WHAT DO WE MEAN BY PARIS ALIGNMENT OF FINANCE FLOWS?

Decoding Article 2.1(c) of the Paris Agreement

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Contents

LIST OF FIGURES

LIST OF TABLES

1. Introduction

Addressing climate change requires a transformation of the global financial system

It is well known that countries urgently require large amounts of money for climate action and sustainable development. Recent estimates suggest that emerging markets and developing countries (apart from China) alone may need about US $2.4 trillion per year by 2030, a four-fold increase over what is currently invested.[1]

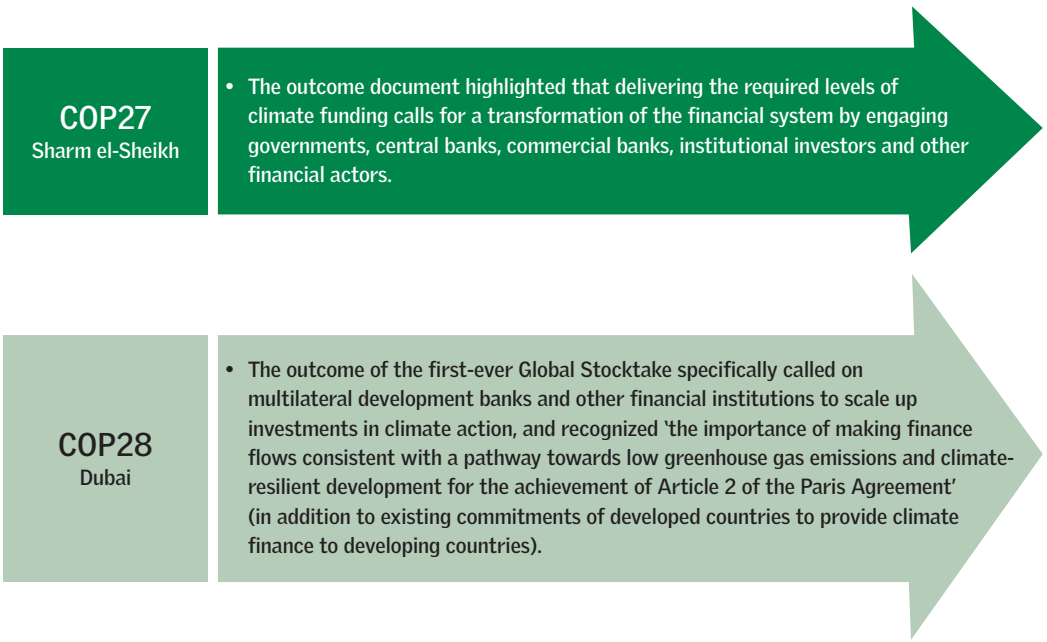
Numerous provisions for financing climate action exist within the mechanisms of the United Nations Framework Convention on Climate Change (UNFCCC/ the Convention). These include the obligations of developed countries to provide finance and resources to developing countries to assist them in implementing climate action. This is done through contributions to multilateral climate funds, lending through bilateral aid organizations, multilateral development banks etc.

A broader finance component is Article 2.1(c) of the Paris Agreement. Article 2.1(c) aims to strengthen the global response to climate change by '*Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.*'[2] It is the third long-term goal of the Paris Agreement, along with the temperature and adaptation goals.

In addition to increasing climate finance that flows to countries in need, the need to reorient the world's finance flows at large towards climate action is highlighted by Article 2.1(c). However, different countries and stakeholders are not necessarily in agreement about precisely what Article 2.1(c) entails just yet. Depending on how it is interpreted, Article 2.1(c) could include the private sector and stakeholders of the global financial system, in addition to policy-level actions by governments (at the domestic and international levels).[3]

The need to go beyond just what is commonly called 'climate finance' to progress on global climate goals has been increasingly noted, even at recent Conference of the Parties to the UNFCCC (COP) summits.

Thus, the role of both national governments, along with stakeholders of the global financial system in contributing to the goals of the Paris Agreement has



been increasingly acknowledged. Simultaneously, the need for structural changes and 'reforms' of the existing international financial architecture to make it fit for purpose has been identified in recent times.[4]

This interaction of non-Party stakeholders, including (but not limited to) development finance institutions, commercial financial institutions, infrastructure funds, institutional investors, private equity and corporate actors (banks, asset managers, pension funds, etc.),[5] with climate-resilient development has increasingly been understood in the context of Article 2.1(c) of the Paris Agreement.

The UNFCCC framework has not provided any official directions on how to implement Article 2.1(c) as yet. Still, there is convergence on the fact that the scale of money required for addressing the climate crisis is immense, and making finance flows 'consistent' with low-emissions development could complement existing climate finance efforts. This paper sheds light on Article 2.1(c) of the Paris Agreement, its interpretations within UNFCCC, and attempts to discuss what its 'real-world' implementation has meant so far.

CLIMATE FINANCE VERSUS CLIMATE-CONSISTENT FINANCE FLOWS: WHAT IS THE DIFFERENCE?

'Traditional' components of climate finance

Within the UNFCCC structure, finance for climate action for developing countries has been enabled through:

- The operating entities of the financial mechanism that serves the Convention and the Paris Agreement, namely the Green Climate Fund and the Global Environment Facility;
- Funds established by Parties, namely, the Adaptation Fund, the Special Climate Change Fund, Least Developed Countries Fund, and the Fund for Responding to Loss and Damage;
- Commitment of developed countries to mobilize climate finance of US $100 billion per year for developing countries until 2025; and
- The post-2025 climate finance goal, or the New Collective Quantified Goal (NCQG) on climate finance (scheduled to be determined at COP29).

Definition (lack thereof) of climate finance

For operational purposes, climate finance is at present understood by the UNFCCC Standing Committee on Finance as finance which 'aims at reducing emissions and enhancing sinks of greenhouse gases and aims at reducing vulnerability of, and maintaining and increasing the resilience of, human and ecological systems to negative climate change impacts'.

The final text of the Global Stocktake at COP28 noted the 'diversity of definitions of climate finance in use by Parties and non-Party stakeholders'. The UNFCCC Standing Committee on Finance is to prepare a report on the different approaches to defining climate finance in use presently, and the different accounting and reporting practices of Parties for discussion at COP29. Developing countries have consistently called for operationalizing an agreed upon definition of climate finance across finance negotiations at the annual climate change conferences. This is important as the absence of a definition has led to various gaps in the provision of finance by developed countries. It also impacts the quality of finance being provided and a lack of sufficient transparency in the process.

Making finance flows climate consistent

Apart from targeted climate finance provided through the mechanisms mentioned above, many financial activities are indirectly linked to climate change. The 'global financial system' broadly includes financial institutions, laws, policies, regulations, and entities that facilitate financial flows across borders. While climate finance directly supports projects such as renewable energy, adaptation initiatives, or resilience building, and often refers to the funding given/used by Parties to multilateral agreements, other financial flows—climate-consistent finance flows—involve broader financial activities that either support or undermine climate goals. For instance, if an asset management firm decides to exclude high-emitting sectors from its investment portfolio and prioritizes low-carbon technologies instead, this could be an example of climate-consistent finance flows. In contrast, investments in new oil and gas projects contribute to greenhouse gas emissions. Climate-consistent finance flows are those that do not undermine emissions reduction targets and can be viewed as 'Paris-aligned' finance. This is understood (outside of the UNFCCC process) as being called for/signaled by Article 2.1(c) of the Paris Agreement.

2. Paris alignment of finance: What does Article 2.1(c) mean?

Article 2.1(c) aims to *'make finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development'*. It is widely interpreted to be the overarching finance goal of the Paris Agreement (PA). Simply put, it aims to align all the world's finance flows towards climate action, both for mitigation and adaptation.[6]

Steering the world's finance towards alignment with the Paris Agreement means changing the way the world invests in and finances infrastructure, energy, and other key sectors to lower emissions and increase resilience. This would mean aligning public and private finance flows, at domestic and international levels, with climate action.[7]

While Article 2.1(c) calls for 'making finance flows consistent' with the Paris Agreement, it is Article 9 of the agreement that explicitly states the financial obligations of developed countries. It states that developed countries are to provide financial resources to developing countries for adaptation as well as mitigation, '*in continuation of their existing obligations under the Convention*'. Article 9 further notes that developed countries are to take the lead in mobilizing climate finance, noting the importance of public sources, and that there should be special consideration of countries particularly vulnerable to climate impacts. Public sources of climate finance include funding from government budgets, multilateral and national development banks, international climate funds etc.

Historical context of Article 2.1(c) of the Paris Agreement

The Convention as well as the Paris Agreement already have clear provisions calling for the transfer of finance from developed countries to developing countries. These provisions materialized through an acknowledgement of the historical responsibility of the developed world for their past emissions.[8] This is vital, given that even today, India and the entire continent of Africa, comprising 17 per cent of the world's population, contribute only 7 per cent and 4 per cent respectively to the world's carbon dioxide emissions.[9]

ARTICLE 2 OF THE PARIS AGREEMENT, 2015 [EMPHASIS ADDED]

Article 2

1. This Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by:
   (a) Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;
   (b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production; and
   (c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

2. This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

The need to establish a clearer link with the broader financial system of the world arose during the negotiations that resulted in the final text of the Paris Agreement as we know it today. According to a study published in *Nature Climate Change*, finance in the Convention originally meant two things: one, the amounts to be contributed towards the operating costs of UNFCCC and, two, which was called 'climate finance' was money meant to support developing countries to prepare their national communications and implement their climate plans. It is the latter that eventually evolved into 'climate finance' referred to in Article 9 of the Paris Agreement.[10]

The study points to the fact that during negotiations for the Paris Agreement, submissions on finance began as a push for expanding the number of countries who (are to) provide climate finance. However, what eventually became Article 2.1(c) changed to finally reflect the 'greening' of the financial system.

On analysing the pre-Paris Agreement negotiations, the study found three distinct finance narratives and counter-narratives. These are summarized in Table 1.

The differences presented in Table 1 to a large extent echo the points of contention between developed (left column) and developing countries (right column) negotiating Article 2.1(c) even today.[11] The study in *Nature Climate Change* notes that the European Union, and the Parties represented by the Independent Alliance of Latin America and the Caribbean (AILAC) pushed for finance to have

Table 1: Narratives on climate finance

Narratives	Counter-narratives
NR 1. Contribution by all Include own contributions by developing countries	**CN 1. No new responsibilities to developing countries** Include context of implementation of the convention
NR 2. Full transformation Include shifting flows away from high-carbon investments	**CN 2. No weakening of developed countries' commitments**
NR 3. Engagement of the financial sector Include relevance of enabling environments	**CN 3. No creation of economic conditionalities** Include no language on enabling environments Include no privatization of countries' responsibilities

Source: The climate consistency goal and the transformation of global finance, Luis H. Zamarioli, P. Pauw, M. König, 2021

'transformational' potential, 'in the order of trillions of dollars'. This narrative changed the focus of finance from merely being the means of implementation to also include the 'negative' effects of investments on climate, such as the money poured into the fossil fuel industries. Several developed countries, Canada in particular, promoted the need to engage with financial markets (non-state actors). Additionally, the United States of America drew attention to the need to work on enabling environments to attract capital and promote the 'right incentives for re-orienting investments'.[12]

Developing countries, on the other hand, specified that the Paris Agreement should not add to their commitments, and not deviate from the commitments of the developed countries under the Convention. They expressed concerns over additional climate commitments having to be met at the cost of their other developmental needs. Crucially, developing countries '*opposed any language that could be interpreted either as conditions to the provision of climate finance [expressed by G77 group and China] or as a way of using climate change to impose greater market access for developed countries' private sector to developing countries' economies [voiced by the Like-Minded Developing Countries group]*'. They also voiced concern over the potential transfer of responsibilities from States to the private sector.

Article 2.1(c) at present: Sharm el-Sheikh dialogue on Article 2.1(c) and Article 9

Eight years since the adoption of the Paris Agreement (PA), the conversation on climate finance and Article 2.1(c) has evolved. Some of the fault lines among different country blocs continue as they did in the negotiations leading up to its

adoption. Simultaneously, convergence on the need for broader, system-level measures to truly catalyse climate action has grown in recent years.

It was only at COP27 in 2022 that countries agreed to establish the Sharm el-Sheikh Dialogue on Article 2.1(c). This was aimed at creating an independent space within the negotiations framework for the discussion of the scope of Article 2.1(c) and its complementarity with Article 9. So far, three workshops on Article 2.1(c) and its complementarity with Article 9 have been held under the aegis of the UNFCCC Standing Committee on Finance. An examination of the various submissions and discussions shows that though the need for broader alignment of finance flows is generally agreed upon, how exactly its mandate is linked to Article 9 is still up for debate.[13]

Beyond UNFCCC

Several financial actors beyond countries have begun trying to implement Article 2.1(c) over the years, even as consensus on what exactly it means is underway.

- Ten of the biggest multilateral development banks (MDBs) committed to transforming their workings to be 'Paris Aligned' back in 2017.[14]
- The same year, the Network of Central Banks and Supervisors for the Greening of the Financial System (NGFS) was launched.
- Initiatives such as the Green Bond Principles of the International Capital Market Association preceded the adoption of the Paris Agreement and have possibly contributed to the inclusion of a goal on making broader finance flows consistent with low-emissions development.[15] The Green Bond Principles are voluntary best practice guidelines for issuers of green bonds, which are bonds aimed at ensuring money is raised for activities that benefit the environment. The guidelines were first issued in 2014 by a group of large investment banks.[16]

3. What are the differing interpretations of Article 2.1(c) within UNFCCC?

Countries as well as some non-Party stakeholders have expressed their views on the overall meaning of Article 2.1(c) through submissions and deliberations over the last few years. The following is a list of broad interpretations, based on select factors, mainly: connections between provision of financial resources by developed countries and Article 2.1(c), its scope, and caveats for its implementation.

All individual views provided by single Parties/stakeholders are not necessarily reflected here.

Figure 1: Article 2.1(c) should reiterate existing climate finance commitments

Source: CSE analysis of UNFCCC literature and expert interviews

Interpretation 1

One interpretation suggests that the climate-consistent finance flows referenced in Article 2.1(c) are simply ways of implementing existing climate finance obligations of developed countries. In this view, existing finance obligations are 'vehicles' through which Article 2.1(c) can be achieved. These existing finance obligations are established by Article 4.3 of the Convention and Article 9 of the Paris Agreement and require finance to be mobilized by developed countries for developing countries. Simply put, in this interpretation, Article 9 and Article 2.1c of the Paris Agreement are not necessarily distinguishable, and both allude to the finance flowing from developed to developing countries which must contribute to low-emissions and climate-resilient development pathways (see *Figure 1*).

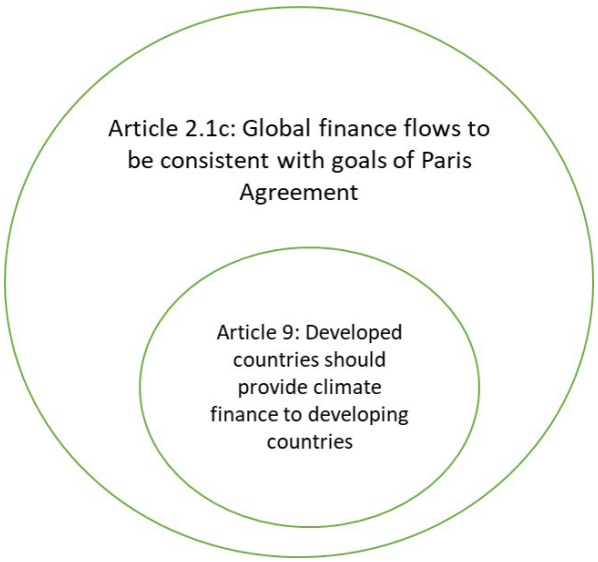
Country/bloc positions: This view has been emphasized by Bolivia on behalf of the Like-Minded Developing Countries (LMDC) group. The LMDC view further stresses the importance of ensuring finance flows from developed to developing countries are in line with national circumstances, and that the money extends to needs identified by all the Nationally Determined Contributions (NDCs) of developing countries. Lastly, the LMDC group also states that implementing Article 2.1(c) should not increase responsibilities of developing countries.[17] The Arab Group's and the African Group's views are in alignment with the LMDC's.[18, 19]

Interpretation 2

A second interpretation lays more emphasis on the links between the broader 'financial system' and climate change, and 'looks at consistency of domestic and global investments with climate goals.'[20] This broadens the scope of Article 2.1(c) to beyond the Convention and the Paris Agreement to include the financial system on the whole. Article 2.1(c) is thus seen as the ecosystem within which other finance goals function. Finance given as part of Article 9 obligations are 'included in' and 'reinforce' the finance flows referred to in Article 2.1(c), but are only *one part* of achieving the goal. The focus is on the global financial architecture and economic systems on the whole as well.

Country/bloc positions: The European Union (EU) has vocalized support for a broad scope of Article 2.1(c), highlighting that its implementation presents a 'global effort'. The EU has, in its submission to the Standing Committee on Finance (SCF), also mentioned that several policy initiatives undertaken by its member states relevant to Article 2.1(c) focus on making markets investor friendly and

Figure 2: Article 2.1(c) is broad and overarching; Article 9, NCQG are just parts of it



Source: CSE analysis of UNFCCC literature and expert interviews

attracting more climate-consistent investments. In this interpretation of Article 2.1(c) as a broad, overarching effort to be undertaken by all stakeholders, there is a larger emphasis on the role of the private sector.[21] The EU has also made explicit its view that the implementation of Article 2.1(c) can have a cascading effect, i.e., help facilitate greater provision of climate finance globally.

The USA has been a vocal advocate for creating a separate work programme for Paris Alignment within UNFCCC. USA's view also places more focus on a 'broader than climate finance' interpretation, by emphasizing the need for: creating demand for 'climate-smart' investments; increasing finance by mobilizing capital from a variety of sources; and managing climate-related risks.[22]

The perspective of Argentina, Brazil and Uruguay (ABU) has some similarities. They state that Article 2.1(c) presents a transitional goal, aimed at catalysing a structural change of the global economy. However, it emphasizes that the focus on discussions on Article 2.1(c) must remain on the provision of finance from developed to developing countries as part of achievement of the goal as well.[23]

Importantly, while the EU's suggestions for operationalizing Article 2.1(c) have long included the development of carbon pricing and emissions trading

schemes, or the Carbon Border Adjustment Mechanism, ABU have highlighted that implementing Article 2.1c should not result in disguised trade restrictions. Referring to the policies put forth by EU, the developing country group has articulated that there is currently '*no multilateral agreement on such proposals, and they could lead to arbitrary or unjustifiable discrimination, and may not be the least trade restrictive measures to achieve the legitimate objective of combating climate change*'.

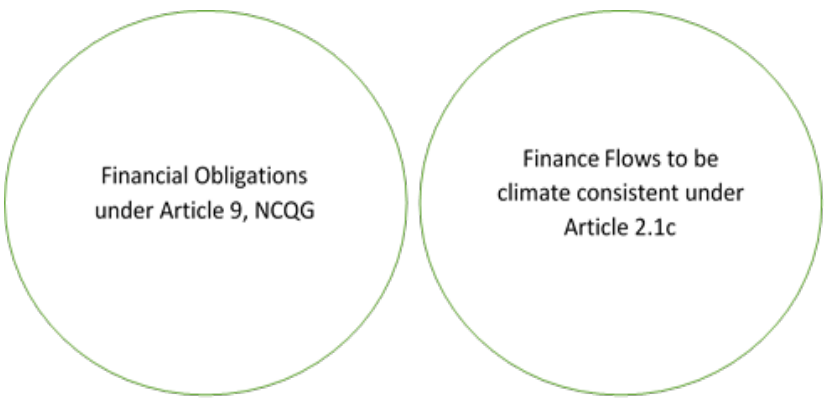
The Least Developed Countries (LDC) group also noted in its submissions to the Standing Committee on Finance prior to COP28 that Article 2.1(c) refers to a broader, long-term perspective, beyond the provision of 'climate finance' alone.

Interpretation 3

Some Parties see implementation of Article 2.1(c) as being independent of that of Article 9, and that the two should be seen as separate but complementary. The SCF's synthesis of views report also notes that while some Parties opined that Article 9 and Article 2.1(c) should be considered separately, most Parties have alluded to some interconnection between them both, even if not explicitly referred to as 'Art. 9' in their submissions.[24]

Country/bloc positions: Kenya, Canada, New Zealand and the United Kingdom have suggested through their submissions that the two are separate, and that making broader financial flows aligned with PA is crucial, but should not, in practical terms, interfere with the provision of climate finance.[25] This is similar to

Figure 3: Article 2.1(c) and Article 9 should be seen as independent but complementary goals



Source: CSE analysis of UNFCCC literature and expert interviews

the first interpretation, as both call for ensuring that commitments for finance to flow from developed to developing countries remain unaffected.

But this interpretation sees the two goals as separate, rather than provision of finance from developed to developing countries being a component of the larger Paris alignment goal; the two are seen as complementary. The Independent Association of Latin America and the Caribbean (AILAC) group has also stated that though Article 2.1(c) is a transformational goal, it must not be seen as a substitute for provision of funds to developing countries by developed ones.

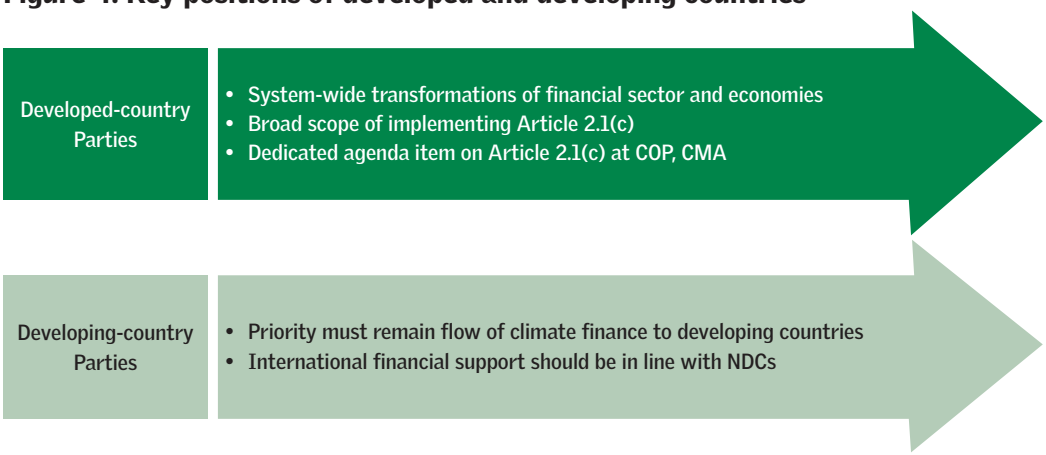
Divergence in interpretation between developed and developing countries

As with most finance-related discussions, differences of opinion between developed and developing countries on Article 2.1(c) persist. At the workshops under the Sharm el-Sheikh Dialogue, two narratives that emerged included:

Some **overlaps** between views of developed and developing countries also exist, including:

- Nearly all countries do agree that broader finance flows being consistent is welcome as long as existing commitments are honoured.
- Global finance should flow away from high-emitting activities and increase towards low-emitting and resilience-advancing activities.
- Some developing country groups such as AILAC do support the developed country position that Article 2.1(c) presents a transformational goal and that it should be so.

Figure 4: Key positions of developed and developing countries



The two main **concerns** of developing-country groups and some civil society stakeholders around 'wrongly' interpreting Article 2.1(c) have been:

1) Implementing Article 2.1(c) should not 'distract from or reduce the provision and mobilization' of international climate finance from developed to developing countries. Most developing country opinions suggest the need to explicitly include provision of financial resources by developed countries as part of operationalizing Article 2.1(c).
2) The fear of potential conditionalities on climate finance flows as an 'unintended' consequence of implementing Article 2.1(c). The fear of having unilateral financial, policy and trade measures imposed onto developing countries by the international community in an effort to ensure 'all finance flows' are climate consistent has been noted in some submissions made by developing countries to the Standing Committee on Finance for discussing Article 2.1(c).

Article 2.1(c) and the New Collective Quantified Goal on Climate Finance (NCQG)

Article 2.1(c) has also been a recurring point of contention among developed and developing countries in other finance negotiations, specifically, negotiations for the New Collective Quantified Goal (NCQG) on climate finance. The NCQG, commonly referred to as the post-2025 climate finance goal, is expected to be decided by COP29 in 2024. At COP28 in Dubai, developing countries voiced their opposition to discussing aspects of Article 2.1(c) within NCQG negotiation tracks, with China repeatedly calling for the deletion of all portions of the draft text that directly called for or alluded to the need to bring in the objectives of Article 2.1(c) into the NCQG discussions. India too echoed this sentiment, stating that the topic of aligning global finance flows has a separate discussion space. The Arab Group noted its 'strong disagreement' with inclusion of such language in the draft text as well.[26]

The fear is that if Article 2.1(c) is integrated into NCQG discussions and processes, instead of focusing on how to best include the needs of developing countries into a new finance goal, the focus could become disproportionately on how to ensure domestic finance flows of all countries are Paris aligned, and potentially add pre-conditions for developing countries to receive climate finance.[27]

This inhibition points to a lack of trust within the multilateral forum, flowing from the same vein as submissions have outlined above, i.e., that Article 2.1(c) provides the necessary framework and goals, but must not be used to abdicate

developed Party obligations. This mistrust, it is argued, is not unwarranted, given that the erstwhile commitment of mobilizing US $100 billion per year to provide to developing countries was met in 2022, but even in this, some have argued the actual flow of finance to be much lesser than US $ 100 bn.

Article 2.1 (c) as a way to avoid responsibility?

Further, experts such as Charlene Watson of London-based global affairs think tank ODI say that bringing Article 2.1(c) discussions into the same negotiation track as NCQG carries the risk that appropriate scrutiny of developed countries' domestic finance flows is sidelined, i.e., their obligation of ensuring that domestic flows are 'Paris aligned'. Developed countries must be held accountable in a separate agenda item she argues, to scrutinize their actions for Paris alignment domestically.

On the flipside, if the NCQG, by using Article 2.1(c) language, does get interpreted as a 'finance in general' goal, there is a risk that it becomes about what all countries do domestically instead, as opposed to providing finance to developing countries based on their needs. For instance, it has been noted in the past[28, 29] that USA does not particularly want to commit any (more) climate finance to developing countries. Within UNFCCC negotiations, USA has tried to make the new finance goal a goal for 'everyone'. Combining both tracks—Article 2.1c and the NCQG—thus risks derailing focus of the NCQG, which should be about provision of finance.

Overall, while there is agreement on the need to scale up finance, close the climate finance gap and mainstream climate action across the spectrum of stakeholders, the exact routes to do so are still under discussion.

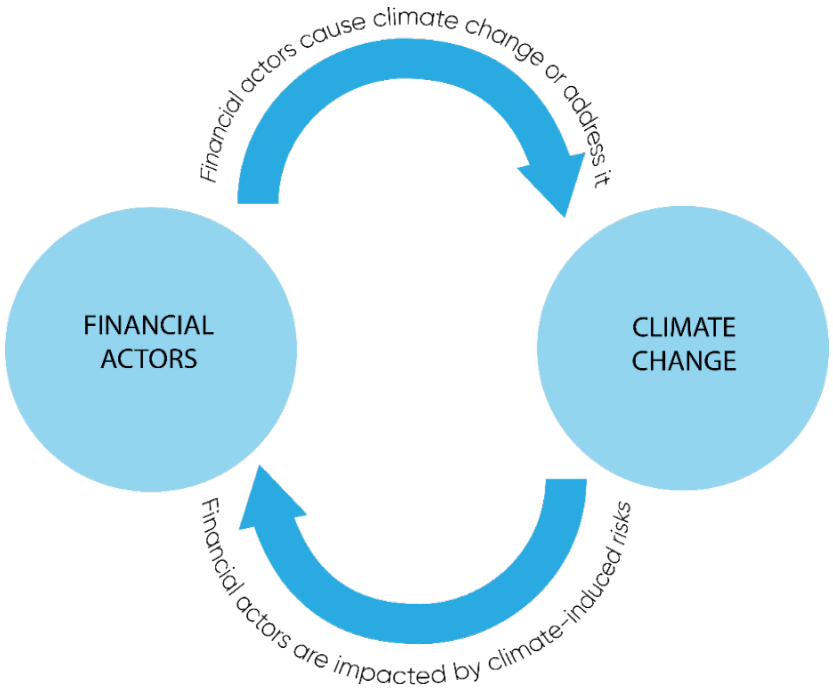
4. Finance and climate change: An overview

4.1 How does the financial system interact with climate change?

As highlighted previously, a part of the 'real world' implementation of Article 2.1(c) will be achieved through the actions of non-government stakeholders.

The global financial system comprises public and private financial stakeholders, such as central banks or asset management firms, financial instruments and assets being exchanged among them, as well as the various policies and regulations governing their operations, along with the entities facilitating the same. Different sets of financial actors stand to be affected by climate change, and several initiatives to respond to these impacts have been created over the years.

Figure 5: The financial system is interlinked with climate change



Source: CSE

Many of them have emerged after the adoption of the Paris Agreement and address the call for global alignment of finance flows to its goals, i.e., implementation of Article 2.1(c). Essentially, Paris alignment of finance flows in practice refers to whether and how the private and public sector actors are considering climate change in their decision-making.[30]

Many efforts are already underway. To understand this, we first look at the two primary ways in which the global financial system interacts with climate change (see *Figure 5*).

4.1.1 Financial actors either cause or address climate change

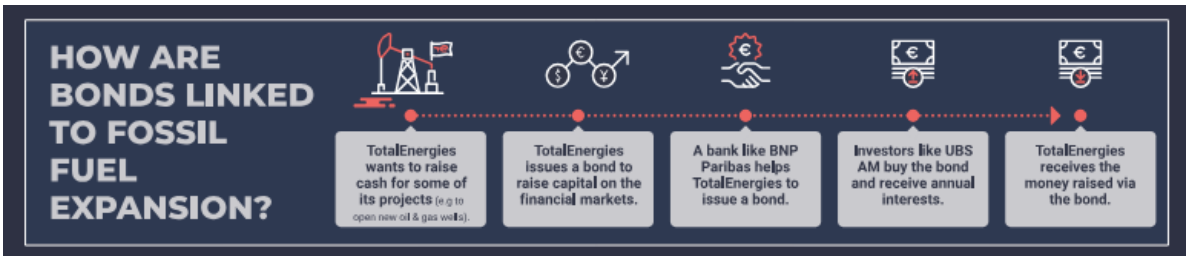
Providing financing to advance infrastructure projects that will lead to high-emitting activities is one of the ways in which the financial sector can directly contribute to worsening climate change. Reducing funding to fossil fuels (direct and indirect) and increasing flows to low-emissions development activities and projects, such as clean energy investment, is a direct way of making finance flows consistent with the Paris Agreement's objectives.

Despite there being a global climate agreement in place, funding towards fossil fuels has continued. The world's 60 largest banks financed companies engaging in fossil fuel related businesses by pouring in money to the tune of US $6.9 trillion since the adoption of the Paris Agreement. In 2023 alone this figure stood at US $ 705 billion.[31]

One key way that banks help finance fossil fuel projects is by facilitating the issuance of bonds, allowing companies to raise cash for new investments. Bonds are debt instruments that companies can opt for to raise capital. Banks often play the role of underwriting (purchasing to resell to investors) or facilitating the issuance of these bonds, thereby connecting investors to the companies that need money. By being a part of the bonds issued to raise money for financing fossil fuel projects, banks thus act as key financial stakeholders furthering climate change.

Over 100 banks were directly or indirectly involved in the structuring of at least one of the bonds issued for fossil fuel projects in 2023.[32] Fossil fuel companies like BP and Duke Energy were among these companies, despite having climate goals of their own. BP released its public commitment to go Net Zero by 2050 in February 2020[33] while Duke Energy did so in 2019. The latter was touted to be among the 'most significant commitments for reducing emissions in the US power sector.'[34]

Figure 6: Bonds help fossil fuel companies raise money



Source: Reclaim Finance

This is not to say that money has not been flowing towards cleaner sources of energy. Analysis by the International Energy Agency (IEA) shows that annual investment in most forms of clean energy, ranging from electric vehicles to renewable power projects has increased between 2015 and 2024. In its World Energy Investment 2024 report, it stated that global investment in clean energy in terms of annual flows reached US $2 trillion in 2024, while investment in fossil fuels in the same year was far less.

Though the flows towards clean energy are higher, the amount of money going to fossil fuels is still immense.

4.1.2 Financial actors are impacted by climate change

The flipside of the coin is how the financial sector views climate change impacting itself. Banks, insurance companies and asset managers consider two primary risks—physical and transition risks—to their profitability and survival in a climate-risked world.

Physical risks

Climate-induced extreme weather events and natural disasters cause loss and damage to physical assets. Insured losses, the financial losses due to natural disasters covered by insurance policies, totaled US $130 billion in 2021, according to the 2021 Weather Climate and Catastrophes Report by management consulting firm Aon. In 2023, the world saw 398 natural disasters, causing US $380 billion in economic losses worldwide.[35] Insurance companies are most exposed to climate-induced physical risks, as they are responsible for securing the physical assets covered by them. The banking system is also exposed to climate risks since the chances of borrowers being unable to pay back their loans is potentially disrupted by climate-induced natural disasters. Further, if entities such as insurers begin to move out of highly vulnerable geographies or businesses, the banks and other financial intermediaries may see their risks increasing as a result.[36]

BACKTRACKING ON COMMITMENTS

Several financial actors have made voluntary commitments to achieve net zero emissions, a move that would aid the shift towards Paris alignment, but have then backtracked on these commitments.

Notably, several big banks have gone back on their public climate commitments in 2023 and 2024, potentially narrowing the scope and impact of aligning their operations with the goals of the Paris Agreement. Political backlash from Republicans in the US (during this election year) caused three members of the Net Zero Insurers Alliance (NZIA) to leave the alliance in February 2024, raising the total number of departures to seven, including five of its founding signatories, Reuters reported. According to reportage in the Guardian, four of the biggest American fossil fuel financiers, Citi, Bank of America, J.P. Morgan Chase and Wells Fargo, left the 'Equator Principles', a set of guidelines for industry and financial institutions for addressing the environmental and social risks in countries where they fund fossil fuel projects.

And J.P. Morgan Asset Management and State Street Global Advisors confirmed that they were exiting Climate Action 100+, an investor-led initiative attempting to ensure the world's largest corporate emitters take sufficient action on climate change. The group announced in 2023 that it would move from pressuring companies to increase their climate disclosures to actively reducing their greenhouse gas emissions. With this latest exit, none of the world's five largest asset managers are part of this effort at present, according to reportage in the *Financial Times*.*

* *Financial Times* reportage 2024. Accessed on September 17 2024 at https://www.ft.com/content/3ce06a6f-f0e3-4f70-a078-82a6c265ddc2

Transition risks

Transition risks cover the potential impacts on the financial system brought about by shifting away from carbon-intensive to low-carbon economies. As the call to move rapidly towards clean energy sources and climate-resilient infrastructure increases, it is the pace of transition that could destabilize the financial system. As governments make policies aimed at reducing fossil fuel investments, and technological advancements make clean energy transitions more financially viable, several asset classes could be quickly rendered 'stranded'.

Studies also highlight that the impact of transition will not be linked to directly fossil fuel-linked sectors alone, such as thermal power plants or oil and gas pipelines. The risk also extends to sectors such as cement production, transportation or agriculture, which are emissions intensive. Policy changes by governments could lead to earlier stranding of these sectors as well, in an effort to meet global climate commitments. Different entities—including banks, pension funds, investors and companies—could face losses in their portfolios due to this, as highlighted by the Network for Greening the Financial System.

Though the importance of recognizing climate-related risks for the financial sector is gaining significance, there is little evidence based on historical data on the links between climate-related risks and impacts on the financial sector. But the following examples illustrate the point:

- According to a World Bank research policy paper, severe climate and environmental disaster episodes lead to an increase in Non-Performing Loan (NPL) Ratios.[37] Non-performing loans are those that are in default or close to default, when borrowers have not made interest or principal payments over a long period of time. A high NPL ratio indicates potential financial strain on the institution. The paper uses data of 184 economies over forty years (1980–2019), and finds that NPL ratios are expected to increase by 0.37 percentage points after natural disaster episodes (when official declarations of emergencies are made).
- Infrastructure is most directly impacted by extreme weather events and natural disasters such as wildfires, flooding, storm surges, cyclones etc. Insurance companies are likely to be the most exposed to these risks. For example, the state of California in USA has long been known to be susceptible to deadly wildfires. In 2021 it experiences at least 7,000 wildfires. With the effects of climate change, this frequency is likely to increase. At least three major insurers (including Allstate and State Farm) decided in 2023 to stop sales of property and casualty coverage in the state, citing the high costs induced by the high frequency of natural disasters and 'rapidly growing catastrophe exposure' as the reasons.[38] At least two credit unions (non-profit financial cooperatives that provide services similar to those of banks) in USA have also closed due to natural disaster related concerns in recent years, with several located in 'relatively high or very high-risk geographies', according to the 2023 Climate Risk Scorecard report by Ceres.[39]

The major ways in which financial actors are responding to the growing calls for including the goals of the Paris Agreement in their operations are through risk management and disclosures, as well as assessing potential impacts through scenario analyses. Banks, companies and institutional investors are showing signs of acknowledging, if not acting on, the linkages with climate change.

Risk assessments are exposing which companies are highly polluting, leading to investors thinking about where to put their money. Various alliances such as the Glasgow Financial Alliance for Net Zero (GFANZ), the Net Zero Asset Managers Initiative, and the Network for Greening the Financial System (NGFS) are attempting to address these risks.

Theoretically, when climate risks are identified and assessed, the real value of 'climate-friendly' financial flows is better recognized. Further, an understanding of the negative implications of 'climate-inconsistent' financial flows could lead to a reduction of such spending. Supervision of climate-related risks is seen as contributing to the achievement of Article 2.1(c) of the Paris Agreement.

According to the United Nations Environment Programme (UNEP), climate-related risks will emerge as the top risks in the coming decade, with extreme weather events ranking number two over a two-year period. This shows that the economic and financial risks induced by climate change are increasing and have to be reckoned with at a systemic level, beginning now.

One of the key initiatives to increase the assessment and reporting of climate-related risk has been the recommendations from the Taskforce on Climate Related Financial Disclosures (TCFD) released in 2015 by the G20-led multilateral body, the Financial Stability Board. This is a voluntary reporting of climate-related risks in four buckets: a company's governance, strategy, risk management and scenario analysis. Annual reports based on various company disclosures are released periodically. These reporting guidelines are increasingly being used by corporations, banks and public companies as well.

4.2 Present scenario of finance flows vis-à-vis climate change

The flow of finance towards activities aiming to address the climate crisis has seen an increase in recent years. Still, the amount of money remains below the overall needs, particularly for developing countries. A key element of the Paris alignment of finance flows, as currently interpreted by various stakeholders, is to reduce the funding of emission-intensive activities, such as those from fossil fuel-based industries, and increase the spending on low-emissions activities and development pathways.

An examination of the present scenario of finance flows towards the fossil fuel sector, clean energy, and climate finance itself provides a snapshot of where things stand with respect to alignment with the goals of the Paris Agreement.

4.2.1 Climate finance is inadequate

Of a global gross domestic product (GDP) of about US $101 trillion in 2022, 0.1 per cent—or US $115.9 billion—was reported as climate finance flows from developed to developing countries as per the latest Organisation for Economic Co-operation and Development (OECD) estimate for 2022. US $1.3 trillion flowed in overall

climate finance flows among all countries in 2021–22, about 1 per cent of global GDP.

Official development assistance (ODA) provided by certain OECD member countries also comprises a part of the money tracked as flowing from developed countries to developing countries. In 2022, total ODA amounted to US $211 billion[40] still falling short of the aid target of 0.7 per cent of the gross national income of countries, according to the UN-DESA Financing for Sustainable Development Report 2024. Out of the total ODA, in 2021, 27.6 per cent of allocable bilateral ODA was used towards climate objectives, a decline compared to 2020.

In contrast, climate finance needs of developing countries (other than China) alone is estimated at US $2.4 trillion per year. Thus, climate finance flows are grossly inadequate.

4.2.2 Clean energy investment is growing, but fossil investments persist

The response of economies to COVID-19 and the global energy crisis triggered by the Russia–Ukraine conflict led to a rise in clean energy investment, according to the International Energy Agency (IEA). In 2024, about US $2 trillion was invested in clean energy, compared to $1.05 trillion in fossil fuels.[41] The International Renewable Energy Agency (IRENA) estimates that more than $5 trillion must be invested annually, totalling to $35 trillion by 2030 for the energy transition.[42]

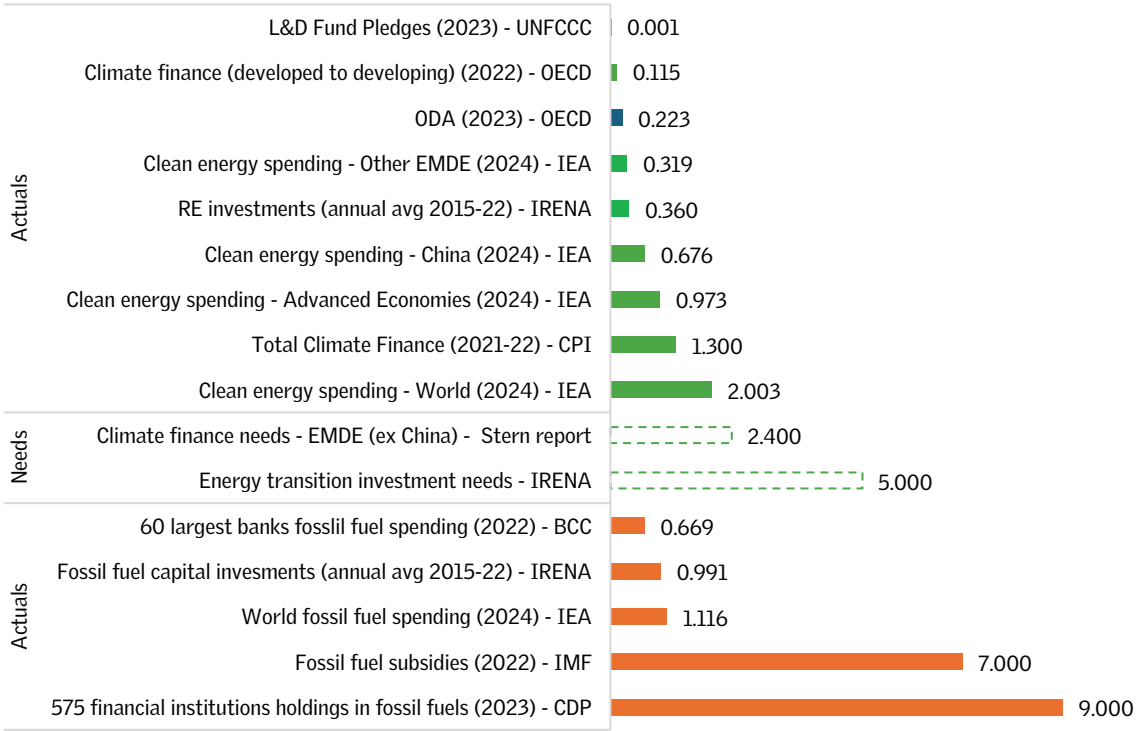
Despite this boost in clean energy spending, investment in fossil fuels has not ceased. IRENA states that some 41 per cent of planned investment by 2050 remains targeted at fossil fuels.[43] In terms of investment in new capacity, renewables have outpaced fossil fuels at US $339 billion annually versus US $135 billion for new fossil-powered plants. In terms of overall investments however, an average of US $991 billion was invested annually in fossil fuels between 2015 and 2022, almost three times higher than renewable energy investments estimated at an average US $360 billion annually (see *Figure 7*).[44]

4.2.3 Regional imbalances

4.2.3.1 Climate and clean energy financing

Climate and clean energy finance is heavily concentrated in a few regions. Of the US $1.3 trillion of overall climate finance flows, 75 per cent was concentrated in

Figure 7: Climate finance needs outpace actual flows while fossil financing flows persist (annual flows in trillion US $)



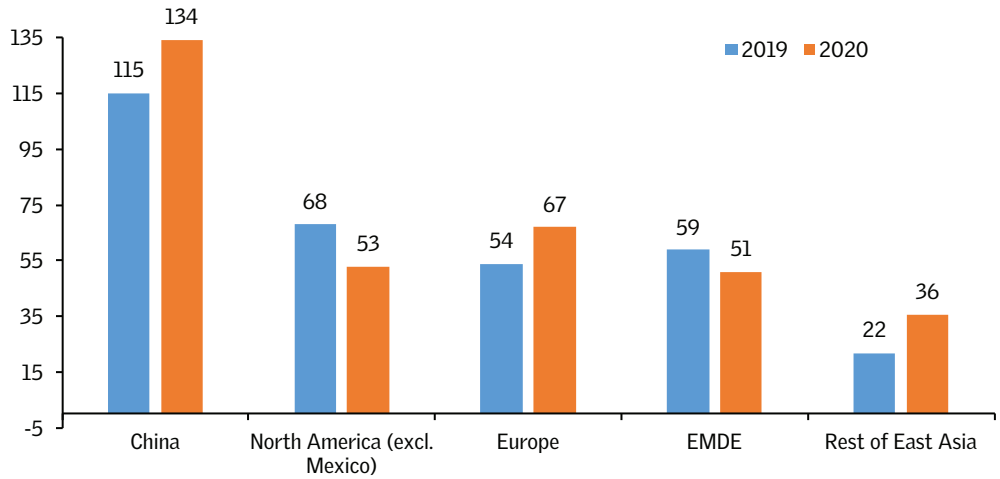
Source: CSE, Based on data from IEA, UNFCCC, CDP, IMF, IRENA, Banking on Climate Chaos, OECD, CPI, Stern-Songwe Report 2022

THE FINANCIAL SECTOR IS STILL FOSSIL-FRIENDLY

Despite a slew of initiatives and policy changes aimed at achieving 'net zero', the world's major financial players are still heavily invested in fossil fuels.[52]

- According to the latest analysis by a coalition of civil society groups, including Rainforest Action Network, in the report titled Banking on Climate Chaos, investments in fossil fuels from the world's largest banks stood at a staggering US $669 billion in 2022 alone. The total fossil fuel financing from 60 of the world's largest banks has reached about US $6.9 trillion since 2015.[53]
- In 2023, almost 50 per cent of 575 financial institutions reported holding about US $9 trillion in fossil fuel financing across their portfolios, as reported by CDP (global non-profit that runs the world's leading environmental disclosure system).[54]
- Reclaim Finance, a non-governmental research and campaigning organization, has made findings that since the Paris Agreement, companies involved in fossil fuel expansion have secured at least US $1 trillion in funding from the global bond markets.[55]
- Insure Our Future, a coalition of non-governmental organizations, published its 2023 scorecard on insurance, fossil fuels and the climate emergency as per which insurance companies have reneged on their pledges to make their business Paris-aligned and greenwashed profits derived from fossil fuels. For instance, Zurich, a Swiss insurance company and one of the founding members of the Net Zero Insurance Alliance, is the world's sixth-largest fossil fuel underwriter,[56] and made an announcement of wanting to quit the NZIA in 2023. Insurance companies 'underwrite' fossil fuels by assessing the risks associated with providing insurance coverage to fossil fuel projects.[57]

Figure 8: Renewable energy investments (in US $ billion)—2019 and 2020



Source: IRENA, CSE

Table 2: Renewable energy investment per capita (US $/population)

Region	2015	2021	% change
North America (excluding Mexico)	127	179	41
Europe	122	127	5
China	84	124	48
India	6	8	34
Latin America and the Caribbean	42	31	–25
Sub-Saharan Africa	6	3	–44

Source: IRENA, based on: Investment data is from CPI (2022a) and BNEF (2023b) and population data from World Bank (n.d.)

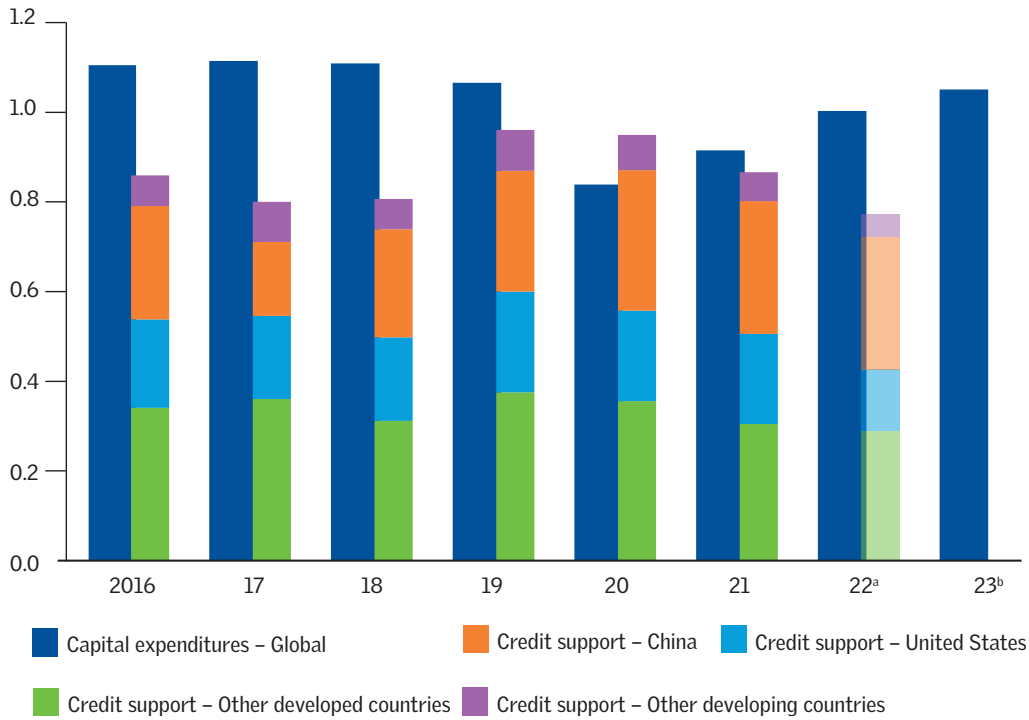
North America, Western Europe, and East Asia and the Pacific, primarily led by China, according to US-based non-profit Climate Policy Initiative (CPI). Regions where the majority of low- and middle-income countries are located receive less than 25 per cent of climate finance flows.

IRENA highlights that in 2022, regions that were home to 120 developing and emerging economies—more than 50 per cent of the world's population—received only 15 per cent of global investments in renewables. Further, IRENA added, the share of renewable energy investments going to these countries had been gradually declining year on year (e.g. from 27 per cent in 2017 to 15 per cent in 2022). Countries defined as 'least developed' by the Intergovernmental Panel on Climate Change (IPCC) attracted only 0.84 per cent of renewable energy investments on average between 2013 and 2020 (see *Figure 8*).

On a per capita basis, renewable energy investment grew in regions such as North America (excluding Mexico), Europe, China, and India between 2015 and 2021. Latin America and the Caribbean, and sub-Saharan Africa on the other hand saw a decline (see *Table 2*).

The International Energy Agency's (IEA's) data for 2024 shows that advanced economies dominate clean energy spending at 49 per cent of the world total. China alone accounts for 34 per cent, while emerging and developing economies account for only 16 per cent.

Figure 9: Developed countries are the major financiers of fossil fuels



Note: Urgewald data on credit support (including loans and underwriting services) extended by public and private banks to GCEL companies runs until August 2022, and Reclaim Finance data on credit support to GOGEL companies runs until mid-September 2022. This data was gathered in Bloomberg, Refinitiv and IJGlobal. More methodological details in Warmerdam (2022), https://www.coalexit. org/methodology and https://gogel.org/about-data. IEA global figures refer to capital expenditure on fossil fuel without CCUS and are based on corporate accounts, surveys and estimates.
a = As credit support data for the year 2022 only extends over 8 months (and not 12), the credit support figures for 2022 have been multiplied by a factor 1.5.
b = The capital expenditure figure for 2023 is a projection.

Source: UNCTAD calculations based on Reclaim Finance (2023); a 2022 update of Urgewald (2021); and IEA (2023a and b).

Fossil fuel financing

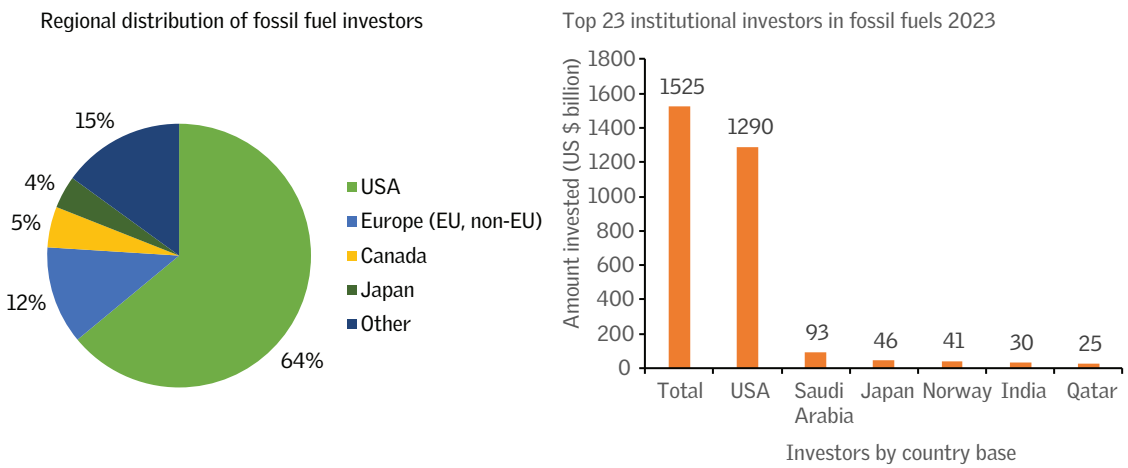
The Global North is overwhelmingly the largest source of financing for fossil fuels. For the capital-intensive fossil fuel sector, credit is extended by banks in the form of loans and underwriting services to fossil fuel companies. According to the 2023 United Nations Conference on Trade and Development (UNCTAD) Trade and

Development Report, 61 per cent of credit extended to fossil fuel companies is attributed to banks in developed countries, with the US accounting for 22 per cent. Credit from China amounts to 30 per cent. Developing-country banks are responsible for only 9 per cent of global fossil fuel credit (see *Figure 9*).[45]

Institutional investors such as asset management companies hold fossil fuel bonds, and shares in coal, oil, and gas companies. According to the report *Investing in Climate Chaos* by German non-profit Urgewald, the majority of institutional investments in fossil fuel companies are by US-based investors. Vanguard and Blackrock, the world's largest asset managers, alone dominate a significant 27 per cent chunk of US investments. The total investments by Vanguard and Blackrock are US $267,742 million in 375 companies and US $261,659 million in 386 companies respectively. Of the total institutional investments in fossil fuels, 50 per cent have been made by the top 23 investors. Of them, US-based entities dominated, comprising 84.59 per cent of the total (see *Figure 10*).[46]

In terms of recipients or locations where financing is directed, fossil fuel investments have been concentrated in emerging market and developing economies (EMDE),

Figure 10: Most institutional investors in fossil fuels are based in the US

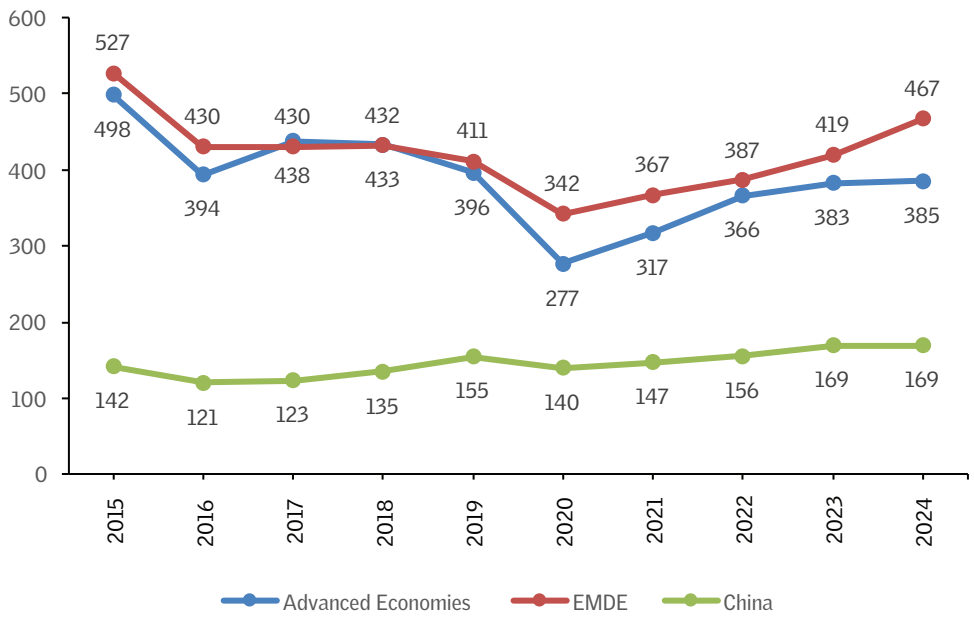


Source: CSE, based on Investing in Climate Chaos by Urgewald

WALK THE TALK

Many of the public announcements about Paris alignment by financial actors in recent years have been led by stakeholders from the Global North. For instance, Norway's Sovereign Wealth Fund (among the world's largest) announced in 2022 that it would require all the thousands of companies in its portfolio to achieve Net Zero emissions by 2050. Another example is of the Danish Akademiker Pension and Finland's Varma pension funds, which in 2023 became two out of three in the world to have their climate plans approved by the Science Based Targets Initiative (SBTi), aiming to reduce CO_2 emissions from their entire supply chains and their own operations. More broadly, the many coalitions/groups of financial stakeholders that have come together to work towards Paris alignment have actors from the Global North dominating their signatories (such as Net Zero Asset Managers Initiative, Net Zero Insurers Alliance, the UN Net Zero Asset Owners Alliance, several of the major MDBs such as World Bank etc.). Despite this, according to the data, the major fossil fuel financiers are concentrated in the North, showing that there is a need to walk the talk on their claims. While the efforts towards Paris alignment are necessary, they arguably hold little value without simultaneous reduction of fossil fuel spending by the North as well.

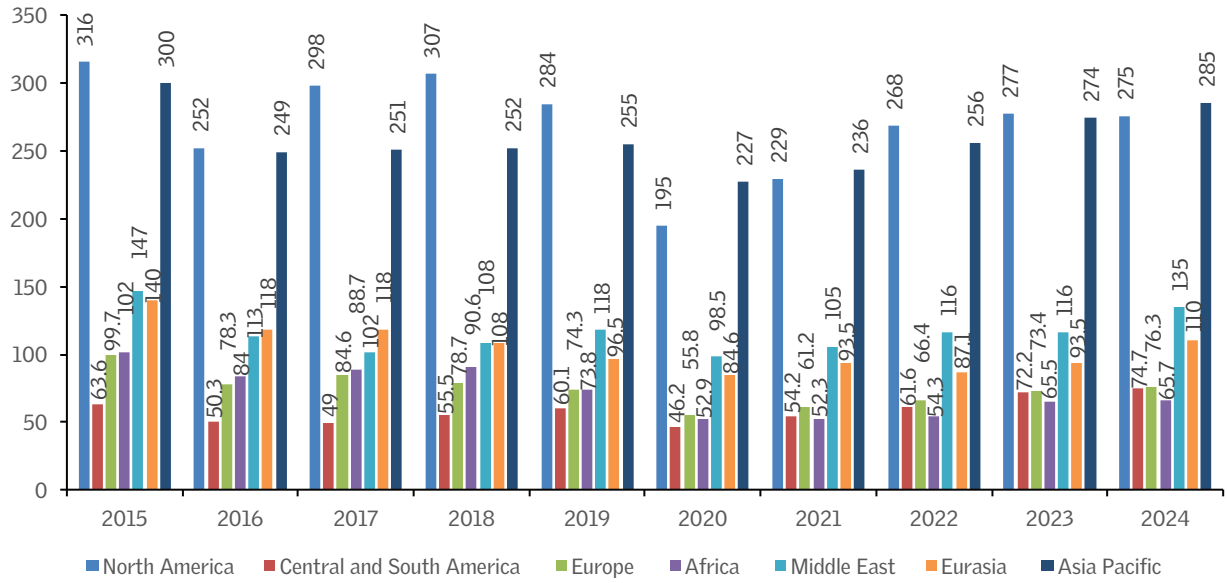
Figure 11: Investments in fossil fuels



Source: IEA, CSE https://www.iea.org/reports/world-energy-investment-2024/overview-and-key-findings

where energy demand is growing, and there are multiple priorities such as overall development, energy security, growth of manufacturing and energy access. According to IEA, on average, EMDEs accounted for an annual average of 44 per cent of fossil fuel investments between 2015 and 2024, closely followed by advanced economies at 41 per cent, and China at 15 per cent (see *Figure 11*).

Figure 12: Investments in fossil fuels (regional breakdown)



Source: IEA, CSE https://www.iea.org/reports/world-energy-investment-2024/overview-and-key-findings

Table 3: Annual investments in renewable energy versus fossil fuel by region, 2015–20

Region	RE	FF	Ratio of FF to RE
Asia and the Pacific	932	1722	2
North America (incl. Mexico)	368	1526	4
Eurasia and Central Asia	11	643	58
Middle East	23	637	28
Europe (incl. Turkey)	392	516	1
Africa	46	450	10
Central and South America	97	354	4

Source: IRENA, CSE https://mc-cd8320d4-36a1-40ac-83cc-3389-cdn-endpoint.azureedge.net/-/media/Files/IRENA/Agency/Publication/2023/Feb/IRENA_CPI_Global_RE_finance_2023.pdf?rev=8668440314f34e588647d3994d94a785

A regional breakdown shows a more nuanced picture, where the Asia-Pacific—covering wealthy countries like Australia, Japan, South Korea, and China, as well as emerging economies like India, and least developed countries like Bangladesh—has seen the highest fossil fuel investment at an average of 27 per cent of the world total. This is followed by North America (USA, Mexico and Canada) at 26 per cent, the Middle East at 13 per cent, and Europe and Eurasia at 7 and 10 per cent each. Africa accounted for only 6 per cent.

IRENA's data for 2015 to 2020 shows that the Asia-Pacific region is spending twice as much on fossil fuels as it is on renewables. The figure is most stark for Eurasia and the Middle East, which are spending 58 and 28 times more, respectively.

Aside from ranking second on overall fossil fuel investment, North America, comprising just three countries, is also spending four times as much on fossil fuels as it is on renewables (see *Table 3*).

Moreover, all fossil fuel funding in developing countries is not necessarily benefiting their energy needs or economic growth. For example, IRENA states, 'in Africa, substantial investments have been made in 48 countries over the past few years, both in exploration and in exploitation of recently discovered reserves, with the majority of projects being export oriented and undertaken by foreign companies'. Fossil funding is being directed to produce fuels for consumption in the developed world—the European Union is a major consumer of African oil and gas. Countries also do not benefit from the sale of their own fossil fuels. For example, oil and gas royalties are as low as 2 per cent for Guyana and 5 per cent for Mozambique, with a majority of the financial benefits accruing to transnational oil and gas companies.[47]

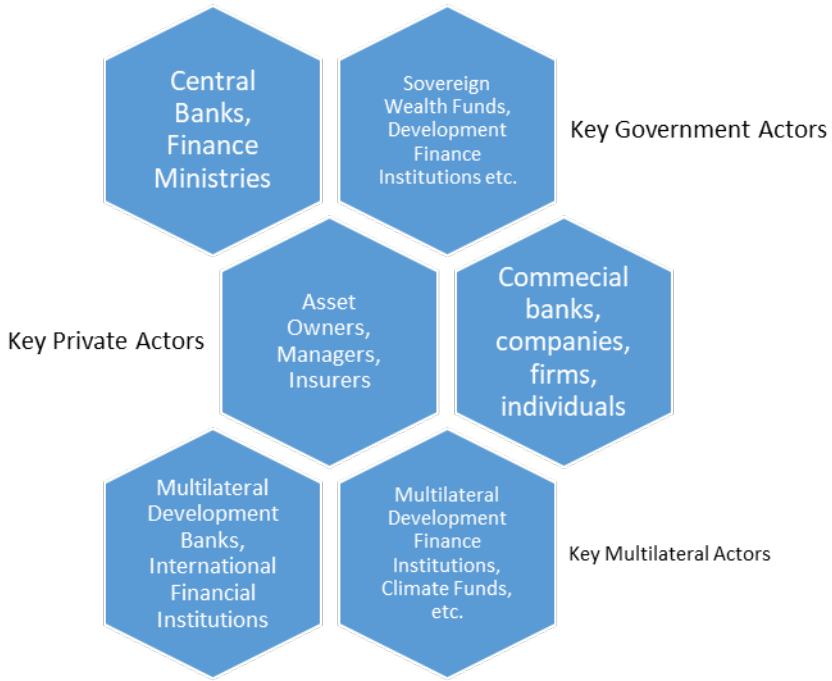
5. What does Article 2.1(c)/ Paris alignment look like in practice?

5.1 Financial actors and Paris alignment

Different actors in the global financial system interact with climate-related financing.

Table 4 provides a snapshot of the real-world activities that are being undertaken by different financial actors to operationalize Article 2.1(c).

Figure 13: Major financial system actors working towards Paris alignment (non-exhaustive listing)



Source: CSE

Table 4: Key financial actors and Paris alignment

S. no.	Financial actor	Money, financial assets held/assets under management	Examples of ways to achieve Paris alignment (ongoing and under consideration)
1	Central banks	US $39 trillion at end of 2022[48]	Green Lending Programmess: The People's Bank of China in 2021 launched a carbon emission reduction facility (CERF) to provide low-interest rate loans to financial institutions that help cut carbon emissions. It announced in 2024 that this lending would be extended to 2027.[49] Dual interest rates: Central banks try to control inflation by raising interest rates. Renewable energy, which has higher upfront costs than fossil fuels, is disproportionately penalized as a result. Advocates have been demanding dual interest rates for green versus highly emitting activities. This was supported by French President Macron at COP28 in Dubai as well.[50]
2	Finance ministries	NA	Green budgeting: In 2022, France published its third comprehensive green budget. Proposed expenses are tagged as having favourable, unfavourable, mixed or neutral impacts on environment. This is decided on the basis of six environmental factors in line with EU's taxonomy, of which climate change mitigation and adaptation are a part.[51] Policy for higher 'green' investments: In 2023, the UK published its updated Green Finance Strategy aimed at integrating climate considerations into financial and economic policy to meet Net Zero by 2050 and increase investment in climate-consistent activities.[52]
3	Sovereign wealth funds	$11.4 trillion assets under management as of February 2024[53]	Divesting from carbon intense, shifting to climate-consistent investments: In 2022, New Zealand's Superannuation Fund shifted 40 per cent of its portfolio to entities that are considered aligned with goals of the Paris Agreement, amounting to about US $25 billion worth of investments.[54]
4	International Monetary Fund	~$932 billion lending capacity as of December 2023[55]	The IMF's Climate Change Strategy includes the provision of affordable, long-term financing for low- and middle-income countries through the Resilience and Sustainability Trust.
5	Multilateral development banks	$1.86 trillion in assets as of 2022[56]	Different actions by MDBs as part of the Joint MDB Alignment approach. Development of criteria for project-wise assessment of Paris alignment: The World Bank developed a method to use criteria to assess alignment of projects across three of its instruments of providing finance, i.e., Development Policy Financing (DPF); Investing Project Financing (IPF) and Program for Results (PforR). To be noted though is that the approach has been critiqued as potentially being paternalistic in its top-down approach of deciding what counts as a Paris-aligned project and what does not.[57]
6	Development finance institutions (including MDBs and others)	Over $5 trillion in collective assets as of 2020 (National Development Banks);[58] ODA from OECD countries totaled $211 billion in 2022[59]	Establishing Paris-aligned lending criteria for direct project financing: The European Investment Bank (EIB) in 2019 committed to align 'all new financing activities' with the goals of the PA from 2021 onwards. EIB's 'Paris Alignment Framework—Low Carbon' provides sector-wise listing of eligibility criteria for activities for funding support in line with PA goals, along with specification of projects that will not be supported (the latter are mainly fossil fuel linked activities).[60] Establishing criteria for aligning intermediary financing (their lending to institutions which then lend to other entities/projects): As of 2021, no DFIs had established specific PA criteria for intermediary financing.[61]

S. no.	Financial actor	Money, financial assets held/assets under management	Examples of ways to achieve Paris alignment (ongoing and under consideration)
7	Commercial banks, investment banks	Assets worth US $111.965 held by 100 largest banks at the end of 2022[62]	Net-zero commitments: HSBC announced its ambition to align its financed emissions to net zero by 2050 or sooner; to make its own operational emissions and that of its supply chain net zero by 2030. More recently, the bank updated its Thermal Coal Phaseout policy, aiming to stop all thermal coal financing in the EU and OECD by 2030, and other markets by 2040.[63]
8	Insurers, asset managers	Global assets under management US $115.1 trillion at end of 2022 (asset managers)[64]	Increase their exposure to companies with credible net-zero targets: UBS initiated the process of introducing climate-aware investment strategies in an effort to reallocate capital to companies with lower carbon footprints and those contributing to cleaner technologies.[65]
9	Asset owners	$ 23.4 trillion held by the world's 100 largest asset owners at end of 2022[66]	Net Zero Asset Owner Alliance (UNEP Finance Initiative); Paris Aligned Investors Initiative
10	'Big' investors (institutional investors)	(overlap with other categories)	As part of alliances such as Institutional Investors Group on Climate Change (IIGCC), Asia Investor Group on Climate Change (AIGCC) and Investor Climate Action Plans (ICAPs) under the Investor Agenda, big investors such as asset management firms are attempting to align their portfolios to the Paris Agreement.
11	Companies/ firms	NA	Companies assess and disclose climate-related risks for the benefit of investors and other actors as part of the recommendations made by the Taskforce on Climate-Related Financial Disclosures (TCFD).

5.2 Countries and Paris alignment

Many countries across the world have put policies and regulations in place for operationalizing Article 2.1(c), and several others have proposed to do the same.

According to ODI's report 'Developing a collective Framework for Operationalizing Article 2.1 (c)', the tools that country actors can employ or have employed for enhancing 'climate-compatible finance' can be divided into the following four categories:

- **Financial policies and regulations** include mandatory TCFD-aligned disclosure requirements, transition finance frameworks, regulatory frameworks, green taxonomies, mandatory environmental social and governance (ESG) standards, priority sector lending and monetary policy interventions.
- **Fiscal policy levers** include fossil fuel phase-out policies and subsidies, carbon pricing, feed-in tariffs, aviation levies, financial support for green buildings, cap-and-trade systems for carbon emissions, tax credits or tax reductions for electric vehicles (EVs) or subsidies for charging infrastructure.
- **Public finance instruments** include investment grants for climate-proofing buildings, guarantees for climate-friendly technology development, interest-

free loans for the development of innovative energy technologies, investment funds and agencies, leasing programmes for solar panels, climate funds for small-scale renewable energy projects, technology funds, green funds or banks, climate budget tagging (CBT).

- **Information instruments** include transparency initiatives, awareness campaigns, long-term plans, corporate strategies, certification and labelling, green bond guidelines, environmental information disclosures, low-carbon labels, measuring, reporting and verification (MRV) systems.

Some country-level policies for 'climate-compatible finance' are summarized in Table 5.

Table 5: Country-level policies implementing Paris alignment

S. no.	Type of policy levers	Countries/regions
1.	Climate-related disclosures	• US Securities and Exchange Commission (SEC) has issued a rule for climate-related disclosures. The rule has been stayed as of now vide an SEC order pending completion of judicial review. • The EU has supplemented its guidelines to ensure that climate-related financial disclosures by financial institutions and non-financial companies are in accordance with TCFD.[67] • India has recently issued a Draft Disclosure Framework on Climate-related Financial Rules, 2024.[68] • SEBI in India has issued revised disclosure requirements for issuance and listing of green debt securities.[69] • The EU through its sustainable finance disclosure regulation seeks transparency about sustainability risks and adverse sustainability impacts by financial market participants and financial advisers. • The EU's Corporate Sustainability Reporting Directive requires all large companies and all listed companies including small and medium-sized enterprises (except micro undertakings) to disclose information on environmental and social risks and opportunities, and their environmental and social impacts.[70] • The Bank of Japan announced that it will encourage financial institutions to make climate-related disclosure requirements in accordance with the TCFD.[7]
2.	Green and sustainable finance	• Indonesia has a mandatory regulation on sustainable finance for financial institutions including banks, capital markets, and non-bank financial institutions, accompanied by voluntary financing guidelines for renewable energy and energy efficiency.[72]
3.	Green bonds and green deposits	• The RBI in India has issued sovereign green bonds in compliance with the framework for sovereign green bonds. • The EU issued a Green Bond Standard Regulation in 2023. • Japan has issued non-binding green bond guidelines. For climate change-related lending, availability of loans depends on the how the investment of financial institutions performs on green bonds.[73] • In the Middle East, there are Shari'ah-compliant green financial instruments such as green or sustainable Islamic bonds (sukuks) and green deposit products.[74] • RBI in India has created a framework for acceptance of green deposits that are interest-bearing deposits received by the regulated entities for a fixed period and the proceeds of which are earmarked for being allocated towards green finance.[75] • Fiji issued a sovereign green bond for raising FJ$100 million which focused on investments for climate resilience.[76]

S. no.	Type of policy levers	Countries/regions
4.	ESG	• SEBI in India has certain reporting requirements on ESG disclosures through its Business Responsibility and Sustainability (BRSR) Core, a subset of BRSR, which includes additional key performance indicators such as greenhouse gas (GHG) footprint, water footprint, energy footprint, and embracing circularity regarding waste management.[77] • France's Energy Transition Law requires disclosure of ESG in investments.[78]
5.	Green taxonomy	• The EU has established a taxonomy for classifying its sustainable activities. Related to this, a delegated act on sustainable activities for climate mitigation and adaptation objectives has been issued.
6.	Taxation	• Under the Carbon Border Adjustment Mechanism, the EU imposes a carbon tax on imports of carbon-intensive goods such as cement, iron, steel, aluminium, fertilizers, electricity and hydrogen, levying charges based on their associated carbon emissions during production.[79]
7.	Tax credits	• In the US, tax credits for clean energy, energy efficiency, and electric vehicles have been provided under the Inflation Reduction Act.
8.	Climate scenario, Climate stress tests, and climate risk analyses	• Central banks and large financial institutions in the US, Singapore, Japan, South Korea, Pakistan, China, New Zealand, Egypt, Morocco, UAE, Saudi Arabia, Armenia, Turkmenistan, Uzbekistan, Oman, and Azerbaijan are carrying out climate scenario and risk analyses as well as dealing with climate-related financial risk management.[80] • In 2022, the RBI in India conducted a pilot climate vulnerability assessment and stress testing (VAST) to measure climate-related financial risks faced by banks.
9.	Green lending and priority sector lending	• The International Financial Services Centre Authority (IFSCA) in India has issued a Guidance Framework on Sustainable and Sustainability Linked Lending by Financial Institutions to guide IFSC banking units and finance companies/finance units on undertaking green, social, sustainable and/or sustainability-linked lending activities.[81] • The Greenhouse Gas Reduction Fund, a US $27 billion programme, has been launched under the US IRA to mobilize financing and private capital for GHG and air pollution-reducing projects.[82]
10.	Greenwashing	• SEBI in India has laid down dos and don'ts relating to green debt securities to avoid occurrences of greenwashing.[83]
11.	Green dual interest rates	• Lower interest rates for green projects as compared to interest rates for lending to highly emitting activities to encourage RE investments instead of investments in fossil fuels. Green dual interest rates were endorsed by French President, Emmanuel Macron at COP28.
12.	Portfolios	• The Monetary Authority of Singapore is the first central bank to adopt emission targets on its investment portfolio.[84] • A voluntary programme is available to Swiss pension funds and insurance funds, allowing them to assess whether their portfolios of stocks and corporate bonds are aligned with the Paris temperature target through the 2°C Investing Initiative s Paris Agreement Capital Transition Assessment Tool.[85] • The Bank of England is considering capital requirements rules to limit the amount of fossil fuel assets a bank can have on its balance sheet due to climate-related financial risks.[86]
13.	Divesting from fossil fuels	• The Norwegian Parliament issued a resolution for the sovereign wealth fund to divest from companies deriving over 30 per cent of their turnover or activity from coal.[87]

6. Emerging questions for consideration

It is clear that money going towards fossil fuels needs to be scaled down and the money for lowering emissions and adapting to climate change needs to be scaled up. Actors of the global financial system and country governments are attempting to make shifts to include climate change in their financial decision-making.

While consensus on the precise interpretation and scope of Article 2.1(c) is still under discussion in UNFCCC, attempts to implement it are underway simultaneously. Even the definition of climate finance is yet to be 'fully agreed' upon. It is important to understand the real-world implications of such provisions even as the timeline for diplomatic consensus is lingering. Moreover, the reasons that developing-country groups are sceptical of a disproportionate focus on Article 2.1(c) need further scrutiny.

6.1 The Global North must lead the way in phasing out fossil fuel funding domestically

The need to shift financing away from fossil fuels and towards clean technologies is undeniable, but this cannot be uniformly imposed. Paris-alignment strategies, if implemented strongly, may theoretically create positive shifts of finance away from high-emitting fossil-based activities. In line with the principle of common but differentiated responsibilities, developed countries must take the lead in facilitating this.

But current trends point to continued fossil fuel funding and expansion in developed countries. North America as a region is still investing twice as much in fossil fuels as it is in renewable energy. UNCTAD states, 'In the challenging context of transitioning away from fossil fuels, it is a major concern that funds continue to flow into fresh exploration and new projects, particularly in developed countries, which already benefit from high levels of energy access.'[67]

Fossil fuel production and expansion plans are intrinsically linked to fossil fuel finance flows. According to the UNEP Production Gap Report 2023, of the world's 20 largest fossil fuel producer countries, seven—Australia, Canada, Germany, Norway, Russian Federation, UK and the US—are advanced economies. These countries also plan to expand their fossil fuel production further.[68] China, as a

newly developed country, must also come under scrutiny for its continued funding of fossil fuels.

6.2 Article 2.1 (c) cannot divert responsibility for climate finance

While interpretations of Article 2.1(c) vary as shown in Section 3 of this paper, a perspective gaining ground, as implied in developed country narratives, is that Paris alignment of global finance flows will lead to more climate finance flows to developing countries. Obligations of developed countries to provide climate finance under Article 9 of the Paris Agreement must be kept separate from Article 2.1(c), and the latter must not be advanced as a substitute for the former. This concern has been adequately highlighted by developing-country Parties in UNFCCC negotiations and is a demand that must be amplified.

A gradual shift of finance flows away from fossil fuels, first within developed countries and then globally, must be met simultaneously with efforts to ratchet up efforts by developed countries to provide 'new and additional' climate finance to developing countries. In addition to addressing climate justice by providing climate finance as reparations to countries disproportionately affected by climate change, climate finance is required by countries to make a transition as they continue to develop.[69] Article 2.1(c) must be kept separate from discussions on the New Collective Quantified Goal on Climate Finance (NCQG) in determining a quantum and structure for a new climate finance goal at COP29.

6.3 Countries of the Global South need differentiation in implementing Paris alignment

Cumulatively, the highest fossil fuel financing flows are currently directed to developing countries, where increasing energy demand is dictating higher investment in energy sources that will provide large amounts of reliable energy for growing populations and economies. These are also countries where major fossil fuel producers are betting on demand growth,[70] as demand in advanced economies begins to plateau and decline.

Developing countries cannot suppress energy demand in the short to medium term. This is particularly applicable to energy needed for improving energy access and the short- and medium-term growth of industry. Although ultimately energy and industry must be decarbonized in this part of the world, investment for clean technologies is not flowing to these regions (see *Section 4.2.3*). Developing countries therefore must be given a more lenient timeline to phase out fossil fuel financing. Financing, which is clearly driven by the developed country-dominated financial

sector, must be simultaneously scaled up rapidly for clean energy in the Global South. As with all globally applicable climate targets, Paris-alignment targets cannot come at the expense of poverty eradication and sustainable development.

6.4 Readiness to respond to top-down Paris alignment policies

The financial systems of Global South countries are at varying stages of development compared to their Western counterparts. It has been noted by the Bank for International Settlements that financial system fragility is far greater in many developing countries than in the industrial world.[71] Moreover, the financial systems of developing countries are more vulnerable to climate change. A study by Bengaluru-based non-profit Climate Risk Horizons from August 2023 showed that economic losses caused by climate change threaten the stability of the Indian banking system.[72]

The readiness of banks can be assessed on various criteria, including whether or not they have a fossil fuel exclusion policy in place, which prevents their financing of new high-emitting projects, whether they are disclosing Scope 1/2/3 emissions, and whether they are conducting relevant climate scenario analyses to understand the potential impact on their operations under different climate scenarios. The Climate Risk Horizon report notes that Indian banks, for example, are highly unprepared on all of the above factors.

The readiness of these countries' financial entities to be able to incorporate climate considerations in their operations in a big way is at differing stages and requires further preparedness.

Further, a large part of operationalizing Article 2.1(c) is the assessment, measurement and management of climate-related physical and transition risks. In a study conducted by UNCTAD, it was found that central banks of LDCs are under two pressures at once: first, to move towards global best practices and, second, to adapt to the technical demands posed by climate induced risks. According to the Network for Greening the Financial System, a major challenge has remained the lack of high quality, consistent data across jurisdictions for addressing climate related risks. The lack of sufficient skilled sustainable finance professionals and institutes with expertise also poses a problem. To implement

Article 2.1(c) or respond to the actions of other countries, the capacity of several Global South countries may need a lot more preparation at the very least.[73]

6.5 Green conditionalities imposed on development finance

Nearly all advocates of implementing Article 2.1(c) acknowledge the need for 'enabling policy environments' to make finance flows consistent with the Paris Agreement. But whether the policy priorities of developing countries align with what may be required of them to create 'enabling' environments also warrants further scrutiny.[74]

Climate and development finance are already inadequate; the former is heavily loan-based and worsens indebtedness. Adding to this are potential 'green' conditionalities attached to the financial assistance provided by development finance institutions.

For instance, as part of the Joint MDB Approach to Paris Alignment, the World Bank announced that beginning from July 2023, all new projects would either contribute to the reduction of GHG emissions or climate-resilient development. According to its Paris Alignment Methodology, the criteria of assessing whether a 'Development Policy Financing Operations' (DPF) action is Paris aligned are:

- If it actively contributes to GHG emission reductions or increasing sinks, such as policies that promote renewable energy generation;
- If it has little or negligible GHG emissions, for instance digital inclusion reforms; and
- If it generates GHG emissions, but is aligned with a country's long-term decarbonization pathway (and is not at risk of locking in carbon-intensive activities).

Providing climate and development finance only if certain policy conditions exist in recipient countries could tread on the national circumstances of developing countries. Further study is required to establish precisely how this affects them, but a preliminary assessment of the World Bank's energy sector decarbonization financing shows requirements for privatization and unbundling of power utilities as a condition to receive green finance.[75] Such 'green conditionalities' potentially impositions on recipient countries and may be at odds with their requirements depending on the level of development.[76]

WILL THEY, WON'T THEY? THE CASE OF BP'S CLIMATE FLIP-FLOPPINGS

UK oil giant British Petroleum (BP) announced in 2020 its plans to achieve net zero emissions by 2050. Specifically, its plans included cutting oil and gas production by 40 per cent from 2019 levels by 2030 and channeling billions of dollars into wind and solar projects. But, between January 2020 and December 2022 its stock value dropped by 10 per cent. In September 2020, then CEO Bernard Looney doubled down on BP's commitment to reducing fossil fuel production and simultaneously growing its renewables business. A week after he announced the new climate strategy detailing this vision, BP's share price fell to a 25-year low, Bloomberg reported the same year. Looney had promised investors they would be able to 'decarbonize' their portfolio while ensuring 8–10 per cent returns to investors, but this does not seem to have happened so far. Moreover, in early 2023, the company reported making the highest annual profits in its 114-year history—a profit driven by the increase in oil prices due to the Russian invasion of Ukraine.

The company promptly responded by announcing a scaling back of its plans to cut oil and gas production, i.e., backtracking on its ambitious climate targets.** In 2023, BP indicated that its oil and gas production will be lowered only by 25 per cent by 2030 compared to 2019 levels (as opposed to 40 per cent), according to its Net Zero Progress Update 2023. Though this has come along with announcements of increasing investment in other 'transition businesses', such as EV charging, renewables and hydrogen, a 2023 analysis of BP's climate strategy by Reclaim Finance shows that they have not done nearly enough—for every dollar invested in its low-carbon energy businesses in 2023, BP invested US $11.6 in oil and gas. The idea that money derived from fossil fuel production can be successfully funnelled to greener/cleaner energy has been supported by many—even one of BP's top 30 shareholders argued that higher earnings from oil and gas would support a faster transition FT reported—but so far, this does not seem to have been put into practice.

* NPR reportage 2023. Accessed on September 17 2024 at https://www.npr.org/2023/12/11/1217802769/oil-prices-exxon-mobil-green-energy-solar-wind-cop28-climate-talks
** *Financial Times* reportage, 2023; https://www.ft.com/content/419f137c-3a83-4c9c-9957-34b6609bcdf7. Accessed on September 16, 2024

6.6 The limitations of voluntary commitments

A large share of Paris Alignment strategies, particularly for non-governmental stakeholders, are in the form of voluntary commitments, be it net zero targets or voluntary membership of alliances. It is unclear if these are sufficient to shift financing away from fossil fuels and towards clean technologies. As eplained in the *Box: Backtracking on commitments*, several banks and asset managers have reneged on their pledges when the financial implications and disclosure requirements became evident.

Moreover, as noted by Brett Christophers, Professor at Uppsala University, three of the largest European oil and gas companies, BP, Shell and Total, continue to invest heavily in fossil fuels along with new investments in renewables. He suggests that all three companies signal that the production of hydrocarbons in sectors such as oil remains significantly more profitable than renewable energy generation. He notes that the internal rates of return (IRRs), a metric commonly used for gauging

an investment's profitability, are around 15–20 per cent or higher on hydrocarbons compared to that for renewables, which stands at around 5–6 per cent.[77]

Moreover, the oil and gas sector particularly is prone to volatility in response to fluctuating geopolitics, which often creates opportunities for huge short-term profits. In the wake of the Russian invasion of Ukraine, Norway's oil and gas revenue jumped four times from Norwegian krone (NOK) 0.288 trillion in 2021 to NOK 1.17 trillion in 2022, and then five times higher than 2021 the next year to NOK 1.38 trillion in 2023.[78]

IEA's World Energy Investment 2023 found that only 1 per cent of the oil and gas industry's unprecedented cash flow during the Russian conflict was channelled to low-carbon capital expenditure, such as that for clean energy production.

Without binding regulations by governments, the achievement of Paris alignment of financial flows through voluntary initiatives remains a major question mark as long as there is money to be made in fossil fuels in the short to medium term.

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This paper explores the nuances of Article 2.1(c) of the Paris Agreement, which aims to align global finance flows with low greenhouse gas emissions and climate-resilient development. It delves into the different interpretations of Paris alignment of global finance flows and how different stakeholders may contribute to its implementation. To illustrate this, it also provides a bird's eye-view of the current state of finance flows with respect to climate change.

While the precise scope of Article 2.1(c) is still under discussion within the UNFCCC framework, attempts to implement it are underway simultaneously. The implications of this for developing countries warrants further scrutiny. This paper highlights the key themes to watch in this regard.

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