interests, and without the predominance of few concentrated interests”. However, one actor being more influential than others and exerting greater authority can also lead to incoherence. As such, inconsistencies between goals and measures in a policy leading to incoherence could be seen as indirectly resulting from conflicting interests pulling in different directions (ibid). Overall, the authors argue that political processes and power dynamics are key in shaping policy coherence and determining which interests dominate over others.

Looking at actors and interests, Persson et al (2016) use examples of environmental policy integration from Sweden to theorise that the interests of the ruling government and whether they give a high priority to integration to begin with is a key factor influencing policy coherence.. Building on this,

integration itself could influence interests by driving governance shifts and imposing new actor constellations, coordination requirements and procedures of decision-making (ibid).

3.2. Policy content / output

3.2.1. Ideas

Within policy outputs, policy images or “frames” can link specific issues, actors and objectives within policies together to serve a certain purpose (May et al. 2006). Importantly, framings and discourses in policy documents can influence how issues are interpreted and how boundaries around certain issues are created, which in turn define in what ways and why particular issues should be seen as problems (Gamson and Modigliani, 1987). Different framings or discourses within different policies could therefore also affect coherence between them through perpetuating different ideas of what the problem is, how it should be managed and whose responsibility it is to manage it.

3.2.2. Institutions

Policy coherence at the output stage can be assessed through the institutional mechanisms for coordination detailed in various policies. The OECD (2018)’s Policy Coherence for Sustainable Development (PCSD) framework, for example, focuses primarily on institutional solutions and mechanisms for coherence, such as integrating sustainable development goals into existing institutions. The PCSD framework puts emphasis on cross-sectoral and whole-of-government approaches, particularly through utilising existing institutional structures and facilitating better coordination across sectoral departments and policy instruments (Zeigermann, 2018). This is also emphasised by the policy coherence literature more broadly, which highlights the importance of putting vertical and horizontal coherence mechanisms in place (Ranabhat et al, 2018; Nilsson et al, 2012).

Institutions can also facilitate coherence through the mainstreaming of climate action across sectors and regions as stated in policy documents (eg Di Gregorio et al, 2017). For example, England et al (2018) look at policy coherence of climate change adaptation in Malawi, Tanzania and Zambia and argue that to facilitate policy coherence, more effective mainstreaming is needed through longer-term cross-sectoral and integrated planning. On the other hand, Nordbeck and Steurer (2016) argue that policy integration “cannot be achieved with a single multi-sectoral strategy”; context-specific governance approaches are needed that account for different norms and ideas.

According to Biermann et al (2009), creating new institutions or environmental organisations for purposes of policy integration will not be effective due to too many different issues existing with their own distinct problem structures. and will instead contribute to further institutional fragmentation. Instead, the authors make the claim for a clustering of institutions and bureaucracies through: (i) grouping together the functions of related convention secretariats; (ii) streamlining activities and meetings; (iii) coordinating operations and budgeting; or (iv) improving transparency and participation to minimise institutional overlap and fragmentation (ibid). These could be structures incorporated into policy outputs to facilitate coherence.

3.2.3. Interests

At the policy output stage, interaction of different interests and how they come across through policies could influence coherence. Policy content is often structured around the narrow interests and approaches of a few powerful political actors, which could lead to diverging and irreconcilable priorities inhibiting coherence (Bocquillon, 2018). Focusing specifically on integrating the 2030 Agenda at the national level, Nilsson and Persson (2017) argue that challenges arise in integrating an entire UN agenda into “a pre-existing (but constantly evolving) domestic political agenda, often with a strong and intricate root system in parliamentary politics, domestic public opinion and the bureaucracy”. Therefore, due to conflicting interests, the 2030 Agenda faces risks of marginalisation, particularly if the SDGs are not thoroughly contextualised within the national political agenda (ibid).

In Mexico, Valenzuela (2014) finds that nationalistic, federalism-based interests and political fragmentation of the presidential regime has been hindering coordination with subnational governments, particularly due to a lack of incentives for cooperation among federal and subnational authorities.

3.3. Policy implementation

3.3.1. Ideas

When it comes to policy coherence at the implementation stage, ideas play a key role in dictating how actors interact with one another. According to Nordbeck and Steurer (2016), policy areas where key actors share basic ideas and images are more coherent than others. This is echoed by Jordan and Lenshow (2010), who emphasise that the “strong normative interpretations” of policy integration by different actors have not been fully embedded into everyday political practices, thereby hampering coherence.

The role of actors is also stressed by Rietig (2019), highlighting how actors hold different beliefs guiding their preferences and behaviour, which ultimately affects climate policy integration. Looking at the EU budget as a case study, the study finds that in cases where policy integration conflicts with core beliefs of implementers on what policies to prioritise, attempts to integrate climate objectives often result in resistance (ibid). Overall, the study concludes that underlying beliefs of actors are particularly important in influencing levels of conflict and thereby affecting coherence. Similarly, Runhaar et al (2014) finds that framing of environmental objectives is particularly important when it comes to policy integration, as actors from non-environmental policy sectors need to be convinced to take environmental action through being made aware of how it would be beneficial to them.

Lastly, Skovgaard (2018) argues that the ideas and discourses inherent in a given organisation influence how it interacts with other actors, particularly through rules and norms. Giving examples from the European Commission, he provides evidence that differences in organisational culture as well as differences in “normative and causal ideas” between the Directorate-General of Energy and the Directorate-General of Climate Action lead to differences regarding policy objectives and instruments, thereby hampering policy coherence (ibid).

3.3.2. Institutions

Similar factors relating to institutions in the policy formulation stage also influence coherence at the implementation stage as illustrated by a number of case studies. For example, Antwi-Agyei et al (2016) assess policy coherence between adaptation, mitigation and development action in Ghana and find

that a lack of institutional capacity is a key gap in coherence between sectoral policies. As such, the authors recommend that national institutions such as the Environmental Protection Agency (EPA) need to be strengthened, vis-à-vis its counterparts, to provide appropriate mechanisms for achieving social, economic and environmental objectives.

Looking at environmental mainstreaming and policy coherence in the Caribbean region, Bizikova et al (2018) argue for the informed inclusion of environmental concerns into decisions of institutions driving national, local and sectoral development policy. Similarly, Scobie (2016) looks at policy coherence for climate change governance in Caribbean Small Island Developing States and finds a high level of fragmentation in the implementation of climate policy in the region, particularly due to institutional problems such as silos in public environmental governance architectures. Overall, organisational structures and governance mechanisms are major factors influencing policy coordination, and improved institutionalisation of the governance of multi-sectoral strategies could facilitate coherence at implementation stages (Nordbeck and Steurer, 2016).

Looking at policy integration for implementing the 2030 Agenda, Nilsson and Persson (2017), however, argue that institutional strategies should not involve the complete breaking down of silos, as the expertise and know-how of specialised ministries and agencies is important for implementing effective policies. Instead, the authors recommend that institutional reform should focus on enhancing communication and collaboration, such as through creating a cross-ministerial task force. Overall, the study concludes that the key challenge for integration and implementation of the 2030 Agenda is not only a lack of political will but also the lack of will to “change institutionalised and in many places efficient and effective existing national policy frameworks”. This once again frames policy incoherence as an inherently institutional problem (ibid).

3.3.3. *Interests*

At the implementation stage, interests affect policy coherence through how power dynamics play out and shape interactions among actors. One illustration of this is presented by Di Gregorio et al (2017), who provide evidence from Indonesia where power concentrations and the interests of key ministries to “maintain sectoral control and appropriate the climate agenda” led to coordination structures being dismantled, thereby promoting greater fragmentation of climate change responsibilities across sectors and departments and weakening overall policy integration. As such, the authors argue that policy integration ultimately depends on “the constellation of power of policy actors”. Building on this, Azizi et al (2019) argue that powerful actors can often have strategic interests in keeping institutions separate and preventing policy integration. As such, some interests may be opposed to policy coherence due to coherence efforts threatening the power of certain actors to put forward their agendas.

Interests as barriers for policy coherence does not only concern public actors. Local interest groups such as businesses and civil society can also play a role in shaping policy integration (Hawkins and Wang, 2013). For example, Nordbeck and Steurer (2016) hypothesise that policies tend to be more coherent if “the political rhetoric in a policy area is matched by a unified interest group population”. Power relationships between involved actor groups, both public and private, are key to consider for making progress on policy coherence. Which actors are involved and which are excluded has an impact on policy implementation (Humalisto 2015). Lastly, Runhaar et al (2014) argue that a key barrier to policy integration is that relevant actors to the climate and development agenda such as environmental ministries often lack authority, power and resources to push interests of coherence.

3.3.4. Discussion

Overall, the review of the policy coherence literature through a comparative politics lens conducted above demonstrates that explanatory factors and criteria for coherence exist beyond the institutional level, with all three I's being important, both as standalone and as interacting, in influencing policy coherence at different policy stages. Different strategies for coherence also appear to serve different interests and ideas, and therefore may favour certain actors or agendas over others.

Ideas play a role in influencing policy coherence through the alignment of problem definitions and policy paradigms, the beliefs and priorities held by different actors and the extent of compatibility of different instruments. Institutions also play an important role through influencing fragmentation, mainstreaming of agendas, the extent to which relevant actors interact and coordinate and their levels of capacity to engage in policy processes. Finally, interest-based factors such as power and political buy-in, the agenda of interest groups, power dynamics and governance models all also influence the degree of policy coherence.

More broadly, the relative importance of the three I's in different countries is crucial to consider as this influences the policy recommendations for increasing coherence that can be made within the different contexts. For example, a comparative politics lens might reveal that ideas or interests are the prominent factors dictating coherence in specific countries, meaning that recommendations focused on investing in institutions would have a limited overall effect in increasing coherence. Our work is therefore necessary for filling a gap within the policy coherence literature and generating recommendations for increasing policy coherence that also address interests and ideas-based barriers.

In addition, both literatures appear to lack strategies for how the relative influence of the three I's can actually be assessed or accounted for, or what it means to assess the role of the three I's in influencing coherence, particularly within the context of climate change and sustainable development. In order to fill this literature gap, the next section therefore presents a set of criteria and indicators in order to more empirically evaluate the role of ideas, institutions and interests in influencing coherence at different policy stages for our country case studies.

4. Operationalising the analytical framework: policy coherence between climate change and the 2030 Agenda

In this section we will first define what counts as more or less coherent *outputs*. Based on the analytical framework in Section 3, we then summarize our theoretical expectations on the role of the three I's in influencing the level and nature of policy coherence coming out of a policy process in Table 2. Finally, we give examples of how these theoretical expectations can be operationalized into indicators and questions for studying the role of the three I's in influencing the level of coherence between climate and SDG policy outputs in national case studies.

It is policy outputs, composed of the policy content and policy implementation, that are the dependent variables in our framework and as a result our definition of coherence below is focused on these two stages of the policy process (i.e. as they are depicted in Figure 1). We adopt this focus on understanding the coherence of the content of policies and how they are implemented because it is the policy outputs and their implementation that will determine the extent to which the policy process in general helps to bring about the achievement of the SDGs and climate goals. What we ultimately

want to understand in applying our framework is how factors both within and outside of the policy process impact on the coherence of policy outputs.

One could also attempt to conceptualize the policy formulation stage itself in terms of it being more or less coherent. However, a definition for what counts as coherent policy formulation will be quite distinct from a definition of what counts as coherent policy content and implementation. We do not add this additional layer of complexity to the conceptualization of coherence in our framework because it risks confusing our dependent and independent variables given that it is features both within the policy formulation stage and features outside of the policy process that are treated as explanatory factors for the level of coherence in policy content and implementation. Of course, when analyzing the results of empirical studies using our framework it will be important to assess how features of the formulation stage *lead to* more or less coherent policy outputs.

It is also important to mention that for the purposes of this paper, we do not attempt to unpack the plethora of possible interactions and linkages as portrayed in Figure 1. Instead, for the purposes of feeding directly into our empirical case study work, we limit the scope of this section to understanding the role of the three I's on the level and nature of policy coherence within policy outputs (i.e. the part of the figure that is to the left of the arrow).

4.1. Policy coherence as the dependent variable

We define coherent policy outputs (i.e. policy content and policy implementation) as consisting of two components, (i) the comprehensiveness criterion and (ii) inter-relationship criterion. By comprehensiveness we mean that coherent policy outputs are those that address the full range of issues contained in a given set of policy goals (Underdal 1980). In other words, policy outputs should address the full set of policy goals that countries have already signed up to, or a set of ideal policy goals stipulated by the analyst. For example, if the policy goals are to implement the SDGs nationally and to achieve national climate targets consistent with the Paris Agreement, then policy outputs should address the range of issues that are embodied within these two global agendas and that are relevant to the national context. What is and is not included in a test of comprehensiveness will of course be a contested issue. Yet for the purposes of conceptual definition, one can both recognize the likelihood of such contestation and that the concept of coherence requires some notion of what issues, objectives, and desired outcomes make up the population of policy features that are to be evaluated as being more or less coherent.

Secondly, we define coherent policy outputs as achieving high levels of synergy, consistency, or independence between specific policy objectives, instruments, and implementation modalities (Nilsson et al. 2012; Nilsson et al, 2016; Rogge and Reichardt, 2016); we call this the 'inter-relationship criterion'. Policy objectives, instruments and implementation modalities are synergistic when mutually supportive features of these outputs are identified to produce an effect greater than if the objectives, instruments and implementation modalities were pursued independently. Synergy is thus the result of coordinating the complementarities of two or more issues or processes, for example by identifying more cost-effective solutions though coordinating policy instruments or implementation (e.g. Linnér 2005).

Policy outputs are consistent when specific policy objectives, instruments and implementation do not counteract other policy objectives, instruments and implementation modalities. For example, it may not be possible to avoid trade-offs between different policy goals. However, if active decisions are made about trade-offs between policy goals, the management of these decisions should be reflected

in policy outputs that are consistent with each other because they do not work at cross-purposes. Finally, policy outputs are independent when they do not interact with each other in adverse or conflictive ways.

Although exploiting synergies should clearly lead to better outcome achievement compared to simply having independence between policy outputs, it is important to note that we do not conceptualize synergy, consistency and independence as representing a scale from more to less coherence with respect to the policy outputs. This is because the various goals that a policy process is trying to achieve may be more or less conducive to synergistic, consistent and independent solutions. For the purposes of our framework, maximum coherence is achieved when the set of policy outputs is as synergistic, consistent or independent as is possible given the overall goals of the policy process. Again, this reflects that it is the coherence of the policy *outputs* that are evaluated in this framework, and not the extent to which policies achieve multiple policy goals on the ground (i.e. policy outcomes). To our knowledge this distinction between the *nature* of coherence (synergistic, consistent, or independent) and the *extent* of coherence achieved has not been previously made in the literature. However, to make fair assessments on the how effective a policy process is in producing coherent outputs it is important to distinguish between what type of coherence are accessible to policy makers in a specific context and how effective they are in realizing these types of coherence.

The conceptual definition of policy coherence above does not preclude recognizing that policy coherence can be a highly political and contested concept. A political understanding of policy coherence acknowledges that prioritisation among (sometimes competing) goals and processes can result in winners and losers. Competing ideas about what is or is not a coherent policy output or about whether or not coherence itself is a desirable objective may often be based in ideological and political contestation. This calls for studying the application of policy coherence measures by different actors and institutions, in different ideological contexts, including whose interests are served (or not) by pursuing coherence between and across goals. Such critical perspectives on policy coherence have attracted less attention from scholars and policymakers, who instead tend to focus on ways to enhance coherence rather than the consequences of different forms and degrees of coherence.

The analytical framework developed here can help further our understanding of the role of coherence in political contestation. We argue that the three I's influence policy options and shape the ambition and importance given to different agendas, goals and actors in pursuing or resisting policy coherence. This approach can aid our understanding of policy coherence as a political process.

The next subsections provide suggestions on how to operationalize the role of ideas, institutions and interests in influencing policy coherence for empirical analysis. We outline our theoretical expectations, based on the existing literature, for how ideas, institutions and interests affect the extent of policy coherence in policy outputs. We then give examples of the types of indicators and questions that could help one understand the role of the three I's in determining the levels of coherence between NDC and SDG implementation for a specific country case study.

4.2. The three I's as independent variables for explaining the coherence of policy outputs

Based on the analytical framework in Section 3, Table 2 below summarizes our theoretical expectations on the role of the three I's in influencing the level and nature of policy coherence. Examples of how one can operationalise the 3 Is for studying when and why SDG and NDC policy outputs are more or less coherent are also presented. We give examples of indicators and questions for studying the role of the 3 Is in explaining the level of coherence between climate and SDG policy

processes in national case studies. It is important to note, however, that the range of indicators and questions outlined are intended more as an agenda for future research, and may not all be necessarily addressed within the national case studies.

Table 2: Summary of the role of the three I's in influencing policy coherence

	<i>Impact of the three I's on policy coherence</i>	<i>Examples of questions and indicators for studying the role of the three I's</i>
Ideas	<p>Extent to which coherence between policy goals is considered an overarching policy goal</p> <p>Framing of what coherence is and how it should be achieved</p> <p>Level of awareness of and commitment to the need to coordinate multiple policy objectives among decisionmakers.</p> <p>Level of agreement among policymakers and key stakeholders/constituencies on what the most important interactions and trade-offs between different policy goals are</p> <p>Actors' levels of knowledge and expertise relating to policy goals</p> <p>Levels of alignment between the organizational cultures, beliefs and norms of involved institutions and actors</p>	<ul style="list-style-type: none"> • Level of priority that policymakers place on climate and SDG goals at the national level. • Policy makers' perceptions of the most important interactions between climate policy and the implementation of Agenda 2030 and the overall challenges of achieving targets. <ul style="list-style-type: none"> ○ The extent to which policy actors are aware of links between different relevant policy spheres. ○ How are issue boundaries drawn, what management strategies are espoused, and how is responsibility for implementation delegated? • Differences in perceptions of the SDGs and climate policy goals across ministries and other key institutions. <ul style="list-style-type: none"> ○ Are ideological differences or differences in organizational culture apparent? • Extent to which policy makers perceive policy coherence as important to successful implementation of their climate and SDG agendas. <ul style="list-style-type: none"> ○ How do perceptions of what counts as a coherent SDG and climate policy mix differ across ministries and other key institutions? • Policy makers' views on how environmental and social performance are related to economic development. <ul style="list-style-type: none"> ○ To what degree are discourses of sustainable economic development embraced by policy-makers (including which indicators are used to track national progress)? • Policy makers' perceptions on the salience and political importance of climate change and sustainability for the public.

<p>Institutions</p>	<p>Level of formal interaction mechanisms and informal interactions between institutions such as ministries and agencies</p> <p>Cross-sectoral mainstreaming of policy objectives</p> <p>Adoption of new institutional apparatuses for horizontal or vertical coordination:</p> <ul style="list-style-type: none"> • New institutions and organizations • New mechanisms for coordination and clustering functions across existing organizations and institutions <p>Institutional capacities across ministries/agencies:</p> <ul style="list-style-type: none"> • Match or mismatch between relative capacity and balance of policy objectives 	<ul style="list-style-type: none"> • Overall institutional capacity/governance quality of the country, e.g.: <ul style="list-style-type: none"> ○ Achievement of policy objectives ○ Accountability and transparency ○ Control of corruption • Overall governance structures: <ul style="list-style-type: none"> ○ Democracies vs non-democracies ○ Presidential vs parliamentary systems ○ Leadership dominated by head of state vs more independent senior ministers ○ Power of executive relative to parliament and judiciary ○ Degree of centralization/decentralization of decision-making (including unitary vs federal systems, membership of a supranational body such as the EU) ○ Degree of public participation in decision-making • Levels of cross ministerial/cross agency coordination for governments in the country, i.e. baselines with respect to capacity for institutional coordination. <ul style="list-style-type: none"> ○ Do NDC and SDG implementation issues fit naturally into pre-existing mechanisms for cross ministerial/agency coordination? ○ Have any new coordination mechanisms (horizontal or vertical) been introduced to manage the implementation of NDCs and or SDGs? <ul style="list-style-type: none"> ▪ New institutional arrangements? ▪ New mechanisms to enhance coordination within existing institutional arrangements? • Presence of independent environmental/sustainable development authorities (e.g. environmental protection authority, sustainability commissioner). <ul style="list-style-type: none"> ○ If present, what role do they play in coordinating government climate and SDG policy and implementation?
<p>Interests</p>	<p>Breadth / number of affected interests and level of political fragmentation of interests</p>	<ul style="list-style-type: none"> • Economic structure (e.g. concentration of extractive/manufacturing/agricultural/services industries) <ul style="list-style-type: none"> ○ How dependent is the economy on sectors with high greenhouse gas

	<p>Economic structure and the distribution of resources, income and wealth.</p> <p>Comparative power/influence of interest groups, including balance or authority, power and resources between ministries, institutions and/or key stakeholders.</p> <p>Extent to which cross-cutting policy goals and objectives challenge or disrupt established political dynamics/power relations</p>	<p>emissions or high vulnerability to climate change?</p> <ul style="list-style-type: none"> ○ What are the country's natural resource assets and its exploitation levels/planning? ○ Connectedness with the global economy (may make coherence difficult if this reduces a country's policy space) ○ How challenging are low-carbon pathways for those sectors of the economy with the largest climate impacts? <ul style="list-style-type: none"> ● To what extent do climate goals and SDG priorities impact national economic interests? <ul style="list-style-type: none"> ○ Are there significant constituencies that have high comparative benefits from NDC/SDG implementation? ○ Is there coalition building between constituencies in favor of NDC and SDG implementation? ● Level of political influence among high environmental impact sectors on government policy compared to other sectors. ● Development context of the country (e.g. national income/wealth & levels of inequality) ● Overall degree of public support for climate and sustainability policies. ● Overall degree of political polarization/social conflict within the country. <ul style="list-style-type: none"> ○ Level of political polarization on climate and sustainability policy (i.e. among the public and political parties/elites). ● Relative power structure between ministries and the extent to which cross-cutting climate and SDG objectives challenge or disrupt established power relations within government. <ul style="list-style-type: none"> ○ How are bureaucratic interests impacted (e.g. budget maximisation, political power)? ● Extent to which cross-cutting climate and SDG objectives challenge or disrupt power relations between levels of government (i.e. states/provinces, regional and local government, and cities).
--	---	---

5. Conclusions and next steps

This paper has conducted a targeted literature review to demonstrate the potential role of ideas, institutions and interests in influencing policy coherence at different policy stages, within the context of Agenda 2030 and the Paris Agreement. Overall, we argue that the three I's influence policy options and shape the ambition and importance given to different agendas, goals and actors in pursuing or resisting policy coherence. As such, the framework developed serves as a necessary contribution in the *politicization* of policy coherence, whilst also providing tangible grounding for empirical work to investigate this politicization.

Such a framework that is well suited for studying the politics of policy coherence has not previously been developed within the context of climate change and sustainable development. Additional research could further develop this framework to explore the host of relationships captured in Figure 1, addressing additional research questions such as: (i) how do coherent policy outputs impact on the coherence at other policy stages; (ii) how coherence affects the achievement of goals; and (iii) how goal achievement favours certain ideas or interests. Importantly, this framework is not equipped to study policy outcomes in terms of the achievement of climate and sustainable development goals, which could be a further area of expansion.

As a next step, this paper will serve as a basis for four comparative country case studies, where the framework will be applied to data collected through policy document analysis, semi-structured interviews and workshops to investigate the role of the 3 I's in influencing policy coherence at different policy stages in the countries. This will generate valuable insights on how the role of the three I's differs depending on country context, and how they shape synergies and conflicts between climate goals and SDGs in different countries. We hope that this will provide insights into and expand the set of indicators and questions raised in Table 2.

References

- Antwi-Agyei, P., Dougill, A.J., Stringer, L.C., 2017. Assessing coherence between sector policies and Climate Compatible Development: Opportunities for triple wins. *Sustainability* 9.
- Azizi, D., Biermann, F., Kim, R.E., 2019. Policy Integration for Sustainable Development through Multilateral Environmental Agreements: An Empirical Analysis, 2007–2016. *Global Governance: A Review of Multilateralism and International Organizations* 25, 445–475. <https://doi.org/10.1163/19426720-02503005>
- Béland, D., 2016. Kingdon Reconsidered: Ideas, Interests and Institutions in Comparative Policy Analysis. *Journal of Comparative Policy Analysis: Research and Practice* 18, 228–242. <https://doi.org/10.1080/13876988.2015.1029770>
- Biermann, F., Davies, O., van der Grijp, N., 2009. Environmental policy integration and the architecture of global environmental governance. *Int Environ Agreements* 9, 351. <https://doi.org/10.1007/s10784-009-9111-0>
- Bizikova, L., Metternicht, G., Yarde, T., 2018. Environmental mainstreaming and policy coherence: essential policy tools to link international agreements with national development—a case study of the Caribbean region. *Environ Dev Sustain* 20, 975–995. <https://doi.org/10.1007/s10668-017-9924-x>
- Blyth, M., 2002. *Great Transformations: Economic Ideas and Institutional Change in the Twentieth Century*. Cambridge University Press, New York.
- Bocquillon, P., 2018. (De-)Constructing coherence? Strategic entrepreneurs, policy frames and the integration of climate and energy policies in the European Union. *Environmental Policy and Governance* 28, 339–349. <https://doi.org/10.1002/eet.1820>
- Bowen, K.J., Cradock-Henry, N.A., Koch, F., Patterson, J., Häyhä, T., Vogt, J., Barbi, F., 2017. Implementing the “Sustainable Development Goals”: towards addressing three key governance challenges—collective action, trade-offs, and accountability. *Current Opinion in Environmental Sustainability* 26–27, 90–96. <https://doi.org/10.1016/j.cosust.2017.05.002>
- Boykoff, M., Pearman, O., 2019. Now or Never: How Media Coverage of the IPCC Special Report on 1.5°C Shaped Climate-Action Deadlines. *One Earth* 1, 285–288. <https://doi.org/10.1016/j.oneear.2019.10.026>
- Brandi, C., Dzebo, A., Janetschek, H., Lambert, C., Savidou, G., n.d. *NDC-SDG Connections: Bridging climate and the 2030 Agenda*.
- Breukers, S., Wolsink, M., 2007. Wind energy policies in the Netherlands: Institutional capacity-building for ecological modernisation. *Environmental Politics* 16, 92–112. <https://doi.org/10.1080/09644010601073838>
- Caramani, D., 2017. *Comparative Politics*, 2 edition. ed. Oxford University Press, Oxford ; New York, NY.
- Carbone, M., 2008. Mission Impossible: the European Union and Policy Coherence for Development. *Journal of European Integration* 30, 323–342. <https://doi.org/10.1080/07036330802144992>

- Collste, D., Pedercini, M., Cornell, S.E., 2017. Policy coherence to achieve the SDGs: using integrated simulation models to assess effective policies. *Sustain Sci* 12, 921–931. <https://doi.org/10.1007/s11625-017-0457-x>
- Darden, K., 2009. *Economic Liberalism and Its Rivals: The Formation of International Institutions among the Post-Soviet States*, 1 edition. ed. Cambridge University Press, Cambridge ; New York.
- Di Gregorio, M., Nurrochmat, D.R., Paavola, J., Sari, I.M., Fatorelli, L., Pramova, E., Locatelli, B., Brockhaus, M., Kusumadewi, S.D., 2017. Climate policy integration in the land use sector: Mitigation, adaptation and sustainable development linkages. *Environmental Science & Policy* 67, 35–43. <https://doi.org/10.1016/j.envsci.2016.11.004>
- Dzebo, A., Janetschek, H., Brandi, C., Iacobuta, G., 2019. Connections between the Paris Agreement and the 2030 Agenda: the case for policy coherence.
- Dzebo, A., Janetschek, H., Brandi, C., Iacobuta, G., 2018. The Sustainable Development Goals viewed through a climate lens.
- England, M.I., Dougill, A.J., Stringer, L.C., Vincent, K.E., Pardoe, J., Kalaba, F.K., Mkwambisi, D.D., Namaganda, E., Afionis, S., 2018. Climate change adaptation and cross-sectoral policy coherence in southern Africa. *Reg Environ Change* 18, 2059–2071. <https://doi.org/10.1007/s10113-018-1283-0>
- Flood, R.L., 2002. Rethinking the Fifth discipline : learning within the unknowable.
- Fourie, W., 2018. Aligning South Africa’s National Development Plan with the 2030 Agenda’s Sustainable Development Goals: Guidelines from the Policy Coherence for Development movement. *Sustainable Development* 26, 765–771. <https://doi.org/10.1002/sd.1745>
- Gamson, W.A., Modigliani, A., 1989. Media Discourse and Public Opinion on Nuclear Power: A Constructionist Approach. *American Journal of Sociology* 95, 1–37.
- GIZ, 2018. Spinning the web: the cobenefits approach to an integrated implementation of the 2030 agenda and the Paris agreement in Mexico. *Deutsche Gesellschaft für Internationale Zusammenarbeit*.
- GIZ, WRI, 2018. *Connecting the Dots: Elements for a Joined-Up Implementation of the 2030 Agenda and Paris Agreement*.
- Griggs, D., Stafford-Smith, M., Gaffney, O., Rockström, J., Öhman, M.C., Shyamsundar, P., Steffen, W., Glaser, G., Kanie, N., Noble, I., 2013. Sustainable development goals for people and planet. *Nature* 495, 305–307. <https://doi.org/10.1038/495305a>
- Hall, P.A., Soskice, D., 2001. *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford University Press.
- Hawkins, C.V., Wang, X., 2013. Policy Integration for Sustainable Development and the Benefits of Local Adoption. *Cityscape* 15, 63–82.
- Hay, C., 2004. Ideas, interests and institutions in the comparative political economy of great transformations. *Review of International Political Economy* 11, 204–226. <https://doi.org/10.1080/0969229042000179811>

- Howlett, M., Vince, J., Río, P. del, 2017. Policy Integration and Multi-Level Governance: Dealing with the Vertical Dimension of Policy Mix Designs. *Politics and Governance* 5, 69–78. <https://doi.org/10.17645/pag.v5i2.928>
- Hulme, M., 2009. *Why We Disagree about Climate Change: Understanding Controversy, Inaction and Opportunity*, 4th Edition edition. ed. Cambridge University Press, Cambridge, UK ; New York.
- Humalisto, N.H., 2015. Knowledge in Climate Policy Integration: How non-governmental organizations re-frame the sciences of indirect land-use changes for policy-makers. *Environmental Policy and Governance* 25, 412–423. <https://doi.org/10.1002/eet.1692>
- Johnson, O., Shawoo, Z., Talebian, S., Kemp-Benedict, E., Lindblom, A., 2020. Shaping a sustainable and low-carbon recovery that spurs industry transition.
- Jordan, A., Lenschow, A., 2010. Environmental policy integration: a state of the art review. *Environmental Policy and Governance* 20, 147–158. <https://doi.org/10.1002/eet.539>
- Kent, A., 2014. Implementing the principle of policy integration: institutional interplay and the role of international organizations. *International Environmental Agreements: Politics, Law and Economics* 14, 203–224.
- Kern, F., 2011. Ideas, Institutions, and Interests: Explaining Policy Divergence in Fostering ‘System Innovations’ towards Sustainability. *Environ Plann C Gov Policy* 29, 1116–1134. <https://doi.org/10.1068/c1142>
- Kettner-Marx, C., Kletzan-Slamanig, D., 2018. Climate Policy Integration at the National and Regional Level. A Case Study for Austria and Styria (No. 552), WIFO Working Papers. WIFO.
- Kingdon, J.W., Thurber, J.A., 2002. *Agendas, Alternatives, and Public Policies*, 2nd Edition, 2nd edition. ed. Pearson, New York.
- Knoll, A., 2014. Bringing Policy Coherence for Development into the post-2015 agenda – Challenges and Prospects. ECDPM.
- Kurze, K., Lenschow, A., 2018. Horizontal policy coherence starts with problem definition: Unpacking the EU integrated energy-climate approach. *Environmental Policy and Governance* 28, 329–338. <https://doi.org/10.1002/eet.1819>
- Laird, F.N., 2001. *Solar Energy, Technology Policy, and Institutional Values*, 1 edition. ed. Cambridge University Press, Cambridge ; New York.
- Larsen, R.K., Powell, N., 2013. Policy Coherence for Sustainable Agricultural Development: Uncovering Prospects and Pretence within the Swedish Policy for Global Development. *Development Policy Review* 31, 757–776. <https://doi.org/10.1111/dpr.12034>
- Lenschow, A., Bocquillon, P., Carafa, L., 2018. Understanding coherence between policy spheres. *Environmental Policy and Governance* 28, 323–328. <https://doi.org/10.1002/eet.1818>
- Linnér, B.-O., Wibeck, V., 2019. *Sustainability Transformations: Agents and Drivers across Societies*. Cambridge University Press, Cambridge. <https://doi.org/10.1017/9781108766975>
- Markusson, N., Ginn, F., Ghaleigh, N.S., Scott, V., 2014. ‘In case of emergency press here’: framing geoengineering as a response to dangerous climate change. *WIREs Climate Change* 5, 281–290. <https://doi.org/10.1002/wcc.263>

- May, P.J., Sapotichne, J., Workman, S., 2006. Policy Coherence and Policy Domains. *Policy Studies Journal* 34, 381–403. <https://doi.org/10.1111/j.1541-0072.2006.00178.x>
- McCollum, D.L., Echeverri, L.G., Busch, S., Pachauri, S., Parkinson, S., Rogelj, J., Krey, V., Minx, J.C., Nilsson, M., Stevanic, A.-S., Riahi, K., 2018. Connecting the sustainable development goals by their energy inter-linkages. *Environ. Res. Lett.* 13, 033006. <https://doi.org/10.1088/1748-9326/aaafe3>
- Moe, E., 2016. *Renewable Energy Transformation or Fossil Fuel Backlash: Vested Interests in the Political Economy*. Springer.
- Mueller, D.C., 2003. *Public Choice III*, 3 edition. ed. Cambridge University Press, Cambridge ; New York.
- Müller, A., Weigelt, J., Götz, A., Schmidt, O., Lobos Alva, I., Matuschke, I., Ehling, U., Beringer, T., 2015. *The Role of Biomass in the Sustainable Development Goals: A Reality Check and Governance Implications (IASS Discussion Papers and IASS Working Papers)*. Institute for Advanced Sustainability Studies.
- Munasinghe, M., 2011. Addressing sustainable development and climate change together using sustainomics: Addressing sustainable development and climate change. *WIREs Clim Change* 2, 7–18. <https://doi.org/10.1002/wcc.86>
- Nilsson, M., Griggs, D., Visbeck, M., 2016. Policy: Map the interactions between Sustainable Development Goals. *Nature News* 534, 320. <https://doi.org/10.1038/534320a>
- Nilsson, M., Persson, Å., 2017. Policy note : Lessons from environmental policy integration for the implementation of the 2030 Agenda. *Environmental Science and Policy* 78, 36–39.
- Nilsson, M., Weitz, N., 2019. Governing Trade-Offs and Building Coherence in Policy-Making for the 2030 Agenda. *Politics and Governance* 7, 254–263. <https://doi.org/10.17645/pag.v7i4.2229>
- Nilsson, M., Zamparutti, T., Petersen, J.E., Nykvist, B., Rudberg, P., McGuinn, J., 2012. Understanding Policy Coherence: Analytical Framework and Examples of Sector–Environment Policy Interactions in the EU. *Environmental Policy and Governance* 22, 395–423. <https://doi.org/10.1002/eet.1589>
- Nordbeck, R., Steurer, R., 2016. Multi-sectoral strategies as dead ends of policy integration: Lessons to be learned from sustainable development. *Environ Plann C Gov Policy* 34, 737–755. <https://doi.org/10.1177/0263774X15614696>
- OECD, 2018. *Policy Coherence for Sustainable Development 2018 - Towards Sustainable and Resilient Societies*. OECD.
- Oliver, M., Pike, J., Huang, S., Shogren, J., 2014. Climate policy coordination through institutional design: An experimental examination. pp. 106–127.
- Parsons, C., 2002. Showing Ideas as Causes: The Origins of the European Union. *International Organization* 56, 47–84.
- Persson, Å., Eckerberg, K., Nilsson, M., 2016. Institutionalization or wither away? Twenty-five years of environmental policy integration under shifting governance models in Sweden. *Environ Plann C Gov Policy* 34, 478–495. <https://doi.org/10.1177/0263774X15614726>

- Persson, Å., Runhaar, H., Karlsson-Vinkhuyzen, S., Mullally, G., Russel, D., Widmer, A., 2018. Editorial: Environmental Policy Integration: Taking stock of policy practice in different contexts. *Environmental Science & Policy* 85, 113–115. <https://doi.org/10.1016/j.envsci.2018.03.029>
- Petak, Z., Kotarski, K., 2019. Quo Vadis Croatia? The Interplay of Institutions, Interests and Ideas. https://doi.org/10.1007/978-3-319-73582-5_17
- Pickering, J., Skovgaard, J., Kim, S., Roberts, J.T., Rossati, D., Stadelmann, M., Reich, H., 2015. Acting on Climate Finance Pledges: Inter-Agency Dynamics and Relationships with Aid in Contributor States. *World Development* 68, 149–162. <https://doi.org/10.1016/j.worlddev.2014.10.033>
- Pojani, D., Stead, D., 2014. Ideas, Interests, and Institutions: Explaining Dutch Transit-Oriented Development Challenges: *Environment and Planning A*. <https://doi.org/10.1068/a130169p>
- Purdon, M., 2014. *The Comparative Turn in Climate Change Adaptation and Food Security Governance Research*. CGIAR.
- Ranabhat, S., Ghate, R., Bhatta, L.D., Agrawal, N.K., Tankha, S., 2018. Policy Coherence and Interplay between Climate Change Adaptation Policies and the Forestry Sector in Nepal. *Environ Manage* 61, 968–980. <https://doi.org/10.1007/s00267-018-1027-4>
- Reitan, M., 1998. Ecological Modernisation and ‘Realpolitik’: Ideas, Interests and Institutions. *Environmental Politics* 7, 1–26. <https://doi.org/10.1080/09644019808414391>
- Rietig, K., 2019. The importance of compatible beliefs for effective climate policy integration. *Environmental Politics* 28, 228–247. <https://doi.org/10.1080/09644016.2019.1549781>
- Rogge, K.S., Reichardt, K., 2016. Policy mixes for sustainability transitions: An extended concept and framework for analysis. *Research Policy* 45, 1620–1635. <https://doi.org/10.1016/j.respol.2016.04.004>
- Runhaar, H., Driessen, P., Uittenbroek, C., 2014. Towards a Systematic Framework for the Analysis of Environmental Policy Integration. *Environmental Policy and Governance* 24, 233–246. <https://doi.org/10.1002/eet.1647>
- Schirm, S.A., 2016. Domestic ideas, institutions or interests? Explaining governmental preferences towards global economic governance. *International Political Science Review* 37, 66–80. <https://doi.org/10.1177/0192512114540190>
- Schmidt, V.A., 2008. Discursive Institutionalism: The Explanatory Power of Ideas and Discourse. <https://doi.org/10.1146/annurev.polisci.11.060606.135342>
- Schmidt, V.A., 2006. Institutionalism, in: Hay, C., Lister, M., Marsh, D. (Eds.), *The State: Theories and Issues*. Red Globe Press, Houndmills, Basingstoke, Hampshire ; New York.
- Schreuer, A., Rohracher, H., Späth, P., 2010. Transforming the energy system: the role of institutions, interests and ideas. *Technology Analysis & Strategic Management* 22, 649–652. <https://doi.org/10.1080/09537325.2010.496280>
- Scobie, M., 2016. Policy coherence in climate governance in Caribbean Small Island Developing States. *Environmental Science & Policy* 58, 16–28. <https://doi.org/10.1016/j.envsci.2015.12.008>
- Scott, W.R., 2008. *Institutions and Organizations: Ideas and Interests*. SAGE.

- Shearer, J.C., Abelson, J., Kouyaté, B., Lavis, J.N., Walt, G., 2016. Why do policies change? Institutions, interests, ideas and networks in three cases of policy reform. *Health Policy Plan* 31, 1200–1211. <https://doi.org/10.1093/heapol/czw052>
- Skovgaard, J., 2018. Policy coherence and organizational cultures: Energy efficiency and greenhouse gas reduction targets. *Environmental Policy and Governance* 28, 350–358. <https://doi.org/10.1002/eet.1821>
- Sovacool, B.K., 2018. Bamboo Beating Bandits: Conflict, Inequality, and Vulnerability in the Political Ecology of Climate Change Adaptation in Bangladesh. *World Development* 102, 183–194. <https://doi.org/10.1016/j.worlddev.2017.10.014>
- Tosun, J., Leininger, J., 2017. Governing the Interlinkages between the Sustainable Development Goals: Approaches to Attain Policy Integration. *Global Challenges* 1, 1700036. <https://doi.org/10.1002/gch2.201700036>
- Underdal, A., 1980. Integrated marine policy: What? Why? How? *Marine Policy* 4, 159–169.
- UNEP, 2019. Emissions Gap Report 2019. United Nations Environment Programme (UNEP), Nairobi, Kenya.
- Valenzuela, J.M., 2014. Climate Change Agenda at Subnational Level in Mexico: Policy coordination or policy competition? *Environmental Policy and Governance* 24, 188–203. <https://doi.org/10.1002/eet.1638>
- Zeigermann, U., 2018. Governing Sustainable Development through ‘Policy Coherence’? The production and circulation of knowledge in the EU and the OECD. *European Journal of Sustainable Development* 7, 133-149–149.