



Working paper



Putting climate-resilient development at the heart of equitable implementation of Article 2, paragraph 1(c) of the Paris Agreement: Towards scaled-up adaptation finance

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Key messages

The implementation of Article 2.1(c) must centralise climate-resilient development in order to avoid the sole pursuit of climate change mitigation. Such an approach requires meeting both adaptation and mitigation objectives, and it would better recognise that Article 2 of the Paris Agreement is intended to pursue sustainable development and efforts to alleviate poverty.

While non-Party stakeholders are often the primary owners of a large portion of finance flows, States as Parties to the Paris Agreement treaty remain its primary audience. Shaping finance flows will therefore rely on the various institutions that govern and regulate finance flow owners, as well as the incentives and disincentives that influence their decision-making at both domestic and international level: so-called in this paper ‘consistency makers’.

Internal consistency makers – set by the State and influencing those within its jurisdiction – may well be familiar to many governments, but many developing countries face challenges to putting such actions in place to advance climate-resilient development and particularly, for adaptation. This is because these national objectives can, in part, be facilitated or constrained by external consistency makers arising from international regimes or from regulation put in place by other States with transnational effects. Thus, to equitably scale climate-consistent finance flows to meet the urgency of our challenge, and so to meet the goals of the UN Framework Convention on Climate Change (UNFCCC) and Paris Agreement, these external consistency makers need to be considered.

Adjustments or the reform of external consistency makers will largely be taken outside the UNFCCC process. Several fora already exist that are discussing or are in the process of addressing external consistency makers, from trade in the World Trade Organization (WTO), through Organisation for Economic Co-operation and Development (OECD)-led tax initiatives and UN-led proposals, to the Common Framework on Debt Treatments. The UNFCCC could play a key role in clearly articulating this need for all action to contribute to climate-resilient development.

Inclusive and effective international cooperation on external consistency makers will require the participation of developing countries in decision-making, to better serve their needs and interests. Such inclusive governance can also be driven by Parties to the UNFCCC, which are to varying degrees also represented in all other forums and processes. Collaboration between States and ongoing monitoring and adjustment of consistency makers will be essential to achieve the intended goals and promote sustainable development worldwide. This too might be a function that the UNFCCC could take on.

Without addressing external consistency makers for Article 2.1(c) implementation, the constraints faced by developing countries related to the availability of finance from all sources is likely to hinder progress in their pathways to climate-resilient development and therein, adaptation. It may also hinder deliberations on Article 2.1(c) to focus solely on domestic consistency makers without consideration for this national–international linkage. Such broadening of the understanding of Article 2.1(c) also holds the potential to create a wider base for common ground as deliberations continue.



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Acronyms

AFI	Alliance for Financial Inclusion
CADI	Climate Asset Disclosure Initiative
CBAM	Carbon Budget Adjustment Mechanism (of the EU)
CBDRRC-NC	common but differentiated responsibilities and respective capabilities in the light of different national circumstances
CMA	Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
COP	UN Climate Change Conference/Conference of the Parties
CPI	Climate Policy Initiative
FDI	foreign direct investment
GDP	gross domestic product
GST	Global Stocktake
G20	Group of 20
IFF	illicit financial flow
IGF	inclusive green finance
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
ISSB	International Sustainability Standards Board
MDB	multilateral development bank
MNC	multinational corporation
MSMEs	micro, small and medium-sized enterprises
NDCs	Nationally Determined Contributions
OECD	Organisation for Economic Co-operation and Development
SCF	Standing Committee on Finance
SDGs	Sustainable Development Goals
TCFD	Task Force on Climate-related Financial Disclosures (of the Financial Stability Board)
UNFCCC	UN Framework Convention on Climate Change
WTO	World Trade Organization

Executive summary

With a narrow and closing window for a liveable and sustainable future, both the Intergovernmental Panel on Climate Change (IPCC) and the first Global Stocktake highlight the need for a step-change in progress on adaptation. Both also articulate how finance is a key enabler of action, considering a role for scaled-up, international concessional public finance flows from developed to developing countries, as well as greater finance flows for adaptation actions regardless of geographic origin or destination. This paper explores if it is possible to reduce the barriers to much-needed financing for transformational adaptation in developing countries through the implementation of Article 2.1(c) of the Paris Agreement, the aim of which is to *‘make finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development’*. Highlighting the adaptation component of climate-resilient development, this paper goes beyond the analysis of finance flows themselves. Rather it considers the actions taken to scale and direct those flows, through their owners, via the institutions that govern and regulate them and which set the incentives and disincentives that influence their decision-making at multiple scales, called here ‘consistency makers’.

Central to the premise of this paper is the pursuit in Article 2 of the Paris Agreement of sustainable development and efforts to reduce poverty. Article 2.1(c) specifically seeks the consistency of finance flows with a pathway towards low-emission, climate-resilient development. While differing context opportunities and constraints between communities, countries and regions result in more than one pathway to climate-resilient development, the IPCC framing of such development is instructive. It requires the simultaneous consideration of sustainable development, poverty alleviation, adaptation *and* mitigation. What is clear in this IPCC framing is that trade-offs will exist. These trade-offs are not just between mitigation, adaptation and development, but likely also between societal groups and their priority objectives. The decisions made to get one individual, business, community or country to the desired outcome, may come at a cost to neighbouring individuals, businesses, communities or countries (and globally). The paper therefore calls for equity and climate justice to be at the heart of Article 2.1(c) implementation, so that actions taken are not in direct contradiction with commitments to ‘leave no one behind’ in the pursuit of sustainable development.

By highlighting adaptation as a component of climate-resilient development, this paper seeks to avoid the risk of side-lining adaptation in favour of mitigation in the implementation of Article 2.1(c). To date, literature and efforts on Article 2.1(c) have largely reflected a mitigation focus. A range of frameworks define finance flows consistent with low-emission development and are focused on the temperature goal of the Paris Agreement, while the alignment with ‘net-zero’ emissions is increasingly synonymous with ‘Paris alignment’ of finance flows, despite not considering resilience to climate change impacts. Reinvigorating the focus on adaptation in Article 2.1(c) implementation will also be necessary to ensure the avoidance of maladaptation, and to support more transformational approaches that expand the solution space for adaptation and create a ‘virtuous cycle’ of climate action towards climate-resilient development.

With equity placed at the forefront of any Article 2.1(c) implementation, this paper aspires to stimulate meaningful discussion and action in the international climate change regime to take ownership of and assume leadership for its goal. This ownership is required despite non-Party stakeholders often being the primary owners of a large portion of finance flows, as States that are Party to the Paris Agreement treaty remain its primary audience. Thus, to achieve the implementation of Article 2.1(c), effectively responding to climate change and attaining poverty eradication and sustainable development in an equitable manner, it is pivotal to address these stakeholders that own and control the largest finance flows. This will rely on the various institutions that govern and regulate them, as well as the incentives and disincentives that influence their decision-making at both the domestic and international levels. It will also require Parties to the Paris Agreement to seek to better identify non-Party stakeholders and their role in the climate consistency of finance flows: for example, where they have transnational operations; how negative impacts outside a Party's jurisdiction can be minimised and positive impacts on climate-resilient development actively sought; and, where those with lowest ability, capacity, capability to become more consistent with low-emission, climate-resilient development pathways, require support.

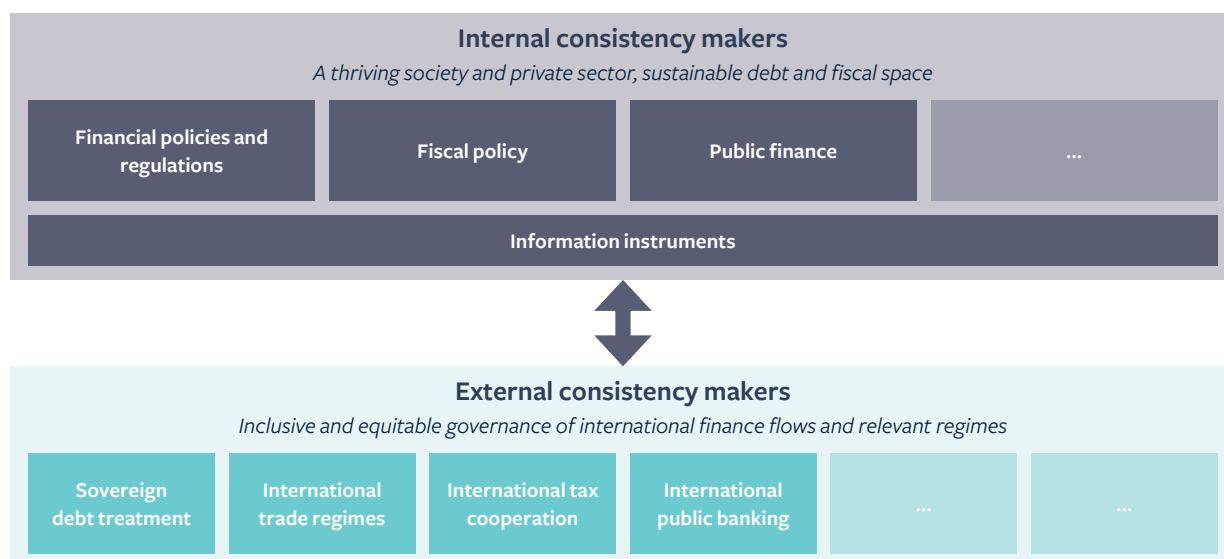
From the perspective of States as Parties to the Paris Agreement and so actors that are ultimately responsible for its effective implementation, this paper proposes two broad categories of consistency makers that can be considered in the implementation of Article 2.1(c) (this is also represented in Figure ES1):

- **Internal consistency makers** are those set by the State and focused on influencing the individuals, entities, groups or enterprises domiciled within its jurisdiction. Existing work on internal consistency makers for the implementation of Article 2.1(c) suggests a role for central banks and regulators in setting financial policy and regulation; using taxes, subsidies and wider fiscal policies; harnessing the expenditure of public finance institutions; and signalling via information instruments, a national intent towards climate-resilient development pathways.
- **External consistency makers** are those set by either an entity or group of entities external to, and beyond the sole control of, the considered State, and directly or indirectly influencing the individuals, entities, groups or enterprises domiciled in the considered State's jurisdiction.

These two categories of internal and external consistency makers proposed in this paper are intended to illustrate that, despite internal consistency makers being familiar to governments, many developing countries face challenges to putting such tools in place to advance climate-resilient development and particularly, for adaptation. This is because these national objectives can, in part, be facilitated or constrained by external consistency makers arising from international regimes or from regulation put in place by other States with transnational effects. To equitably scale climate-consistent finance flows to meet the urgency of our challenge, and so to meet the goals of the UN Framework Convention on Climate Change (UNFCCC) and Paris Agreement, these external consistency makers need to be considered. This is particularly true for developing countries where cascading and compounding crises are focusing attention on short-term

financing needs as a result of policies and decisions taken at an international level, either through multilateral processes or by specific governments that influence finance flows. While these international consistency makers are rising on the UNFCCC and multilateral agendas, such as through the work of the UN Secretary General, they have not yet been conceptually embedded in deliberations surrounding the implementation of Article 2.1(c).

Figure ES1 Examples of internal and external consistency makers of climate-resilient finance flows



Source: Authors' own

The paper uses four examples of external consistency makers. This is a non-exhaustive list that is intended to exemplify how external consistency makers can act as barriers to internal consistency making in developing countries:

- **Sovereign debt:** Public debt has increased faster in developing countries than in developed countries. Developing countries also borrow at higher cost, while facing the highest costs of the adverse impacts of climate change. Increased debt servicing in several developing countries is competing with much-needed investments in health systems and education. International cooperation on sovereign debt could help to provide the fiscal space needed for countries to increase national adaptation finance and apply domestic consistency makers for climate-resilient development.
- **International trade:** Developing countries tend to incur higher costs of international trade rules. Facilitating trade in new technologies and services such as weather forecasting and insurance can support developing countries in their pursuit of climate-resilient development. Helping developing country engagement in greater international trade can also provide opportunities to deepen the private sector and increase trade revenues; where these are well targeted, they could raise additional finance for adaptation actions.

- **International taxation:** Increasing trade and foreign investment in developing countries can also support the financing of climate-resilient development if these countries can efficiently tax the multinational corporations (MNCs) that operate in their borders. Public finances raised could be directed towards and encourage a wider range of actors to pursue climate-resilient development. However, this in turn requires that the international tax regime inhibits MNCs from exploiting gaps and mismatches between different countries' tax systems.
- **International public banking:** Developing countries face difficulties in channelling private finance to adaptation, not least due to more constrained financial returns, over long time horizons, and in the face of future risks and difficulty pricing these risks. International public finance institutions, such as the multilateral development banks (MDBs), could go further in making capital available for developing countries, in particular by taking on risks and increasing the envelope of finance available for climate-resilient development.

Many if not most of the decisions needed to adjust or reform external consistency makers will be taken outside the UNFCCC process. Several fora already exist that are discussing or are in the process of addressing external consistency makers. These range from trade in the World Trade Organization (WTO), through Organisation for Economic Co-operation and Development (OECD)-led tax initiatives and UN-led proposals, to the Common Framework on Debt Treatments. The recognition in these fora of the need to adjust or reform in order to serve the new challenges brought about by climate change is important. The UNFCCC could play a key role in clearly articulating this need for all action to contribute to climate-resilient development.

Inclusive and effective international cooperation on external consistency makers will also require the participation of developing countries in decision-making, to better serve their needs and interests. Such inclusive governance can also be driven by Parties to the UNFCCC, which are to varying degrees also represented in all other forums and processes. Those Parties already represented could also take the lead in driving the necessary reforms to align these processes with the goals of the Paris Agreement, while concurrently calling for effective participation in decision-making. This could include, where necessary, addressing parallel needs to build expert capacity, policy support and meaningful participation of countries in these fora. Collaboration between States and ongoing monitoring and adjustment of consistency makers will be essential to achieve the intended goals and promote sustainable development worldwide. This too might be a function that the UNFCCC could take on.

This paper recognises that internal and external consistency makers are interlinked, much like the financial system itself and actions in the real economy. It is therefore intended to inform a progression in the discussions around the implementation of Article 2.1(c), rather than to propose a complete list, 'framework' or tool around which to operationalise consistency makers. It is recognised that finance is just one enabler of climate-resilient development. This paper briefly touches on the role of governance – but does not mention the enabling roles of technology transfer or capacity building, for example. It also acknowledges, but does not address, a potential need for more fundamental changes in the attributes of our current system, such as a move of

asset owners away from the pursuit of individual self- and shareholder- interest, which the climate consistency of finance flows may require. Finally, this paper is focused on the implementation of Article 2.1(c) from the perspective of States as Parties to the Paris Agreement – and so actors that are ultimately responsible for its effective implementation. It is not written from the perspective of the diversity of private actors that are involved in the adaptation response. It considers, therefore, how incentives can be set by States to seek adaptation actions in the context of resilient development, rather than focusing on, for example, how to better serve explicit household or small enterprise financing needs or the balance between public and private finance for adaptation actions. These incentives will have differing relevance, salience and impact on the diverse range of private sector actors.

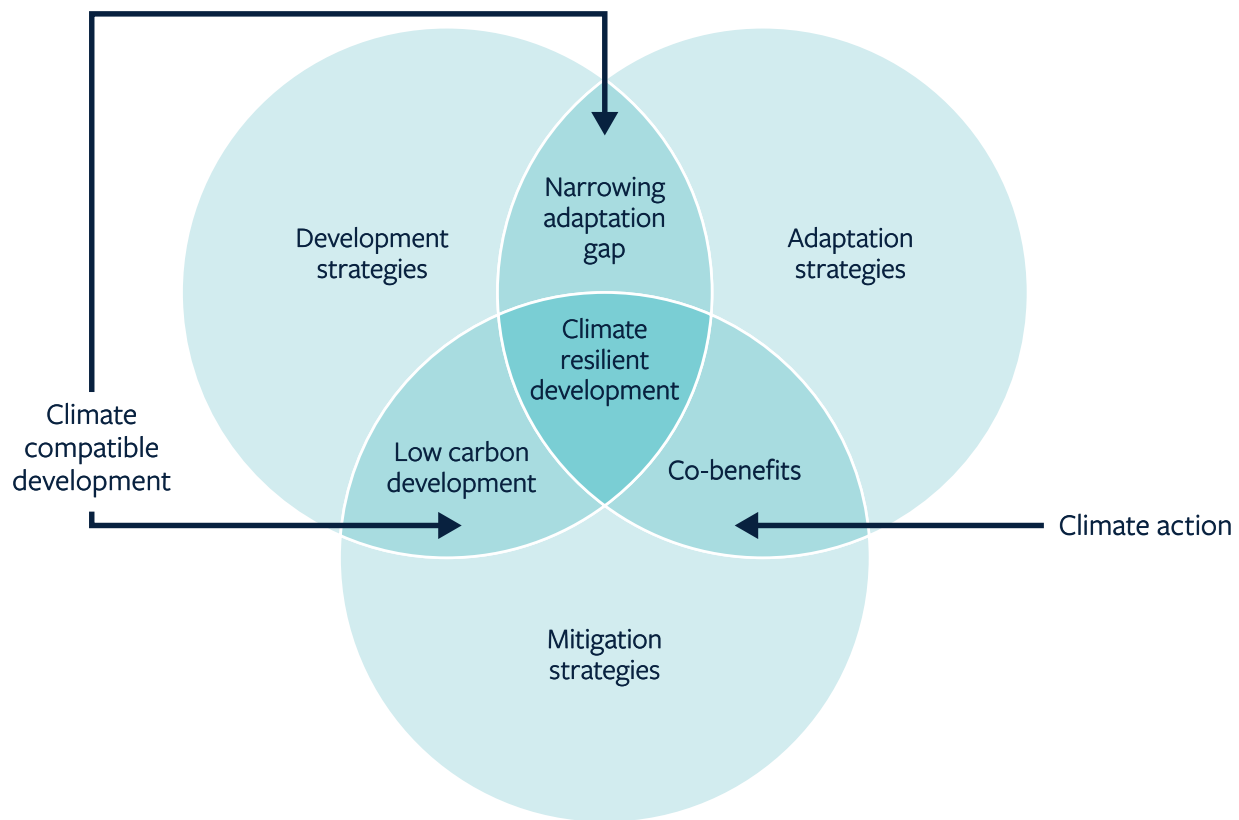
Without addressing external consistency makers for Article 2.1(c) implementation, the constraints faced by developing countries related to the availability of finance from all sources is likely to hinder progress in their pathways to climate-resilient development and therein, adaptation. It may also hinder deliberations on Article 2.1(c) to focus solely on domestic consistency makers without consideration for this national–international linkage. The full and equitable implementation of Article 2.1(c), therefore, constitutes an important opportunity to break a cycle of increasing vulnerability and the increasing costs of climate-resilient development, particularly for the poorest and most climate-vulnerable developing countries. Such broadening of the understanding of Article 2.1(c) also holds the potential to create a wider base for common ground as deliberations continue.

1 Introduction: Why focus on adaptation, climate-resilient development and Article 2.1(c)?

The recent technical synthesis of the first Global Stocktake (GST)¹ is clear that a step-change is needed in collective progress on adaptation (and the loss and damage response) given our rapidly closing window to secure a liveable and sustainable future for all. The technical outcomes of the GST, in line with the Intergovernmental Panel on Climate Change (IPCC, 2022) *Sixth Assessment Report (AR6)*, point to ‘*fragmented, incremental, sector-specific and unequally distributed adaptation efforts*’ (UNFCCC, 2023). Adaptation – described as a process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities, in human and natural systems (IPCC, 2014) – is needed at the local, subnational, national, regional and international level. These adaptation needs are mediated by a multitude of environmental, social, technological and economic factors. As such, adaptation actions do not fit neatly into sectoral classifications and are often inseparable from the pursuit of, for example, improvements in education, health and social policies that build resilience and adaptive capacity in the longer term.

Adaptation as a response to climate change is a critical part of pursuing climate-resilient development (Figure 1; IPCC, 2022), whereby such development integrates adaptation measures and their enabling conditions with mitigation to advance sustainable development for all. Adaptation – as part of climate-resilient development – remains vital to bracing for, and managing the risks associated with, the negative impacts of climate change. Such development requires going beyond incremental measures of adaptation focusing on marginal changes within a system, to adjustments that are transformational and can shift a system entirely to adequately respond to climate change. The only way that action can transform systems sustainably is to do so in an equitable or fair way, in particular for those who are already vulnerable and the ecosystems that they depend on. Support for overcoming the barriers to such adaptation action, especially those of inequity and poverty, is therefore critical for this type of transformation. The ultimate aim being to build thriving societies in a changing climate, and to prevent the reinforcing and entrenching of existing inequalities for the most vulnerable. Commensurate and fit-for-purpose reforms of relevant actors, institutions and systems are needed at the national and international levels to adequately facilitate a shift of this nature.

1 Established under Article 14, the Paris Agreement’s Global Stocktake (GST) is a two-year process ‘to assess the collective progress towards achieving the purpose of [the Paris] Agreement and its long-term goals’. The first GST started in 2021 and will culminate in 2023 at COP28 in Dubai. The GST is intended to inform countries in updating and enhancing their climate actions and support through their Nationally Determined Contributions (NDCs).

Figure 1 IPCC representation of climate-resilient development

Source: Schipper et al. (2022)

While studies have illustrated that adaptation is cost effective (Trisos et al., 2022), there remain barriers to providing and mobilising finance for adaptation. Financial returns are often more constrained for adaptation activities than they are for mitigation activities. This is because of a multitude of interventions requiring context-specific design, leading to relatively small scale and high-transaction costs in implementation, with long-time horizons providing uncertainty on future climate risks and associated difficulties in pricing these risks (Mullen and Ranger, 2022; Global Commission on Adaptation, 2019; Miller et al., 2019). At the same time, there are challenges to track the finance being directed towards adaptation, given that it is an ongoing process of adjustment to current and future climate, particularly for the diversity of private sector actors – from households and micro-enterprises to multinational corporations (MNCs). The specific and important role of international public finance in the adaptation efforts of developing countries is well-documented, both for building and sustaining capacity, providing direct grant funding for adaptation actions that do not deliver revenue streams, as well as to mobilise private sector finance by taking on risks under uncertainty (UNFCCC, 2023;² Songwe et al., 2022).

² The technical synthesis of the first Global Stocktake includes the mobilisation of international public finance as a key message; see UNFCCC (2023).

A slow increase was seen in international public finance flows for adaptation up until 2019/2020 (UNFCCC, 2022a). However, the Organisation for Economic Co-operation and Development (OECD) estimated that adaptation finance declined in 2021, with \$89.6 billion provided and mobilised by developed countries for climate action in developing countries, of which \$24.6 billion was for adaptation: down from \$28.6 billion in 2020 (OECD, 2023). Global total climate finance flows for adaptation were estimated to have increased to \$49 billion annually in 2019/2020, from \$30 billion a year in 2017/2018 (UNFCCC, 2022a). The needs of developing countries to adapt to a changing climate continue to grow and exceed the finance flows available to them. This was recognised in the Glasgow Climate Pact, paragraph 18 of Decision 1/CMA.3,³ that: *‘urges developed country Parties to at least double their collective provision of climate finance for adaptation to developing country Parties from 2019 levels by 2025, in the context of achieving a balance between mitigation and adaptation in the provision of scaled-up financial resources’*.

Alongside mitigation and adaptation, one of the Paris Agreement’s long-term goals – Article 2.1(c) – aims to *‘make finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development’*. This goal, in combination with the other two, endeavours to guide the world’s response to climate change while pursuing broader poverty eradication in the first instance and, ultimately, sustainable development for all. Without agreement on the scope of Article 2.1(c) or guidance from the CMA on its equitable implementation, however, the pursuit of climate-resilient development, of which the process of adaptation is a critical component, is currently being side-lined in favour of low-emission development. A range of frameworks have been established to define what finance flows consistent with low-emission development look like, with a focus on the temperature goal or alignment with ‘net-zero’ emissions, which implies an overall balance between greenhouse gases produced and taken out of the atmosphere (Feyertag et al., 2023). These net-zero commitments and their implementation are increasingly synonymous with ‘Paris alignment’ of finance flows, despite not considering resilience to climate change impacts (Ranger and Mullan, 2022).

This paper explores if equitable implementation of Article 2.1(c) of the Paris Agreement can reduce the barriers to much-needed scaled financing for transformational adaptation in developing countries. With an intention to refresh discussions on Article 2.1(c), the paper puts fairness at the forefront of any implementation. This is attempted by centring adaptation as part of climate-resilient development and by articulating how factors external to a State’s control will influence its ability to make finance flows climate consistent. As a result, this paper aspires to stimulate meaningful discussion and action in the international climate change regime to take ownership of its goal and assume leadership of Article 2.1(c) implementation.

3 While the COP refers to the Conference of the Parties and is the decision-making body for the UNFCCC, the CMA refers to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (those that have signed and ratified the Paris Agreement).

With this State focus, the paper does not directly address the full breadth of developing country challenges in channelling private investment, domestic or international, towards adaptation. It is not written from the perspective of the diversity of private actors that are involved in the adaptation response, which has been covered elsewhere in the literature (for example, Tsefaye et al, 2023; OECD, 2023; ICR, 2021). Section 2 articulates the key concepts used in this paper. Section 3 then situates the so-called ‘consistency makers’ of Article 2.1(c) implementation in the context of equity and transformational adaptation vis-à-vis climate-resilient development, before articulating a set of climate-consistency makers, both internal and external to a Party and its jurisdiction. Section 4 concludes.

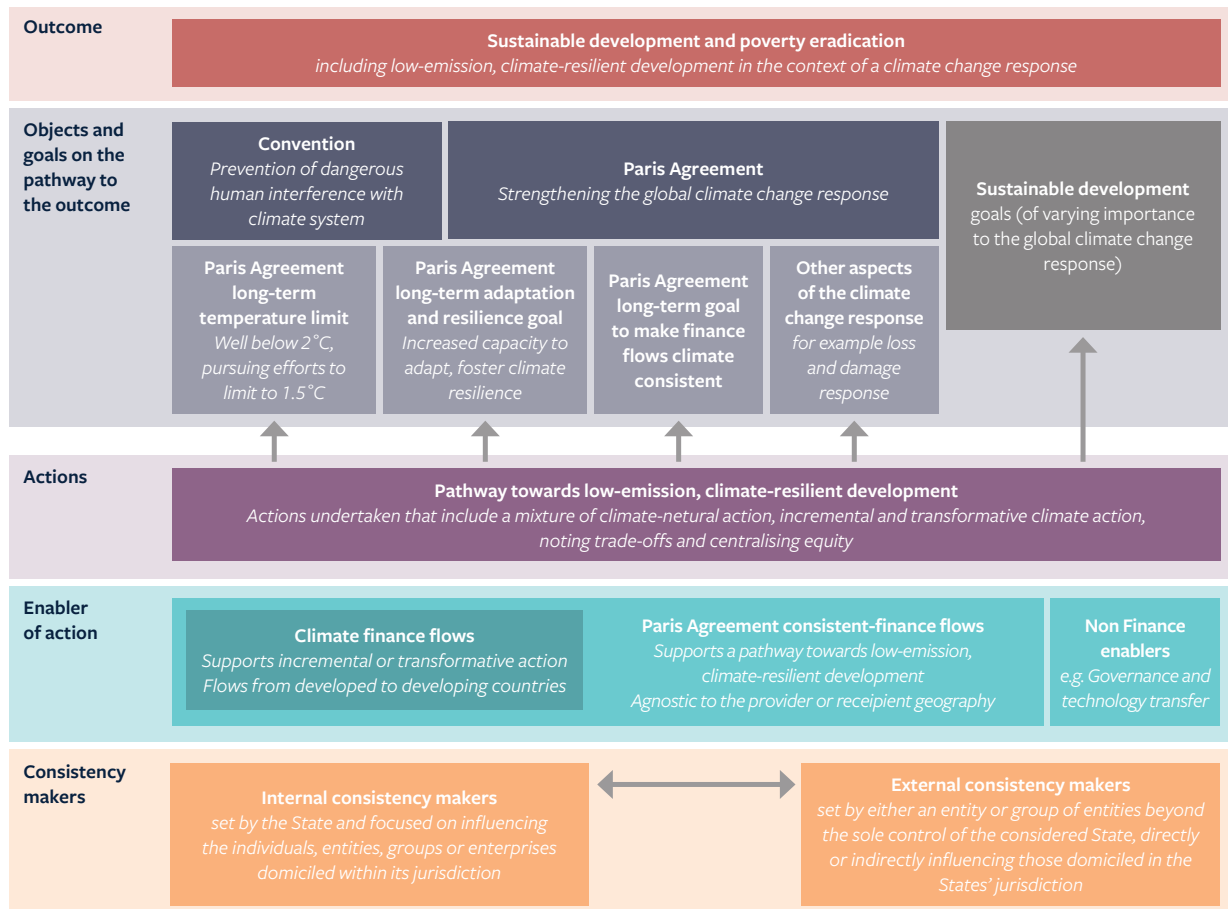
2 Key concepts in the pursuit of climate-resilient futures

2.1 Pursuing sustainable development and poverty eradication as part of the climate change response

Article 2 is clear that the 2015 Paris Agreement seeks to enhance the implementation of the 1992 United Nations Convention on Climate Change (UNFCCC or ‘the Convention’), in the context of sustainable development and efforts to eradicate poverty. This means that the global climate change response and sustainable development should be pursued in an integrated and coherent manner, as this will better allow countries to achieve multiple objectives efficiently and quickly under both the Paris Agreement and the 2030 Agenda for Sustainable Development (UNFCCC, n.d.). Climate action with a focus on poverty and inequality reduction has been shown to lead to strong, inclusive, resilient and sustainable development (Lankes et al., 2022).

Figure 2 outlines how this overarching outcome for a low-emission, climate-resilient future is guided by the objects and purposes, as well as the goals, that are laid out in the Convention, the Paris Agreement and by other efforts towards sustainable development and poverty alleviation. While poverty and climate change are well recognised as interlinked, these latter efforts may include those that are not pursued with the climate change response in mind – for example, aspects of goals towards peace and justice. In the context of the principles of equity and common but differentiated responsibilities and respective capabilities, embedded both in the Convention and Paris Agreement, and in the spirit of the bottom-up nature of the Paris Agreement, forward motion is considered via pathways to the desired outcomes. It is acknowledged that not all countries, communities, entities or individuals start in the same place in terms of their ability, capability and capacity to address these problems, nor is there necessarily a static endpoint with climate continuing to change, as do relevant economic and geopolitical factors. As such, each country, institution, entity, household or individual will undertake different actions, based on their starting points, route and intended destination, noting that some objectives may well trade off against each other in the pursuit of the ultimate outcome. The final layer of Figure 2 is the focus of Section 3, which explores the consistency makers that lead to actions towards a pathway to our ultimate outcomes.

Figure 2 A stylised theory of change centralising the multilateral climate change response in the context of sustainable development and poverty eradication⁴



Source: Authors' own

2.2 The objects and goals on the way to our outcome

The 1992 Convention was primarily focused on ensuring that the causes of climate change were mitigated ‘within a time frame sufficient to allow ecosystems to adapt naturally to climate change’ (UNFCCC, 1992). This ultimate objective of the regime’s Framework Convention was further enhanced in Article 2.1(a) of the Paris Agreement, which articulated its accepted limit for average global increased temperature. The regime’s intention was to limit global average temperature to well below 2°C, while pursuing efforts to limit it to 1.5°C above pre-industrial levels. As time progressed and mitigation of the causes of climate change continued to lag, however, it has

⁴ It is noted that finance is one of many enablers and while it forms the basis of this analysis, it is not intended to imply that, for example, other enablers such as technology transfer and capacity building do not also play important roles.

become increasingly difficult for human and natural systems to naturally adapt (Khan et al., 2020). This has highlighted the need for greater attention to the concept of ‘adaptation’ – or the need to adapt to the adverse effects of climate change has become more apparent.

The 2015 Paris Agreement recognised adaptation as a global challenge, by embedding in Article 2.1(b) an aim to increase the ability to adapt to the negative impacts of climate change and foster climate resilience and low greenhouse gas emissions development. Adaptation is also articulated in the Paris Agreement’s global goal on adaptation under Article 7, to ‘enhance adaptive capacity, strengthen resilience, and reduce vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the temperature goal’ (UNFCCC, 2015).⁵ The global goal on adaptation, as such, appreciates diverse levels of adaptation capability that are closely related to levels of vulnerability, making broader development progress that affects vulnerability important for adaptation outcomes. While Article 7, paragraph 2, of the Paris Agreement acknowledges that adaptation has different dimensions, from the local to the international, it does not, define ‘climate resilience’.

Climate-resilient development does, however, have a dedicated chapter in the 2022 IPCC *Sixth Assessment Report*. Documenting the term’s use, the IPCC dates ‘climate-resilient development’ being first used in 2009, with an acceleration of its use around the launch of the Green Climate Fund as it became more widely utilised in UNFCCC materials (Schipper et al., 2022). Importantly, for the implementation of Article 2.1(c), climate-resilient development is defined as integrating adaptation measures and their enabling conditions with mitigation to advance sustainable development for all (IPCC, 2022) and illustrated in Figure 1.

‘Climate-resilient development (CRD) is a process of implementing climate action, including greenhouse gas mitigation and risk reduction adaptation measures, to support sustainable development for all.’

IPCC AR6 Working Group II

It is in this context of climate-resilient development that Article 2.1(c) should be understood. Article 2.1(c) aims towards ‘making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development’. Six years after the Paris Agreement was ratified, the Standing Committee on Finance (SCF)⁶ reported that understandings of the scope of Article 2.1(c) remain divergent (UNFCCC SCF, 2022a). In response to submissions made

5 In 2021, at the 26th UN Climate Change Conference/Conference of the Parties (COP26), Parties established the two-year long Glasgow–Sharm el-Sheikh (GlaSS) work programme on the Global Goal on Adaptation (GGA) under Decision 7/CMA.3 in order to advance its operationalisation. This allows for measuring and reporting of progress, as well as enhancing national planning, implementation and better communication of needs and priorities.

6 The Standing Committee on Finance has a function to assist the COP and CMA on various aspects of climate change financing.

from Party and non-Party stakeholders, several stakeholders noted their understandings of Article 2.1(c) and what it could mean to achieve it in their implementation of the Paris Agreement, including shifting finance flows to allow both mitigation and adaptation goals to be reached, ensuring adaptation and loss and damage are addressed, and allowing low-emission, climate-resilient pathways to be followed. Views also differed in terms of the approaches to implement Article 2.1(c), the role of public and private actors, and the differences in roles between developed and developing country Parties (Annex 1). Recent SCF reports have also summarised that while there are several initiatives that may be relevant to Article 2.1(c) (though with a significant risk of ‘greenwashing’), there is a clear need to complement existing approaches with further consideration of climate-resilient development pathways to redress the bias towards mitigation (UNFCCC SCF, 2022b; UNFCCC SCF, 2023). A tension between climate finance provision and mobilisation from developed to developing countries, and the global collective pursuit of Article 2.1(c), is also well-documented (Watson, 2022; Zamaroli et al. 2021) as well as being visible in ongoing deliberations.

2.3 A focus on equitable adaptation actions and climate-resilient development, rather than on dollars

There is more than one route to climate-resilient development, but these pathways become harder to forge as temperatures rise. This is particularly true for the most vulnerable and marginalised communities and the ecosystems they depend on, whose opportunities for climate-resilient development are already restricted by past development choices and existing capabilities comprising resources, vulnerability, culture and values (IPCC, 2022).

‘Multiple climate-resilient development pathways are still possible by which communities, the private sector, governments, nations and the world can pursue climate-resilient development – each involving and resulting from different societal choices influenced by different contexts and opportunities and constraints on system transitions.’

IPCC, 2022

With climate-resilient development pathways consisting of actions and social choices made by multiple actors – government, industry, media, civil society and science (Schipper et al., 2022) – it can be assumed that the distribution of impacts and costs of these actions and choices will not be even. Trade-offs will exist, not just between mitigation, adaptation and development, but likely also between societal groups and their priority objectives. Furthermore, the decisions made to get one individual, business, community or country to the desired outcome, may come at a cost to neighbouring individuals, businesses, communities or countries (and globally). Trade-offs can also occur across time and space, highlighting the importance of considering future generations within climate-resilient development pathways. Thus, without centring and basing actions on the pursuit of equity and climate justice, actions might be in direct contradiction with the commitment to ‘leave no one behind’ (Schipper et al., 2022).

Equity and climate justice will also be key to avoid maladaptation. Maladaptation results from actions that increase vulnerability, exposure and risk to climate impacts, or diminish welfare, creating lock-ins that are hard to change and exacerbate inequalities (IPCC, 2022). There is evidence that most maladaptation comes from a failure to address the root causes of vulnerabilities and from responses that are not equitable at the policy level. Maladaptation is also linked to actions that address sectors and risks in isolation, and/or focus on the short term and on direct impacts or physical changes only, without addressing the distributional effects of responses. To reduce maladaptation, considerations of procedural and distributional justice in decision-making are needed, as well as a stronger focus on multi-sectoral, multi-actor and long-term responses (IPCC, 2022).

As an adaptation action becomes part of the pathway to climate-resilient development, this action can be incremental or transformational. The IPCC (2022) highlights that most adaptation actions to date have been incremental and more project based, whereas transformative adaptation actions consider instead the fundamental attributes of a system in response to climate change. Further, across lower-income regions of the world, the incremental nature of coping or adaptation responses to climate change have tended to be at the household level and behavioural, with limited evidence of risk reduction (IPCC, 2022; O'Neill et al., 2022; Berrang-Ford et al., 2021). Transformations in support of climate-resilient development pathways are noted to include those that explicitly: *'redress social drivers of vulnerability; shift dominant worldviews; decolonialise knowledge systems; activate human agency; contest political arrangements; and insert a plurality of knowledges and ways of knowing'* (IPCC, 2022).

Incremental and transformational adaptation are both needed and remain interconnected processes that sit on a continuum. Incremental adaptation serves as a starting point to drive more transformational societal change, with both concepts linked to adaptation limits. Here, 'soft limits' represent those for which no current adaptation options are feasible but new ones might become available in the future, while 'hard limits' include those for which adaptation options are no longer effective and new ones no longer possible (ibid). Transformational adaptation can overcome soft adaptation limits by expanding the available solution space. As climate change accelerates, and exposure and vulnerabilities intensify, an acceleration of transformational adaptation approaches will be needed to expand the set of effective, feasible and just adaptation solutions to achieve climate-resilient development (ibid).

2.4 How finance catalyses climate-resilient development pathways

Finance is commonly considered as 'catalytic' or an enabler of action. It is the means to an end, rather than the end itself. There are wider enablers for climate-resilient development that are not addressed centrally here. Inclusive governance, for example, will lead to more effective and enduring adaptation outcomes, and facilitates climate-resilient development (Simpson et al., 2023). Formal and informal institutions and practices also contribute where they are well aligned across scales, sectors, policy domains and timeframes, as well as where they are flexible and responsive to emerging risks (IPCC, 2022). Other enablers may include technology or capacity building.

Climate finance provision and mobilisation from developed to developing countries will be central to adaptation action. Article 4.7 of the Convention is clear that the effective implementation of its commitments by developing countries will be reliant on the developed country Parties meeting their commitments related to financial resources and transfer of technology, taking into account economic and social development and poverty eradication as the first and overriding priorities of developing countries (UNFCCC, 1992). Provisions under Article 9 of the Paris Agreement reiterate commitments under the Convention and highlight the need for public and grant-based resources for adaptation, especially in countries that are particularly vulnerable to climate change and with capacity constraints (UNFCCC, 2015).

Such international public finance for adaptation from developed to developing countries is often the most risk-taking form of finance available, flowing bilaterally as well as through multilateral climate change funds and the multilateral development banks (MDBs). Recent reports are clear that developed countries are off track in relation to their 2009 commitment to collectively mobilise and provide \$100 billion a year by 2020 for both mitigation and adaptation in developing countries (OECD, 2023).

Adaptation finance – which refers to all public and private, domestic and international flows – also needs to increase. Of total global climate finance measured by the Climate Policy Initiative (CPI), which includes primary capital flows, targeting physical assets and activities, of an estimated total of \$1,265 billion, just \$63 billion was directed at adaptation,⁷ with \$15 billion directed at water supply and sanitation and \$7.5 billion directed towards wastewater treatment in 2021 (Buchner et al., 2023). These global totals are falling massively short of what is needed. It is estimated that in developing countries alone, adaptation costs are in the range of \$215 to \$387 billion per year for this decade (UNEP, 2023). While these numbers are large, they remain tiny compared to the total flows and investments that happen around the world.

A final enabler of climate-resilient development is finance flows that are consistent with low-emission, climate-resilient development pathways. These consistent finance flows will be geographically neutral to the provider/spender or the receiver. This distinction is important given historical responsibility for climate change and, as a result, developed countries' financial and other commitments made under the UNFCCC and in the Paris Agreement, as referred to above. Climate-consistent finance flows can be from developed or developing country sources, public or private entities, and channelled within and across borders. As such, they encompass a much larger volume of finance flows, and these flows are related to but not necessarily considered

7 Available data on total global finance for adaptation represents that which flows predominantly through international public finance providers and national development finance institutions; as such, it does not include adaptation finance spent by the private sector or domestic governments. Although total adaptation finance estimates are likely to be higher, the gap to meet adaptation finance needs in developing countries is likely to remain significant.

climate finance that flows from developed to developing countries. It is important, however, that any efforts towards making finance flows climate consistent do not imply any diminution of or attempt to distract from the responsibilities of developed countries therein (see Watson, 2022).

Usefully, in addition to considering the positive flows of finance that deliver adaptation, climate-consistent finance flows require consideration of the flows that are inconsistent with climate-resilient development – for example, those that add climate risk – in addition to scaling those that build climate resilience. This consideration also needs to happen across scales and will be transboundary. Financing of hydropower construction and operation, for example, may change downstream and often transboundary water flow, retain river sediments, and affect the stability and fertility of riverbanks, with knock-on impacts downstream (Anisimov and Magnan, 2023).

Consideration of climate-consistent finance flows necessitates a closer look at non-Party stakeholders as the primary owners of a large portion of finance flows (Forbes, 2023; UBS, 2023). This is despite the Paris Agreement being a treaty with its primary audience being States that are Party to it. To achieve Article 2.1(c), effectively responding to climate change and attaining poverty eradication and sustainable development in an equitable manner, it is pivotal to address these stakeholders that own and control the largest accumulation of flows. These consistent finance flows and their respective owners will rely on the various institutions and fora that govern and regulate them, as well as the incentives and disincentives that influence their behaviours, at both the domestic and international levels. For example, while the total global adaptation finance assessed by CPI considers flows in the real economy, it does not consider insurance or guarantees or the role of taxes and subsidies in its figures. This points to the need to assess how these financial instruments, fiscal and financial policies and regulation, and the incentives and disincentives they collectively put in place go on to dictate actors' choices and so finance flows in the real economy.

Thus, the pursuit of climate-consistent finance flows is about the actions taken to scale and direct those flows, through their owners, via the institutions that govern and regulate them, and the incentives and disincentives that influence their decision-making at multiple scales in one direction (that is, low-emission, climate-resilient development) over another, reflecting equity in their implementation: called here 'consistency makers'.

3 Towards fair climate-consistency makers for climate-resilient development

3.1 Unpacking equity towards fair consistency makers

In the pursuit of Article 2.1(c) of the Paris Agreement, it cannot be ignored that Article 2.2 provides a collective expectation that implementation will reflect the ‘fairness’ principles of the UNFCCC (UNFCCC, 2023). How equity and the principle of common but differentiated responsibilities and respective capabilities in the light of different national circumstances (CBDRRC-NC) will be reflected in the Parties’ actions to implement Article 2.1(c) warrants greater unpacking to ensure that fairness exists horizontally between Parties, and permeates vertically between Parties and non-Party stakeholders (Castro, 2016). This consideration of equity is also important given that the need to deliver adaptation and its financing also comes from a focus on and prioritisation of developing countries and their needs, based on their particular vulnerability to climate change and their capacities to respond under the UNFCCC regime (Khan et al., 2019), as well as because adaptation actions are primarily public goods that contribute to societal resilience.

A key challenge towards the implementation of fair climate-consistency makers is that it is non-Party stakeholders that often have the largest finance flows (and stocks) and are major players in global capital markets. With climate change, debatably, the largest market failure the world has witnessed, self-regulation by global markets to secure equitable and transformational adaptation vis-à-vis climate-resilient development appears not to be happening (Bowman, 2023). This paper stops short of seeking to address this challenge. Instead, it focuses on Parties and the international climate change regime as the first-instance custodians of Article 2.1(c) implementation.

As the first-instance custodians of Article 2.1(c) implementation, when reflecting equity in the implementation of consistency makers, Parties might seek to:

- identify the different ability, capability and capacity of non-Party stakeholders, as finance flow owners to become more consistent with low-emission, climate-resilient development pathways, providing and prioritising support to those domiciled in developing countries with lowest ability, capability and capacity
- identify non-Party stakeholders that are transnational in operations, but that remain under a Party’s jurisdiction and control, and tailor consistency makers to ensure those operations allow for low-emission, climate-resilient development, especially when operations impact developing countries
- evaluate potential negative, and seek positive, impacts of consistency makers on Party and non-Party stakeholders outside of a Party’s jurisdiction, for global climate-resilient development.

A further dimension of equity relevant for a Party's consistency making will be the differing levels of responsibility between non-Party stakeholders for climate change (Castro, 2016).⁸ The political and academic debate and lack of global consensus on the interpretation of CBDRRC-NC at a Party level, however, complicates further discussion on the potential usage of this dimension for non-Party stakeholders (Rajamani, 2020; Dobson, 2021; Castro, 2016).

While there remain complicated challenges in bridging the gap for private investment in climate-resilient development in developing countries, even countries with less developed financial markets will need to be engaged (Ranger and Mullan, 2022). This will be important so that the implications of international companies and financial institutions' decision-making do not act in opposition to climate-resilient development for communities. Mullan and Ranger (2022) illustrate that corporations and financial institutions need to go beyond their own management of climate risk to their operations and towards the support of the wider policy goals of helping societies become more resilient to the adverse impacts of climate change: the authors consider this akin to the double materiality for mitigation finance whereby climate change impacts on a corporation and a corporation also impacts on the climate.

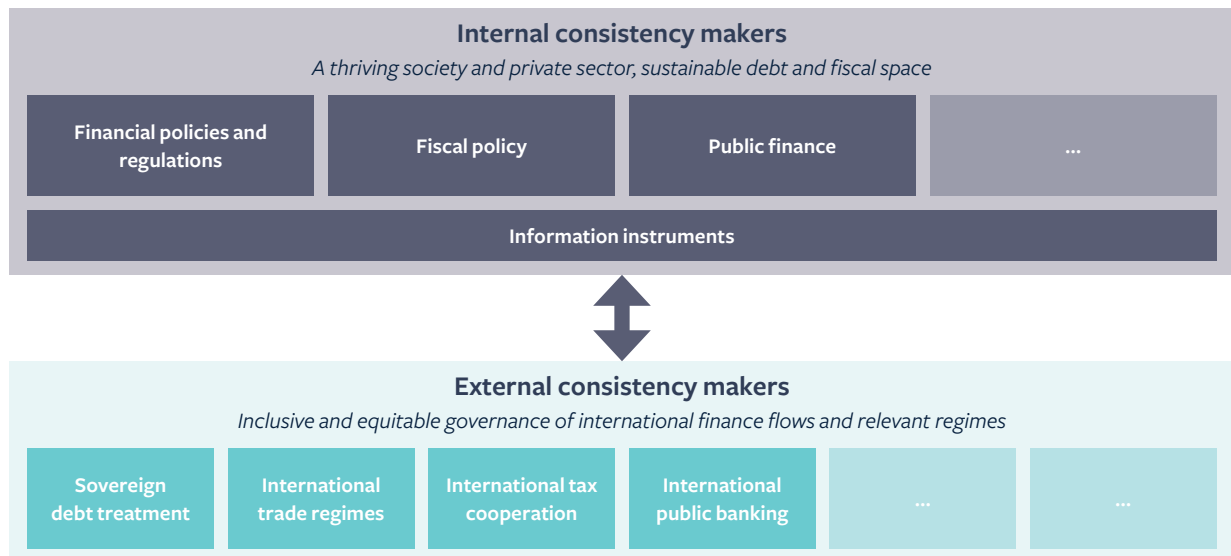
3.2 A framing of consistency makers

From the vantage point of States as Parties to the Paris Agreement, and so actors that are ultimately responsible for its effective implementation, consistency makers are divided by this paper into two general categories:

- **Internal consistency makers.** These are set by the State and focused on influencing the individuals, entities, groups or enterprises domiciled within its jurisdiction.
- **External consistency makers.** These are set by either an entity or group of entities external to, and beyond the sole control of, the State under consideration and are focused on directly or indirectly influencing the individuals, entities, groups or enterprises domiciled in that State's jurisdiction.

Figure 3 strives to illustrate both internal and external consistency makers. They are recognised to interact with each other. It is also recognised that existing country context and future ambitions will determine the relevance and salience of different consistency makers within and between countries and sectors.

8 General principles that might allow such reflection in the implementation of climate action have been argued to include broader notions of 'fairness, justice, equality (for equals), affirmative action, redistribution and restoration', for example (Lawrence and Reder, 2019).

Figure 3 Examples of internal and external consistency makers of climate-resilient finance flows

Source: Authors' own

1.1.1 Internal consistency makers

Internal consistency makers are involved in creating a domestic environment for climate-resilient development. They focus on a State's intention to move towards climate-resilient development, inclusive of achieving thriving societies, notably a thriving private sector, adequate revenue raising capabilities and sustainable levels of sovereign debt. It is well understood that national enabling environments support climate action, with interlinkages between national policies, good governance and regulation, and business confidence (Ameli et al., 2021), and are related to the feasibility of adaptation (Williams et al., 2021). These consistency makers are typically supported by common law and policy levers at the State's disposal that shape finance flows, including internally focused financial policies and regulations, fiscal policy levers, public finance and information instruments (Whitely et al., 2018; Table 1).

Table 1 Internal consistency makers: government tools to move finance towards low-emission, climate-resilient economies

Tool	Relevance in the pursuit of adaptation or resilience to climate impacts
<p>Financial policies and regulations</p> <p><i>refer to the use of tools operating through the rule of law, often used by central banks and other financial regulators</i></p>	<p>Central bank and financial regulator mandates primarily focus on price stability, followed by financial stability, while in some developing and emerging economies they also have development mandates. Ensuring physical climate risks are incorporated into the risk management practices of financial institutions and private actors has been the main route through which to seek resilience to climate impacts (Box 1). Actors have also sought to create taxonomies of adaptation activities, set bond guidance to reduce ‘greenwashing’, set requirements for climate-risk stress-testing, or to adjust capital and lending requirements that ensure financial institutions have enough assets available if market conditions shift and limit exposure to certain types of investments or assets, respectively (Mullan and Ranger, 2022; Watson, 2021a; AFI, 2022).</p> <p>The role of financial sector policy-makers in rendering climate-consistent finance accessible to individuals and micro, small and medium-sized enterprises (MSMEs) is rising on the agenda. Ensuring equitable access to financial products and services, specifically aimed at advancing climate mitigation and adaptation, ensures finance for climate action reaches those who need it most. As such, the discussion on inclusive green finance (IGF) brings a new dimension to the ongoing global climate discourse (Box 2).</p>
<p>Fiscal policy tools</p> <p><i>change price incentives to steer behaviours towards certain policy objectives, including through subsidies, taxes, levies, royalties</i></p>	<p>Governments are able to directly subsidise adaptation actions, such as resilient technologies, or provide tax exemptions for goods and services that build resilience. However, each country will have its own unique combination of fiscal mechanisms (Feyertag et al, 2023). Antigua and Barbuda has value-added tax exemptions for hurricane shutters, which can be prohibitively expensive for households, particularly in times of low liquidity (such as when stocking up on essential food and water before a hurricane) (Watson et al., 2020). In Brazil, government-sponsored, low-interest agricultural loans must include compliance with the Forest Code, which restricts how much forest land farmers can clear (Watson, 2021b). There may also be a case for altering subsidies that already exist but that encourage maladaptation or inefficient resource use. Examples include farm-level payments for production that might lead to depletion of groundwater or inefficient use of water (ibid).</p> <p>Public budgets can be directly used to support adaptation research and advisory services, and investment in resilient infrastructure, including by influencing public procurement practices. In the case of procurement, for example, resilient procurement might mean the use of nature-based solutions as a substitute to grey infrastructure (for example, mangrove rehabilitation over concrete coastal protection) (Mullan and Ranger, 2022). In these ways, public investment shifts both supply and demand for adaptation goods and services (ICR, 2021).</p>

Tool	Relevance in the pursuit of adaptation or resilience to climate impacts
<p>Fiscal policy tools continued</p> <p><i>change price incentives to steer behaviours towards certain policy objectives, including through subsidies, taxes, levies, royalties</i></p>	<p>Governments can also build fiscal resilience to physical climate change impacts and the costs they impose. They may seek to manage risk at the level of the Nation State or subnational entities – for example, through contingency funds, credit lines and insurance pooling (Watson, 2021a), or by addressing individual and firm-level risk. Governments already support a wide range of State-backed insurance and social protection systems through subsidies and tax breaks, including via social assistance programmes like cash transfers and social insurance schemes (such as pensions). These may not explicitly seek to support climate resilience, instead aiming to address a wider range of risks or specific non-climate risks (such as, ill health, unemployment); however, they often have adaptation co-benefits, giving climate-vulnerable households and businesses a safety net that can facilitate investments for improved resilience and to recover more quickly.⁹</p>
<p>Public finance</p> <p><i>refers to expenditure from majority government-owned financial institutions¹⁰</i></p>	<p>Capturing the rules governing disbursement from majority government-owned financial institutions, such as national development banks, international or sectoral fund structures, or through financial intermediaries, ‘public finance’ refers to the use of grants, debt and equity, among other financial instruments, to shift the financial risk for investors, with governments taking on the greatest risk so that private actors will invest. As such, it relates to upstream policies, such as the development of mandates, strategies and operations – for example, negative listing of investments, or institutional- or portfolio-level tracking of these institutions. It could also relate to downstream policies, such as those informing decision-making and evaluation processes – for example, lending limits, caps and floors for various sectors and technologies, or development of particular de-risking tools (Watson, 2021b).</p>
<p>Information instruments</p> <p><i>influence behaviour through awareness</i></p>	<p>Including tools such as certification and labelling, transparency initiatives, and awareness campaigns, national climate strategies – including Nationally Defined Contributions (NDCs) and, in particular, National Adaptation Plans (NAPs) – can serve in this role, providing a high-level indication of ambition and strategy on adaptation and/or climate-resilient development. Developing countries are already moving towards implementing their NAPs and setting out strategies to secure potential sources of domestic and international public finance for adaptation and to increase domestic finance allocations (Murphy, 2022). Countries also have in place numerous strategies, plans and policies that relate to sustainable development and economic growth objectives that can be considered here in the context of climate-resilient development.</p>

9 The efficacy of such schemes to support climate-resilient development depends on numerous factors, including who can access the scheme (poor and climate-vulnerable people may be excluded if recipients need to pay into the scheme beforehand or require official documentation or registration), its financial value, the behaviours and outcomes it incentivises, and how it is integrated with other climate adaptation efforts (Agrawal et al., 2019).

10 It therefore excludes expenditures through fiscal policy and direct budget spending that is captured by fiscal policy.

Box 1 How climate-risk disclosure can foster adaptation action and climate-resilient development

The disclosure of climate-related risks has accelerated since 2017, when the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) released its 11 recommendations, providing a framework for companies and other organisations to develop more effective climate-related financial disclosures. The percentage of companies disclosing information has steadily increased yearly, by 32% on average. Disclosure allows for information to be presented on the financial risks stemming from climate change, their assessment and their management, to reduce possible losses and bolster the resilience of business in the medium and long term. It can be used by companies, banks, investors and regulators alike. Since 2017, disclosures have become more complete, there is more appropriate pricing of climate-related issues, and there is a growing body of evidence that climate-related risks are beginning to affect prices for certain types of assets (EIB, 2022).

Climate-risk disclosure has evolved from being voluntary to becoming a regulated and mandatory requirement in multiple countries worldwide. Several jurisdictions, including eight of the G20 countries – Brazil, Canada, the EU, Japan, UK, France, Italy and Germany – have already implemented regulations for financial institutions. These regulations vary in scope but generally require institutions to define and address climate change risks in their risk management and disclosure systems. Some explicitly mandate compliance with TCFD recommendations (University of Oxford, 2023). Additionally, countries like Colombia, Egypt and Chile, among others, have also taken steps in this direction. Additionally, the International Sustainability Standards Board (ISSB) has developed and released standards for disclosing climate risks in a comparable and transparent manner, advancing an understanding of the financial risks posed by climate change to the portfolios and, consequently, the business strategies of companies.

Climate disclosure makes companies' progress in identifying and managing risks more transparent. As disclosure becomes mandated, key stakeholders are forcing companies to critically assess and ideally adjust their operations, financial strategies and even core business models to address the challenges of climate change. Internal transformation of business operations might include internal coordination on climate issues and long-term management strategies, thus engaging boards of directors, senior management and technical experts from several areas of the companies (those that focus on risks, investment, sustainability, legal issues, among others). In addition to serving compliance and investor relations purposes, transformational disclosures can also arise, reflecting a long-term vision and deep commitment to taking action with the goal of reshaping a business model to be more resilient to climate change.

Disclosure has, to date, centred around industries that are highly exposed to transition risks – that is, those associated with policy changes (like low-emission transitions), technological breakthroughs, reputational impacts, or shifts in market preferences and social norms. This has often come at the expense of adequately understanding, addressing and assessing associated physical risks (Bolstad et al., 2020). Such physical risks refer to those arising from the interaction of climate-related hazards with the vulnerability of human and natural systems. This is changing. The European Central Bank highlights that in recent years, physical risks have started to be taken as seriously as transition risks (UNEP FI, 2021).

Disclosures are also increasingly driving financial institutions and real sector companies to assess physical risks, although the pace of implementing corresponding risk management practices still lags transitional risks. Moreover, there are concerns that many climate-scenario models developed in the financial industry are underestimating climate risks, including the risk of major climate tipping points. Meanwhile, scenarios being advanced by regulators have in some cases been adopted without sufficient scrutiny (Trust et al., 2023). With these caveats in mind, there are opportunities to improve and expand how disclosure can support climate-resilient development.

Climate-risk disclosure has the potential to strengthen adaptation actions either by the public or private sectors (IPCC, 2023). When institutions rigorously evaluate their vulnerabilities to climate-related threats, such as flooding, droughts and elevated temperatures, among others, they are better positioned to safeguard their resilience and financial health in the medium and long term. This can be through direct investments in resilience or via the development of new financial products. In turn, they are likely to experience better performance by preventing future value erosion, which can also increase their attractiveness to financial institutions. Likewise, these actions contribute to global economic stability and improve the welfare of the communities they serve or depend on (UNEP FI, 2021). Consistent with this view, financial institutions are expected to take proactive steps to manage these risks after completing their risk assessments. Additionally, they are encouraged to disclose their risk management strategies transparently.

The **Climate Asset Disclosure Initiative** (CADI) in Latin America, introduced by Transforma in 2019 (initially in Colombia (CCADI)¹¹ and Mexico and Peru (LACADI)),¹² responds to the financial sector's urgent need to shift investments away from carbon-intensive activities and to climate-resilient industries. This could be especially transformative in Latin America, where many sectors and regions are doubly vulnerable: they are both highly dependent on carbon-intensive activities and at high risk from climate-related physical impacts. The CADI promotes

11 CCADI, homepage: <https://ccadi.transforma.global/>

12 LACADI, homepage: <https://lacadi.transforma.global/>

intelligent, climate-conscious investments that seamlessly incorporate climate change risks and opportunities into decision-making and operations. Its primary goal is to support aligning financial flows with climate action objectives. The approach used by CCADI and LACADI encompasses enhancing awareness, transparency, identification, assessment and disclosure of climate-related risks and opportunities. It follows the TCFD framework, facilitating the redirection of financial resources towards sustainable, climate-resilient assets and sectors, and supporting public and private stakeholders involved in preparing for the ISSB standard.

CADI evaluates the status of implementation of the TCFD recommendations, provides customised recommendations and aggregated rankings to facilitate the development of capacity-building processes, aids in the identification of climate change-related risks, and conducts qualitative assessments of stakeholders' exposure to such risks. Furthermore, CCADI and LACADI help define strategies to adapt business models, addressing physical and transition risks, and disclosing both climate risks and risk management strategies. These efforts enhance corporate resilience over the short, medium and long term, as well as the resilience of the communities and resources upon which they depend and operate.

As such, CADI offers more than just a toolset for understanding and managing climate risks; it seeks to create a compelling pathway for designing new and innovative portfolios, attracting much-needed capital to vulnerable sectors. By facilitating comprehensive climate-related disclosures, companies can instil greater confidence in investors and provide a nuanced understanding of a business or sector's resilience and long-term prospects. Such increased transparency could potentially lead to lower-risk premiums, making capital more affordable for companies operating in high-risk physical environments. Through these disclosures, therefore, capital crucial for transformation toward climate-resilient development can flow.

Source: Transforma

Box 2 The increasing role of central banks in developing countries: the role of financial inclusion for climate change adaptation

In developing countries and emerging economies, central banks and financial regulators can play a particularly important role in supporting a just transition, where they have a development mandate that addresses the unique vulnerabilities and challenges faced by those economies and their inhabitants. The nature of climate action and policy initiatives from central banks and regulators varies significantly across countries and institutions; however, an emerging trend is the integration of green finance initiatives to empower vulnerable populations. This approach aims to bolster resilience against climate impacts, enhance adaptive capacities and facilitate a just transition to low-emission economies.

Historically, green finance initiatives from central banks and financial regulators have predominantly concentrated on large-scale mitigation and climate-risk disclosures. There is an emerging recognition, however, that financial inclusion – referring to access to financial products such as a bank account, savings, credit, payment systems and insurance – can propel climate resilience and climate change mitigation among micro, small, and medium-sized enterprises (MSMEs), households and individuals (Volz et al., 2020). This is because, while climate change impacts all our societies, it disproportionately affects those at the base of the economic pyramid. Through mechanisms like savings, credit, insurance and robust payment systems, those with limited means can access greener technologies or rebuild after climate change-induced natural disasters (Alliance for Financial Inclusion, 2020).

Currently, 1.4 billion adults globally remain excluded from financial services (World Bank, 2022a). Nearly 1 billion of these inhabit some of the most climate-vulnerable countries (UNSGSA, 2023). There is also a 6% gender gap in account ownership within financially included segments of emerging markets (Women's World Banking, 2022). This disparity could be further compounded when comparing specific groups and segments within unbanked populations, such as young people or persons living with disabilities.

A focus on extending access to financial services to advance climate mitigation, adaptation and biodiversity conservation, is known as inclusive green finance (IGF). The Alliance for Financial Inclusion (AFI) network¹³ has been a trailblazer in IGF (AFI, Inclusive Green Finance and Inclusive Green Finance Working Group, 2020), with members committing to IGF policies and initiatives since adopting the Sharm El Sheikh Accord on Inclusive Green Finance in 2017 (AFI, 2022a),

13 The Alliance for Financial Inclusion (AFI) is owned and led by member central banks and financial regulatory institutions. It was founded in 2008 to help policy-makers drive financial inclusion.

reaffirmed in 2022 (AFI, 2022b). Since 2017, developments have been rapid and members within the AFI network have emerged as early policy champions, increasing national efforts to advance financial inclusion centred on building climate resilience, developing inclusive green finance taxonomies, and championing specific projects to offer access to green finance and insurance.

It is clear, however, that understanding the real needs and preferences of the public is key. Central banks can, therefore, conduct specific demand-side surveys to map the demand and specific needs of populations impacted by climate change. The Banco Central de Reserva de El Salvador (Central Reserve Bank of El Salvador) conducted such an initiative in 2022. The ‘National Survey on Access and Usage of Financial Products and Services’ demand-side survey included IGF-related questions. Although climate events were not perceived as a significant risk by the people of El Salvador, survey results indicated that 10% of the respondents had experienced climate-related events, 64% of the respondents expressed an interest in green financial products, such as green credit, and 9% were aware of existing green financial products, such as loans and insurance. An overwhelming 85% of respondents thought the government should provide subsidised financial products to mitigate climate-related impacts (Resultados Encuestas, 2022).

A large proportion of central banks and selected financial regulators in developing and emerging countries already have mandates related to financial inclusion and are beginning to combine these with mandates related to green finance. Digital financial services, for example, are playing an increasingly critical role in growing financial inclusion post the Covid-19 pandemic. They are also assuming a more significant role in supporting climate action and fortifying resilience by expediting the inflow of finance into disaster-affected communities and enabling off-grid communities to access finance for their household and business needs. In the aftermath of Tropical Cyclone Winston in Fiji (2016), mobile money was used to streamline government-to-person payments (AFI, 2021). The Government of Fiji, through its Fiji Provident Fund, partnered with Vodafone Fiji’s M-PAiSA to expedite the distribution of government aid for reconstruction efforts. The Reserve Bank of Fiji facilitated the government-to-person (G2P) payments, enabling the Provident Fund to transfer funds to the recipient’s bank directly through mobile money (Alliance for Financial Inclusion, 2022).

Finally, central banks can advance climate-resilient development by facilitating transitions in MSMEs. In 2017, the Central Bank of Egypt (CBE) decreased the minimum limit for the annual turnover of small enterprises operating in agri-business, fisheries, poultry and livestock from 1 million Egyptian pounds (EGP) to EGP250,000. This allowed more enterprises to benefit from the small enterprises initiative (SMI), with a subsidised interest rate of 5%, as these are the economy’s most climate-sensitive sectors. In March 2019, the CBE expanded the initiative to

include agricultural cooperatives established by farmers, extending the SMI subsidised interest rate (5%) to help them to adopt modern irrigation methods. The CBE has also facilitated green financing schemes for MSMEs, for instance, by requiring banks to allocate 25% of their portfolio to finance MSMEs, including renewable energy and climate-resilient irrigation (Central Bank of Egypt, 2023).

Sources: AFI

2.2.2 External consistency makers

Despite internal consistency makers being familiar to governments, many countries face challenges to putting such tools in place to advance climate-resilient development and particularly for adaptation. This is because these national objectives can, in part, be facilitated or constrained by external consistency makers arising from international regimes, or from regulation put in place by other States with transnational effects. To equitably scale climate-consistent finance flows to meet the urgency of our challenge, and so to meet the goals of the UNFCCC and the Paris Agreement, these external consistency makers need to be considered. This is particularly true for developing countries that, with multiple and cascading development, governance and adaptation challenges, have struggled to look beyond their short-term financing needs and to longer-term investments in climate resilience (UNCTAD, 2022b; Trisos et al., 2022).

A wide breadth of institutional homes exists for external consistency makers. This paper does not comprehensively map or take stock of all external consistency makers and their institutional homes. However, it seeks to raise awareness and foster discussion among States as to the fora in which equitable implementation of Article 2.1(c) could be sought, ideally in collaboration with and being guided by the international climate change regime (see Section 3.3, below). Table 2 presents a non-exhaustive list of external consistency makers. The impact of four of these (sovereign debt, international trade, international taxation, international public banking) on internal consistency makers is further articulated below. The additional fora for international rules and regulation and their roles in consistency making merit further research and dialogue. However, the paper focuses on these four external consistency makers as areas where international cooperation holds the clearest binding constraint on national action to make finance flows consistent with climate-resilient development.

Table 2 Non-exhaustive list of external consistency makers and their general focus, with examples of corresponding fora where relevant rules and regulations are set

Subcategory for external consistency makers*	Point at which consistency maker subcategories may influence finance flows	Examples of corresponding international fora in which external consistency makers are addressed
Sovereign debt	Sustainability of borrowing of finance by a sovereign debtor from a creditor with the expectation to be repaid, typically with interest	<ul style="list-style-type: none"> • Paris Club • Group of 20, supported by the International Monetary Fund and World Bank
International trade	Reduction of barriers to the international trade of goods, services and intellectual property, focusing specifically on governing tariffs, subsidies, countervailing measures, etc.	<ul style="list-style-type: none"> • World Trade Organization
International tax	Strengthening of international tax cooperation in order to ensure inclusiveness and effectiveness	<ul style="list-style-type: none"> • Organisation of Economic Co-operation and Development/Group of 20 • United Nations General Assembly
International public banking	Scaling the provision of financing from international public banks or financial institutions to governments	<ul style="list-style-type: none"> • World Bank
International monetary system	Adjusting the supply of money and the network of banking and commercial practices	<ul style="list-style-type: none"> • International Monetary Fund • Bank of International Settlements' Basel Committee on Banking Supervision • Financial Stability Board
International insurance market oversight	Ensuring fair and efficient financial compensation for specified losses	<ul style="list-style-type: none"> • International Association of Insurance Supervisors
International securities trading	Enabling free and fair markets for buying and selling of financial assets like bonds, stocks and options	<ul style="list-style-type: none"> • International Organization of Securities Commissions • Financial Stability Board
Anti-trust / competition law and arbitration	Maintaining free and fair market competition, primarily by combatting anti-competitive practices of firms, especially transnational enterprises (e.g. avoidance of cartels, monopolistic behaviour, abuse of a dominant position, anti-competitive mergers)	<ul style="list-style-type: none"> • United Nations Conference on Trade and Development
Global credit rating system	Comprehensive and accurate assessment of the creditworthiness of a debtor (both sovereign and corporate)	<ul style="list-style-type: none"> • International Organization of Securities Commissions • Financial Stability Board
International investments of corporations	Investing beyond borders through transnational enterprises and via foreign direct investment	<ul style="list-style-type: none"> • International Centre for Settlement of Investment Disputes • United Nations Conference on Trade and Development

*NOTE: Consistency makers include, among others, any guidance, frameworks, standards, policies or laws, all with varying degrees of prescriptiveness, seeking to influence or regulate the behaviour of their subject.

Sovereign debt

Unsustainable levels of debt in developing countries hinders investments that can support development and climate outcomes (UN Global Crisis Response Group, 2023). As climate change-induced disasters pressure government spending, they are often forced into taking on increased debt. As their climate vulnerability increases, they are then faced with higher risk premiums, which subsequently leads to even higher borrowing costs (Ameli et al., 2021). In several developing countries, the amount spent on debt servicing has surpassed the amount spent on social spending, such as for education, health and social protection (World Bank, 2022b).

A key factor increasing debt burdens among developing countries is the insufficient financial inflows and limited access to concessional resources (that is, below market rate finance) developing countries face from multilateral financial institutions, regional development banks and bilateral donors. Developing countries have shifted to borrowing from private creditors and non-resident investors, with higher interest rates, as they are increasingly relying on non-concessional terms (Chowdhury and Sundaram, 2023; Kose et al., 2020).

Fiscal space – the ability of a government’s budget to provide resources without risking financial stability – also decreases due to rising sovereign debt, leaving little fiscal space to put in place measures for climate-resilient development.

An increasingly complex creditor base has complicated the search for rapid solutions to the current debt crisis faced by developing countries (World Bank, 2022c; Krueger, 2002). Mechanisms work in an ad hoc and uncoordinated manner, depending on whether debt is bilateral, multilateral, private or domestic (Savvopoulou, 2023). In the wake of Covid-19, the G20 Common Framework for Debt Treatments (‘the Common Framework’) was an important step, but it has major limitations, including: no requirement for private creditors to take part; the exclusion of middle-income countries;¹⁴ and a general creditor hesitance to grant substantial and timely debt relief (World Bank, 2022c).

More comprehensive multilateral debt restructuring will need to address these challenges. The Bridgetown Initiative addresses separate issues in separate forums, including redesigning the Common Framework to speed up debt relief and expand eligibility; encouraging restructuring of private sector debt through the IMF and by redefining debt sustainability analysis; including natural disaster clauses; and improving lending terms and conditions for all creditors (Global Policy Forum, 2023). Other proposals suggest a new UN- or IMF-hosted mechanism with a mandate similar to that of the WTO in dispute settlement, accompanied by a sovereign debt registry and a forum (UNCTAD, 2015; Savvopoulou, 2023).

14 The G20 Common Framework for Debt Treatments includes the 73 low-income countries eligible for the Debt Service Suspension Initiative (DSSI) (IMF, 2021). The list of DSSI-eligible countries can be found here: www.worldbank.org/en/topic/debt/brief/covid-19-debt-service-suspension-initiative

International trade

A thriving and inclusive economy is a longer-term strategy to ensure fiscal space and to pursue climate-resilient development. In a globalised world, economic health is, in part, linked to the international level through the expansion of trade, attracting foreign direct investment (FDI). Developing countries are playing an increasing role in international trade, with their share of world exports increasing from 37% in 2010 to 42% in 2022, with increasing manufacturing and services in addition to their commodity exports (UNCTAD, 2023a).

The growth in the involvement of developing countries in international trade has been uneven. Trade is influenced by several rules put in place domestically and internationally, which have been subject to much study. Such rules include tariffs that act like taxes, raising the price of imports, or non-tariff measures like licenses and quotas. These measures protect national producers and employment, for example, but equally place restrictions on producer countries. As of 2021, trade costs directly related to tariffs stood at about 2% for developed countries and at about 4% for developing countries (UNCTAD, 2023b).

Trade could support climate adaptation by facilitating the transfer of new techniques and technologies, as well as providing access to inputs such as seeds, fertilisers and machinery, especially for small farmers. Changes in trade patterns may help mitigate the projected economic losses of climate change by reallocating agricultural production to less vulnerable geographies and encouraging economic diversification toward less-affected sectors or modes of production (Trisos et al., 2022). Trade could also enhance resilience through trade in services like weather forecasting, insurance and other resilience-building services or by providing access to essential goods like medical supplies after climate-related shocks. Of course, trade is also a route through which climate risks are transmitted. Agriculture and tourism are key sectors that remain vulnerable to climate change, for example, while climate change can increase trade costs. The costs of climate disruption to trade are estimated to be much higher in developing countries than in Europe and North America (WTO, 2022a).

Environmental and climate concerns are gaining traction in trade governance. For example, the introduction of carbon taxes at the border by the European Union, or environmental standards, or the removal of trade and investment barriers to goods that contribute to adaptation (these might include, for example, equipment for early warning or climate-resilient seed varieties).

Yet unilateral actions are being criticised for being discriminatory and burdensome, for introducing trade distortions and for their potentially negative impact on already-vulnerable people in developing countries (European Parliament, 2023; WTO, 2022b; Blot and Hiller, 2022). The introduction of the European Union's Carbon Budget Adjustment Mechanism (CBAM), by some estimates, for example, could lead to a fall in exports of African countries of between 1.32% and 2.84%, as well as a small decrease in gross domestic product (GDP) (with much larger declines if the EU's CBAM results in other countries adopting similar measures) (African Climate Foundation

and LSE, 2023). Implementing the necessary actions to comply with CBAM could also exceed the technical capacities of developing countries (Maliszewska et al., 2023) and potentially worsen income inequality and welfare distribution between rich and poor economies (Xiaobei et al., 2022).

Of relevance to the pursuit of climate-resilient development, therefore, will be ensuring that international and domestic trade policies do not disproportionately affect climate-vulnerable countries and/or prevent them from the pursuit of such pathways – for example, agricultural policy reforms that can reduce the volatility of world food prices and expand access to food (World Bank, 2011). Trade remains a complex topic, mediated by domestic and international tariffs and rules, hard (railways, ports, etc) and soft (transparency, customs efficiency, etc) infrastructures, geopolitics and possible trade-offs between objectives. Discussion is warranted on international trade regimes and their impact on world prices and markets in developing countries, and how trade-facilitating measures might be implemented (WTO and World Bank, 2022; WTO, 2022a).

Of course, an expansion of international trade does not guarantee inclusive development. Inclusive development through international trade requires targeted policies, including a combination of domestic policies aimed at preparing economies, supporting small and medium sized enterprises (SMEs), and implementing social safety nets, along with international reforms focused on reducing trade barriers, eliminating harmful subsidies and promoting fair global governance (ECLAC, 2014). International cooperation will be needed to ensure that trade policies are designed in a way that limits negative impacts. This cooperation already happens within different spaces, for example, in the context of the Sustainable Development Goal (SDG) Agenda and the WTO. The WTO could play a more important role in promoting transparency and predictability in trade policies related to adaptation and in helping to limit trade-restrictive policies (WTO, 2022a).

International taxation

In addition to debt, fiscal space is also determined by a country's ability to raise taxes and effectively manage public finances. This then depends on the economic growth of the country and its ability to raise revenue. Financing climate-resilient development through increasing trade and FDI, will also be a function of the ability of developing countries to tax the companies, including multinational corporations (MNCs), that operate within their borders. Developing country economies are often more reliant on the taxation of domestic and imported goods and services than on taxing their populations directly, in part because this contributes towards keeping food and fuel at lower costs (World Bank, 2022d). Domestic reforms on tax are likely to be required, while approaches exist to promote growth and improve the ability of countries to raise revenue through taxation (for example, the IMF's Resilience and Sustainability Trust)¹⁵ – although these remain challenging

15 More information related to RST conditionality can be found at: [www.google.com/url?q=https://odi.org/en/insights/the-role-of-imf-financing-in-a-climate-changed-world/&sa=D&source=docs&ust=1698841273745363&usg=AOvVawoBHVWmlhRMkwQLKzYnD-l2](https://odi.org/en/insights/the-role-of-imf-financing-in-a-climate-changed-world/&sa=D&source=docs&ust=1698841273745363&usg=AOvVawoBHVWmlhRMkwQLKzYnD-l2)

to implement in many developing countries (Neuneubel, 2023). However, there is widespread agreement that the current international tax cooperation architecture needs to be strengthened to guarantee the functioning of domestic tax systems (UN 2023).

The need for international tax cooperation – for example, to tackle tax avoidance and evasion, and other illicit financial flows (IFFs) – has been long understood: most estimates suggest that IFFs exceed aid flows and investment in volume (OECD, 2014). As such, international tax cooperation has been part of discussions on economic growth and sustainable development since the 1990s, gaining more prominence in discussions around the 2030 SDG Agenda (UNCTAD, 2020). International cooperation on taxation that better allows developing countries to efficiently tax the MNCs that operate within their borders, could therefore raise revenue from increasing trade and foreign investment. This could further alleviate pressures on public financing, which could in turn be put towards the financing of climate-resilient development – as per internal frameworks articulated earlier in this paper. This requires that the international tax regime inhibits MNCs from exploiting gaps and mismatches between different countries’ tax systems.

Some international tax agreements to tackle individual and corporate tax avoidance and evasion have emerged. The Global Forum on Transparency and Exchange of Information for Tax Purposes, created originally by OECD countries and jurisdictions (ATI, 2019), now includes more than 160 jurisdictions (OECD, n.d.). Offshore tax evasion is tackled by the forum through the implementation of two international standards for tax authority cooperation: the international exchange of information on request (EOIR) and the automatic exchange of information (AEOI). The forum also delivers technical assistance to members (OECD, n.d.). The OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS) – which looks to address tax avoidance by MNCs – resulted in the 2021 Global Anti-Base Erosion (GloBE) Rules, setting a global minimum effective corporate tax rate of 15% for large MNCs (OECD, 2022). However, despite its broad agreement, the impact on the tax revenues of many developing countries is likely to be negative due to capacity and legal constraints (UNCTAD, 2022c), with most of the additional tax being generated in developed countries due to their larger relative stocks of FDI and, in general, higher tax rates (Christians et al., 2023).

More recent proposals to reform the global tax architecture include strengthening global tax norms to address digitalisation and globalisation, improving the OECD/G20 Inclusive Framework to reduce wasteful tax incentives and incentivise taxation in source countries, creating a global tax transparency and information-sharing framework (UN, 2023) and, more recently, an African-led proposal calling for a legally-binding UN tax convention (Robin, 2023). These proposals respond to the need for more inclusive and effective cooperation on taxation at the international level. Most multilateral tax agreements, like those mentioned above, have been developed in forums without universal participation, resulting in few benefits for those countries not engaged in them, many of which are those with the greatest need (UNGA, 2023).

Initiatives that go beyond tackling tax avoidance and evasion and focus on the establishment of new global taxes and levies, with a focus on the ‘polluter pays’ principle to both reduce emissions and raise additional finance, have also been explored. For example, a levy on the shipping industry’s emissions has recently been part of the discussions in the International Maritime Organization (IMO). However, these initiatives often face opposition from countries that feel negatively affected by them, while their ability to redirect finance to adaptation and resilience is hampered by disagreement on how to use the resulting proceeds (Patel, 2023; Lo, 2023; LRI, 2011).

International public banking

The pursuit of low-emission, climate-resilient development pathways requires a large uptick in private sector investment and finance, underpinned by scaled-up concessional public finance flows (Stern and Songwe, 2022; CPI, 2023; UNFCCC, 2023). The private sector is not a homogenous group, however. It includes different groups of actors: from households, through small-scale local companies, individual entrepreneurs and farmers; large companies, including multinationals that work in many countries; capital providers, banks, private and institutional investors, and asset managers; insurance companies; associations, cooperatives and multipliers that exist to support members and stakeholders in their business; and private foundations (Cochu et al. 2019; Crawford and Church, 2019; Carter, 2020).

Different private sector actors have different roles to play in adaptation and development, depending on their business cases, the market for their activities and the context in which they function (ICR, 2021). One of their roles is to adapt themselves to climate change, by integrating considerations of physical risks, and other environmental and social considerations, in their investment decisions, while seeking potential new business opportunities. They also play a role in financing others’ adaptation action and development outcomes. Finally, they can support adaptation and resilience building by providing products and services for others to face risks linked to climate change (Cochu et al., 2019; Crawford and Church, 2019). These roles for private actors will also be highly variable depending on a country’s market structure and context. In developing countries, households and local MSMEs are the primary actors when it comes to delivering adaptation goods and services, while also being key in providing financing (Crawford and Church, 2019; ICR, 2021).

Given the diversity of private actors and country context, enhancing the contribution of all private actors to climate-resilient development is unlikely to be achieved through any one specific action of the State. Rather, it will require tackling different potential barriers using different policy tools at the national level, to improve internal investment and business environments, increase awareness and build skills, and to empower enterprises to act towards climate-resilient development. It will also involve tackling external enabling environments, including trade facilitation, and access to financial markets and market information (ICR, 2021).

Notwithstanding such diversity and varying roles for the State in channelling private finance for adaptation, a key challenge to financing adaptation is that investment returns are often more constrained for adaptation activities than they are for mitigation activities, with long time horizons providing uncertainty on future climate risks and associated difficulties in pricing this risk (Mullen and Ranger, 2022; Global Commission on Adaptation, 2019; Miller et al., 2019). This is true in several developing countries, particularly where financial markets and the finance sector are underdeveloped (Feyertag et al., 2023; Tall et al., 2021). Climate risks further discourage firms, investors and financial institutions from investing in developing countries, coming as they do on top of political, governance and currency risks and the increased cost of capital they imply (Buhr, et al., 2018).

Global market volatility further exacerbates developing country challenges, as seen recently as the world continues to face several crises. Monetary tightening aimed at reducing inflation in developed countries, especially in the United States, combined with other recent external shocks, including price increases in some commodity markets and the effects of the Covid-19 pandemic, have resulted in negative capital flows from developing countries since September 2021. This has been a result of the movement of capital to safer assets, a reduction in overall investments, a rise in the cost of capital and downscaled economic growth prospects (UNCTAD, 2023c). If local currencies depreciate against the dollar, developing countries whose external debt is denominated in US dollars will also see this increase proportionately (UN DESA, 2022).

Central to channelling private sector finance towards adaptation in developing countries is the de-risking of such investment – that is, distributing risks between public and private actors. The multilateral development banks (MDBs) play a key role in this regard, given their role in providing long-term finance at a lower cost, as well as their capacity to mitigate risks (Songwe et al., 2022). To this end, the MDBs have been involved in processes of reform that can enable them to better tackle current global challenges, including climate change, as part of their mission to promote socioeconomic development and poverty eradication (Kotzias et al., 2023). There has been a review (*the Independent Review of MDBs' Capital Adequacy Frameworks*) and recommendations from it would redefine their risk appetite, allow callable capital to be put to use, expand their use of financial innovations, establish an engagement between MDBs and credit rating agencies to assess and strengthen the latter evaluations of the MDBs, and improve the enabling environment for capital adequacy governance (Expert Panel on MDBs Capital Adequacy Frameworks, 2022). Individual MDBs have also been seeking their own reforms: for example, the *Evolving the World Bank Group's Mission, Operations and Resources* roadmap (World Bank, 2022e). These reforms do not address adaptation finance specifically, but could deliver an expansion of total resources in pursuit of adaptation and climate-resilient development, if successful.

The MDBs could do more in the pursuit of climate-resilient development. A more ambitious International Development Association (IDA) replenishment could get funds for climate-resilient development to some of the most vulnerable countries, given that the World Bank has committed to allocate at least 50% of IDA climate finance for adaptation by 2025 (World Bank, 2021). Wider

proposals for reform of the MDBs focus on their ability to address risks, at the macro level as well as at the project and programme levels, while – importantly – expanding the volume of the finance they provide. The use of foreign exchange guarantees by MDBs and the IMF could reduce the risk-return profile of developing countries; while an expansion in their use of risk reduction instruments and blended finance, as well as provision of support for project preparation and pipeline development, could scale climate-resilient development projects (Global Policy Forum, 2023). Proposals also tackle eligibility criteria that hinder access from vulnerable middle-income countries to concessional finance.

Beyond the existing proposals, MDB reform should also address the current divide between climate and development finance, which is implicitly embedded in the MDBs' Paris alignment approach.^{16, 17} IPCC findings already indicate that prevailing development pathways do not advance climate-resilient development (IPCC, 2022). In the context of a changing climate, addressing this reality will require moving towards pathways that systematically address synergies and trade-offs between adaptation, mitigation and sustainable development, and transform development practices (ibid). From an MDB perspective, this will require addressing development and climate outcomes not as separate issues, but in an integrated manner across all operations, identifying opportunities to promote adaptation, prevent maladaptation and address key drivers of vulnerability. This would result in increased flows of finance going to promote adaptation outcomes, including beyond direct MDB finance, through MDB's engagement and partnerships with national development banks (NDBs) and other development finance institutions (IFIs).

3.3 The importance of inclusive and coordinated governance of consistency makers

As highlighted throughout the above discussion on consistency makers, a transition to climate-resilient development will require rethinking the governance of the different fora in which the enabling environment is created. Some of the institutions and fora in which external consistency makers are being addressed are perceived as not responding to the needs and priorities of developing countries. Others place a high burden on these countries to meet the requirements for participation, which outweighs the potential benefits. This is the case, for example, of the existing tax-related forums developed under OECD leadership (UNGA, 2023). It can also be seen in the exclusion from the Common Framework on Debt Treatments of highly vulnerable middle- and high-income countries, like some small island developing states (SIDS) (United Nations, 2021).

16 Which can be found here: www.eib.org/attachments/press/20181203-joint-declaration-mdbs-alignment-approach-to-paris-agreement_cop24.pdf

17 This difference is more clearly articulated in the World Bank's Resilience Rating System, here <https://documents1.worldbank.org/curated/en/860801611264556929/pdf/Resilience-Rating-System-A-Methodology-for-Building-and-Tracking-Resilience-to-Climate-Change.pdf>

Inclusive and effective international cooperation will require the participation of developing countries in decision-making. In doing so, cooperation can better address the needs and interests of developing countries (Akman et al., 2023). The importance of such inclusive governance for developing countries is clearly reflected in current discussions on international financial architecture reform (Global Policy Forum, 2023), as well as in the more recent discussions within the UNFCCC on the establishment of the Loss and Damage Fund (UNCTAD, 2023d; Vandamme, 2023).

While more effective participation of developing countries in decision-making processes will more equitably address external consistency makers, it also suggests that there may be parallel needs to build expert capacity and political support, and to support ongoing and meaningful participation in coalitions (Christensen et al., 2020; Akman et al., 2023). If not addressed, there is a risk that developing countries will tend to join these coalitions once the rules have already been developed and then face difficulties in their implementation (UNGA 2023).

While Article 2.1(c) is considered a catalyst to trigger reflection and, where necessary, reforms to internal and external consistency makers, it is recognised that there are a number of initiatives and fora already in place to undertake this work. This paper is therefore, not suggesting that the multilateral UNFCCC process is the central body to undertake efforts. Instead, that if these consistency makers are brought into the implementation of Article 2.1(c), the UNFCCC can play a strong signalling function; one that clearly articulates to States and financial flow owners, the need for these forums to contribute to climate-resilient development, while potentially retaining a role in monitoring progress.

4 Conclusions

Building on the existing literature and discussions on the implementation of Article 2.1(c), this paper proposes that – following the language of Article 2 – implementation of Article 2.1(c) must centralise climate-resilient development. This implies that sustainable development and equity are central to Article 2.1(c) implementation, while mitigation and adaptation are concurrently pursued within this climate-resilient development framing, as elaborated by the IPCC. Such framing better recognises trade-offs between objectives, seeks to avoid maladaptation at multiple scales, and leads to more transformational changes that increase the solution space for adaptation.

Putting equity at the heart of Article 2.1(c) implementation, this paper moves beyond the internal or State levers that can make finance flows consistent with the goals of the Paris Agreement. It illustrates how decisions taken externally to a State, either through international processes or by other States governments, can constrain or enhance national efforts to implement Article 2.1(c). Where the links between internal and external consistency makers can be made, their adjustment and reform can reduce barriers and scale finance for adaptation, either directly or indirectly, in the pursuit of climate-resilient development. While these external consistency makers are rising on the UNFCCC and wider multilateral agenda, such as led by the UN Secretary General (UN, 2023), they have not yet been sufficiently embedded in the scope and objectives of Article 2.1(c).

Many developing countries are currently trapped in a cycle of increasing vulnerability, which is increasing the costs of climate-resilient development and increasing the costs of financing climate-resilient development. Through inclusive governance, greater efforts to put measures in place that create equitable external enabling conditions to implement Article 2.1(c). can seek to break this cycle, particularly for the poorest and most climate vulnerable. Such broadening of the understanding of Article 2.1(c) also holds the potential to create a wider base for common ground as deliberations continue.

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Annex What the submissions to the Standing Committee on Finance said about adaptation and climate-resilient development, in the context of ways to achieve Article 2.1(c)

The CMA requested the SCF to work on ways to achieve Article 2.1(c), including on options for approaches and guidelines for implementation both in 2021 and 2022. As part of this work, Parties and stakeholders were invited to make submissions on their views. Two sets of submissions had been received at the time of this report, one in 2022 and one in 2023, making a total of 39 submissions. Overall, the submission syntheses reiterate an absence of shared understanding of the scope of Article 2.1(c), with many noting that guidance would be needed to foster such an understanding – particularly as there are linkages with other processes such as the Global Stocktake and the New Collective Quantified Goal on climate finance. That said, most submissions appreciated the breadth of the sources and channels of finance, acknowledging domestic and international, public and private, finance flows, and the guiding role of governments in shaping these flows through policies and approaches, including promoting transparency to avoid ‘greenwashing’. A strong need to embed equity in the pursuit of Article 2.1(c) is seen in the submissions, noting national implementation will vary based on needs, capabilities and in pursuit of just transitions. There were differing views on who has responsibility to act to make finance flows consistent, as well as on the relationship between Article 2.1(c) implementation and Article 9 provision and mobilisation of climate finance from developed to developing countries.

An emerging view across submissions was that the actions and methods to pursue climate-resilient development or adaptation are less represented and more underdeveloped as compared to those seeking low greenhouse gas emission pathways. It was noted in the submissions that for finance to be consistent with climate-resilient development, it must be disbursed in a way that does not act in opposition to development priorities and attempts to eradicate poverty, and in a form that does not undermine countries’ abilities to address climate impacts. It was also noted that the private sector has a role to play in filling the adaptation finance gap, while one submission envisioned that establishing adaptation finance targets to support climate-resilient development within private sector institutions’ long-term climate strategies will be important to implement Article 2.1(c).

Submissions differed in their views of the approaches to implement Article 2.1(c), along with their views of the role of public and private actors in contributing to the goal’s implementation, and the differences in roles between developed and developing country Parties. In terms of

methods to implement Article 2.1(c), some examples of domestic policies and enabling conditions that were highlighted in the submissions as measures that all Parties could put in place include: improvement of national regulatory, structural and capacity systems; strengthening national capacities through deepening domestic capital markets and improving tax administration; government-led incentives, market signals and policy instruments (such as green bonds, mandatory climate-related financial disclosures, carbon pricing and fossil fuel subsidy reform); fostering public-private partnerships; and creating investment taxonomies.

In addition to domestic actions, submissions also highlighted broader challenges that need to be addressed to implement Article 2.1(c). Several submissions highlighted the ongoing debt crisis being faced by developing countries and rising debt-servicing costs due to mounting indebtedness. There have been calls for debt relief, restructuring and cancellation as necessary measures that should be brought into the Article 2.1(c) dialogue. Submissions also highlighted that delivering the necessary funding will require a transformation of the overall international economic and financial system, in order to make finance more available and affordable for developing countries. It was further mentioned that reforms to the international financial architecture that would support the flow of private finance at scale, in addition the overall objectives of Article 2.1(c), would be welcome.

Sources: Submissions, UNFCCC SCF, 2022a; UNFCCC SCF, 2022b; UNFCCC SCF, 2023