GLOBAL STOCKTAKE

THE GLOBAL STOCKTAKE: AN OPPORTUNITY FOR AMBITION

Climate Finance Landscape Analysis: Themes and Trends

February 2022

The Center for Climate and Energy Solutions (C2ES) is working closely with the Environmental Defense Fund (EDF) on a project to help shape the Paris Agreement's global stocktake (GST) process, including by ensuring a strong focus on opportunities to scale up climate ambition. We have developed three landscape analyses,[1] or surveys, of promising opportunities that could provide substantial, near-term scalable enhanced climate action and support in the context of the Paris Agreement's long-term goals.

These landscape analyses are not intended to be comprehensive, but rather provide a snapshot of key opportunities and could serve as a basis for further work. They also address the draft cross-cutting guiding questions posed by the Subsidiary Body Chairs for the Technical Assessment component of the first GST, particularly around good practices, barriers, and challenges for enhanced action in mitigation, adaptation, and climate finance.[2]

A separate paper suggests some initial considerations relevant to how the GST could best translate the vast amount of inputs it will generate into clear signals that will ultimately be of use to decision-makers in raising climate ambition and implementing existing commitments.[3]

These considerations, together with the landscape analyses, comprise an 'opportunities framework' that may be helpful in adding further structure to information gathering and technical analysis under the GST, as well as towards generating clear outputs.

[1] "Global Stocktake: An Opportunity for Ambition," Center for Climate and Energy Solutions (C2ES), last modified February 28, 2022, https://www.c2es.org/content/global-stocktake-an-opportunity-for-ambition.

[2] See *Guiding questions by the SB Chairs for the Technical Assessment component of the first Global Stocktake*, paras 21–22, updated February 16, 2022, https://unfccc.int/sites/default/files/resource/Draft%20GST1_TA%20Guiding%20Questions.pdf.

[3] See *Distilling Critical Signals from the Global Stocktake* (Center for Climate and Energy Solutions, February 2022: Arlington, VA), www.c2es.org/document/distilling-critical-signals-from-the-global-stocktake.

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Introduction

The finance goal under the Paris Agreement aims to make “finance flows consistent with a pathway toward low greenhouse gas emissions and climate-resilient development” (Article 2.1c). The global stocktake will track collective progress toward this goal, including assessing the commitments made by developed countries to support developing countries in their climate action.

The modalities of the GST adopted at COP 24 identified the biennial assessment and overview of climate finance flows as a formal input into the global stocktake.

The GST will also consider aggregate information on the finance flows, “including the information referred to in Article 2, paragraph 1(c), and means of implementation and support and mobilization and provision of support, including the information referred to in Article 9, paragraphs 4 and 6, Article 10, paragraph 6, Article 11, paragraph 3, and Article 13, in particular paragraphs 9 and 10, of the Paris Agreement.”[1] Progress toward the commitment by developed countries that at least $100 billion per year be mobilized from public and private sources is likely to be a part of this assessment. A new finance goal is to be set for the post-2025 period.[2]

Decision 19/CMA.1, paragraph 36(d) states that the stocktake should consider information at a collective level related to Article 9.4, which states that that provision of climate finance should aim to achieve a balance between adaptation and mitigation, taking into account the priorities of developing country Parties, particularly those most vulnerable to the impacts of climate change, such as the Least Developed Countries (LDCs) and Small Island Developing States (SIDs).

Decision 19/CMA.1, paragraph 36(d) also refers to information referenced in Article 13, paragraphs 9 and 10, which relate to transparency of support. Article 13, paragraph 9 speaks to the provision of information from developed country Parties to the UNFCCC on financial, technology transfer, and capacity-building support provided to developing country Parties.

Article 14 of the Paris Agreement states that the global stocktake shall inform Parties in updating and enhancing their support.

This paper is a concise overview of selected main actors and initiatives addressing climate finance flows as well as suggested emerging themes and trends. It is a snapshot intended to stimulate discussion. The high-level approach taken in this paper is to take a step back and suggest **overarching themes and trends** in climate finance. The idea is to lay the ground for identifying opportunities for raising ambition, within and outside the climate regime.

Part I: Executive Summary

1. Raising ambition with regard to climate finance has **two aspects**: The first aspect is raising ambition *for* finance. However, more climate finance is not an end in itself, but an enabler for mitigation and adaptation. The second aspect is therefore raising ambition *through* climate finance to increase mitigation and adaptation

2. The **highest urgency** could be making the **post-COVID economic recovery** programs consistent with climate and sustainability goals
   - Ensure G20 Action Plan is green
   - Commitment or other policy signal in climate regime, e.g. at COP26, to climate-proof recovery programs

3. Divestment and sustainable investment
   - Generally, divesting and re-directing finance away from fossil fuels is a priority. Apply "just transition" concept also for phasing out fossil fuel subsidies.
   - Seek synergies between climate finance and sustainable finance in general
   - Create and improve enabling environments for climate and sustainable finance: Need for public policies and regulatory frameworks to ensure clarity and transparency and prevent greenwashing with regard to sustainable finance.
   - Adequate degree of international coordination: It has been argued that the "climate finance system today is cluttered and fragmented; many similar initiatives can address an issue, with each having their own criteria, requirements and process."[3] On that basis, aiming for a harmonized or centralized "system" could be understandable. However, it needs to be asked, for instance, whether there actually is a climate finance "*system*" and whether there is a single authority or forum that could reorganize this whole "architecture."

4. Measuring and tracking finance flows:
   - Distinguish tracking overall flows from tracking flows counting for the $100bn commitment.
   - Consider detaching question of $100bn achievement from seeking definition of climate finance.
   - Assess data needs and facilitate availability and exchange of data; there is a need to better track private finance flows.
5. Political leadership and the climate regime
   - There is no single institution or forum that addresses all aspects of climate finance in an overarching manner.
   - The multitude of so many initiatives is a positive sign, but it is difficult to sort the wheat from the chaff and assess actual impact.

- While there is no single leading actor or group, the G20 remain highly relevant.
- With regard to the bigger picture of climate finance more broadly, the climate regime is not leading, it is trailing. Although it does not have the power to change the global financial system, it has the opportunity to provide political leadership.

6. The ratio between finance for mitigation and adaptation continues to be an important issue. Increase finance for adaptation while considering how to look at them together.

7. Debt constraints limit the ability of countries concerned to implement the climate transformation. Develop common understanding of debt sustainability and debt transparency and consider debt relief and other measures.

8. Carbon border adjustment mechanisms (CBAM) are back on the global agenda. Aim at political consensus (as far as possible) on CBAM in order to decrease the risk of WTO disputes and the resulting uncertainty for business.

Part II: Context

*It is important to recognize that with regard to climate finance, **raising ambition has two levels:** Finance is not an end in itself. It is an enabler for mitigation and adaptation.*

The first aspect of raising ambition therefore relates to raising ambition *for* climate finance, mainly how much is provided, mobilized, invested etc. toward climate purposes.

The second aspect, raising ambition *through* climate finance, is about to what extent climate finance has an impact and actually increases mitigation and adaptation.

The GST Process

Alongside its binding obligation for each Party to maintain and implement a nationally determined contribution (NDC), the Paris Agreement establishes two essential mechanisms. The first is an **enhanced transparency framework requiring all parties to regularly report on their GHGs and on the implementation and achievement of their NDCs**, subject to two layers of international review. This system provides some measure of accountability and—to the degree that it demonstrates that countries are fulfilling their commitments—can strengthen collective confidence to do more. The second essential feature is a global stocktake (**GST) process in which, every five years, countries assess collective progress toward the agreement's long-term goals, considering mitigation, adaptation and finance, as well as equity and the best available science**. Each country, informed by this periodic stocktake, is then to submit an updated NDC reflecting a "progression" beyond its current NDC and "its highest possible ambition." This combination of GST and NDC updating is known as the "ambition cycle." Properly executed, the GST process can provide the critical foundation for a regular series of high-level political moments that progressively ratchet up climate ambition.

Although the GST is, formally, a process among countries, it will be taking place within an evolving climate regime in which non-state actors play an increasingly prominent role. Traditionally relegated to the role of observers, NGOs, companies, subnational governments and other non-Party stakeholders have been afforded greater opportunity in recent years to engage more directly in UNFCCC processes, through the Marrakech Partnership on Global Climate Action facilitated by the UNFCCC High Level Champions and the Technical Examination Process.[4] The GST's modalities explicitly provide for "participation" by non-Party stakeholders, including through an invitation for them to provide submissions, thereby opening the way for them to exert a stronger presence in the negotiations and subsequent country action. Moreover, the GST is now widely accepted even beyond the UNFCCC process by a wide range of actors, who will also be working to enhance action alongside Parties and non-Party stakeholders that formally participate in the GST process.

The GST is widely understood as an exercise in assessing action to-date against the Paris Agreement's long-term goals. However, in designing the GST, countries put strong emphasis on identifying “opportunities for enhanced action and support,” a clear recognition that the goal of higher ambition will be best served by highlighting both urgency and opportunity. The success of the GST depends on adequate attention to both dimensions and an emphasis on near-term scalable action. The GST provides an opportunity to refocus global efforts on the actions and opportunities that can be scaled to achieve long-term goals, including by identifying clear strategies for enhancing or increasing international climate finance. Indeed, there is already a large body of work that analyses these opportunities that could be immeasurably useful for inputting into the GST process.

The next section of this paper provides a compilation of that work.

Part III: Interventions

There are many initiatives and fora relating to climate finance, and they can involve public as well as private actors. The purpose of the following list of initiatives is to show their diversity in terms of e.g. objective, scope, actors and organizational structure. The list is for the most part descriptive and does not claim to be comprehensive or complete. The examples are presented in chronological order.

There are many interlinkages between these initiatives, with overlapping initiators, participants, objectives and commitments. They are presented here based on criteria such as political weight and visibility (e.g. because of political involvement), and financial clout (e.g. when pension funds or investors are involved who direct substantial amounts of finance). Some initiatives are mentioned as part of the work of actors in Appendix 2

This section clusters observations from Appendix 2 into trends and themes. It is a mixture of descriptive clustering and assessing what appears to be "relevant" themes. In accordance with the terms of this study, the suggested themes and trends are not confined to what could be directly relevant for the global stocktake (GST).

Measuring and tracking finance flows

In respect of measuring and tracking climate finance, several relevant aspects should be distinguished:

- Tracking the $100bn commitment: The $100bn commitment is a matter within the climate regime. The amount is only a relatively small part of the total climate finance needed, but it is politically important. There is no agreed methodology or body, inside or outside the climate regime, that "officially" determines whether the commitment is met. In this context, the absence of a commonly accepted definition of "climate finance" is mentioned in the literature. It is also a demand by some developing countries within the climate regime to develop and have a definition. While there are detailed reports on climate finance with a transparent methodology (e.g. by the Organisation for Economic Co-operation (OECD) and Development or Climate Policy Initiative (CPI)), they are not bound by definitions that might be politically agreed in the climate regime.
- Tracking the amount and direction of climate finance flows generally: These flows cover much more than the $100bn commitment. An initial estimate for 2019 suggests that 2019 climate finance flows will amount to $608-622 billion, representing a 6 - 8 percent increase from 2017/18 averages, but still substantially below the amounts need.[5] For the

usefulness of existing reports providing general overviews of climate finance, availability of data may be more important than the political question of "what counts" and a prescriptive definition.

- Providing a policy signal that improves market clarity, for instance by defining taxonomies: Although taxonomies are in a sense "definitions" of e.g. what qualifies as "sustainable finance", this aspect is different from tracking flows and political commitments such as the $100bn commitment. The purpose of such policy signals is mainly to make finance flows climate-consistent or direct them toward sustainable finance in a broader sense. This aspect is addressed in the section on sustainable investments.

Solution #1: Definition of climate finance

Description

- Distinguish tracking overall flows (about $600 billion in 2019 according to CPI) from tracking flows counting for $100bn.
- Consider detaching question of whether $100bn commitment is met from seeking definition of climate finance.

Key geographies

- Global

Key actions and policies

- Assess the actual added value of seeking a definition of climate finance within the climate regime and whether the purpose of a definition is clear.

Influential actors (i.e. initiatives, coalitions, and organizations, key geographies)

- States in climate regime
- Standing Committee on Finance Biennial Assessment
- OECD - key report [6]
- CPI - key report[7] and finance tracker[8]
- Independent Expert Group 2020[9]
- Oxfam[10]

Policy and other barriers

- A definition is not a matter of natural science; it involves (at least partly) political and other choices and preferences

- The purpose of establishing "trust" is a political one. Since the $100bn commitment is part of the climate regime, the definition would have to be negotiated with that regime, which is very difficult. Most demands in literature for a definition overlook the cons of trying to negotiate a definition, which could weigh heavier than living with the current uncertainties.[11]

Solution #2: Improve availability of data to inform policy	Influential actors
Description • Assess data needs and facilitate availability and exchange of data, in order to better understand. opportunities and challenges such as distributional aspects. **Key geographies** • Data at national level, aggregation to global picture **Key actions and policies** • Assess data needs and facilitate availability and exchange of data.[12]	• OECD[13] • Multilateral Development Banks • Institutions such as CPI[14] • National statistics agencies **Policy and other barriers** • Availability of data at national level varies.

Post-Covid recovery programs

There is widespread agreement that the vast amounts of finance invested through post-recovery programs are a huge opportunity to make "green" investments.[15] Conversely, there is a risk that the recovery funding goes in the other direction and results in long-term and irreversible climate-harmful impacts. Several analyses have pointed out that only a small fraction of recovery spending so far can be considered green, and the vast majority of green spending has come from a small set of high-income nations.[16] Despite the pandemic, according to the International Energy Agency global carbon dioxide emissions in December 2020 were actually 2 percent higher than they had been in December 2019. The International Energy Agency suggests that this development was driven by global economic recovery and lack of clean energy policies.[17]	
Solution #1: Ensure G20 Action Plan “Supporting the Global Economy Through the COVID-19 Pandemic?" is green	**Influential actors** • G20 • The EU "Green Deal" is a potential example

Description • UN Environment Programme (UNEP): "the greatest opportunity in decades"[18] **Key geographies** • Global • G20 and states with substantial recovery packages **Key actions and policies** • G20 to revise and follow-up on Action Plan • UNEP lists five major green investment opportunities to be prioritized ("in 2021"): – green energy, – green transport, – green building upgrades & energy efficiency, – natural capital, and – green research and development	• States, e.g. Japan, hosted an online ministerial meeting on sustainable recovery in September 2012 and established the "Redesign 2020" online platform. The platform is an invitation to governments to showcase information on their policies and actions to achieve a sustainable and resilient recovery from COVID-19[19] • UNEP • IMF policy tracker[20] • OECD policy tracker[21] • "Several international institutions developed relevant guidelines. For instance, the World Bank,[22] International Monetary Fund (IMF),[23] the International Energy Agency (IEA),[24] and the International Renewable Energy Agency (IRENA)[25] all developed some form of recommendations for sustainable recovery programmes [sic]." **Policy and other barriers** • Focus on short-term stimuli
Solution #2: Push for additional, visible commitments or other policy signal, to climate-proof recovery programs **Description** • Public declarations are not binding and of course could be just a fig-leaf. However, they could raise public pressure • Possibly at a climate COP (not necessarily "by"), UN climate summit or at general UN level.	**Influential actors** • Parties to climate regime: COP26 **Policy and other barriers** • Focus on short-term stimuli • Competition with other potential initiatives at COP26 • Unclear whether a climate COP would be a suitable forum

Key geographies • Global **Key actions and policies** • See above.	• Added value and impact not certain

Sustainable finance and investment

Finance to address climate change is not only an issue within climate policy and the climate regime. It is also included in the overarching topic of sustainable, or "green" finance in the broader sense. The sustainable development goals (SDGs) include climate change but place it in a wider context. Implementing the SDGs also requires finance, and there are similar, if less prominent, calls for mobilizing finance flows. More specifically, following the example of the Paris Agreement, the goal of making finance flows toward consistent with overarching environmental or sustainability objectives has been taken up in other areas, e.g. biodiversity.[26] This could increase competition for finance, but it also opens opportunities for synergies and holistic approaches in mobilizing and directing sustainable finance.[27]

At the level of finance institutions, investors, companies etc., there already is a multitude of voluntary commitments and standards, in particular in large jurisdictions with developed financial markets. Sustainable investments are linked to Corporate Social Responsibility (CSR) often under the umbrella label "Environmental, Social, Governance" (ESG). The core of sometimes confusing myriad of neologisms, buzzwords, and labels is that investors increasingly base their investment decisions on criteria that include climate considerations. While climate change is recognized as a strategic priority in most financial institutions, this does not mean that finance necessarily plays an enabling role for climate investments.

There is a need for public policies and strong regulatory frameworks to ensure consistency, clarity, and transparency.[28]

- For instance, there is an apparent need and trend to have some common notions of what qualifies as "sustainable finance". Several states and the EU have defined so-called taxonomies in this regard. Global or multilateral coordination could therefore be useful, also in view of cross-border finance flows and investments.

• Since financial markets are global, a degree of international coordination seems useful in order to strengthen good practices across global markets.[29] This does not necessarily mean one authoritative global standard. The functions of such coordination would be to provide policy certainty for investors and a level playing field, and to prevent greenwashing. In addition, a "climate investment trap" for developing countries needs to be avoided when finance frameworks present barriers to accessing low-cost finance.[30]	
Solution #1: Create and improve enabling environments for climate and sustainable finance **Description** • Promote and implement climate finance as part of sustainable finance policies at national level. • Create and improve enabling environments so that the conditions for climate and sustainable finance are better than for "other" finance. **Key geographies** • G20 states • Global **Key actions and policies** • Public policies that define and create transparent and favorable conditions for climate and sustainable finance: – Taxonomies (being aware of their drawbacks) – Incorporate climate-related financial risk more strongly in decision-making – De-risking instruments – Policy clarity and certainty for investors – Prevent greenwashing[31] – Focus on transparency and follow-up, such as disclosure requirements[32]	**Influential actors** • UN SDGs[33] • G20[34] • MDBs, e.g. in the "Joint declaration of all public development banks in the world" over 450 public development banks committed inter alia to support the transformation of the economy and societies toward sustainable and resilient development"[35] • States • UN Conference on Trade and Development • IMF • Principles for Responsible Investment (PRI) • "OECD-UNDP Framework for SDG Aligned Finance.[36] • Taxonomies: ○ OECD work on taxonomies[37] ○ ISO published an international standard for sustainable investments in 2021.[38] • Transparency: "The most widely adopted standards include the Task Force on Climate-related Financial Disclosures (TCFD, climate-related reporting), CDP (climate-related

• Seek synergies between climate finance and sustainable finance in general	reporting). The TCFD is gaining popularity and has the potential to become the industry standard for climate-related risk reporting".[39] The G7 and G20 support "moving towards [sic] mandatory climate-related financial disclosures".[40] **Policy and other barriers** • Concerns about over-regulation • Concerns about (unintentionally) allowing greenwashing • Competition for funding between climate and other policy areas
Solution #2: Adequate degree of international coordination **Description** • Since financial markets are global, a degree of international coordination seems useful in order to strengthen good practices across global markets. • Policy cross-border policy clarity and certainty for investors • Provide level playing field. • Prevent greenwashing. • Avoid climate investment trap for developing countries. **Key geographies** • Global	**Influential actors** • G20 • MDBs, central banks and other international finance institutions (IFIs) • Developing countries • Potentially climate regime, but no sign so far (see section on policy leadership and article 2.1(c) of the Paris Agreement) • Multitude of coalitions and initiatives sometimes comprising diverse actors, e.g., the One Planet Summit Sovereign Wealth Fund Coalition (OPSWF) and the International Forum of Sovereign Wealth Funds (IFSWF)

Key actions and policies	Policy and other barriers
• Agree high-level global principles as needed avoid making finance conditions worse for developing countries	• Different national circumstances • Protection of sectors and markets • Concerns about over-regulation • Concerns over financial bubble[41] • Success of climate finance in some countries can worsen finance conditions for developing countries (see also section on debt constraints)

Divestment

Divestment could be regarded as the flipside of sustainable finance and investment. It could be useful to distinguish the following aspects:

- phasing out subsidies for activities that contribute to climate change, in particular for fossil fuels
- stop <u>in</u>vesting in such activities, e.g. in coal.[42] Funds flowing to fossil fuel projects still greatly outweigh finance for clean energy[43]
- <u>di</u>vesting, i.e., actively withdrawing investments already made (e.g., changing portfolios)

There are a substantial number of pledges and commitments to decrease fossil fuel subsidies, from states to sovereign wealth funds, pension funds, and companies. Back in 2009, G20 leaders first committed to rationalize and phase out over the medium term of inefficient subsidies that encourage wasteful consumption during the Pittsburgh Summit. Most recently, they reiterated their commitment during the Riyadh Summit in November 2020.[44] The commitment is not comprehensive, as it is limited to *inefficient* fossil fuel subsidies that *encourage wasteful consumption*. Similarly, in 2016, G7 leaders pledged for the first time to end fossil fuel subsidies by 2025 – a pledge also limited to inefficient fossil fuel subsidies that encourage wasteful consumption. They reaffirmed their commitment during the G7 summit in Carbis Bay in June 2021.[45] The phase-out of fossil fuel subsidies has also been integrated into the 2030 Agenda for Sustainable Development via SDG target 12.c. Similar to the G7 and G20 pledges, it aims at the rationalization of inefficient fossil-fuel subsidies that encourage wasteful consumption. However, the target allows flexibility for developing countries and mentions restructuring taxation as a specific example. UNEP functions as custodian agency for the corresponding SDG indicator

12.c.1 and has developed a methodology for measuring fossil fuel subsidies in the context of the SDGs in 2019.[46] Data collection from UN member countries started in 2020.

Various international organizations monitor and estimate fossil fuel subsidies of countries on a continuous basis, among them OECD, IEA, and IMF as intergovernmental organizations and international think tank International Institute for Sustainable Development (IISD). The data provided is not comparable as methodologies for estimation and the definition of subsidies differ. As it is binding for WTO member countries, many organizations use the definition in Article 1 of the Agreement on Subsidies and Countervailing Measures (ASCM).[47] Accordingly, financial contributions by a government or public body and, beyond that, any form of income or price support, are covered. The OECD uses a broader approach for its inventory and looks at support measures, which include direct budgetary transfers and tax expenditures.[48] Up to now, there is no universally applied definition for what constitutes an *ineffective* subsidy.

However, despite pledges and commitments, so far fossil fuel subsidies are not decreasing steadily or sufficiently. For example, IEA and OECD reported in 2019 that after a downward trend in fossil fuel subsidies across G20 countries from 2013 to 2016, the trend was reversed with an increase of 5 percent in 2017 compared to 2016.[49] The G20 scorecard published by IISD together with ODI and Oil Exchange in 2020 found that the “G20 support to fossil fuels dropped by 9 percent in absolute USD terms between the 2014–2016 average and the 2017–2019 average.”[50] The scorecard, however, also shows that this overall drop “was not based on a consistent decline across G20 countries over time: seven of the G20 countries increased their support over the period, including Australia, Canada, China, France, India, Russia, and South Africa.”[51]

There is also no consistent approach within the European Union. Under Regulation (EU) 2018/199 on Governance of the Energy Union and Climate Action, Member States are required to report on their fossil fuel subsidies and their plans to phase out of them as part of their National Energy and Climate Plans (NECPs). In October 2020, the European Commission published a report on the State of the Energy Union under the Governance Regulation. It found that the overall amount of fossil fuel subsidies continued to increase slightly despite of positive developments – in absolute numbers by 6 percent from 2015 to 2018.[52]

For some years, international development banks have been phasing out of fossil fuel subsidies. When launching its new climate strategy and energy lending policy in November 2019, EIA committed to end financing fossil fuel energy projects from the end of 2021.[53] The World Bank and the Asian Development bank are heading in the same direction. In June 2021, the World Bank released its new Climate Action Plan 2021-2025. The funding priorities listed for the energy sector show that the World Bank will phase out support to fossil fuel activities but will still give priority to access to energy in lower-income countries.[54] The World Bank will also continue to provide support to energy subsidy reforms via its Energy Subsidy Reform Facility.[55] The Asian Development Bank (ADB) published its draft energy policy in May 2021. It is an update from the current 2009 energy policy and will, after consultation, be submitted to the board for consideration in September or October 2021.[56] The draft lists fossil fuel activities which the ADB will stop funding, e.g., coal mining, new coal-fired capacity for power, and head generation.[57]

Other high-profile developments include:

- In January 2020, BlackRock announced in its annual letter to CEO that it will align its portfolios with the Paris Agreement and will provide for a fossil fuel screen for investment products.[58]
- In May 2021, Exxon lost at least two board seats to activist hedge fund *Engine No. 1*[59] in a shareholder vote.[60] Engine No. 1 engages in efforts to "Reenergize Exxon."[61]

There also are less prominent, but potentially important opportunities. Currently, parties are negotiating reforms to the EU Energy Charter Treaty (ECT). For the fourth negotiation round in March 2021, the EU proposed changes to the ECT that would push for a phase-out of fossil fuel protection from 2030.[62] Negotiations continued in June and July 2021.[63]

Solution #1: Increase pressure on key actors to follow up on and implement their general pledges

Description

- Strengthen monitoring, e.g., by UNEP or NGOs, and increase transparency
- Increase public pressure on governments
- Increase awareness amongst and public pressure on large investors
- Potentially: setting targets

Key geographies

- Global

Key actions and policies

- Flipside of policies that encourage sustainable finance:
  - Push for more concrete overarching policy commitments from states, e.g. G20.

Influential actors

- States, e.g., Denmark, Costa Rica, seek alliance to speed up the end of oil and gas; expected launch of the Beyond Oil & Gas Alliance at COP26[64]
- Large investors, all MDBs and IFIs
- UNEP as custodian agency for the SDG indicator 12.c.1 "Amount of fossil-fuel subsidies per unit of GDP (production and consumption) and as a proportion of total national expenditure on fossil fuels."[65] The report presents a methodology to measure fossil fuel subsidies.
- EIA
- IISD (think tank)
- Public opinion

– Support specific opportunities such as adopting the ADB's energy policy or changes to the Energy Charter Treaty. • Strengthen monitoring and increase transparency. • Policies on incorporating climate risk into decision-making (e.g., recent trends in climate litigation)	**Policy and other barriers** • Political clout of vested interests • Societal, political, and economic challenges of "just transition" • Lack of clarity over what are "inefficient" subsidies
Solution #2: Apply "just transition" concept also for phasing out fossil fuel subsidies **Description** • Devise policies that take into account fiscal costs and distributional effects, not least in order to avoid political backlash **Key geographies** • States • Global exchange of knowledge and coordination as needed[66] **Key actions and policies** • Anticipate and mitigate distributional impacts of phasing out fossil fuel subsidies and carbon pricing, e.g., by redirecting the resources for subsidies toward low-carbon energy[67] • Increase public awareness and acceptance through modern forms of citizen engagement	**Influential actors** • States: concept acknowledged in Paris Agreement preamble; G7 recognize the concept.[68] • Input from institutions such as OECD[69] and other think tanks[70] **Policy and other barriers** • Societal, political, and economic challenges of “just transition”[71]

Political leadership

Today there is a plethora of public and private actors which individually or in various collective groupings and initiatives commit to shift finance flows toward climate-friendly or generally sustainable development. There is no single leading actor or group.

The G20 remains highly relevant simply because of its mere existence as a group of the largest economies and the highest finance volume. This is not to say that the G20 is always providing leadership or mostly successful.

The climate regime is not leading, it is trailing. Article 2.1(c) of the PA is ground-breaking but has changed very little so far within the climate regime. Compared to the general consensus on the importance of directing finance flows toward the climate goals, this goal of the Paris Agreement is severely "under-discussed" in the climate regime.[72] Outside the climate regime, actors such as the AOA, a group of institutional investors, explicitly refer to article 2.1(c) of the PA.[73]

With regard to the traditional climate finance within the climate regime, institutional issues are often really about how much control the parties to the climate regime have over accessing climate finance and directing what it is used for. There is an element of donor and recipient preferences, prestige and politics, as well as competition with regard to which channels are used to provide climate finance. The World Bank Group claims to be the biggest provider. At the same time, the Green Climate Fund's envisaged scale is explicitly envisaged 'to evolve over time and become the main global fund for climate change finance.'[74]

<table>
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<td>Solution #1: Political leadership by the climate regime

Description

• There is an opportunity for the climate regime to provide political leadership beyond focusing on the $100bn commitment. That leadership does not have to be on the technical aspects of climate finance. It could be sending signals about acknowledging the public sector's role in creating favorable conditions for climate finance and achieving Article 2.1I.
• The potential impact of sending credible policy 'signals' should not be underestimated, as it can well influence</td>
<td>Influential actors

• CMA (i.e., the COP of the Paris Agreement)
• The Marrakesh Partnership for Global Climate Action has published a finance action vision and a detailed action table with milestones.[77]
• Standing Committee on Finance has picked up on the Paris Agreement and provides information related to Article 2.1(c) in its Biennial Assessment
• COP26 presidency is currently very active, also on finance, but it remains to be seen where this is going and to what extent this will bring about leadership by the climate regime.</td>
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</table>

investment strategies and have significant real-world impacts[75] **Key geographies** • Global **Key actions and policies** Climate regime, preferably the CMA, to: • Start discussing what climate regime and parties can do to achieve the goal of Article 2.1(c). • Acknowledge the public sector's role in creating favorable conditions for climate finance and achieving Article 2.1(c). • Make progress toward Article 2.1(c) part of the global stocktake. • Consider and the Marrakesh Partnership's finance action vision and action table. • Potentially, set measurable interim targets to shift finance and investment onto a long-term path[76]	**Policy and other barriers** • The wider picture of finance flows and Article 2.1(c) is currently severely "under-discussed" in the climate regime. "Paris-aligned finance"[78] appears to be regarded by some as something separate from, or even threatening to, classic climate finance from developed to developing countries under Article 9 of the PA. Concerns appear to be whether addressing article 2.1(c) might detract from the $100bn commitment and public flows. • Since legally speaking, the climate regime addresses states, the real-world impact of addressing Article 2.1(c) in the climate negotiations is indirect, i.e., through the Parties that in turn address these actors. For parties, action under Article 2.1© is mainly about setting policies.[79] • It is unclear whether and in which form it would be useful to improve involvement of actors such as central banks and investors etc. in climate regime (e.g., Marrakesh Partnership), and whether they would want to be involved.
Solution #2: G20 remains highly relevant **Description** • G20 remains highly relevant for setting example and providing political guidance **Key geographies** • Global	**Influential actors** • G20 **Policy and other barriers** • Disconnect between G20 and climate regime • Credibility of G20; ability and willingness of members to follow through and implement

Key actions and policies • Setting political goals • High-level coordination of regulatory approaches to finance flows • Fossil fuel subsidies (see Divestment section)	

Distributional and other issues

The ratio between finance for mitigation and adaptation continues to be an important issue, not least politically and with regard to the livelihood of many people. Even if some may question the plausibility or usefulness of that distinction, adaptation action is significantly underfunded.[80] Private finance in particular does not easily go into adaptation. However, UNEP's Adaptation Gap Report and CPI note positive developments, for instance, that the Green Climate Fund (GCF) has allocated 40 percent of its total portfolio to adaptation and is increasingly crowding-in private sector investment.[81] After having been widely discussed some years ago, so-called carbon border adjustment mechanisms (CBAMs) are back on the global agenda as part of the EU's Green Deal. In most countries, import tariffs and non-tariff barriers are substantially lower on relatively more carboin dioxide intensive industries, which creates an implicit subsidy.[82] CBAM are part of addressing cross-border carbon pricing and creating a level playing field with regard to implicit carbon subsidies.[83] They can be effective and are high-profile measures politically.[84] Empirically, there is little evidence of carbon leakage, but it could be important in the future with more stringent climate policies.[85] Debt constraints restrict spending in emerging market and developing economies, in particular following the pandemic. Costs and risks of financing are high, which is a barrier to finance flows going into these countries and instead elsewhere. This limits the ability of countries concerned to implement the climate transformation.	
Solution #1: Further increase finance for adaptation while considering how to look at them together **Description** • Further develop instruments that make climate finance for adaptation more attractive.	**Influential actors** • States through their bilateral finance • MDBs and IFIs • Climate regime • GCF already aims at balance between mitigation and adaptation

Key geographies • Global • Bilateral **Key actions and policies** • Climate regime continues to address issue and provide guidance within its mandate; while considering whether it is possible to move away from a strict distinction and numbers approach • States and finance institutions further develop and promote instruments that make climate finance for adaptation more attractive	**Policy and other barriers** • difficulty for adaptation to attract private finance • difficulties in separating mitigation and adaptation in real life as well as for measuring and tracking purposes • There is a push in the climate regime to address "Loss and Damage" as a third category besides mitigation and adaptation.
Solution #2: Address debt constraints of developing countries in implementing the transformation **Description** • Creditors to consider debt relief for countries that have relevant debt constraints **Key geographies** • Global • Bilateral **Key actions and policies** • Develop common understanding of debt sustainability and debt transparency	**Influential actors** • G20 • Developing countries • Creditors • MDBs **Policy and other barriers** • Fiscal concerns of creditors • Criteria for relevant debt constraints

• Consider concessional finance while keeping in mind the increasing debt, as well as the criticism that too little climate finance is grants[86] [87] • G20 to follow up on its statement that "We support a time-bound suspension of debt service payments for the poorest countries that request forbearance."[88] • Debt for nature swaps have shortcomings but could be considered. They do not have to be used as a conditionality but could be used as a reward for additional climate measures.[89] However, the limits of this instrument need to be considered. For instance, the major emitter China holds a major share of developing countries' bilateral debt and would therefore appear to be less susceptible to this particular incentive. Moreover, where the creditors are private rather than public actors, it is more difficult to see the rationale for them foregoing on their claims.	
Solution #3: Build political consensus on compatibility of CBAM **Description** • Building political consensus (as far as possible) on CBAM could decrease the risk of WTO disputes and the resulting uncertainty for business. **Key geographies** • Global	**Influential actors** • WTO, WTO Member States • EU **Policy and other barriers** • Concerns about free trade and disguised protectionism • Uncertainty about WTO-compatibility • In contrast to other environmental areas, the climate regime has stayed away from addressing trade measures, which contributes to uncertainty about WTO compatibility.

Key actions and policies • Ideally, some form of understanding between key actors, about conditions for CBAM that could avoid trade disputes under the WTO.	

Appendices:

Appendix I: Rationale/organizing principles

It is important to distinguish **different uses of the term “climate finance:”**

- In the more narrow, traditional sense of the climate negotiations, climate finance includes the financial support provided by developed countries to developing countries, based on their obligations in the UNFCCC and the Paris Agreement, to support mitigation and adaptation action. This climate finance is provided through various forms and channels, including through bilateral development assistance and multilateral institutions such as multilateral development banks.

- Climate finance in the broader sense includes this and much more. For instance, it covers public finance that is not provided to developing countries, but invested domestically for climate-related purposes. It also includes private finance invested, e.g., by households or investors. An initial estimate suggests that 2019 climate finance flows in this broader sense will amount to $608-622 billion, representing a 6 – 8 percent increase from 2017/18 averages, but still substantially below the amounts needed.[90]

The important political commitment by developing countries to jointly mobilize $100bn per year by 2020 includes both traditional public climate finance "provided" to developing countries, as well as private finance insofar as it is "mobilized" by developed countries, i.e. finance that is in some way attributable to developed countries and is therefore accounted for as their effort.

We use the term **"climate finance" in the broad sense**, including public, private, and other sources of financing.

The updates of some key reports are currently in drafting and are due to come out shortly after this paper, notably Climate Policy Initiative's landscape of climate finance reports, the Organisation for Economic Co-operation and Development (OECD) report on climate finance provided and mobilized; the Standing Committee on Finance’s (SCF) Biennial Assessment and the IPCC AR6 chapter on climate finance. They will provided updated numbers, data, and statements.

We use the following terms:

- "Climate finance:" Without prejudice to the discussion on definitions and terminology, we use the term 'climate finance' in a broad sense, as outlined above, including public, private, and other sources of financing.[91]

- "Climate regime:" The 1992 United Nations Framework Convention (UNFCCC), its 1997 Kyoto Protocol and the 2015 Paris Agreement, each of which is a separate treaty, and which together form the climate regime.
- "Countries" and "states" includes EU unless otherwise stated.
- "Adaptation" includes "loss and damage" unless otherwise stated.
- In line with the Paris Agreement, this paper uses the terms "developed" and "developing countries" which, although not defined, the Paris Agreement uses instead of the UNFCCC's references to Annex I and Annex II.

Appendix II: List of actors/initiatives

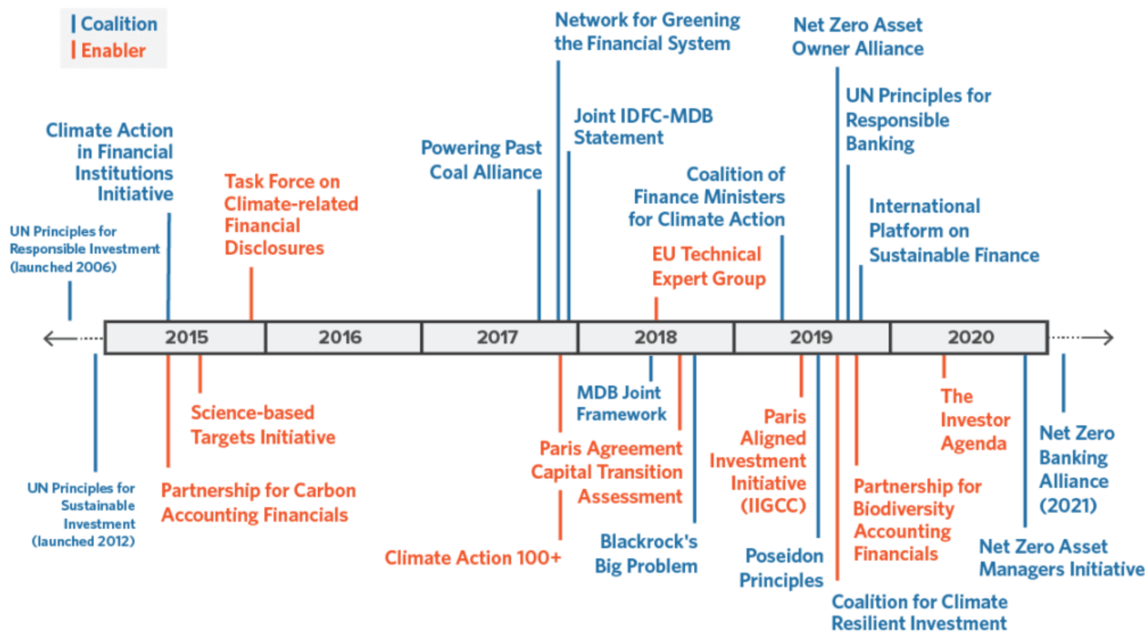
*The following overview of actors is a **snapshot of mainly the climate regime and international and state-based institutions** that address climate finance. In addition, there is a multitude of investors and companies that individually, collectively, or cumulatively control substantial amounts of finance. The same goes for civil society organizations. They are too numerous to list, and many are part of the initiatives described in the subsequent section on initiatives.*

The role of finance flows and the financial system in addressing climate change is not a new topic. It has been discussed for long time, for instance:

- As early as 1992, UNEP launched the Statement of Commitment by Financial Institutions on Sustainable Development, in the wake of the Rio Earth Summit in 1992;[92]
- the 2007 "Investment and financial flows to address climate change" report by UNFCCC Secretariat, and its 2009 update;[93]
- the 2010 High-level Advisory Group AGF Report, on investment;[94]
- the 2014 The New Climate Economy Report;[95]
- the 2018 High-Level Expert Group (HLEG) on Sustainable Finance final report was the basis for the EU's action plan on sustainable finance.[96]

Today, there is a multitude of public and private actors who address climate finance individually and through an increasingly complex number of initiatives.

An alternative snapshot of "coalitions and enablers" is collated by Climate Policy Initiative:



Source: Tonkonogy and Choi 2021, 2

The Climate Regime

The climate regime in the formal sense consists of three treaties: The 1992 Framework Convention on Climate Change (UNFCCC), the 1997 Kyoto Protocol (KP), and the 2015 Paris Agreement (PA). Over the years, several bodies and processes have been established under these treaties.

There are general obligations in the UNFCCC on developed countries to provide financial and other support to developing countries. Over the years they were specified through COP decisions, for instance regarding scale, sources, balance, prioritization, reporting, and institutions.[97] In 2010, developed countries committed, in the context of meaningful mitigation actions and transparency on implementation, to jointly mobilize $100bn per year by 2020 to address the needs of developing countries.[98] The amount is only a relatively small part of the total climate finance needed, but it is very important politically,[99] and also in many countries economically to support and leverage transformation in its initial phase.

The second commitment period of the KP ended on December 31, 2020, and several major emitting developed countries have indicated that, in view of the Paris Agreement, they will not enter into a third one. In addition, the KP contains few provisions on climate finance and can be mostly disregarded for the purpose of this report. However, the KP established the Clean Development Mechanism (CDM), a market mechanism which provides a backdrop for the current negotiations for the market mechanisms under Article 6 of the Paris Agreement to build on.

The 2015 Paris Agreement does not replace but instead complements the UNFCCC by referring to and incorporating existing elements.[100] The decision adopting the Paris Agreement continues the $100bn commitment through to 2025.[101] The main institutional outcome on climate finance in the Paris Agreement is that the institutions relating to finance also serve the Paris Agreement. A major success for small island states was the establishment of a permanent institution: The Warsaw International Mechanism for Loss and Damage associated with Climate Change is now anchored in the treaty text of the Paris Agreement and made a permanent institution.[102]

Main financial institutions and mechanisms in the climate regime

Recurring prominent themes in the climate regime include, besides the obvious issue of 'how much,' the channels and sources through which it climate finance is provided.[103] In this regard Article 11(5) of the UNFCCC states that climate finance may be provided 'through bilateral, regional and other multilateral channels.' The UNFCCC's institutional issues are also about how much control the parties to the climate regime have over accessing climate finance and directing what it is used for.

The UNFCCC's financial mechanism also serves the Paris Agreement. It is not a separate institution in the sense of, for instance, having staff, rules of procedure or its own budget. It is an abstraction, created to give the COP a certain degree of influence in how the 'operating entities' spend their funds.[104] The financial mechanism's operating entities are the Global Environment Facility (GEF), which an institution separate from the UNFCCC, and the Green Climate Fund (GCF), established by the UNFCCC but also a legal entity under South Korean law.

As a rule of thumb, the delineation between COP influence and the GEF and GCF in Article 11(1) is understood as the COP providing guidance for overarching 'strategic' directions but not interfering in the GEF's day-to-day operational business.[105]

The Global Environment Facility (GEF)

The GEF is the older of the two operating entities of the climate regime's financial mechanism. It is an institution separate from the UNFCCC and also serves other environmental treaties. The World Bank serves as the trustee for the GEF's funds. In the UNFCCC's practice, the GEF reports annually to the COP, and the COP, through decisions, provides guidance for the GEF to implement in its climate change focal area.

The Least Developed Countries Fund and Special Climate Change Fund

The Special Climate Change Fund and the Least Developed Countries Fund were established in 2001 by the COP to the UNFCCC.[106] Both are essentially funds of voluntary contributions by countries, managed separately by the GEF under the guidance of the COP along familiar lines of the financial mechanism.[107] They are comparatively small and have not raised relevant issues.

The Adaptation Fund

The Adaptation Fund was established under the KP and today also serves the Paris Agreement. In contrast to the GEF and GCF, the Adaptation Fund is not merely subject to strategic guidance of KP Parties, but is under its full 'authority.' Developing countries have a structural majority on its governing board, which is elected by KP Parties. The Adaptation Fund furthermore provides for 'direct access,' which means that not only multilateral institutions, but also other accredited national entities are eligible to receive funds directly from the Adaptation Fund to implement projects. In return, developed countries embedded in the governance structure that the Adaptation Fund has to abide by international fiduciary standards and independent monitoring, evaluation and financial audits.

The Adaptation Fund was supposed to be funded by a share of proceeds from the carbon credits generated under the CDM. Since their monetary value depends on the carbon market, the Adaptation Fund became the first development fund financed by a market-based mechanism.[108] However, the market in carbon credits under the KP, and therefore the revenue from the share of proceeds, did not develop as expected and the Adaptation Fund has had to rely on voluntary contributions for some years now.[109]

The Green Climate Fund (GCF)

In 2010 the COP decided to establish as the 'Green Climate Fund' along some key parameters.[110] Setting up the GCF on the basis of these parameters took several years and COPs. The relationship between the COP and the GCF is set out in 'arrangements' between them that are similar to how the GEF serves the climate regime. Similar to the GEF, the GCF is a second operating entity of the finance mechanism governed by Article 11 of the UNFCCC, and the COP confines itself to strategic guidance. In contrast to the GEF, the GCF exclusively serves the climate regime. The GCF is funded mainly by contributions from developed countries committed in periodic formal replenishment rounds,[111] while it also allows for financial inputs 'from a variety of other sources.'[112] Following the ground-breaking model of the Adaptation Fund, the GCF also has a direct access modality. An important difference to all existing funds is the GCF's envisaged scale, which is explicitly envisaged 'to evolve over time and become the main global fund for climate change finance.'[113] The first formal replenishment round in October 2019 raised $10 billion. It should be noted that several developing countries also contribute to the GCF.[114]

A key innovative feature of the GCF is its explicit objective to 'promote the paradigm shift toward low-emission and climate-resilient development pathways.'[115] The private sector facility is another innovation. It seeks to mobilize at large scale private funding flows from international, regional, and local commercial banks and institutional investors.[116]

The Standing Committee on Finance (SCF)

In 2010 the COP also established the Standing Committee on Finance (SCF) with the mandate to 'assist' the COP in exercising its authority with respect to the financial mechanism. The original outline of functions includes improving coherence and coordination in the delivery of climate change financing, rationalization of the financial mechanism, mobilization of financial resources and measurement, reporting and verification of support provided to developing country parties.[117] The SCF is composed of 20 experts, half of which nominated by developed and the other half by developing countries. Its role is advisory, as it prepares reports and makes recommendations to the COP.[118] Examples of its work include the Biennial Assessment and Overview of Climate Finance Flows and preparing draft guidance to the operating entities of the financial mechanism.

As a dedicated expert body for climate finance, the SCF is an innovative step. Given the role of finance within this particular legal regime, having finance experts prepare input for the UNFCCC could make sense. However, in practice the SCF does not always reach its potential. For instance, since in practice the SCF members are for the most part the finance negotiators from the COPs,[119] there is a risk that instead of technical expert advice, the politics from the climate negotiations is carried into the SCF.

High-level Ministerial Dialogue on Climate Finance (HLMD)

In 2013, COP19 in Warsaw decided to convene biennial high-level ministerial dialogues on climate finance starting in 2014.[120] The fourth and last Dialogue was scheduled for COP26 in November 2021. These dialogues are an interesting attempt to link the technical work and inputs relating to climate finance to the political level.[121] Usually the high-level segment at the end of a COP, which is supposed to resolve remaining political issues, includes representatives normally from the environment, energy, foreign, etc. ministries, but not from finance. The dialogues are semi-institutionalized in that they are a scheduled series meetings with a thematic focus, but not a permanent body.

Reporting

The reporting rules under the Paris Agreement (the "enhanced transparency framework") contains rules for developed and developing countries regarding what and how to report on finance provided and mobilized as well as needed and received.

Ex ante information on climate finance is also important: Under Article 9(5) PA, developed country Parties have to biennially provide ex ante information. This new obligation is related to the predictability of financial support and includes, as available, projected levels of public financial resources to be provided to developing country parties.

However, there is virtually nothing on reporting on wider aspects of climate flows (see SCF).

Article 2.1(c) of the Paris Agreement

The UNFCCC's Executive Director had already in 2007 published a report that attempted to widen the focus from climate finance in the narrow sense to a broader perspective.[122] This was not, however, addressed in the climate regime until the 2015 Paris Agreement.[123] Article 2.1(c) of the Paris Agreement introduces a broader perspective into the climate regime than the previous focus on how much climate finance developed countries provide to developing countries. It states that the aim of the Paris Agreement includes 'making finance flows consistent with a pathway toward low greenhouse gas emissions and climate resilient development.' This a major innovation because it establishes addressing financial flows as one of the three goals of the Paris Agreement. While being a goal in its own right, it is also an essential *means* to achieve the mitigation and adaptation goals and thereby linked to ambition in the interest of all Parties.[124]

Article 2.1(c) is ground-breaking but has changed very little so far *within* the climate regime: Compared to the general consensus on the importance of directing finance flows toward the climate goals, this goal of the Paris Agreement is severely "under-discussed" in the climate regime.[125] Up to now the climate regime has barely addressed the broader picture of what had been labelled "finance flows" long before Article 2.1(c) was made part of the PA. The "long term finance" agenda item and its associated workshops did provide a potential space for it, but did not result in the COP or CMA addressing this topic.

Currently, there is no real "home" for Article 2.1(c) in the climate regime, except for small instances:

- The basic reporting rules that have so far been adopted under the "enhanced transparency framework" do not refer to Article 2.1(c).[126] Some parties wish to include it in the more detailed rules that are currently under negotiation, mainly the common reporting tables and the outline for the Biennial Reports;
- The biennial *ex ante* communications by developing countries "should" include how support provided and mobilized assists developing countries in efforts to make finance flows consistent with a pathway toward low greenhouse gas emissions and climate-resilient development;[127]
- The sources of input for the Global Stocktake. A 2018 CMA decision determines that the sources will consider the information at the collective level on finance flows in the sense of Article 2.1(c). However, it is not clear how and to what extent this will be done.[128]
- The SCF's 2018 Biennial Assessment for the first time included information on Article 2.1(c), albeit rudimentary. In the same year COP24 formally requested the SCF "to map, every four years, the available information relevant to Article 2.1(c) as part of the Biennial Assessment.[129]

Other considerations include the formal mandate for the SCF to map information relevant to Article 2.1(c) and the mandate for the "deliberations" on the post-2025 finance goal (starting at COP26) to "consider" Article 2.1(c).

Marrakech Partnership/Global Climate Action Agenda

The Marrakech Partnership was established under the two High-Level Climate Champions who in turn were created by the 2015 UNFCCC decision that adopted the Paris Agreement.[130] The Marrakech Partnership has recently published a vision and a detailed action plan for finance.[131]

Current overarching issues, including COP26

The climate regime has so far mainly focused on the general obligation of developed countries to provide, and, since 2009, also to mobilize climate finance. The issue is whether developed countries provide climate finance to developing countries, and how much. Since 2009-2010, the $100bn commitment has been very important *politically*. The $100bn commitment is also the focus of public pressure regarding the climate regime and COP26.[132]The main focus is on how to measure this commitment and whether the sum is reached.[133] There has also been pressure for some time to increase finance for adaptation and to address finance for loss and damage, in particular at the GCF, through the Warsaw International Mechanism.[134] An important development is the United States re-joining the Paris Agreement in February 2021 and in September 2021 stating its intention to become a leader in providing public climate finance.[135]

Apart from the balance between mitigation and adaptation, so far there has been basically no attention in the climate regime to where climate finance goes and what it achieves in terms of mitigation and adaptation. Some finance-related issues have so far simply not been addressed and seem almost taboo, notably creating the favorable conditions for climate finance, for instance relating to subsidies and enabling environments.

A related new issue in this regard is the post-2025 goal: While the Paris Agreement does not contain quantified obligations regarding financial support, the accompanying COP decision of 2015 decided that the Conference of the Parties of the Paris Agreement (CMA) shall set a new quantified goal 'prior to 2025,' 'from a floor of $100 billion per year, taking into account the needs and priorities of developing countries.'[136] The mandate includes considering the wider context of finance flows in accordance with Article 2.1(c). Deliberations began at COP26 in Glasgow.

The COP26 presidency has set out specific approaches for public and private finance and expectations for COP26.[137]

Within the climate regime, it needs to be distinguished what the climate regime can do generally, and specifically what the GST can do. The climate regime has a limited number of instruments. Its main tool for influencing what states do are decisions. Their normative and political impact varies. Generally, they are not binding under international law (unless the UNFCCC, the Kyoto Protocol, or the PA so provide). However, since they are based on consensus, their political force and impact can be strong and bring about domestic action by parties. They can also provide policy signals that influence decisions by to non-state actors.

United Nations in general

The UN has several bodies and initiatives that address sustainable finance generally or climate finance specifically.[138] For instance, the Inter-agency Task Force on Financing for Development publishes a regular "Financing for Sustainable Development Report."[139]

It also hosts high-level events on climate change to maintain political momentum and raise ambition, such as the Climate Action Summit 2019 and the Climate Ambition Summit 2020. The Secretary-General has also publicly intervened with regard to the $100bn commitment.[140]

Intergovernmental Panel on Climate Change (IPCC)

The IPCC is a scientific body jointly established by the UNEP and the World Meteorological Organization in 1988 and endorsed by the UN General Assembly.[141] It is the United Nations body for assessing the science related to climate change and has 195 member countries. The IPCC is linked to the international climate regime through provisions in all three treaties and ensuing decisions. It does not conduct its own research but prepares regular and comprehensive assessment reports and special reports about the state of scientific, technical and socio-economic knowledge on climate change. The forthcoming IPCC's Sixth Assessment Report will contain a chapter on investment and finance. This contribution by Working Group III is planned to be published in 2022.[142]

United Nations Development Programme (UNDP)

UNDP, UN's development arm, launched the Climate Investment Platform in 2019, together with IRENA, Sustainable Energy for All (SE4ALL) and the Green Climate Fund.[143] Together with OECD, in 2020 UNDP launched the "Framework for SDG Aligned Finance."

United Nations Environment Programme (UNEP)

UNEP is the UN's main environmental arm, with the UN Environment Assembly (UNEA) as its highest-level decision-making body. Activities relevant to climate finance mainly address sustainable finance generally, such as several reports[144] but also the Adaptation Gap Reports.[145] UNEP’s Finance Initiative is a partnership between UNEP and the global financial sector to mobilize finance for sustainable development. Is has established or co-created frameworks such as the 2009 Principles for Responsible Investment, the 2012 Principles for Sustainable Insurance and the 2019 Principles for Responsible Banking (PRB).[146] With regard to fossil fuel subsidies, UNEP is custodian agency for SDG indicator 12.c.1.

The World Bank

The World Bank Group (WBG) claims to be the largest source of climate finance to developing countries and provides technical assistance. It lends to middle- and low-income countries, uses trust funds to complement its core funding development assistance, administers a number of financial intermediary funds related to climate change, and also implements development projects. For instance, it hosts the Climate Investment Funds (CIF) with a volume of about $4 billion.[147]

Arguably its main relevance in raising ambition is where it directs the funding and which projects it finances. The new Climate Change Action Plan 2021-2025[148] states that "key steps may include retiring coal-fired power plants, replacing fossil fuels across the economy, and removing market barriers for green technologies, while working to ensure a just transition."[149] In addition, it recognizes “strong demand from client countries for just and inclusive reforms to eliminate or reduce energy subsidies" and intends to "support policy reforms through lending operations."[150]

International Monetary Fund (IMF)

The International Monetary Fund (IMF) is an intergovernmental organization with 190 members set up to promote international financial stability and cooperation.[151] To this end, the IMF monitors the economic and financial policies of its member countries (IMF Surveillance[152]), provides loans to those member countries experiencing actual or potential balance-of-payment problems (IMF Lending[153]), and provides technical assistance and training to help countries to build better economic institutions (IMF Capacity Development[154]). Its monitoring typically involves annual visits to member countries followed by and evaluation report which is discussed (Article IV consultation).

The IMF is relevant as its macroeconomic assessments of countries also include climate and climate finance aspects. IMF launched the Climate Change Indicators Dashboard in April 2021 to respond to the growing need for data in macroeconomic and financial policy analysis to facilitate climate change mitigation and adaptation.[155] In May 2021, the IMF published its Comprehensive Surveillance Review which also re-assesses the Article IV surveillance in light climate-related risks.[156] Focus areas include green recovery, green finance and fossil fuel subsidies.[157] In 2017 the IMF, together with the World Bank, also introduced "Climate Change Policy Assessments" as a pilot, which so far has covered six small island states.[158]

The IMF also provides information about fossil fuel subsidies on its website, including suggestions to countries to reform their subsidies.[159] In addition, the IMF is monitoring fossil fuel subsidies. In 2019, the IMF published a paper “Global Fossil Fuel Subsidies Remain Large: An Update Based on Country-Level Estimates.”[160] The paper updates the estimates for 191 countries and found that China, the United States, Russia, the European Union and India were the largest subsidizers.

International Energy Agency (IEA)

The International Energy Agency is an international organization with 30 member countries and 8 association countries. Its role has shifted from addressing oil security toward global energy policy in general. In 2021, the IEA published a flagship study on how to transition to a net-zero energy system by 2050.[161] It looked at performance of renewable energy compared to fossil fuel companies. It found "a superior risk and returns profile for renewable power in both normal market conditions and amidst recent events."[162]

The IEA has also been measuring fossil-fuel subsidies for more than 10 years and integrates findings in its World Energy Outlook series. For 2020, IEA reported a 40 percent drop compared to 2019 levels:

> In 2020, the fall in fossil fuel prices and energy use brought the value of fossil fuel consumption subsidies down to a record low – the estimate of just over $180 billion is some 40% down from 2019 levels. This is the lowest annual figure since we started tracking these subsidies in 2007. Almost all countries had lower estimated subsidies year-on-year; Iran remains the single largest provider of these subsidies, although the value of the implicit support to domestic consumers fell by more than $50 billion in 2020, due to low crude prices and weak economic conditions. One of the very few categories where our subsidy estimate grew year-on-year was oil products in China (notably for residential use), reflecting a relatively rapid recovery from the pandemic. Overall, the weighted-average subsidy rate was some 10 percent - meaning that consumers receiving these subsidies paid on average around 90 percent of the competitive market reference prices for the energy products concerned.[163]

Organisation for Economic Cooperation and Development (OECD)

The Organisation for Economic Cooperation and Development (OECD) is mainly relevant as an intergovernmental think tank that engages its mostly developed member states in setting standards. For instance, in 2016 OECD established the Centre on Green Finance and Investment.[164] It also provides data sets and analysis on support for fossil fuels for member countries and other countries.[165] In March 2021, OECD published an analysis of budgetary transfers, tax breaks, and spending programs linked to the production and use of coal, oil, gas, and other petroleum products in 50 OECD, G20, and European Union Eastern Partnership (EaP) economies. The analysis builds on the comprehensive inventory of support measures for fossil fuel compiled by OECD.[166] OECD is also supporting G20 with updates on progress in fossil fuel reform, most recently with a paper in 2019.[167]

Notably, the OECD is prominent in tracking progress toward the $100bn commitment in the climate regime. The latest report was published in September 2021.[168] Although it is not officially mandated to do so, and while there are other reports, its standing and expertise in producing the report mean that the report attracts considerable public and political attention with regard to the $100bn issue.[169]

G20

G20 is relevant because it is a high-level forum that includes the world's largest economies, including both developed and developing countries. G20 member countries are important shareholders in major international financial institutions (IFIs) such as the World Bank Group or IMF and can influence IFIs' policies as well as work toward consistency of approaches between different actors. The G20 has no strong institutional framework. Leaders of the member countries meet annually to agree on common positions, the finance ministers usually meet several times per year. The group's joint political statements can have considerable global influence. However, conflicts among member countries on one policy area can hinder agreement in other fields, and they are mostly quite general and are not always followed up or implemented. Except for the G20 Action Plan (see below), the G20 does not monitor progress or compliance of its members with the guidance and commitments given via the communiqués.

G20 has discussed climate finance at various levels for years. Fossil fuel subsidies have been on its agenda since 2009. In 2009, G20 leaders first committed to rationalize and phase out over the medium term inefficient fossil fuel subsidies that encourage wasteful consumption.[170] Most recently, they reiterated their (qualified) commitment during the Riyadh Summit in November 2020: *"We reaffirm our joint commitment on medium term rationalization and phasing-out of inefficient fossil fuel subsidies that encourage wasteful consumption, while providing targeted support for the poorest."*[171] To follow up with their commitment, some G20 member countries have engaged in a voluntary peer review.[172] Despite success in some years, the drop in subsidies across G20 countries does not represent a consistent decline over time. Also, some countries started increasing their fossil fuel subsidies in recent years. The G20 scorecard on fossil fuel funding published by IISD together with ODI and OilChange is the most recent set of monitoring information.[173]

While climate change was on the agenda in November 2020, G20 leaders did not call for a climate-led recovery. They welcomed growing private sector participation and transparency in mobilizing sustainable finance and reaffirmed their commitment to fully implement the Paris Agreement.[174] Apart from that, climate change only gained limited attention.[175]

Climate finance is a focus of the G20 Finance Track, which gathers G20 Finance Ministers and Central Bank Governors (FMCBG). Some, but not all topics addressed in their communiques are picked up in the G20 Leaders' communique.[176] In April 2020, the G20 Finance Ministers and Central Bank Governors – as mandated an extraordinary G20 Leaders' Summit – endorsed the G20 Action Plan in response to the COVID-19 pandemic.[177] It lists commitments of the G20 member countries, among others a commitment to support an environmentally sustainable and inclusive recovery. The G20 FMCBG also decided that the Action Plan will be reviewed and updated regularly. The third progress report[178] and an update[179] to the plan were presented in April 2021. In July 2021, G20 finance ministers and central bank governors recognized carbon pricing as tool to shape just and orderly transitions to a low-greenhouse gas emission economy.[180]

The Finance Track also includes different groups, among them the Sustainable Finance Working Group (SFWG). The history of the SFWG goes back to 2016 when the Green Finance Study Group (GFSG) was established under China's presidency. While there is a lack of documentation, it seems that the establishment of the GFSG has not been triggered by Article 2.1(c) of the Paris Agreement and does not serve its implementation.[181] In 2018, G20 replaced the GFSG with the Sustainable Finance Study Group (SFSG), especially to widen its mandate.[182] In 2021, the Italian presidency re-established the SFSG and elevated it to a working group.[183]

The mandates and outcomes of the different groups are difficult to assess as information is spread over the different websites of the G20 presidencies – or absent. According to the website of the Italian Presidency, the SFWG's mandate is to "identify institutional and market barriers to sustainable finance and to develop options to overcome such barriers, and to contribute to a better alignment of the international financial system to the objectives of the 2030 Agenda and the Paris Agreement."[184] It aims to "to mobilize sustainable finance as a way of ensuring global growth and stability and promoting the transitions toward greener, more resilient and inclusive societies and economies."[185]

In April 2021, the G20 finance ministers and central bank governors agreed on the SFWG's work plan for 2021, which includes "developing, in a collaborative manner, an initial evidence-based and climate-focused G20 sustainable finance roadmap, improving sustainability reporting, identifying sustainable investments, and aligning International Financial Institutions' efforts with the Paris Agreement."[186] During the second meeting in June 2021, the SFWG started discussions about the climate-focused sustainable finance roadmap.[187] It will focus on specific priority areas, including climate change and its asymmetrical impact on countries, recovery from the COVID-19 crisis to give countries room to continue working on the transition to a sustainable economy.[188] The roadmap will be submitted to G20 Finance Ministers and Central Bank Governors ahead of their meeting in October 2021.

Various groups and organizations are following the G20 process with analysis and recommendations: The "Climate Transparency Report" 2020 reviews the climate policy of the G20 members, including their policies on climate finance.[189] However, it does not assess the different communiqués issued over the years for consistency or against the actual policies of its members. The Think20 (T20) follows the G20 process and has published preliminary policy recommendations of its task force on "Trade, Investment and Growth" on its website.[190]

G7

The Group of Seven (G7) comprises Canada, France, Germany, Italy, Japan, UK, and the United States and thus the world's largest economies with about one third of global GDP at just 10 percent of the world's population. Similar to the G20, the G7 is potentially relevant as a high-level political forum. Similar to the G20, the G7 is essentially a regular high-level political forum.

At its 2021 summit, the G7 "[internationally] commit to aligning official international financing with the global achievement of net zero GHG emissions no later than 2050 and for deep emissions reductions in the 2020s." They supported "moving towards mandatory climate-related financial disclosures" based on the TCFD framework, as well as synergies between finance for climate and biodiversity climate and the then imminent establishment of the Taskforce on Nature-related Financial Disclosures.[191]

The G7 also stated they would "phase out new direct government support for international carbon-intensive fossil fuel energy as soon as possible, with limited exceptions consistent with an ambitious climate neutrality pathway, the Paris Agreement, 1.5°C goal and best available science." Specifically with regard to fossil fuel subsidies, in 2016, G7 leaders pledged for the first time to end fossil fuel subsidies by 2025.[192] Most recently, this commitment was reaffirmed during the G7 summit in Carbis Bay in June 2021: "[W]e reaffirm our existing commitment to eliminating inefficient fossil fuel subsidies by 2025, and call on all countries to join us, recognizing the substantial financial resource this could unlock globally to support the transition and the need to commit to a clear timeline…"[193] Ahead of the summit, Tearfund, together with IISD and ODI, published a report on fossil fuel investments by G7 nations.[194] It has the most recent data on fossil fuel subsidies by G7 nations and criticizes, inter alia, that support for fossil fuels is still higher compared to support for clean forms of energy. Also, support to the transport sector as a response to the COVID-19 pandemic was not made conditional upon future emission reductions.

Vulnerable Twenty Group of Ministers of Finance - V20 of the Climate Vulnerable Forum

The Vulnerable Twenty Group of Ministers of Finance of the Climate Vulnerable Forum is forum of currently 48 developing countries.[195] In 2017, the V20 issued a call for G20 countries to phase out of fossil fuel subsidies by 2020:

> We call for market distorting fossil fuel production subsidies to be removed immediately and no later than 2020, and urge the G20 to set such a clear timeframe for fossil fuel subsidy elimination. Fossil fuel consumption subsidies need to be checked rigorously whether they provide an actual benefit to the poor, and subsequently should be replaced worldwide without harm to those relying on them for their basic energy needs.[196]

At the V20 finance summit in July 2021, the V20 stressed the importance of fulfilling climate finance commitments and the problem of addressing high capital costs and listed specific areas for action.[197]

Public Development Banks

National public development banks are relevant as they direct substantial amounts of development assistance according to strategic priorities and criteria such as climate. For instance, in November 2019, the European Investment Bank (EIB) launched its new climate strategy and energy lending policy. From the end of 2021, it plans to end financing fossil fuel energy projects:[198] *"*Once in effect, this means that the Bank will not support upstream oil or natural gas production, coal mining, infrastructure dedicated to coal, oil and natural gas (networks, liquefied natural gas terminals, storage)." At the international level, the first global summit of all public development banks was held in November 2020. In a joint declaration, over 450 public development banks committed inter alia to support the transformation of the economy and societies toward sustainable and resilient development, including to aligning their financing with the Paris Agreement and to move away from coal.[199]

Task Force on Climate-related Financial Disclosures (TCFD)

Promoted and supported by the G20, the Financial Stability Board (FSB) the FSB was eventually established as a not-for-profit association under Swiss law.[200] In 2015, it created the Task Force on Climate-related Financial Disclosures (TCFD**)** to develop framework to enhance transparency of climate-related financial risk. In June 2017, the TCFD released its climate-related financial disclosure recommendations.[201] This framework has gained widespread support.

The TCFD publishes annual status reports, the latest one in October 2020. It gives an update about the support expressed for the TCFD recommendations and reviews climate-related financial disclosures. According to the 2020 status report, nearly 1,500 organizations expressed their support for the TCFD and "[n]early 60 percent of the 100 largest public companies support the TCFD, report in line with the TCFD recommendations, or both."[202] Detailed information about company support is only given for public companies. A review of 1,701 public companies showed that "disclosure of climate-related information has increased since 2017, but continuing progress is needed."[203]

In March 2021, the International Financial Reporting Standards (IFRS) Foundation announced a working group to develop a baseline global standard for climate-related reporting built on the TCFD recommendations.[204]

The 2020 status report by TCFD also gives an update about efforts by governments and other initiatives. These examples indicate that strong commitments and legally binding disclosure requirements are scarce.[205] However, in 2021 various countries –and also the G7 and the EU– have started initiatives:

At their Carbis Bay Summit in June 2021, G7 Leaders expressed their support for moving toward mandatory climate-related financial disclosures that provide consistent and decision-useful information for market participants and that are based on TCFD framework, in line with domestic regulatory frameworks.[206]

In July 2021, the G20 Finance Ministers and Central Bank Governors agreed that they "will work to promote implementation of disclosure requirements or guidance, building on the FSB's TCFD framework, in line with domestic regulatory frameworks, to pave the way for future global coordination efforts, taking into account jurisdictions' circumstances, aimed at developing a baseline global reporting standard."[207] They also welcomed "the work programme [sic] of the International Financial Reporting Standards Foundation to develop a baseline global reporting standard under robust governance and public oversight."[208]

The EU has started to scale up disclosure requirements for companies. With article 8 of its Taxonomy Regulation (EU) No 2020/852,[209] the EU already expanded existing disclosure requirements for non-financial information to help investors understand whether an economic activity is environmentally sustainable. With the Climate Delegated Act[210] adopted on June 4, 2021, the European Commission defined the technical screening criteria for determining whether economic activities qualify as contributing substantially to climate change mitigation.

With an additional Delegated Act[211] adopted on July 6, 2021, the European Commission supplemented the disclosure requirement under article 8 and requires companies to provide information to investors about the environmental performance as defined by the Climate Delegated Act. Both delegated acts are still under scrutiny by the European Parliament and the Council.

From March to April 2021, the UK conducted a public consultation on mandatory climate-related financial disclosure by publicly quoted companies, large private companies, and LLPs.[212] The outcome has not yet been published.

Before the U.S. election in November 2020, President Biden had pledged to make companies disclose climate risks.[213] On 20 May 2021, he issued Executive Order on Climate-Related Financial Risks[214] which requires the Federal Acquisition Regulatory Council to consider amending the Federal Acquisition Regulation to require major federal suppliers to publicly disclose greenhouse gas emissions and climate-related financial risks and to set science-based reduction targets. Discussions about disclosure requirements beyond procurement are ongoing.

Other

There are other intergovernmental international organizations such as the International Renewable Energy Agency (IRENA) or the Global Green Growth Institute (GGGI), which do not focus on climate finance or even climate change, but whose work is also relevant and influential for climate finance flows.

For instance, the GGGI[215] is an international organization instituted by a treaty, the Agreement on the Establishment of GGGI. The organization has extended from 18 founding member States in 2012 to 39 in 2021. It aims at promoting “strong, inclusive and sustainable economic growth”[216] in developing countries. The overall objective is to support a global transition toward green growth, with a differentiated approach based on the country, with country programs and projects being implemented. The Institute also produced GGGI’s Strategy 2030[217] and is present in the target countries as a partner to governments for policy advice and technical support:[218] GGGI supports developing countries in the establishment of growth plans; does research on the theory and practice of green growth; facilitate public-private cooperation; disseminates evidence-based knowledge and promotes public awareness; but has also a general possibility of performing any other action relevant for its objectives. The Institute has a strong governance structure with permanent institutions. So far its members include few developed countries and major economies. The GGGI is focused on support to developing countries and green growth. It does not exclusively focus on finance, but its comprehensive approach includes programs such as green investments.

In addition to the relevant public bodies and institutions, international or national, there is a large number of think tanks and civil society organizations are relevant in monitoring and assessing climate finance data, providing policy input and holding other actors to account. Examples include CPI's landscape of climate finance report or Oxfam's Climate Finance Shadow Report.

Investors are relevant because they direct large amounts of finance flows. Because of the vast number and diversity of investors and efforts with regard to climate change, we address them, as well as companies, as part of the section on initiatives (see section 3). As an example of individual efforts, in January 2020, BlackRock announced in its annual letter to CEOs that it would align its portfolios with the Paris Agreement. With regard to fossil fuels, the letter announces a screening of investment products: “In a letter to our clients today, BlackRock announced a number of initiatives to place sustainability at the center of our investment approach, including: making sustainability integral to portfolio construction and risk management; exiting investments that present a high sustainability-related risk, such as thermal coal producers; launching new investment products that screen fossil fuels; and strengthening our commitment to sustainability and transparency in our investment stewardship activities.”[219] In January 2021, the *Guardian* newspaper criticized BlackRock for holding $85 billion in coal despite its pledge to sell fossil fuel shares.[220]

Initiatives

2 degrees investing initiative (2dii)

The 2° Investing Initiative,[221] founded in 2012, is an example of a multi-stakeholder, not-for-profit think tank. It aims at ensuring compatibility of the financial markets and regulations with the Paris Agreement objectives.[222] It coordinates research projects on sustainable finances and develops knowledge, instruments, methodologies, and policy analyses to guide both financial institutions and public authorities in the energy transition. It also addresses support to developing countries and has produced special research studies on these emerging markets since 2018.[223]

Credibility and impact of the 2° Investing Initiative are measurable through their activity and the publication of their work – they also indicate working in close cooperation with governments, for example France, which it advised in the process of drafting a 2015 Legislation on Energy Transition for Green Growth; or its contribution to the European Commission's report on sustainable finance.[224]

Climate Bonds Initiative

The Climate Bonds Initiative[225] was registered in 2013 as an English not-for-profit charity promoting the development of climate bonds. It is funded by grants from non-profit organizations and public institutions, as well as subscriptions fees from their partners – big investment companies, banks, or governments.

Given that the aim is to mobilize the bond market in implementing climate change solutions, its work is thus focused on investors. It promotes investments in projects and assets as to ensure the transition toward a low-carbon and climate resilient economy, pursuant to the Paris Agreement. The initiative has different actions: it develops standards and certification mechanisms for bonds which can be issued for example by banks or governments; it also develops policies models and advice; and it provides market intelligence (with reporting on green bond market evolution notably). The Climate Bonds Initiative intends to guide its partners by providing them the tools and information necessary to engage in the transition toward greener finance. It produces databases, platforms, reports, and has several policy projects, some of which target developing countries – with more working group still to be launched in 2021.

It is a non-profit initiative, their work is conceived as being of public interest and is open source—they regularly produce content, some of the reports being specific to a country,[226] and try to keep tracks of the green bond markets, the amount of certification, labels, etc.

The initiatives intended on guiding investors with practical tools, information, and policy suggestions, provided by external advisors, in matters of climate finance specifically.

Addis Ababa Action Agenda on Financing for Development

The Addis Ababa Action Agenda is the result of the Third International Conference on Financing for Development, a meeting between high-level political representatives (heads of states and government, ministers of finance, foreign affairs and development officers) as well as institutional stakeholders, NGOs and private sector actors.[227] The Agenda was adopted through a UN General Assembly Resolution[228] in 2015. It aims at establishing a global framework for financing sustainable development and supporting the implementation of the 2030 Agenda and the SDGs.

Therefore, it provides seven action areas, including domestic public resources, private business and finance, international development cooperation, international trade, science, technology and capacity building, debt and debt sustainability, and systemic issues. The Agenda considers the role of both private and public actors and identifies measures for developed countries to assist developing ones as well as general, long-term measures to improve sustainable financing. The suggested actions are numerous and extremely diverse, from the empowerment of women through domestic legislation and policies to the fight against corruption and tax avoidance or the strengthening the participation of developing countries to the international economic negotiation.

The Resolution also states the need for data collection and monitoring, and the importance of ensuring and improving transparency and even to develop new measurements of progress. Furthermore, the Addis Ababa Agenda has a relatively dense follow-up process. The Financing for Sustainable Development Office of the UN[229] is responsible for the Financing for Development follow-up, and the Addis Agenda also established a special annual ECOSOC Forum[230] on the matter. This Forum is an intergovernmental process aiming at discussing follow-up and reviewing the outcomes and implementation. It provides conclusions and recommendations which in turn inform a High-level Political Forum on Sustainable Development.[231] Finally, the Resolution of 2015 recommended the establishment of an inter-agency task force, which has been created and produces annual reports on the various areas of the Agenda.[232]

The Agenda addresses sustainable development, generally including climate finance. For climate change specifically, it refers to, and reiterates elements of, the climate regime.

One Planet Summit

The umbrella initiative is the result of the international climate summit organized by France, the World Bank and the UN Secretary General in December 2017. It gathered heads of state and government, international organizations, private sector actors, and civil society.[233] The One Planet Summit is based on several coalitions, including of actors from different sectors (business, research, finance and investment) as well as states and institutions.[234] Accordingly, it involves a lot of various actors, public authorities, companies, banks, researchers and investors. Each coalition works on a selected theme, with some focusing on a region – for example, conservation of rainforests[235] or the Mediterranean region[236] – with its own objectives, projects, funding mechanisms. The general objective is to create a “new, pragmatic and effective” framework for the ecological transition, based on international cooperation dynamics.[237] The One Planet Summit also puts a strong emphasis on private sector actors – and involves several central banks, companies, investors. Some coalitions explicitly and exclusively address support to developing countries, such as the Climate Finance Partnership, which aims at funding mitigation projects there.[238] On the other hand, other coalitions such as the public development banks initiative has a broader approach to climate finance objectives and aims explicitly at realizing the goal of Article 2.1(c) of the Paris Agreement of ensuring consistency between finance and low-carbon development.[239] Finally, twelve commitments have been adopted to guide the actions of the One Planet Summit – such as protect land and water against climate change, zero pollution transports, or action of central banks and businesses.

There were annual follow-up summits.[240] In 2018, the second Summit aimed at reporting on progress concerning the twelve commitments made in 2017 and accelerate their implementation.

The subsequent summits also had specific focuses such as Africa in 2020 and biodiversity in 2021.

This initiative benefits from a high-level convening power and a considerable number and diversity of actors.

One Planet Sovereign Wealth Fund Coalition

The One Planet Sovereign Wealth Fund[241] is one of the projects of the One Planet Summit and includes major institutional investors. The original six sovereign wealth funds were later extended to include asset managers in 2019 (with the One Planet Asset Managers initiative) and to private equity and investment firms in 2020 (with the Planet Private Equity Funds). In 2021, there were 33 members: 14 sovereign funds, 14 asset managers, and 5 private equity and investment firms, amounting to manage or hold more than 30 trillion dollars of assets.

It aims at supporting and promoting the ecological transition of the economy through integration of climate related risks in investments management and investments in energy transition. In 2018, the founding sovereign wealth funds published the One Planet Sovereign Wealth Fund Framework – a document identifying principles. It notably provides that the sovereign wealth funds need to consider climate change systematically in the decision-making processes and support programs to address climate change. Action rests on three principles, namely improving the consideration of climate change issues; encouraging companies to address climate-related risks and integrate them in their governance and risk management policies, as well as reporting procedure; and considering climate change realities in investment managements, to ensure long-term resilience.

The One Planet Sovereign Wealth Fund Framework Companion Document[242] of 2019 and 2020 summarize the implementation progress of the principles set out in the Framework. The OPSWF also organizes annual summits. In 2021, a study published in collaboration with the International Forum of Sovereign Wealth Funds,[243] provided information on the sovereign wealth funds' progress on climate change – the first report to assess the funds' involvement and consideration of climate change in their activities. The initiative also seeks cooperation with other actors and initiatives: For instance, in November 2020, the members of the One Planet Sovereign Wealth Fund and of the One Planet Asset Managers committed to support the recommendations of the Taskforce on Climate-Related Financial Disclosures and promote their implementation through their value chain.

The value of assets involved, together with the focus on climate change and integration into decision-making, make this initiative a potentially important element for raising ambition.

Climate Finance Partnership

The Climate Finance Partnership[244] was launched by France, Germany, the Hewlett Foundation, Grantham Environmental Trust and IKEA foundations as well as the asset manager BlackRock. It is a cooperation between private and public actors, with philanthropies, private investors, and governments. The initiative was announced at the second One Planet Summit in September 2018[245] and is still raising funds – in July 2021, it had more than $250 million and a goal of $500 million.[246] The project now also involves Japan and more institutional investors and foundations.[247]

BlackRock is to develop a structure using the capital provided by the other members. The aim is to invest in climate infrastructure. The project targets three regions: Latin America, Asia and Africa. The project has been supported by a 2017 One Planet Summit project, the Task Force on Philanthropic Innovation, which also illustrates the coordinating potential of the One Planet Summit initiative.

The initiative is quite new[248] and it may be too early to assess it. It does not indicate specific follow-up procedures, apparently relying on transparency and public information on its activities.

Climate Finance Leadership Initiative

The Climate Finance Leadership Initiative[249] was formed upon request of the UN Secretary General. It gathers big investors and banks with eight members: Allianz Global Investors, AXA, Bloomberg, Enel, Goldman Sachs, Japan's Government Pension Investment Fund, HSBC and Macquarie. It was launched in January 2019.

The objective is to increase private investment to address climate-change in emerging markets. CFLI supports country pilots which convene domestic and international financial institutions, with the support of the governments, and aim at strengthening local policy on environment and mobilize capital. The near-term objectives of catalyzing immediate investment in line with NDC of the country links climate finance back to the Paris Agreement. The initiative delivered a report in 2019[250] on best practices and opportunities to enhance climate finance mobilization as well as on current obstacles They also produced in 2021 a report on private sector considerations for policymakers[251] in collaboration with the European Development Finance Institutions and the Global Infrastructure Facility.

The initiative appears to have political clout, as the report of 2019 was first delivered to the G7 Finance Ministers and then was released at the UN Climate Summit. Its work seems to go more into the practical side of mobilizing climate finance.

Coalition of Finance Ministers for Climate Action

The Coalition of Finance Ministers for Climate Action[252] was launched in April 2019 and gathers the ministers for fiscal and economic sectors. Originally, there were 26 governments participating to the initiative – in 2021, 63 countries of both developed and developing countries were members to the Coalition, which was also supported by 19 institutional partners, such as the Asian Development Bank, the European Commission, the OECD, the World Bank, and several UN programs.

It aims at supporting the transition toward climate-friendly development, in line with the Paris Agreement. The Finance Ministers of the participating countries commit to implement a set of principles, the Helsinki Principles,[253] in their national actions and policymaking. There are six principles: align the policies and practices with the Paris Agreement objectives; share the experience and expertise with other members; work toward measures for effective carbon pricing; take climate change into account in macroeconomic policy, fiscal planning, budgeting, public investment and procurement practices; mobilize private sources by facilitating investments and develop a more climate-friendly financial sector; and engage in domestic preparation and implementation of the NDC. In December 2019, the Coalition launched the Santiago Action Plan defining the strategy for collective progress on the Helsinki Principles for the years to come.[254]

The Coalition has met several times, facilitating review and discussions of actions and progress – in 2020, meetings were planned in the Santiago Action Plan but the Coalition also met subsequently.[255] Additionally, the Coalition sometimes publishes reports, such as a review of country cases on long-term strategy for climate change in 2020.[256]

The initiative underlines the specific position of finance ministers, as they are key actors to identify the risks of climate change on economies and the opportunities of climate action – underlining the important potential incomes and employments it could create. They also have strong positions as public authorities and can develop incentives and mobilize fiscal tools to influence the greenhouse gas emissions, thus implementing the transition toward climate finance. The action involves a lot of countries and high-government representatives, with ambitious objectives.

Net Zero Asset Owner Alliance (AOA)

The Net Zero Asset Owner Alliance[257] was established in September 2019 and comprises more than 40 institutional investors – banks, pension funds and insurers – representing together over $6.6 trillion in assets. The Alliance also has supporters, scientific advisers (including the UNEP), conveners (UNEP Finance Initiative and the Principles for Responsible Investment), collaborators, and strategic and scientific partners.

The initiative aims at aligning portfolios of its members with a 1.5°C warming scenario, in line with the Paris Agreement and Article 2.1(c), i.e., making finance flows consistent with low-carbon emissions and climate-resilient development. Concretely, it aims at guiding the transition of the investments to a net-zero GHG emissions by 2050.

The Alliance pledges to take into account scientific knowledge and especially the IPCC reports. As for follow-up, they commit to regularly report on progress and establish near-term targets, every five years, in line with the Paris Agreement's provisions. The commitment to the Alliance[258] provides that members are to complete once a year an "informal and qualitative stock-take," in order to qualitatively and continuously review progress, inform the agenda and interventions of the Alliance and inform the Alliance's annual report. A quantitative review is also planned. In January 2021, the Alliance produced an inaugural 2025 Target Setting Protocol, planning on a process for each member to determine a near-term target for the next five years, on the basis of scientific materials of the IPCC.[259] The document identifies reduction targets for 2025 between 16 and 29 percent. The Protocol also determines strategies in order to ensure a "real world impact" of the action – members are to engage with companies for decarbonization, to back the efforts to reduce the emissions of the most critical sectors, and to finance climate-friendly projects and sectors. For all these actions, the members are advised to determine targets and report on progress.

Coalition for Climate Resilient Investment (CCRI)

The Coalition for Climate Resilient Investment was launched at the UN Secretary-General's Climate Action Summit in September 2019.[260] It is a multi-stakeholder initiative including, inter alia, institutional investors governments, MDBs, insurance companies and think tanks. It aims at "transform[ing] infrastructure investment by integrating climate risks into decision-making." As of September 2021, the website does not have information on progress on the planned analytical and practical tools, such as a physical risk pricing framework or a taxonomy for resilience bonds.[261]

International Platform on Sustainable Finance

The International Platform on Sustainable Finance[262] was launched in October 2019 by the EU and Argentina, Canada, Chile, China, India, Kenya and Morocco. The Platform had grown to 17 members in 2021, amounting to 55 percent of global greenhouse gas emissions, 50 percent of the world population and 55 percent of global GDP. The European Commission also set up several expert groups on sustainable finance to assist and advise, including: a platform on sustainable finance composed of experts from the private and public sectors;[263] the technical expert group on sustainable finance;[264] a high level expert group on sustainable finance composed from experts from the civil society, finance sector, academia and observers from European and international institutions;[265] and a Member States expert group on sustainable finance composed from financial markets and environmental experts from the Member States.[266]

The objective of the platform is to help environmentally sustainable projects obtain more private capital investment. The initiative intends to improve and strengthen international cooperation and coordination, which in turn can push private investors to invest in sustainable environmental and climate projects. It is conceived as a forum for dialogue between public authorities developing sustainable finance regulations, where members can exchange best practices, disclose information, compare their initiatives and identify challenges and opportunities.

A follow-up public report was published in October 2020[267] that relays the work of the platform – notably, its activities, sustainable finance initiatives, and an overview of suitable finances plans in member states. In addition, the platform works in close collaboration with other international institutions. Its work is informed by the Coalition of Finance Ministers for Climate Action, the European Investment Bank, the IMF, or the UNEP Finance Initiative.

Race to Zero Campaign

The Race to Zero campaign[268] includes various types of non-state and sub-national actors such as companies, cities, regions, financial institutions, and universities. The campaign has an extremely high number of members: 31 regions, 733 cities, 3067 companies, 624 educational institutions, 173 investors and more than 3000 hospitals from 37 healthcare institutions – the largest alliance of its kind. The program was initiated at UNFCCC COP25 and launched in June 2020.[269] Its sister campaign, the Race to Resilience, was launched at the 2021 Climate Adaptation Summit and focuses on promoting higher global ambition for climate resilience.

Race to Zero recognizes initiatives or networks as "partners" if they meet certain criteria,[270] and individual actors are invited to join as partners. Participants commit to net zero emissions by 2050 at the latest, set interim targets and publicly report on progress. An Expert Peer Review

Group, composed of independent experts, is also tasked with providing recommendations on the initiatives and their compliance with the criteria.

While Race to Zero is not specifically related to climate finance, and it sets out a separate finance campaign (see Glasgow Financial Alliance for Net Zero below), some of its participants are in the finance sector. A Finance Sector Expert Group for both the Race to Zero and Race to Resilience[271] initiatives comprises around 20 individual experts and practitioners. That Expert Group has several responsibilities: advising the High-Level Climate Champions on interpretation guidelines of the Race campaigns criteria related to finance; producing guidance and materials to support finance actors participating to the campaign; supporting the Expert Peer Review Group and its equivalent for the Race to Resilience concerning finance actors' networks and initiatives; and supporting the development of a community of practice for finance actors. It is, however, not a decision-making body and cannot decide on the criteria nor process directly the applications. Its mandate is limited and will end at the end of June 2022 (but could be extended).

Glasgow Financial Alliance for Net Zero (GFANZ)

The Glasgow Financial Alliance for Net Zero[272] was launched in April 2021 by the UN Special Envoy on Climate and Action, in a partnership with the COP26 Private Finance Hub, the UNFCCC Climate Action Champions, the Race to Zero and the COP26 Presidency. The Alliance is intended to bring together existing and new net zero finance initiatives into one sector-wide strategic forum. It is composed of more than 160 firms, amounting to assets of $70 trillion, including the bank members of the Net Zero Banking Alliance. All members must be accredited by the Race to Zero campaign.

The objective is to accelerate the transition of the financial system to net zero emissions at the latest by 2050, by mobilizing funds and establishing a forum for coordination among the major finance institutions. The objective is to "catalyze strategic and technical coordination." The Alliance shares the admission criteria and action commitments of Race to Zero, with the same aim of ensuring credibility and consistency of the initiative. In view of the multitude of overlapping initiatives, GFANZ's objective of strategic coordination could be useful, but its impact remains to be seen.

Net-Zero Banking Alliance

The Net Zero Banking Alliance[273] is composed of banks. It currently has 55 members and represents $37 trillion in assets – almost a quarter of the world's banking assets. It was launched in April 2021. The initiative is convened by the UNEP Finance Initiative, joined the Race to Zero, and is also the banking element of the Glasgow Financial Alliance for Net-Zero.

The bank members to the Alliance seek to modify their lending actions and investments in order to reach a net-zero emissions by 2050. Similar to the Race to Zero initiative, the banks'

CEOs must sign a Commitment Statement[274] in order for the bank to become a member. These commitments are inspired by the Guidelines for Climate Target Setting for Banks,[275] a document produced by the UNEP Finance Initiative that is strongly focused on reporting, verification, and identifying and reviewing targets.

While big banks are important actors in directing finance flows toward climate-friendly investment, these commitments have been questioned by NGO who argue that they are inadequate to meet the objective of net-zero emissions, and unachievable as long as financing fossil fuels and offsetting are not addressed.[276]

Export Finance for Future (E3F)

The Export Finance for Future[277] is an initiative of the governments of Denmark, France, Germany, the Netherlands, Spain, Sweden, and the United Kingdom. The project was launched in April 2021. It aims at addressing public export finance and its role in fighting climate change. It seeks to increase support for sustainable projects as well as impose restrictions on fossil fuels overseas. Long-term, the objective is to phase out of carbon-intensive projects and increase financial support to more climate-friendly exporters' projects. The initiative does not seem to use concrete follow up measures, such as reporting procedures or a supervisory body, but the initiative is fairly new and might develop such procedures.

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[2] Paragraph 53, decision 1/CP.21; paragraph 1, decision 14/CMA.1
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[5] Macquarie et al. 2020, 6–7.
[6] OECD 2020a.
[7] Buchner et al. 2019; Macquarie et al. 2020.
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[9] Independent Expert Group on Climate Finance 2020.
[10] Carty, Kowalzig, and Zagema 2020.
[11] For instance, Roberts et al. 2021.
[12] Cf. Macquarie et al. 2020, 13–15.
[13] OECD 2020b;Tandon 2021.
[14] Cf. Macquarie et al. 2020, 15.
[15] UNEP 2021a, 42; IEA 2020, 14–15; United Nations, 'Climate Change and COVID-19: UN urges nations to 'recover better' (*United Nations* 2020a) <https://www.un.org/en/un-coronavirus-communications-team/un-urges-countries-%E2%80%98build-back-better%E2%80%99> accessed 06 July 2021.
[16] Macquarie et al. 2020, 18–19; UNEP 2021a, 40; IEA (2021), Global Energy Review: CO2 Emissions in 2020, IEA, Paris https://www.iea.org/articles/global-energy-review-co2-emissions-in-2020; vivideconomics 2021; https://www.energypolicytracker.org/ ; https://www.theguardian.com/business/2021/jul/15/trillions-of-dollars-spent-on-covid-recovery-in-ways-that-harm-environment.
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[18] UNEP 2021a, 42.
[19] Platform for Redesign 2020, 'PLATFORM for REDESIGN 2020. PLATFORM for REDESIGN 2020' (*Platform for Redesign* 2020) <https://platform2020redesign.org/> accessed 06 July 2021).
[20] https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19.
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[22] World Bank, 'Sustainability Checklist for Assessing Economic Recovery Investments [Discussion Paper]' (The World Bank 2020) .
[23] IMF, 'Greening the Recovery' (International Monetary Fund 2020).
[24] IEA, 'Sustainable Recovery' (International Energy Agency 2020).
[25] IRENA 'The Post-COVID recovery: An agenda for resilience, development and equality' (International Renewable Energy Agency 2020).
[26] Cf. UNEP 2021b; Abdelli et al. 2021.
[27] CF G7 summit 2021 communique, para 40.
[28] OECD 2020c, 36.
[29] To cite just one example, OECD Secretary General is quoted in November 2020 as "We need harmonised policies along the investment chain...", https://www.undp.org/press-releases/oecd-and-undp-launch-plan-align-global-finance-sustainable-development.
[30] Cf. Ameli et al. 2021; Macquarie et al. 2020, 11; https://www.bloomberg.com/news/articles/2021-07-02/green-finance-isn-t-going-where-it-s-needed.

[31] DWS, a subsidiary of Deutsche Bank, temporarily lost up to 13% of its share value after the Wall Street Journal reported that the U.S. Securities and Exchange Commission is investigating whether it overstated how it used sustainable investing criteria to manage its assets, https://www.reuters.com/business/shares-dws-fall-53-early-frankfurt-trade-after-report-us-probe-2021-08-26/.

[32] Cf. UNCTAD's analysis and criticism of the implementation of the Principles for Responsible Investment, United Nations Conference on Trade and Development (UNCTAD) 2020, 2, 41; International Forum of Sovereign Wealth Funds (IFSWF) 2021.

[33] The "Joint Declaration of all public development banks in the world", 12.11.2020, states that "recovering from Covid-19 and achieving the Sustainable Development Goals (SDGs) and the objectives of the Paris Agreement are one and the same, i.e. interlaced and complementary goals to be pursued together", https://financeincommon.org ,

[34] Cf. a China Daily opinion piece arguing that China is “becoming more and more proactive” in aligning its overseas investments with the Paris Agreement", https://www.chinadaily.com.cn/a/202108/09/WS611066b4a310efa1bd667753.html.

[35] "Joint Declaration of all public development banks in the world", 12.11.2020, https://financeincommon.org/. With regard to coal, the actual wording is "work toward applying more stringent investment criteria, such as explicit policies to exit from coal financing in the perspective of COP26". This is less straightforward than the summit's self-"assessment", p. 3, which says the commitment was "to move away from coal", https://financeincommon.org/sites/default/files/2020-12/FICS_ASSESSMENT.pdf.

[36] launched in November 2020 to help private and public actors to shift finance towards achieving the SGDs https://www.undp.org/press-releases/oecd-and-undp-launch-plan-align-global-finance-sustainable-development.

[37] OECD 2020b.

[38] ISO 14097 "Greenhouse gas management and related activities – Framework including principles and requirements for assessing and reporting investments and financing activities related to climate change", https://www.iso.org/news/ref2671.html; https://www.responsible-investor.com/articles/iso-standards.

[39] United Nations Conference on Trade and Development (UNCTAD) 2020, 19.

[40] G7 2021 summit communique, para 41, see 2.14.

[41] https://www.ft.com/content/0a3d0af8-7092-44c3-9c98-a513a22629be; https://www.economist.com/finance-and-economics/2021/05/17/green-assets-are-on-a-wild-ride.

[42] https://www.theguardian.com/world/2021/sep/22/china-climate-no-new-coal-fired-power-projects-abroad-xi-jinping

[43] Buchner et al. 2019, 18. According to the Guardian, Five Asian countries account for 80% of new coal power investment, https://www.theguardian.com/environment/2021/jun/30/five-asian-countries-80-percent-new-coal-power-investment.

[44] G20 Leader’s Declaration, G20 Riyadh Summit, 21-22 November 2020, para. 31, available at https://www.consilium.europa.eu/media/46883/g20-riyadh-summit-leaders-declaration_en.pdf.

[45] Carbis Bay G7 Summit Communiqué, Our Shared Agenda for Global Action to Build Back Better, 11-13 June 2021, available at https://www.g7uk.org/.

[46] UNEP, OECD and IISD (2019): Measuring Fossil Fuel Subsidies in the Context of the Sustainable Development Goals. UN Environment, Nairobi, Kenya, available at https://www.unep.org/resources/report/measuring-fossil-fuel-subsidies-context-sustainable-development-goals.

[47] Agreement on Subsidies and Countervailing Measures, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, 1869 U.N.T.S. 14.

[48] OECD (2015): OECD Companion to the Inventory of Support Measures for Fossil Fuels 2015, p. 26, available at https://www.oecd.org/environment/oecd-companion-to-the-inventory-of-support-measures-for-fossil-fuels-2015-9789264239616-en.htm,

[49] OECD/IEA (2019): "Update on recent progress in reform of inefficient fossil-fuel subsidies that encourage wasteful consumption", p. 16, https://www.oecd.org/fossil-fuels/publication/OECD-IEA-G20-Fossil-Fuel-Subsidies-Reform-Update-2019.pdf.

[50] Anna Geddis et al. (2020): Doubling Back and Doubling Down: G20 scorecard on fossil fuel funding, published by IISD, ODI and OilChange, p. 26, https://www.iisd.org/system/files/2020-11/g20-scorecard-report.pdf.
[51] Anna Geddis et al. (2020): Doubling Back and Doubling Down: G20 scorecard on fossil fuel funding, published by IISD, ODI and OilChange, p. 26, https://www.iisd.org/system/files/2020-11/g20-scorecard-report.pdf.
[52] Report of 14.10.2020, COM(2020) 950 final, p. 5, https://ec.europa.eu/energy/sites/ener/files/progress_on_energy_subsidies_in_particular_for_fossil_fuels.pdf
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[54] World Bank, 2021, World Bank Group Climate Change Action Plan 2021-2025: Supporting Green, Resilient, and Inclusive Development, pp. 20-21, available at: https://openknowledge.worldbank.org/handle/10986/35799.
[55] World Bank, 2021, World Bank Group Climate Change Action Plan 2021-2025: Supporting Green, Resilient, and Inclusive Development, p. 23, available at: https://openknowledge.worldbank.org/handle/10986/35799.
[56] The indicative timeline is available here: https://www.adb.org/who-we-are/about/energy-policy-review.
[57] ADB, May 2021, Energy Policy – Supporting Low Carbon Transition in Asia and Pacific, Draft Paper for Consultation, available at https://www.adb.org/documents/draft-energy-policy-supporting-low-carbon-transition-asia-and-pacific.
[58] https://www.blackrock.com/au/individual/larry-fink-ceo-letter.
[59] https://engine1.com/.
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[61] https://reenergizexom.com/.
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[63] For more information see https://trade.ec.europa.eu/doclib/press/index.cfm?id=2273.
[64] https://www.euractiv.com/section/energy/news/denmark-costa-rica-seek-alliance-to-speed-up-the-end-of-oil-and-gas/.
[65] UNEP, OECD and IISD (2019). Measuring Fossil Fuel Subsidies in the Context of the Sustainable Development Goals. UN Environment, Nairobi, Kenya, available at https://www.unep.org/resources/report/measuring-fossil-fuel-subsidies-context-sustainable-development-goals.
[66] Cf. Corrocher and Mancusi 2021;Sattich et al. 2021
[67] There is vast literature on carbon pricing and carbon tax, cf. Monasterolo and Raberto 2019; Frondel and Schubert 2021; Carroll and Stevens 2021; Hu, Dong, and Zhou 2021
[68] G7 summit 2021 communique, para 39; see also the World Bank, 2.6
[69] Cf. Elgouacern 2020
[70] See for instance the Webinar "Supporting Energy Transitions with Subsidy Reform", 07.09.2021, https://www.iisd.org/events/fossil-fuel-subsidy-reform-clean-energy-transitions
[71] Cf. Chang, Ji, and Zhang 2021
[72] Bodle and Noens 2018, 205.
[73] https://www.unepfi.org/net-zero-alliance/.
[74] GCF Governing Instrument, para 32. In 2017/18, the GCF provided about 50% of total finance from multilateral climate funds, while the GEF and Climate Investment Funds of the World Bank provided 32% and 14% respectively, Buchner et al. 2019, 12.
[75] The "whatever it takes" statement by the European Central Bank's president during the 2011-12 Euro crisis, is widely regarded as restoring confidence in the Euro, Alcaraz et al. 2019. The long-term temperature goal in the Paris Agreement arguably also had a huge impact on public discourse.
[76] As suggested by Marrakech Partnership 2021a, 4; Marrakech Partnership 2021b, 36. Cf. UNEP FI Guidelines for Climate Target Setting for Banks, https://www.unepfi.org/net-zero-banking/commitment/.
[77] However, authorship and responsibility not fully clear.
[78] Navizet 2020.
[79] Bodle and Noens 2018, 252–53.

[80] OECD 2020a, 7.
[81] https://sdg.iisd.org/news/uneps-adaptation-gap-report-focuses-on-nature-based-solutions/; Macquarie et al. 2020, 11, while noting that estimates are challenging due to data gaps.
[82] Shapiro 2021.
[83] Nachtigall et al. 2021.
[84] Cf. https://www.euractiv.com/section/climate-environment/news/carbon-taxes-could-hurt-russia-more-than-sanctions-says-oil-tsar/.
[85] Jakob 2021.
[86] UNEP 2021a, 3, 40. In 2017/18, East Asia & Pacific was the origin and destination for most climate finance, Macquarie et al. 2020, 11.
[8787] Cf. ENB's summary of the Climate Change Dialogues held in lieu of the COP in December 2020, https://enb.iisd.org/events/un-climate-change-dialogues-2020/summary-report-23-november-4-december-2020.
[88] G20 2020.
[89] Krohn 2021, 130.
[90] Macquarie et al. 2020, 6–7
[91] Cf. Bodle and Noens 2018, 248 The UNFCCC website states that '[c]limate finance refers to local, national or transnational financing - drawn from public, private and alternative sources of financing - that seeks to support mitigation and adaptation actions that will address climate change', <https://unfccc.int/ topics/climate-finance/the-big-picture/introduction-to-climate-finance>.
[92] https://www.unepfi.org/about/.
[93] UNFCCC Secretariat 2007; UNFCCC Secretariat 2009.
[94] High-Level Advisory Group on Climate Change Financing 2010.
[95] Global Commission on the Economy and Climate 2014.
[96] Communication from the Commission: Action Plan: Financing Sustainable Growth, COM(2018) 97 of 08.03.2018; https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en.
[97] Bodle and Noens 2018, 248.
[98] COP decision 1/CP.16, para 98. The commitment had already been made as part of the so-called Copenhagen Accord in 2009, but had not been formally adopted by all parties.
[99] Cf. https://www.theguardian.com/global-development/2021/sep/20/meeting-cop26-finance-goals-going-to-be-tough-says-boris-johnson
[100] Bodle and Oberthuer 2017, 94.
[101101] COP decision 1/CP.21, para 53.
[102] Art 8.2 Paris Agreement.
[103] This section is to a large extent based on Bodle (forthcoming) See also Yamineva and Kulovesi 2013and Gastelumendi and Gnittke 2017.
[104] Bodle (forthcoming).
[105] Bodle (forthcoming).
[106] UNFCCC COP decisions 7/CP.7, para 2 and 6.
[107] On the SCCF and LDCF see Yamineva and Kulovesi 2013, 201–3.
[108] Czarnecki and Guilanpour 2009, 82.
[109] As of 2019, the cumulative revenue from share of proceeds for the Adaptation Fund amounted to USD 201.4 million, while cumulative voluntary contributions amounted to USD 657.9 million, cf. decision 3/CMP.15 para 2(f).
[110] UNFCCC COP decision 1/CP.16, paras 102-112, 100. Cf. Yamineva and Kulovesi 2013, 216.
[111] GCF Governing Instrument, para 29; COP decision 3/CP.17, para 9.
[112] GCF Governing Instrument, para 30.
[113] GCF Governing Instrument, para 32.
[114] See list of contributors to IRM and GCF-1: https://www.greenclimate.fund/about/resource-mobilisation.
[115] GCF Governing Instrument, para 2.
[116]Cf. https://www.greenclimate.fund/sectors/private; Climate Finance Advisory Service, https://www.cfas.info/en/page/gcf-green-climate-fund.

[117] UNFCCC decision 1/CP.16, para 112. See list of relevant decisions and SCF documents at https://unfccc.int/SCF.
[118] UNFCCC decision 2/CP.17, para 120.
[119] Cf. https://unfccc.int/process/bodies/constituted-bodies/standing-committee-on-finance-scf/members for 2019.
[120] COP decision 3/CP.19 para 13.
[121] Cf. UNFCCC decision 3/CP.24, para 13, which decides that the fourth dialogue 'will be informed by the reports on the in-session workshops on long-term climate finance and the 2020 Biennial Assessment and Overview of Climate Finance Flows'.
[122] UNFCCC Secretariat 2007; UNFCCC Secretariat 2009.
[123] On the negotiating history see Gastelumendi and Gnittke 2017; Zamarioli et al. 2021.
[124] Bodle and Noens 2018, 250.
[125] Bodle and Noens 2018, 250.
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