Methodology for the NDCAlign

A tool for mapping the alignment of NDC commitments with domestic laws and policies

This document outlines the methodology for the NDCAlign, a tool designed to assess the alignment between Nationally Determined Contributions (NDCs) and domestic laws and policies. The tool has been developed by the <u>Grantham Research Institute on Climate</u> <u>Change at the Environment, LSE</u> (GRI), in collaboration with <u>Climate Policy Radar</u>, <u>JUMA</u>, and <u>LACLIMA</u>.

The delivery of the Paris Agreement temperature targets is currently hindered by two critical challenges:

- The ambition gap the difference between the agreed temperature goals and countries' emission reduction pledges made through NDCs or other commitments.
- The implementation gap the difference between commitments and the policies actually enacted and enforced.

While many existing initiatives focus on narrowing the ambition gap, the NDCAlign tool was designed to help address the implementation gap. It does so by helping users identify the extent to which countries have developed the institutional frameworks, laws, and sectoral policies needed to implement their NDCs.

Research suggests that there are two key components to bridging the implementation gap:

1. Policy outputs - the laws, regulations, plans and policies that governments produce; and

2. Policy outcomes - the real-world effects and emission reductions these outputs achieve.

We build on this by adding a third, equally essential component:

3. Institutions and processes - the enabling systems that support climate governance, from planning and coordination through delivery.

These institutions and processes are crucial for overcoming challenges such as political fragmentation and lack of public support. They make it more likely that policy outputs will lead to the desired policy outcomes.

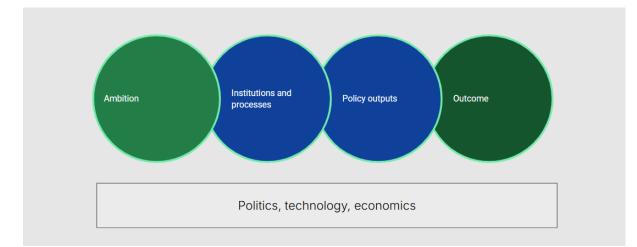


Figure 1: The implementation Gap

Tool overview

The NDCAlign tool builds on the <u>Climate Change Laws of the World</u> database and provides a structured, country-level analysis of how domestic laws and institutions align with NDC commitments. It focuses on what exists "on paper". It does not assess the degree to which laws and policies have been implemented in practice or their effectiveness.

The pilot stage of the project begins with an application of the tool to Brazil, where we map the alignment between NDC priorities and domestic policy frameworks, with special attention to institutional readiness and sectoral planning. The pilot includes an interactive, online country profile allowing users to:

- Assess where Brazil's climate governance aligns with its NDC;
- Identify discrepancies or gaps in institutional processes;
- Explore progress towards implementing climate objectives across thematic modules and governance dimensions.

Subject to available resources, this pilot will serve as the foundation for a broader application of the tool to additional countries, using a hybrid methodology that combines AI-based analysis with human review from legal scholars and climate experts.

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The interface for the NDCAlign tool was developed with Climate Policy Radar and Ode Partners.

Overview of modules

The project consists of four key modules:

- 1. NDC and Domestic Law Alignment Module
- 2. Institutions and Processes Module
- 3. Sectoral and Cross-Sectoral Action Module
- 4. Subnational Government Action Module

The methodology for each is detailed below. It is critical to note that across all modules, our focus has been to understand laws and policies as they exist "on paper". Where possible, we have added notes on the status of the implementation of the different mechanisms and policies that are outlined. However, a full review of the implementation and effectiveness of each mechanism and policy is beyond the scope of this project.

Each module includes a clear scope of review, a set of indicators, and a framework for classifying the status of legal and policy instruments. Detailed indicators tables accompany each module and are used to populate the interactive tool.

A consistent classification system is used across modules 2, 3 and 4 to categorise each indicator:

- Firstly, we provide an overview of the underlying mechanisms reviewed for each component and a summary of the results of our research. Each mechanism is assigned one of the following statuses:
 - In law/ policy/ practice This status means the mechanism has been implemented domestically. If the mechanism exists in a written norm, then it is considered to be in law or in policy. However, in instances where a mechanism is described on a website but is not underpinned by a norm suggesting that it was required as evidence of the mechanism existing "in practice".
 - In existing law/ policy and under further development -This status means that there is a pre-existing mechanism and now there is a new process (often flowing from the NDC) to improve on that mechanism. This status is also used to indicate when there are mechanisms within an existing law or policy which satisfy a substantial part of the question, but do not answer it fully. Where this is the case, greater nuance on which elements exist and which are under development are provided for in the contextual response.
 - Under development This status means that we find evidence of the mechanism being developed (e.g. draft legislation; government consultations about the policies) but it isn't yet in force.
 - No evidence found This status means we were unable to find evidence of a given mechanism for the country in the course of our research.
- Secondly, we provide a high-level overview that assesses the status of the function as a whole. We assign the following four categories:

- Action taken this status is assigned when we find evidence that the country has implemented more than 50% of the mechanisms included in the framework in law, policy or practice*
- Some action taken this status is assigned when we find evidence that the country has implemented some of the mechanisms included in the framework in law, policy, or practice, but where fewer than 50% of the mechanisms are implemented.
- Work in progress this status is assigned where we do not find evidence that any of the mechanisms are implemented in the domestic law, but where plans to implement such mechanisms are mentioned in the NDC or where we find evidence that they are otherwise under development.
- No evidence found this status is assigned when we find no evidence of a mechanism.

*Some questions are only included in the framework to provide the user with additional detail about the nature and scope of a given mechanism, and some mechanisms are functionally alternatives. These questions are not assessed separately. See detailed information next to each indicator in the tables below.

Module 1: NDC and domestic law alignment

This module provides a top-level overview of the direction of travel set out in the country's NDC. It also includes a "view" that shows the difference between the direction set by the NDC and that currently set in domestic law or policy. This helps users understand where further effort may be needed to update overall domestic frameworks.

Scope of review:

Data for the main overview module is drawn directly from the NDC and summarised by the project team.

Data on the domestic landscape used in the NDC and domestic alignment view is derived from the data collected for the "Direction Setting" component of the Institutions and Processes Module discussed below. For each assessment indicator, we assign a status of "aligned" or "not yet aligned" to show where there is harmonisation or discrepancies between the NDC and the domestic policy landscape.

Module 2: Institutions and processes

To successfully implement their NDCs, countries need to develop and successfully implement comprehensive, context-specific climate policy agendas. They need the institutions and processes in place that will support the adoption and delivery of these agendas. These institutions and processes will not look the same in every country. However, countries will have to tackle similar governance challenges to address the climate crisis, and questions about whether a mechanism exists to address a given challenge can give us an initial picture of the country's overall capability to implement its NDC. We acknowledge, however, that there are limitations to looking at what is present in law and policy "on paper",

with more in-depth research into the channelling of resources into each aspect of this system being needed to fully understand a country's readiness to implement its climate commitments.

This module has nine components. Each component consists of a series of questions designed to support the user's understanding of which mechanisms the country has in place to address nine key governance functions, and it was <u>derived from Sridhar et al. 2022</u>. The governance functions considered in this project are:

- 1. **Direction Setting:** States need to set clear goals and pathways for climate action, in a manner that aligns with domestic contexts and priorities.
- 2. **Planning and Strategy:** States need regular but iterative planning processes to bring different actors together to deliver on climate goals.
- 3. **Knowledge and Evidence:** Developing effective climate policy requires adapting to a constantly evolving evidentiary context in which understanding of climate risks and climate solutions must be kept up to date.
- 4. **Integration:** Climate action is required across every sector of the economy. It must be integrated into the work and mandates of all government bodies and ministries, at both the sectoral and subnational levels.
- 5. **Coordination:** Climate action requires an all-of-government response to be effective, which requires mechanisms to ensure coordination between different government entities.
- 6. **Transparency and Accountability:** Countries must keep track of their progress towards climate policy goals to satisfy both domestic and international stakeholders. They should also ensure there are processes of scrutiny and debate regarding the outcomes of monitoring processes.
- 7. **Public Participation and Stakeholder Engagement:** Climate action requires large-scale shifts across society. Participatory approaches and stakeholder dialogue are required to build sustainable consensus on the approach to be adopted.
- 8. **Public Finance Mobilisation:** To ensure effective implementation of climate policy, significant public resources must be mobilised to support countries' domestic policy agendas.
- 9. Private Finance and Corporate Governance: Private enterprise accounts for a significant proportion of most countries' greenhouse gas emissions. Countries have started developing mechanisms to mobilise and direct private capital to support a low carbon and resilient transition. This can include new requirements for both financial institutions and corporations, including changes to reporting processes and more substantive governance requirements.

The original governance functions derived from Sridhar et al, 2022 have been modified in two main ways:

- We have merged "mainstreaming" with "integration", given the close connection between these two concepts.
- We have separated "finance mobilisation and channelling" into two separate areas, given that the mobilisation of both public and private finance is critical to the transition, but requires very different governance mechanisms to implement them.

In developing the framework of questions, particular emphasis was placed on whether climate change was expressly mentioned in the establishment of the law or policy mechanism. We acknowledge that this approach does not necessarily account for

circumstances in which pre-existing governance mechanisms or environmental laws may be being applied to the climate context without that being explicitly required by law or policy. For example, when considering environmental impact assessments for the "Knowledge and Evidence" component of this module, we only looked for explicit references to the need to consider a project's impact on greenhouse gas emissions, or its resilience to climate impacts, in regulations or guidance, rather than interpreting broader references to "environmental impacts" to include these considerations. We believe this approach is justified by a) the need for clarity to ensure that states are indeed explicitly addressing critical climate-related issues in their laws, policies and practices, and b) the urgency of action on climate change and the need to avoid complex questions of interpretation.

We are also indebted to previous research and tools that attempt to map or assess countries' climate governance landscapes. As noted above, this includes the framework of climate governance functions developed by <u>Sridhar et al</u>, and further elaborated by <u>Averchenkova and Chan. 2023</u>. It also includes the following publications and tools:

- Averchenkova and Bassi, *Beyond the targets: assessing the political credibility of pledges for the Paris Agreement* (Grantham Research Institute 2016)
- The methodology for the Transition Pathway Initiative Centre's <u>Assessing Sovereign</u> <u>Climate Risks and Opportunities (ASCOR) tool</u>. We are grateful to Antonina Scheer and her team for their insights in this project, both for this module and the Plans and Policies module.
- The World Bank's <u>*Climate Change Institutional Assessment Framework*</u>, designed in 2021.

Scope of review:

To answer the questions in this module, researchers made reference to a) the text of Brazil's NDC and b) laws and policies already included in climate-laws.org. Where the answers could not be found with reference to these sources, researchers looked at other sources, starting with the websites of the Brazilian government, and also considering research by academia and civil society.

To categorise each indicator, we used the classification system mentioned above:

- In Law / Policy / Practice: evidence of implementation in a legal or policy framework.
- In Existing Law / Policy and Under Further Development: mechanisms exist but are being expanded or revised.
- Under Development: initiatives are underway but not yet formalised.
- No Evidence Found: no available information on the mechanism.

Additional status categories are used for high-level summaries:

- Action Taken: more than 50% of mechanisms in place.
- Some Action Taken: fewer than 50% of mechanisms in place.
- Work in Progress: plans to implement or develop mechanisms are underway.
- No Evidence Found: no evidence found for given mechanism.

Table 1.1: Assessment indicators for Direction Setting:

Indicator	Assessed for high-level overview?	Explanatory notes
1. Long-term econon	ny-wide emissions r	eduction target
1.a) Is there an economy-wide long-term emissions reduction target?	Yes	There is an extensive literature examining the integration of emissions reduction targets into domestic law and policy (Nachmany et al, 2018; Averchenkova and Chan, 2023). Empirical evidence suggests that including target setting in domestic
1.b) If there is no economy-wide target stated in a domestic law, regulation, or policy, is there one stated in the NDC?	Only assessed if the answer to 1a is negative; used to assign "work in progress" status	instruments can have positive impacts on climate governance (<u>Averchenkova et al, 2024</u>).
2. Interim emissions	reduction targets	
2.a) Is there an interim target or a series of interim emissions reduction targets?	Yes	Interim emissions reduction targets or carbon budgets are often considered a long-term complement to long-term targets, to incentivise short-term action (<u>Fankhauser et al, 2021</u> ; <u>Averchenkova and Chan, 2023</u>). Following the conclusion of the second commitment period of the Kyoto Protocol in 2020, there was initially no fixed
2.b) Is there an interim target for 2030?	Not assessed as these questions provide detail for 2.a	timeline for countries' emissions reduction target under the Paris Agreement (<u>Dagnet and Cogswe</u> <u>2019</u>). However, many countries set mid-term emissions reduction targets for 2030 in line with IPCC modelling in the Special Report on Global Warming of 1.5C (<u>IPCC, 2018</u>). In Decision 6/CMA.3 from COP26 in Glasgow, the COP calle on parties to ensure that their new NDCs submitt in 2025 adhere to a common timeframe and inclu actions for mitigation and resilience with an end
2.c) Is there an interim target for 2035?	Not assessed as these questions provide detail for 2.a	
2.d) Is there an interim target for 2040?	Not assessed as these questions provide detail for 2.a	date of 2035. To ensure alignment between NDCs and national laws/ policies, these 2035 targets should also be reflected in the latter.
2.e) Is there a system of carbon budgets?	Yes	

 2.f) Are there any interim targets not already covered by the questions above? 2.g) If there are no interim targets in domestic laws or policies, are these stated in the NDC? 	Not assessed as these questions provide detail for 2.a Only assessed if the answer to 2a and 2e is negative; used to assign "work in			
0. Adaptation abia sti	progress" status			
3. Adaptation objective	ves			
3.a) Is there a high-level goal or set of high-level goals or objectives on adaptation? We would expect these goals to apply to the whole economy.	Yes	Article 7 of the Paris Agreement establishes the Global Goal on Adaptation. Following this, the COP established the UAE Framework for Global Climate Resilience, which has seven thematic targets and four "dimensional targets" (see <u>UNEP, 2024</u>). A two-year work programme on individual indicators has now been launched and is planned to conclude in Belém. A review of national adaptation planning instruments for the UNEP adaptation gap reports		
3.b) If there are no adaptation objectives in domestic laws or policies, are these stated in the NDC?	Only assessed if the answer to 3a is negative; used to assign "work in progress" status	suggests that countries commonly introduce adaptation priorities into national frameworks (ibid.)		
4. Principles for clima	4. Principles for climate action			
4.a) Does the country set out principles to guide climate action (e.g., alignment with human rights, principle of a just transition)? Please specify in the description.	Yes	As Sridhar et al argue, a well-constructed narrative that frames climate change objectives to suit domestic contexts can focus political "attention", and is often set by defining principles for climate action (<u>Sridhar et al, 2021</u>).		

4.b) If no principles	Only assessed if
to guide climate	the answer to 4a
action are set out in	is negative; used
domestic laws or	to assign "work in
policies, are these	progress" status
stated in the NDC?	

Table 1.2: Assessment indicators for Planning and Strategy:

Indicator	Assessed for high-level overview?	Explanatory notes
1. Economy-wide plar	IS	
1.a) Is there a legal requirement to create short or medium-term economy-wide climate change plans OR is there an economy-wide climate change plan?	Considered alongside 1.b) as one question, awarded yes if either is answered in the affirmative	Climate action planning is one of the key instruments for tackling climate change adopted by countries around the world. Many existing schemas of climate governance mechanisms distinguish between short and long-term planning; however, in the interests of flexibility bearing in mind different country contexts and levels of administrative capacity, we treat the two together (World Bank, 2021; Sridhar et al, 2022).
1.b) Is there a legal requirement to create a long-term climate strategy OR is there already such a strategy in place?	Considered alongside 1.a) as one question, awarded yes if either is answered in the affirmative	
1.c) Does the NDC mention an intention to create an economy-wide climate action plan, if no such plan already exists and nothing appears to be under development at the domestic level?	Only assessed if the answer to 1a and 1b is negative; used to assign "work in progress" status	
2. Sectoral plans	1	

 2.a) Is there a legal requirement to create sectoral plans OR are there sectoral strategies in place? If specified, please state the number of sectors to which this answer is relevant. 2.b) Does the NDC mention an intention to create sectoral plans if no such plan already exists? 	Yes Only assessed if the answer to 2a is negative; used to assign "work in progress" status	Recently, there has been an increased focus on the need for climate action plans or transition plans to be based on sector-specific pathways and assumptions, which has led to an emphasis on sectoral planning as a key climate governance instrument (<u>Manning et al. 2024</u> ; <u>Scheer et al. 2024</u>). This emphasis is further reflected in the Policies and Plans module, however we ask about this in this module as well because it is important to understand the institutional context within which such plans as policy outputs are being developed.
3. Development plans	and climate change	I
3.a) Are climate change issues currently integrated into national development planning processes OR is there a requirement that climate change should be integrated into development planning processes?	Yes	In addition to creating separate climate change action plans, the World Bank recommends that countries consider integrating climate change into development planning processes. This has the benefit of ensuring that the priorities of climate change and economic development are considered hand in hand (World Bank, 2021).
 3.b) Does the NDC mention an intention to integrate climate and development planning if this is not already done? 4. Just Transition Stra 	Only assessed if the answer to 3a is negative; used to assign "work in progress" status	
4.a) Is there a national just transition strategy OR is the just transition incorporated into the strategies described above? (*)	Yes	Countries are increasingly developing "just transition" strategies, or incorporating the concept of the just transition into climate action plans and strategies (<u>Chan et al</u> , 2023; Sheer et al, 2023). We adopt the following criteria to determine whether a strategy fulfils the requirements for this indicator: (i) the strategy must mention, justice, equity, fairness or the just transition explicitly as core principles AND (ii) the strategy must be developed and implemented in a way that EITHER involves social dialogue with

4.b) Does the NDC show an intention to create a just transition strategy if there is not already one in place?	Only assessed if the answer to 4.a is negative; used to assign "work in progress" status	workers OR involves engagement with at least three of the following stakeholder groups: Indigenous peoples, rural communities, minorities, a citizens' assembly for climate, civil society, low-income households, women, young people, or another specified group relevant in the national context OR involves both of the previous options. This approach is adapted from <u>Sheer et al, 2023</u> .
5. Climate Change ar	l Id Disaster Risk Manag	gement Plans
5.a) Does the country have a disaster risk management/reducti on plan that includes climate change considerations and the need for adaptation measures as part of the section on preparedness? Please specify if the integration of climate change adaptation measures is required by law, or whether it is only included in practice in the summary answer.	Yes	Bodies like UNDRR strongly recommend the integration of disaster risk management approaches into climate change planning, including National Adaptation Plans (<u>UNDRR.</u> 2023).
5.b) If the answer to question 5.a is no, is there any reference to integrating DRR/ DRM and climate change in the NDC?	Only assessed if the answer to 5.a is negative; used to assign "work in progress" status	

Table 1.3: Assessment indicators for Knowledge and Evidence:

lindicator	Assessed for high-level overview?	Explanatory notes
1. Climate Change in Impact Assessments		

1.a) Does the country have	Considered alongside 1.b as one	To support the integration of climate questions into decision-making, impact assessments
legislation, regulation, or guidance (including judicial guidance) requiring that the impacts of projects on climate change (i.e GHG emissions) should be assessed in environmental impact assessments?	question, answered yes if either is answered in the affirmative	should consider the impact of projects or policies on mitigation and adaptation efforts. States are increasingly applying environmental impact assessment processes to climate change issues (<u>Averchenkova et al. 2024; Mayer, 2025</u> ' <u>de</u> <u>Andrade Moreira et al. 2022</u>).
1.b) Does the country have legislation, regulation, or guidance (including judicial guidance) requiring that the impacts of climate change should be considered when approving a project (i.e. that adaptation must be considered)?	Considered alongside 1.a as one question, answered yes if either is answered in the affirmative	
1.c) Are there laws and/or policies that provide for the consultation of indigenous, tribal peoples and/or traditional communities before the approval of a project or when assessing its environmental impacts?	Not assessed separately, as it provides more detail for questions 1.a and 1.b	The ILO Indigenous and Tribal Peoples Convention No. 169, 1989 provides for the right of consultation and consent, particularly on Article 6 (ILO, 2007). Similarly, the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) requires that Free Prior and Informed Consent should be obtained for projects developed on Indigenous lands (UNDRIP, 2007).

 1.d) If there is no existing legislation, regulation, or guidance requiring climate change to be considered in EIAs (whether regarding adaptation or mitigation) is this discussed in the NDC? 2. Ex ante estimates of the estimates of the existing the estimate of the estimates of	Only assessed if the answer to 1.a and 1.b is negative; used to assign "work in progress" status	from policioo
2.a) Is there a transparent process for estimating emissions savings from policies or policy scenarios and their alignment with overall climate goals?	Yes	Countries have long used climate policy modelling approaches to understand the potential impacts of different policy options and instruments (<u>Pisu et al. 2023</u>). Court cases in the UK and France have concerned the adequacy and transparency of proposed measures as a way of achieving climate goals (<u>Higham and</u> <u>Setzer, 2022</u> ; <u>Higham et al. 2022</u>). It is becoming clear that <i>transparent ex ante</i> assessment of the
2.b) Is an assessment of anticipated emissions reductions published for each specific policy action that is introduced, or is there a requirement that the results should be made public?	Not considered independently of question 2.a	impact of measures is required for governments to have confidence they can meet targets, and so that stakeholders can assess the anticipated cumulative impact of measures and whether these align with the goals stated.
 2.c) If there is no existing practice of ex ante impact assessment of the emissions reduction potential of policy interventions, then is this considered in the NDC? 3. Climate Risk Asses 	Only assessed if the answer to 2.a is negative; used to assign "work in progress" status	

3.a) Is there a	Considered	Climate risk and vulnerability assessments are
process for an iterative climate risk and vulnerability assessment to	alongside 3.c as one question, answered yes if either is answered in the affirmative	essential to create the knowledge base needed for adaptation planning. Although they are often conducted at the subnational or local level, many countries also require them at the national level (World Bank, 2021; European Environment Agency, 2018).
3.b) If there is no existing climate risk and vulnerability assessment, is the development of one referenced in the NDC?	Only assessed if the answer to 3.a is negative; used to assign "work in progress" status	
3.c) Is there a publicly accessible platform to inform citizens and businesses about climate change risks across the country?	Considered alongside 3.a as one question, answered yes if either is answered in the affirmative	
3.d) If the answer to question 3.c is yes, does the platform also provide resources to support citizens and businesses to develop appropriate adaptation measures?	Not considered independently of 3.c	
3.e) If the answer to 3.c is no, then is the development of such a platform referenced in the NDC?	Only assessed if the answer to 2.c is negative; used to assign "work in progress" status	
4. Advisory Bodies	1	l

 4.a) Does the country have a scientific advisory body that provides analysis of mitigation and/or policy adaptation options? 4.b) If the answer to question 4a is yes, is there at least one relevant body independent from the government? 	Yes Not assessed independently of 4.a	Advisory Bodies can play a key role in climate policy innovation and ensuring that governments develop approaches to tackle controversial issues (Averchenkova et al, 2024). Particularly when independent, they can also enhance the legitimacy and accountability of climate action, and can create opportunities for policy innovation and focus on difficult sectors (Averchenkova et al, 2024; Averchenkova et al, 2018; Averchenkova and Lazaro, 2020).
4.c) If the answer to 4a is no, is there an expert advisory body planned in the NDC?	Only assessed if the answer to 4.a is negative; used to assign "work in progress" status	
4.d) Is there a law or policy that establishes a just transition commission or similar body to advise the government on justice issues related to the transition, including analysing the impacts of climate policies on social issues?	Yes	Some countries have created "Just Transition Commissions" or similar bodies to help ensure that climate policy is developed in a way that avoids negative impacts on workers and other stakeholders. A just transition commission is defined by Heffron (2022) as a body that provides expert advice on just transition measures and policies and ensures the delivery of a just transition by monitoring the implications of existing legal and executive government frameworks. However, we interpret this more broadly to capture a range of state practice in this emerging and critical area, including examples where a pre-existing advisory body is given the mandate to consider social issues related to the just transition.
4.e) If the answer to question 4.d above is no, is a just transition commission or similar body considered in the NDC?	Only assessed if the answer to 4.c is negative; used to assign "work in progress" status	As above 4.a to 4.c

Table 1.4: Assessment indicators for Integration:

Indicator	Assessed for high-level overview?	Explanatory notes
1. Public sector mand	ates	
1.a) Is there a law or directive that imposes an obligation on sectoral ministries (or ministers) to meet targets or objectives related to climate objectives? Please specify which ministries are covered and whether these requirements relate to mitigation AND/OR adaptation	Considered alongside 1.b as one question, answered yes if either is answered in affirmative	In addition to having obligations to develop plans and strategies to meet targets, some countries' climate laws impose obligations on ministries to actually meet climate targets (<u>Averchenkova et</u> <u>al</u> , 2024; <u>Flashland and Levi</u> , 2021). Research into the impact of climate framework laws has found that imposing active requirements of public bodies to consider the alignment of decisions with overall climate objectives can lead to emissions reductions (<u>Averchenkova et al</u> , 2024; <u>Foerster and Bleby</u> , <u>2023</u>).
1.b) Is there a law (or laws) that mandates or permits sectoral ministries (or ministers) or other public bodies to consider economy-wide climate targets, objectives, or plans in the course of day-to-day decision-making?	Considered alongside 1.a as one question, answered yes if either is answered in affirmative	
1.c) If the answer to 1.b is yes, does this mandate apply to subnational governments and other public bodies at the subnational level?	Not assessed separately from question 1.b	

1.d) If the answer to both 1a and 1b is no, is there any kind of mandate for public bodies to align their action with or meet climate objectives contemplated in the NDC	Only assessed if the answers to 1.a and 1.b are negative; used to assign "work in progress" status	
2. Subnational integra	ation	
2.a) Is there a national law that requires subnational governments to create climate plans or strategies aligned with national plans and strategies or to implement parts of the economy-wide strategy?	Considered alongside 2.b and 2.c as one question, answered yes if any part is answered in the affirmative	Subnational governments often control critical aspects of the implementation of national climate plans, particularly with regard to land use. Ensuring climate action is integrated into their operations is critical (<u>Averchenkova et al, 2024</u>). Developing subnational plans to align with national climate action can support this process, as can multi-stakeholder dialogues (<u>NDC</u> <u>partnership, 2020</u>).
2.b) Is there any guidance at the national level for the creation of subnational climate policies and plans aligned with national goals?	Considered alongside 2.a and 2.c as one question, answered yes if any part is answered in the affirmative	
2.c) Is there a body comprising subnational and federal government actors that includes a commitment to alignment on climate issues?	Considered alongside 2.a and 2.b as one question, answered yes if any part is answered in the affirmative	
2.d) If there is no current requirement or practice around incorporating subnational governments into climate action, is one	Only assessed if the answers to 2a, 2b, and 2c are negative; used to assign "work in progress" status	

contemplated in the NDC?		
3. Alignment of currer	nt and future policies	
3.a) Is there a process for reviewing existing or future legislation and policy to see whether it aligns with climate objectives in any law or policy, or is there a principle that such legislation should align with climate objectives? If specified, which legislation is in scope?	Yes	In some countries, there is a law mandating that existing laws be reviewed to ensure better alignment with climate objectives, allowing integration of climate action into existing institutions, and that new laws should be assessed for consistency with climate goals. Examples include the <u>EU climate law</u> and <u>Fiji's</u> <u>climate law</u> . In the context of the European law, researchers have argued that this can be a mechanism for climate policy integration, although they warn of shortcomings in the EU approach (<u>Kulovesi et al, 2024</u>).
3.b) If there is no process or principle that new government policies should align with climate goals, is a new mechanism on this contemplated in the NDC?	Only assessed if the answer to 3.a is negative; used to assign "work in progress" status	

Table 1.5: Assessment indicators for Coordination:

Indicator	Assessed for high-level overview?	Explanatory notes
1. Interministerial coo	rdination	
1.a) Is there a law that mandates interministerial cooperation or collaboration in the design and/ or delivery of economy-wide climate change plans?	Considered alongside 1.b as one question, answered yes if either is answered in the affirmative	Interministerial coordination is crucial to achieving a whole-of-government approach to climate action (World Bank, 2021). Evidence suggests that the development and implementation of cross-sectoral climate change plans can facilitate interministerial cooperation and collaboration on climate initiatives, as well as providing opportunities for policy innovation (<u>Averchenkova et al, 2024</u>). Many countries have created a formal body, such as a Climate Cabinet or Interministerial Committee, to oversee

1.b) Is there an interministerial or interdepartmental body (or bodies) that meets regularly to oversee the implementation of climate change action. Please specify the mandate and composition?	Considered alongside 1.a as one question, answered yes if either is answered in the affirmative	the development and implementation of climate action (Sridhar et al. 2022)
development, then is either mechanism considered in the NDC?		
	ubnational governmer	
2.a) Is there a law or policy that mandates or facilitates cooperation or collaboration between central and subnational governments in the design and/ or delivery of economy-wide climate change plans?	alongside 2.c, 2.d, and 2.e, answered yes if any question is answered in the affirmative	In order to effectively act as implementers of climate action, subnational governments need processes and opportunities to coordinate and collaborate with national counterparts and with one another (Fenna, Jodoin, and Setzer, 2022; ICLEI Africa, 2021).
2.b) Does the provision identified in the answer to question 2.a apply to vertical coordination between the national and subnational levels?	Not assessed separately from question 2.a	

2.c) Does the	Considered
provision identified in	•
the answer to	and 2.e, answered
horizontal	yes if any question is answered in the
coordination	affirmative
between subnational	
governments?	
2.d) Is there a forum	Considered
or body that meets	alongside 2.a, 2.c,
regularly involving both federal and	and 2.e, answered yes if any question is
subnational actors to	
facilitate the	affirmative
implementation of	
climate change action? Please	
specify the mandate	
and composition.	
2.e) Is there a	Considered
programme of the	alongside 2.a, 2.c,
national government	and 2.d, answered
to subnational	yes if any question is answered in the
governments to	affirmative
implement climate	
actions?	
2.f) If the answer to	Only assessed if the
all of the questions	answer to 2.a to 2.f
2a to 2e is no, is there a mechanism	is negative; used to assign "work in
to facilitate	progress" status
coordination with	
subnational	
governments considered in the	
NDC?	

Table 1.6: Assessment indicators for Transparency and Accountability:

Indicator	Assessed for high-level overview?	Explanatory notes
1. Open access data		

1. a) Does the country have an open access portal containing mitigation relevant information, including, at a minimum, a national greenhouse gas inventory?	Yes	Open-access data is critical to helping stakeholders understand and assess the adequacy of progress (<u>World Bank, 2021</u>).
1.b) Is there an open access portal containing adaptation relevant information, including information on climate risks and how they are managed?	Yes	
1.c) If the answer to question 1.a above is no, is there a reference to creating a publicly accessible data system covering mitigation in the NDC?	Only assessed if the answer to 1.a is negative; used to assign "work in progress" status	
1.d) If the answer to question 1.b above is no, is there a reference to creating a publicly accessible data system covering adaptation in the NDC?	Only assessed if the answer to 1.b is negative; used to assign "work in progress" status	
2. Progress reporting		
2.a) Is there a requirement on the government to produce regular progress reports on climate policies and measures implemented OR to cooperate in the preparation of such	Yes	Reporting and transparency on progress are widely acknowledged as crucial for ensuring accountability for climate action (<u>Averchenkova</u> <u>et al. 2024</u> ; <u>Higham, 2021</u>). Increasingly, there is an understanding that in addition to reporting on GHG emissions, it is important to ensure there are interim markers of progress to assess whether a government is on track to meet its targets. This is also now being discussed in the context of corporate transition plans (<u>Scottish</u>

and a start of the		Devices with Net 7 O Mill 2020 t N
reports by expert bodies OR is this done in practice? Please specify the frequency with which reports are produced. 2.b) Is there a requirement that the reports in section 2.a) should include information about progress for specific indicators (e.g., n. heat pumps	Not assessed separately to question 2.a	Parliament's Net Zero Committee, 2024; New Climate Institute, 2025).
installed, n. hectares of forest protected) or only high-level progress assessments (e.g., overall emissions reductions)?		
2.c) If there is no existing requirement to report on progress, then is this contemplated in the NDC?	Only assessed if the answer to 2.a is negative; used to assign "work in progress" status	
3. Independent exper	t oversight	
3.a) Is there an independent expert body that regularly scrutinises government reports OR produces its own progress assessments?	Yes	Independent advisory bodies often play an oversight role as well as a knowledge creation role. This independent voice can prompt fresh action from the government when gaps are identified (<u>Averchenkova et al. 2024;</u> <u>Averchenkova et al. 2018; Averchenkova and Lazaro, 2020</u>).
3.b) If no such body exists or is under development, is one contemplated in the NDC?	Only assessed if the answer to 3.a is negative; used to assign "work in progress" status	
4. Legislative oversig	ht	

4.a) Does the legislature regularly review progress reports by the government? Is there a specified timeline for reports to be produced and reviewed? And is there a committee or other group within the legislature tasked with conducting the review?	Considered alongside question 4.b, assigned positive status if either answered in the affirmative	Many countries have chosen to build post-legislative scrutiny requirements into their climate laws, requiring progress reports to be presented to the parliament at regular intervals (Higham et al, 2021).
4.b) Is there a committee or other group within the legislature tasked with the oversight of the government's climate action?	Considered alongside question 4.a, assigned positive status if either answered in the affirmative	
4.c) If neither mechanism described in questions 4 a or 4b exists, is there any mention of legislative oversight in the NDC?	Only assessed if the answer to 4.a and 4.b is negative; used to assign "work in progress" status	
5. Judicial oversight	I	
5.a) Do stakeholders, whether individuals or NGOs, have standing to bring judicial cases in the case of government failures to implement climate action?	Considered alongside question 5.b, assigned positive status if either answered in the affirmative	Evidence suggests that judicial oversight of the implementation of climate action has benefits for climate governance (IPCC, 2022). Around the world, there are more than 100 lawsuits that challenge the failure of governments to act on climate change, whether in terms of ambition or implementation. Evidence suggests such lawsuits can significantly advance climate governance (Setzer and Higham, 2024; Higham et al, 2022; Averchenkova et al, 2024). Not all these cases have been successful, with some being dismissed on standing grounds. Some countries, such as Uganda, have specific legislation giving broad standing to any person to

5.b) Is there a court precedent where courts have allowed actors to bring a case challenging government failures to implement climate action?	Considered alongside question 5.a, assigned positive status if either answered in the affirmative	challenge government failures to act on climate change.
5.c) If the answer to question 5.a and question 5.b is no, is there any reference to improving judicial oversight in the NDC?	Only assessed if the answers to 5.a and 5.b are negative; used to assign "work in progress" status	

Table 1.7: Assessment indicators for Public Participation and Stakeholder Engagement:

Indicator	Assessed for high-level overview?	Explanatory notes
1. Consultation proce	esses	
1.a) Are there laws and/or policies that create opportunities for or mandate consultation with stakeholders, communities, and citizens in the processes of target setting, policy development, and/or evaluation of performance on climate issues?	Yes	Many countries have legislation requiring the government to provide access to information and public participation in line with environmental decision-making, and this is also reflected in international instruments such as the Escazu Agreement and the Aarhus Convention (World Bank, 2022). In this question, we are looking to go beyond the general apparatus of the country regarding environmental decision-making and trying to understand whether there is a specific provision for engagement in the climate change context, given the need for urgent and transformative actions in the climate context.
1.b) Are there laws and/or policies that promote the participation of especially vulnerable groups to climate change impacts (such as	Not considered separately to question 1.a	The ILO Indigenous and Tribal Peoples Convention No. 169, 1989 provides for the right of consultation and consent, particularly on Article 6 (ILO, 2007). The participation of vulnerable groups in climate policy debates is also increasingly recognised in Just Transition policies across a range of countries (<u>Chan et al</u> , <u>2023</u>).

indigenous and tribal peoples and traditional communities) in the processes discussed in question 1.a?		
1.c) If there are no domestic laws or policies that create such opportunities, does the NDC describe contemplate such opportunities being introduced into domestic law, or does it describe a consultative process behind the NDC itself?	Only assessed if the answer to 1.a is negative; used to assign "work in progress" status	
2. Consultative bodies		
2.a) Is there a body or bodies with the power and authority to engage in ongoing stakeholder consultation on climate issues?	Yes	The creation of bodies with a mandate to engage in ongoing social dialogue on climate change issues can ensure ongoing and active engagement of stakeholders in the policy process (World Bank, 2022). Countries such as <u>Mexico</u> and <u>Costa Rica</u> have created permanent consultation bodies or platforms to facilitate
2.b) Please list the stakeholders that this body engages.	Not considered separately to question 2.a	engagement in climate policy.
2.c) If there is no such body, is one proposed or considered in the NDC?	Only assessed if the answer to 2.a is negative; used to assign "work in progress" status	
3) Citizens' participation and deliberative processes		

 3.a) Is there a process for citizens to engage in the development of climate actions, such as climate plans or policies? 3.b) If the answer to question 3a is yes, is this process ongoing, iterative, or time-limited? 	Yes Not considered separately to question 3.a	Citizen buy-in for climate action is a critical factor to ensure climate action is successful, to provide a sense of accountability for climate action, and to avoid backlash (Averchenkova et al, Impact of Laws; <u>OECD</u> , 2022). The OECD Guidelines for Citizen Participation (2022) define engagement as a step above consultation, giving citizens a more active opportunity and resources to engage in the policy-making process.
 3.c) Is there a deliberative democratic process (such as a citizens' assembly or town hall style process) with a mandate to consider climate action? 3.d) If the answer to question 3.c is yes, is this part of an ongoing process or was it convened for a delimited period only? 	Yes Not considered separately to question 3.c	Citizens' assemblies and other forms of deliberative democracy are increasingly seen as a way to increase the legitimacy of climate policy decisions. While citizens' assemblies have predominantly occurred in Global North contexts, in some instances at the national level, these processes for open engagement and discussions on climate issues with citizens may take place in more localised fora, such as Town Halls or Open Meetings, in Global South countries. Although these processes are not necessarily fully deliberative in nature, they are considered here to capture an important aspect of existing climate governance practice, which is also focused on "meaning-making" beyond the simple informational exchange included in typical consultation processes (KNOCA, 2022; World
3.e) If the answer to both question 3.a and question 3.c is no, is there a deliberative process or other opportunity for citizen participation considered in the NDC?	Only assessed if the answer to 3.a and 3.c is negative; used to assign "work in progress" status	Bank, 2022; <u>CIVICUS, Education & Deliberation,</u> 2015)

Table 1.8: Assessment indicators for Public Finance Mobilisation:

Undicator	Assessed for high-level overview?	Explanatory notes
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1. Climate budget tagging		
 1.a) Has the country disclosed its climate-related expenditure OR Does the country apply climate budget tagging? 1.b) If the country applies climate budget tagging, has it applied a transparent methodology to disclose its spending? 	Yes Not assessed separately from question 1.a	Climate budget-tagging and spending disclosures are both emerging practices that can support transparency on climate finance (UNDP, 2019). This indicator is derived from an ASCOR indicator (Sheer et al, 2023). According to the <u>Transitions in Sovereigns 2024 report</u> , "tracking, quantifying and disclosing climate-related fiscal measures enables taxpayers and investors to verify whether governments are collecting revenues and allocating public funds in line with their climate commitments". The application of a transparent budgeting methodology is still relatively rare but is nonetheless important for enhancing transparency.
1.c) If the country does not currently have a transparent system to track climate-related spending in place or under development, is one mentioned in the NDC?	Only assessed if the answer to 1.a is negative; used to assign "work in progress" status	
2. Finance Ministry M	andates	
 2.a) Are there specified processes for the country's Ministry of Finance to incorporate climate action into national budgets? 2.b) Does the 	Considered alongside 2.b and 2.c, answered yes if any question is answered in the affirmative Considered	Ministries of Finance can be key drivers of integration between climate and other government strategies and plans, and can ensure that investments for development and climate change mitigation, adaptation and resilience are mutually supportive (<u>The Coalition</u> of Finance Ministers for Climate Action, 2023a; <u>The Coalition of Finance Ministers for Climate</u> Action, 2022b)
Ministry of Finance play a formal role in monitoring climate finance directed towards achieving the objectives set out in the country's NDC and/or national climate policy?	alongside 2.a and 2.c, answered yes if any question is answered in the affirmative	Action, 2023b). According to the Coalition of Finance Ministers for Climate Action (2023b, p. 20), Ministries of Finance can play several key roles: They can help formulate climate policy by including evaluation of policies, measures, and scenarios from economic and fiscal perspectives. They can help implement the NDC or climate plans by mainstreaming measures and policies outlined in climate plans into national planning,

		decision-making, and budgeting processes. They can work with line ministries to integrate plans into sectoral budgets. Ministries can ensure that there is adequate resourcing for implementation, including by developing dedicated implementation or financing plans. Ministries can also develop systems to monitor the implementation of climate plans and track climate finance.
2.c) Is there a mechanism in place to ensure that the Ministry of Finance is integrating investment planning with the NDC and/or other climate commitments?	Considered alongside 2.a and 2.b, answered yes if any question is answered in the affirmative	The NDC Partnership recommends developing a climate investment plan to help deliver on mitigation and adaptation targets and measures outlined in a country's NDC. The NDC Partnership points out that when NDCs are aligned with national sectoral and development strategies, and other policies that set out climate and development priorities, the NDC can effectively act as a "starting point" for the translation of climate commitments into investment decisions, which send important policy signals for the transition to a low-carbon and climate resilient economy. (NDC Partnership, 2023).
2.d) Has the Ministry of Finance (or another relevant body) produced policies or guidelines to align public procurement spending with national climate targets?	Yes	Aligning public procurement with a country's climate targets can help to generate "multiplier effects" by directing public and private finance towards a common objective (<u>Mazzucato, 2025;</u> <u>Lecavalier et al, 2024</u>).
2.e) If the answer to all of the above is no, is there a specific role for the Ministry of Finance contemplated in the NDC?	Only assessed if the answers to 2.a to 2.d are negative; used to assign "work in progress" status	
3. State-owned banks	and Financial Instituti	ons

3.a) Does the country's national development bank have a climate mandate or a climate programme?	Considered alongside 3.b, answered yes if any question is answered in the affirmative	State-owned banks and financial institutions can play a pivotal role in channelling finance to climate action (<u>Mazzucato, 2025</u> ; <u>Chin et al</u> , <u>2023</u>). For instance, Germany's Energiewende and the <u>KfW</u> , its public development bank, demonstrate how mission-oriented public finance
3.b) In the alternative to question 4.a, if there is no single national development bank, is there a similar body or bodies with a mandate to support investments in green industries and technologies?	Considered alongside 3.a, answered yes if any question is answered in the affirmative	can mobilise private capital for renewable energy initiatives, creating a first-mover advantage in green technology markets.
3.c) If the answer to questions 4.a and 4.b is no, please specify if there is any mention of a role for the national development bank or other state-owned financial institutions in the NDC	in progress" status	
4. National Climate F	und	
4.a) Does the country have a dedicated climate fund or climate funds? If yes, please briefly describe the mandate of the fund(s).	Yes	Many countries have established a climate change fund through which grants and funding can be allocated to specific climate actions (<u>World Bank, 2021</u>). Unlike state-owned financial institutions, which tend to operate as companies, such funds are typically administered directly by the government.
4.b) If the country has no dedicated climate fund or funds, is there any mention of such a	Only assessed if the answer to 4.a is negative; used to assign "work in progress" status	For example, Bangladesh has established a <u>Climate Change Trust</u> to support adaptation activities. The legislation establishing the fund stipulates that 66% of its budget will be spent on the implementation of projects/programmes prioritised in the Bangladesh Climate Change Strategy and Action Plan (BCCSAP).

fund being created in	
the NDC?	

Table 1.9: Assessment indicators for Private Finance and Corporate Governance:

Indicator	Assessed for high-level overview?	Explanatory notes
1. Informational tools		
question 1.a is yes, is	Yes Not assessed separately from question 1.a	Building on decades of progress towards voluntary reporting of climate action, and recognising the relevance of climate risks to businesses, many countries have started to adopt informational tools to support actors involved in the allocation of private capital to understand alignment with climate imperatives (Oxford Climate Policy Monitor, 2024). According to the UN Taskforce on New Zero Policy's 2024 progress report, sustainable taxonomies are foundational policy instruments that classify economic activities based on defined sustainability criteria. They are useful to achieving climate and other sustainability goals as they clarify requirements for sustainable investment and help the process of mobilising private capital toward sustainable development. Taxonomies that include reporting requirements or are linked to related financial regulations can serve as valuable tools for companies and other economic actors seeking access to capital needed to transition to a net-zero, resilient, and environmentally and socially sustainable economy (Taskforce on Net Zero Policy, 2024)
1.c) Has the country established mandatory climate-related disclosure? If yes, which firms does this apply to?	Yes	Climate-related disclosures help to enable progress on corporate climate action and increase transparency by identifying climate-related risks (<u>Scheer et al. 2023;</u> <u>World Resources Institute, 2024</u>). All G20 countries have adopted some form of climate-related disclosure provisions. They are a key policy instrument to support

		companies and financial institutions in acting on climate mitigation and climate goals. Disclosure provisions are focused on providing transparency regarding backward- and forward-looking data and analysis, relevant to companies' and/or financial institutions' strategies, operations, and performance on climate mitigation and other sustainability issues. (<u>Taskforce on Net Zero Policy, 202</u> 4)
1.d) If the answer to 1.c above is yes, does the country specify whether it adopts an approach based on double materiality or single materiality for the assessment of climate risks?	Not assessed separately from 1.c	Double materiality includes both impacts to the company created by physical and transition risks, and the impacts that the company might have on other stakeholders. Single materiality is concerned only with risks to the company itself (<u>Täger, 2021</u>). The difference in approach adopted by different jurisdictions may have an impact on the nature of the data disclosed.
1.e) Does the country have a regulation that stipulates third-party verification and assurance of corporations' climate disclosures?	Not assessed separately from 1.c	The Taskforce on Net Zero Policy makes this recommendation on the basis that verification instills confidence in stakeholders regarding the figures that have been reported and helps to assure that genuine progress is being reported on (<u>Taskforce on Net Zero Policy, 2024; PRI</u> and World Bank, 2020).
1.f) Has the country produced guidance OR rules around the disclosure of the use of voluntary carbon credits in the corporate actor's emissions reduction pathway?	Not assessed separately from 1.c	The UN Secretary-General's High-Level Expert Group on Net Zero Emissions Commitments of Non-State Entities (HLEG) recommends that non-state actors should use high-integrity Voluntary Carbon Market (VCM) credits for 'beyond-value-chain' mitigation, but not for reducing interim emissions. Although the Taskforce didn't explore this
1.g) If the answer to both question 1.a and 1.c above is no, is there any reference to creating instruments to correct for informational asymmetries on climate issues for private	Only assessed if the answer to 1.a and 1.c is negative; used to assign "work in progress" status	recommendation in detail, it still recognises that if credits are disclosed separately and not counted toward interim targets, regulators incentivise companies to stay on track with reducing their own absolute emissions and supporting

financial institutions in		decarbonisation of their value chains
the NDC?		(Taskforce on Net Zero Policy, 2024).
2. Prudential supervision	of climate risk	
2.a) Is there guidance from prudential regulators that requires or helps financial institutions assess, manage, and disclose climate-related risks? To which institutions does this apply?	Yes	As recognised by the Basel Committee on Banking Supervision, prudential frameworks must incorporate climate-related risks to ensure financial institutions are equipped to withstand climate-related shocks and are able to continue to provide financing for the transition to a low-carbon economy (<u>Basel</u> <u>Committee on Banking Supervision</u> , 2023). Prudential guidance that outlines expectations for financial institutions'
2.b) If the country does not currently require the disclosure of climate-related information, is there any reference to this being adopted in the NDC?	Only assessed if the answer to 2.a is negative; used to assign "work in progress" status	transition planning has been issued or is being developed in the EU (with France, Germany and Italy as sovereign G20 countries), Canada and South Africa, as well as countries outside of G20 (<u>Taskforce on Net Zero Policy, 2024</u>).
3. Transition plans		
3.a) Is there a requirement for firms to produce climate transition plans? A requirement on any type of firm is sufficient for this indicator, but please specify the scope of the requirement in the answer.	Yes	Transition plans have emerged as an instrumental tool for companies and financial institutions to describe their strategies to transition their processes, operations and business models to meet climate commitments within a specified timeframe (<u>Taskforce on Net Zero Policy</u> , <u>2024</u>). The UN HLEG Recommendation 4 says that non-state actors must publicly
3.b) If the answer to question 3a above is yes, is there a requirement that transition plans should be aligned with national or international climate goals?	Not assessed separately from 3.a	disclose comprehensive and actionable net-zero transition plans which indicate actions that will be undertaken to meet all targets, as well as align governance and incentive structures, capital expenditures, research and development, skills and human resource development, and public advocacy, while also supporting a just transition (Ibid).

3.c) If the country has introduced mandatory net-zero transition planning requirements, have financial planning provisions been specified (such as capital expenditure or capex plans)?	Not assessed separately from 3.a	Including such provisions creates a requirement for corporate actors to demonstrate that funding is being costed and earmarked to support the implementation of the measures outlined in their transition plan. This plays a role in increasing transparency and accountability (<u>Taskforce on Net Zero</u> <u>Policy, 2024</u>).
3.d) If the country has not introduced transition planning requirements is there an intention to do so expressed in the NDC?	Only assessed if the answer to 3.a is negative; used to assign "work in progress" status	
4. Corporate Conduct		
4.a) Has the country produced guidelines OR rules around the setting of net-zero pledges by corporate actors?	Considered alongside 4.b, answered yes if any question is answered in the affirmative	Efforts to regulate corporate conduct are increasingly important in contexts where questions about the integrity of climate solutions risk undermining confidence in the transition. (Chan et al, 2023)
4.b) Are specified entities required to disclose their climate-related lobbying and/or policy engagement?	Considered alongside 4.a, answered yes if any question is answered in the affirmative	
4.c) If the answer to questions 4a and 4b is no, is there any reference to regulating corporate net-zero pledges or disclosure of climate lobbying in the NDC?	Only assessed if the answers to 4.a and 4.b are negative; used to assign "work in progress" status	
5. Climate obligations for	state-owned enterprises	(SOEs)
5.a) Does the country have an ownership policy for SOEs that includes a reference to alignment of SOEs activities with climate goals, or is such	Considered alongside 5.b, answered yes if any question is answered in the affirmative	Recent work by the OECD and others has highlighted the importance of state-owned enterprises in the transition. These two questions are derived from a questionnaire used by the OECD to assess climate policies regarding SOEs in multiple countries (<u>OECD 2022</u>). The

alignment required by the individual mandates of the 5 largest SOEs?		importance of this agenda is also reflected in the World Bank's Climate Change Institutional Assessment (World Bank, 2021).
5.b) Are SOEs covered by any requirements to align public sector procurement and/or other activities with national climate goals?	Considered alongside 5.a, answered yes if any question is answered in the affirmative	
5.c) If the answer to both questions 3.a and 3.b is no, is there any discussion of SOEs in the country's NDC?	Only assessed if the answers to 5.a and 5.b are negative; used to assign "work in progress" status	

Module 3: Plans and policies

Few countries' NDCs will contain sufficient detail to allow for immediate implementation at the policy level. Increasingly, experts are recommending that countries adopt sectoral plans to support implementation (<u>Manning et al, 2025</u>; <u>Scheer et al, 2024</u>), as well as introducing specific sectoral laws and policies. In addition, countries may benefit from introducing cross-cutting policy measures that have been well studied in the literature. This module provides an overview of sectoral adaptation and mitigation plans that may be introduced to support countries' NDCs, as well as an overview of which cross-cutting policies the country has adopted.

Scope of Review

As with Module 2, to answer the questions in this module, researchers referred to a) the text of Brazil's NDC and b) laws and policies already included in climate-laws.org. A number of older sectoral plans were identified in climate-laws.org, but these were removed where there was no evidence that they were still considered current policy and where all target dates were set in the past.

Where the answers could not be found with reference to these sources, researchers looked at other sources, starting with the websites of the Brazilian government, and also considering research by academia and civil society. The list of sectoral policies displayed beneath details of sectoral plans were identified from a manual review of the climate-laws.org database.

As with Module 2, to categorise each indicator, we used the classification system mentioned in the overview of the modules:

- In Law / Policy / Practice: evidence of implementation in a legal or policy framework.
- In Existing Law / Policy and Under Further Development: mechanisms exist but are being expanded or revised.
- Under Development: initiatives are underway but not yet formalised.

• No Evidence Found: no available information on the mechanism.

Additional status categories are used for high-level summaries:

- Action Taken: more than 50% of mechanisms in place.
- Some Action Taken: fewer than 50% of mechanisms in place.
- Work in Progress: plans to implement or develop mechanisms are underway.
- No Evidence Found: no evidence found for given mechanism.

Table 2.1: Assessment indicators for Cross-cutting policies:

Indicator	Explanatory notes		
1. Economy-wide or cross-cutting plans	Adopting economy-wide climate action plans is a common practice among states. See further discussion in the Planning and Strategies section of the Institutions and		
1.a) Does the country have a mitigation plan that covers multiple economic sectors?	Processes module. This question is replicated in this module to help the user to more easily access the relevant cross cutting plans alongside sectoral plans.		
1.b) To which sectors does the mitigation plan apply?			
1.c) Does the country have an adaptation plan that covers multiple economic sectors?			
1.d) To which sectors does the adaptation plan apply?			
2. Carbon Pricing	Despite challenges, carbon pricing remains one of the most		
2.a) Does the country have a carbon pricing system (emissions trading scheme or carbon tax)?	frequently recommended cross-sectoral policy instruments to encourage emissions reductions. According to World Bank research, more than 75 carbon pricing instruments had been adopted around the world as of 2024 (<u>World Bank</u> , <u>2024</u>). Questions for this indicator are adapted from the		
2.b) If the answer to question 1.a is yes, what sectors are covered by the carbon price?	ASCOR framework (<u>Scheer et al, 2023</u>)		
2.c) If the answer to question 1a is yes, is there evidence that the country has considered and mitigated any potentially regressive impacts of the carbon price on low-income households?			

3. Use of Internationally Transferred Mitigation Outcomes (ITMOs)	Under Article 6 of the Paris Agreement, countries are permitted to purchase internationally transferred mitigation outcomes (ITMOs) to help achieve their NDC ambition.		
3.a) Does the country express an intention around the use of ITMOS in its NDC?	Some countries, such as <u>the Bahamas</u> , have started to put in place domestic laws and policies to guide the circumstances in which ITMOs can be used or generated.		
3.b) Does the country have a domestic policy or regulation in place regarding the use of ITMOS to achieve emissions reduction targets?			
4. Fossil Fuel Policies	Policies to phase out and reduce reliance on fossil fuels are		
4.a) Has the country disclosed/published an inventory of fossil fuel subsidies?	essential to the transition, with the need to phase out fossil fuels being heavily debated in recent COPs (FCCC/PA/CMA/2023/L.17; Newell and Daley, 2024). While many such policies primarily affect the energy sector, they often also have broader cross sectoral implications (e.g. for transport and agriculture) and have thus been treated separately. The detailed indicators in this section are adapted from the ASCOR framework (see <u>Scheer et al.</u> <u>2024</u>).		
4.b) Has the country committed to a deadline by which to phase out fossil fuel subsidies?			
4.c) Has the country committed to not approve new coal mines?			
4.d) Has the country committed to an end date for coal-powered energy generation?			
4.e) Has the country committed not to approve new long-lead time upstream oil and gas projects?			

Assessment of Sectoral Mitigation Plans:

As noted above, sectoral plans and policies that complement overarching national plans and can provide further opportunities for sectoral policies to be fully costed and explored are increasingly recommended by some actors to support national transitions.

Based on Brazil's NDC commitments, we reviewed the status of proposed sectoral mitigation plans for 7 key sectors. We chose to use the sectoral breakdown in the NDC itself to best

allow the user to track progress towards implementation, rather than using an a priori list of relevant sectors. This approach is aimed at better reflecting the specificity of countries emissions profiles. However, in a future scale up an a priori list of sectors will be used in the absence of a list developed by the country itself.

- Energy
- Industry
- Agriculture
- Land Use and Forestry
- Waste
- Transport, except urban mobility
- Cities and urban mobility

For every sector, the following questions/indicators were asked to give the user a high-level overview of the plan and its significance to the country's overall emissions reduction efforts:

- Is there an overarching sectoral action plan?
- Does the plan specify current emissions from the sector?
- Does the plan specify emissions reduction targets and timelines?

Assessment indicators for Sectoral Adaptation Plans:

It is just as critical that countries develop sectoral plans to advance adaptation and resilience across society and the economy as it is for mitigation. As in the case of mitigation, we reviewed the status of proposed sectoral adaptation plans mentioned in Brazil's NDC to give the user a sense of progress towards implementation. Brazil has identified the following sectors as priorities for sectoral adaptation plans:

- Agriculture and Livestock
- Family Farming
- Biodiversity
- Cities
- Risk and Disaster Management
- Industry
- Energy
- Transportation
- Racial Equality and Combating Racism
- Traditional Peoples and Communities
- Indigenous Peoples
- Water Resources
- Health
- Food and Nutritional Security
- Ocean and Coastal Zones
- Tourism

For every sector, the following questions/indicators were asked to give the user a high-level overview of the plan:

- Is there an overarching sectoral action plan?
- Does the plan specify objectives or goals?

Module 4: Subnational government action

Subnational governments play a pivotal role in climate action around the world, particularly in federal systems. While a detailed analysis of every aspect of climate institutions and processes, and associated policy outputs, is beyond the scope of this pilot project, we have sought to recognise this critical element of the national ecosystem by analysing the most comprehensive norms and policies for each of Brazil's 26 states and the Federal District.

Scope of review

For each state, we examine the following key documents (where they exist):

- The state's overarching climate change policy. Sometimes this is part of a broader environmental policy. These documents effectively perform the function of <u>climate</u> <u>change framework laws</u> at the state level.
- The state's plan for climate change mitigation and/or adaptation, or the overarching climate strategy, where these exist.
- We have also made reference to the profile of the state contained in a recent report, <u>Anuário Estadual de Mudanças Climáticas</u>, published by Centro Brasil No Clima (CBC).

As with Modules 2 and 3, to categorise each indicator, we used the classification system mentioned in the overview of the modules:

- In Law / Policy / Practice: evidence of implementation in a legal or policy framework.
- In Existing Law / Policy and Under Further Development: mechanisms exist but are being expanded or revised.
- Under Development: initiatives are underway but not yet formalised.
- No Evidence Found: no available information on the mechanism.

Additional status categories are used for high-level summaries:

- Action Taken: more than 50% of mechanisms in place.
- Some Action Taken: fewer than 50% of mechanisms in place.
- Work in Progress: plans to implement or develop mechanisms are underway.
- No Evidence Found: no evidence found for given mechanism.

Assessment indicators

Using the documents described above, for each Federal State and the Federal District we ask a simplified version of the key questions in the institutions and processes module, recognising that state institutional capacity to act on climate change is critical for national success in achieving climate goals. Finally, in recognition of the need for horizontal inter-state coordination (Sainz de Murieta and Setzer, 2019), we ask whether states are members of key collaborative initiatives. The answer to this question is derived from the websites of relevant initiatives and the CBC report referred to above.

Indicator	Status options	Sources reviewed
Direction setting	 In law/ policy/ practice 	 State climate change policy

 1.a) Does the state have an overarching law or policy that directs its approach to climate governance? 1.b) Does the overarching law establish mitigation objectives or require the establishment of such objectives? 1.b) Does the overarching law establish adaptation objectives or require the establishment of such objectives or require the establishment of such objectives or require the establishment of such objectives? 	 Under development In existing law/ policy and under further development No evidence found 	 State climate action strategy State climate mitigation plan or strategy State climate adaptation plan or strategy Centro Brasil No Clima report
 Planning and Strategy 2.a) If the state has an overarching climate law, does this require the establishment of an economy-wide climate plan/ strategy or plans/ strategies? 2.b) Does the state have an overarching climate plan or strategy? If possible, please specify if this covers adaptation or mitigation or both. 2.c) If there is a plan or strategy, does it establish mitigation objectives and/or adaptation objectives? 2.d) If the answer to 2.a) was yes and the answer to 2.b) was also yes, does the plan or strategy conform to the requirements in the law? 	As above	 State climate change policy State climate action strategy State climate mitigation plan or strategy State climate adaptation plan or strategy Centro Brasil No Clima report
Knowledge and evidence	As above	 State climate change policy

3.a) Does the state have an emissions inventory?		 State climate action strategy
3.b) Does the state have a Climate Risk and Vulnerability Assessment?		 State climate mitigation plan or strategy
		 State climate adaptation plan or strategy
		 Centro Brasil No Clima report
Integration	As above.	State climate change policy
4.a) Is there a body within the state created or		 State climate action strategy
mandated to oversee the implementation of the state's climate action?		 State climate mitigation plan or strategy
		 State climate adaptation plan or strategy
		 Centro Brasil No Clima report
Coordination	As above.	<u>Governors for</u> <u>Climate</u>
5.a) Is the state involved in coordination efforts with other states?		 Consórsio Interestadual sobre o Clima - Consórcio Brasil Verde (Interstate Climate Consortium - Green Brazil Consortium)
		• <u>Consórcio</u> Interestadual de Desenvolvimento Sustentável da Amazônia Legal (Interstate Consortium for the Sustainable Development of the Legal Amazon)

 Participation and stakeholder engagement 	As above.	 State climate change policy
		 State climate action strategy
6.a) Is there an institution within the state to facilitate public participation, whether of citizens or stakeholders?		 State climate mitigation plan or strategy
		 State climate adaptation plan or strategy
		 Centro Brasil No Clima report
Transparency and Accountability	As above.	 State climate change policy
7.a) Is there a requirement		 State climate action strategy
to report on actions taken towards the implementation of climate policy objectives?		 State climate mitigation plan or strategy
		 State climate adaptation plan or strategy
		 Centro Brasil No Clima report