

Summary by the Standing Committee on Finance on the Fourth (2020) Biennial Assessment and Overview of Climate Finance Flows

14.10.2021

I. Context and mandates

1. The Standing Committee on Finance (SCF) assists the Conference of the Parties (COP) in exercising its functions with respect to the Financial Mechanism of the Convention, including, *inter alia*, in terms of measurement, reporting and verification of support provided to developing country Parties, through activities such as the biennial assessment and overview of climate finance flows (BA). The SCF also serves the Paris Agreement in line with its functions and responsibilities established under the COP including the BA.¹

2. Since the first BA in 2014, the preparation of subsequent BAs has been guided by mandates from the COP and the CMA to the SCF.²

3. **The fourth BA (2020) presents an updated overview and trends in climate finance flows up until 2018 and assesses their implications for international efforts to address climate change.** The fourth BA includes an overview of climate finance flows from developed to developing countries³, and available information on domestic climate finance, cooperation among developing countries, and other climate-related flows that constitute global climate finance. It assesses the key features of climate finance flows including their composition and purposes, and explores insights into their effectiveness, access to finance, country ownership and alignment with the needs and priorities of beneficiaries, as well as their magnitude in the context of broader flows. In addition, it provides information on recent developments in the methodological issues related to the tracking of climate finance at the international and domestic level, operational definitions of climate finance in use and new indicators for measuring the impact of climate finance.

4. **The fourth BA (2020) includes mapping of relevant information to the long-term goal outlined in Article 2, paragraph 1(c) of the Paris Agreement on making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.** The fourth BA provides the first mapping exercise to be conducted every four years to identify the latest actions and activities of different actors related to making finance flows consistent with low GHG emission and climate-resilient development pathways including national Governments, development finance institutions, central banks and regulators, multilateral finance institutions and climate funds, as well as private sector actors such as corporations, banks and investors. Information produced by United Nations entities, initiatives and under other multilateral processes, as well as the perspective of civil society organizations and the academic community, were also explored. Emerging methodologies, indicators and datasets to support tracking the consistency of finance flows are also discussed in respective chapters.

5. The fourth BA comprises this summary prepared by the SCF, and a technical report, prepared by experts under the guidance of the SCF drawing on information and data from a range of sources. It was subject to extensive stakeholder input and expert review, but remains a product of the external experts.

¹ Decision 2/CP.17, paragraph 121(f), 1/CP.21, paragraph 63;

² Decisions 1/CP.18, paragraph 71, 5/CP.18, paragraph 11, 3/CP.19, paragraph 11, paragraph 37(f) in the annex to decision 8/CP.22; Decision 4/CP.24, paragraphs 4,5,10, 19/CMA.1, para. 36(d).

³ For the purpose of the overview of climate finance in the BA, various data sources are used to illustrate flows from developed to developing countries, without prejudice to the meaning of those terms in the context of the Convention and the Paris Agreement, including but not limited to Parties included in Annex II/Annex I to the Convention to Parties not included in Annex I to the Convention and MDBs; OECD members to non-OECD members; OECD DAC members to countries eligible for OECD DAC official development assistance; and other relevant classifications.

II. Challenges and limitations

6. The fourth BA provides an updated overview of climate finance flows in 2017 and 2018, along with data on trends from 2011 to 2016 compiled from previous BA reports where applicable. Due diligence has been undertaken to use the best information available from the most credible sources. In compiling estimates, efforts have been made to ensure that they are based on activities in line with the convergence of operational definitions of climate finance identified in the first BA and to avoid double counting by focusing on primary finance, which is finance for a new physical item or activity. Challenges were nevertheless encountered in collecting, aggregating and analysing information from diverse sources.

7. **Data uncertainty:** Most of the uncertainties associated with each source of data which have different underlying causes identified in the previous BAs persist, although there have been some improvements. Uncertainties relating to the data on domestic public investments, resulting from the lack of geographic coverage and differences in the way tracking methods are applied, as well as significant changes in the methods used for estimating energy efficiency and sustainable transport over the years. Uncertainties also arise from the lack of transparency of data for determining private climate finance; the methods used for estimating adaptation finance; differences in the assumptions used in underlying formulas for attributing finance from MDBs to developed countries; the classification of sustainable or green finance; and the incomplete data on non-concessional finance flows.

8. **Data gaps:** Significant gaps in the coverage of sectors and sources of climate finance remain, particularly with regard to private investment, and adaptation and resilience. While estimates of incremental investment in energy efficiency have improved, understanding of the public and private sources of finance and the financial instruments used remains inadequate. For data on sustainable transport, efforts have been made to improve coverage of public and private investment in electric vehicles and charging infrastructure. However, high-quality data on private investments in sustainable agriculture, forestry and land use, water, waste, and adaptation and resilience are particularly lacking. Specifically, adaptation finance estimates, which are context-specific and incremental, are difficult to compare with mitigation finance estimates. and more work is needed on estimating climate-resilient investments.

9. In relation to mapping information relevant to Article 2, paragraph 1(c) of the Paris Agreement, the lack of a common interpretation of or guidelines on what information qualifies as relevant presents a challenge in adequately capturing the scope and depth of related action. For the fourth BA adopts an actor-specific mapping approach was adopted, as opposed to focusing on particular financial instruments, asset classes, or categories of action, in order to capture what financial sector actors consider to be relevant information on activities to be consistent with or align with the goals of the Paris Agreement. Such mapping may be non-exhaustive and limited in terms of representation across geographic areas and sectors. It may also obscure the role of actors that work across multiple categories. Given that a significant amount of information considered relevant is to be derived from multi-member initiatives and coalitions, potentially due to potential benefits of network effects, focusing on these groups may limit the mapping of information from individual cases that may be considered best practice or leading examples. Furthermore, there is a limited track record or in-depth information related to implementation of activities to be consistent with or align to the Paris Agreement to enable a thorough assessment of effectiveness, and therefore its relevance, in achieving the goal outlined in Article 2, paragraph 1(c).

10. The limitations outlined above need to be taken into consideration when deriving conclusions and policy implications from the fourth BA. The SCF will continue to contribute, through its activities, to the progressive improvement of the measurement, reporting and verification of climate finance in future BAs, to help address these challenges.

III. Key findings

A. Methodological issues related to transparency of climate finance

11. **Improvements in the consistency of reporting on climate finance under the Convention are observed.** Progress in the consistency of climate finance reporting was observed in the BR4 common tabular format submissions from Annex II Parties and the provision of qualitative information in the documentation boxes of those tables or in the BRs. One improvement relates to the reporting by type of support, with Parties only reporting on mitigation, adaptation and cross-cutting categories, without including other types of support. Nevertheless, improvements in aggregating geographic or sector-based information remains limited owing to differences in the approaches used by Parties and the functionality of the reporting system to allow differences in reporting. Several Parties referred to ongoing work to resolve challenges related to reporting on private finance mobilized by public interventions.

12. Data coverage and granularity of reporting on climate finance received in the BURs of non-Annex I Parties has improved since the previous BA. Nineteen Parties submitted a BUR for the first time since the previous BA in addition to a further 27 Parties submitting second or third BURs. The proportion of BURs that include information on finance received rose from approximately 60 per cent in 2014 to over 90 per cent in 2019–2020. A total of 41 Parties have provided quantitative information on climate finance received at the project or activity level in tabular formats. Many differences remain in the approaches used for reporting by Parties, including time periods of reported data and information on types of support, sectors and financial instruments. Several Parties, included additional information in their second and third BURs on whether a project is linked to capacity-building, technology development and transfer or technical assistance.

13. **Domestic public climate finance data availability is increasing with more countries establishing climate budget tagging systems.** Notable improvements were observed in the tracking of domestic climate-related public or private finance flows with the issuance of green sovereign bonds incentivizing the establishment of regular tracking systems in both developed and developing countries, building on previous work through CPEIRs. Thirteen countries have established tracking systems for national budgets with a further five countries with methodologies on tracking in development. In total, estimates on domestic public expenditures on climate change in 2017–2018 amount to approximately USD 86.6 billion (see section B).

14. **Operational definitions for climate finance in use generally reflect a common understanding of what is considered mitigation or adaptation finance, but differ when it comes to details of sector-specific activities, certain financial instruments and approaches to public and private finance flows.** Operational definitions of climate finance in use have evolved over the years. The MDB list of activities eligible for classification as mitigation finance added charging stations for electric vehicles and hydrogen or biofuel fuelling in 2017, and resource efficiency in aquaculture in 2018, while the OECD-DAC integrated adjustments to adaptation finance eligibility criteria in 2016 to harmonize with stepwise approach developed by the MDBs.

15. The lists of climate mitigation activities developed by MDBs have served in part to inform green or climate-aligned taxonomies in recent years to support the development of the green bond market and/or regulatory efforts in the field of sustainable finance to combating greenwashing and promote the standardization of financial products. Approaches to defining mitigation and adaptation activities are broadly consistent across various international organizations and regulatory initiatives, although inclusion/exclusion lists and approaches to the criteria used to define such activities can vary.

16. Parties submissions on operational definitions of climate finance in use highlighted a range of views on the need for, form, and scope of, a common definition of climate finance. Some Parties noted that a single definition would not be useful or should be broad enough to cater for the dynamic and evolving nature of climate finance due to a variety of factors, including NDCs and implementation of the enhanced transparency framework over time,

tracking progress related to article 2, paragraph 1(c) of the Paris Agreement, and changes in methodologies and definitions on mitigation and adaptation due to data availability or improvements in processes and knowledge.

17. Some Parties pointed to the use of a classification system or taxonomy rather than a single definition and referred to the development of taxonomies or classifications outside the UNFCCC process or within national sustainable finance frameworks.

18. Other Parties noted how the lack of a common definition affects the ability to track and assess the fulfilment of the obligations of Annex II Parties under the Convention and those of developed country Parties under the Paris Agreement. A common definition could support the preparation of the BA and the overall transparency and effectiveness of the UNFCCC process by highlighting the linkage between the level of action of developing countries and the level of support provided and, ultimately, the achievement of the objectives of the Convention and the Paris Agreement. In this context, two submissions proposed an operational definition of climate finance, while other submissions proposed an operational approach to achieving greater convergence among definitions over time, based either on common principles or responses to a common set of questions to provide granular information.

19. **More methodologies on measuring outcomes of financing for climate resilience have emerged in recent years.** Many multilateral institutions are in the process of developing or have already developed frameworks for measuring impacts, with an increasing focus on adaptation and resilience, such as the Resilience Rating System by the World Bank Group and the Climate Resilience Metrics Framework by MDBs and IDFC. Although approaches to measuring impacts of climate finance vary, most multilateral institutions, as well as bilateral contributors, use a similar set of mitigation and adaptation indicators.

20. **There are four common decision points identified in emerging methodologies and metrics in use for tracking consistency with low GHG emission and climate-resilient development pathways.** As with tracking climate finance, emerging methodologies relevant to tracking consistency with the long-term goal under Article 2, paragraph 1(c) of the Paris Agreement, also need to overcome issues related to definitions, scope or boundary of tracking, data availability and comparability.

21. Methods differ as to the type of finance flows, stocks and services tracked (primary or secondary markets) and the ways of measuring consistency (e.g. on the basis of GHG emissions, emissions intensity metrics or technology choices). However, the four common decision points are:

(a) Identifying a given pathway to low-emission and climate-resilient development against which the consistency of actions will be measured. Different pathways may be chosen relative to their consistency with low-emission development and mitigation goals, and to their consistency with climate-resilient development and adaptation or resilience goals. Pathways may result in compatible activity lists or performance metrics against which to measure action. In addition, the timescale used to measure consistency is important. This could be, for example, within 5 or 10 years, or by a given year, such as 2050;

(b) Reviewing the activities and actions to be tracked (e.g. investments, economic activities such as production and sales or purchasing of goods and services, policymaking, legislation and voluntary standards) that the stakeholder undertakes which is relevant to whether the pathway will be achieved;

(c) Understanding which finance flows that go towards realizing the activities and actions should be tracked by the stakeholder;

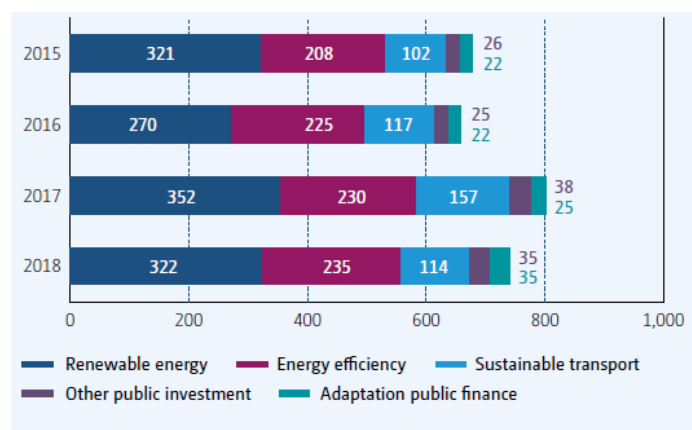
(d) Identifying which key metrics to use to assess whether finance flows and related processes result in activities and actions that are consistent with the given pathway identified during the review.

B. Overview of climate finance flows in 2017-2018

22. **Global climate finance flows were 16 per cent higher in 2017-2018 than in 2015-2016, to reach an annual average of USD 775 billion and achieved significantly higher results in particular in the area of renewable energies.** High-bound climate finance estimates increased from USD 692 billion in 2016 to USD 804 billion in 2017 and USD 746 billion in 2018, for an annual average of USD 775 billion. The growth in 2017 was driven largely by an increase in new private investment in renewable energy as a result of decreasing technology costs; while the decline in 2018 was due primarily to a slowdown in wind and solar investment in major markets. Figure 1 provides a breakdown of global climate finance flows in 2015-2018 by sector and Figure 2 provides an overview of global climate finance and finance flows from developed to developing countries.

Figure 1
Global climate finance flows in 2015–2018

(Billions of United States dollars)



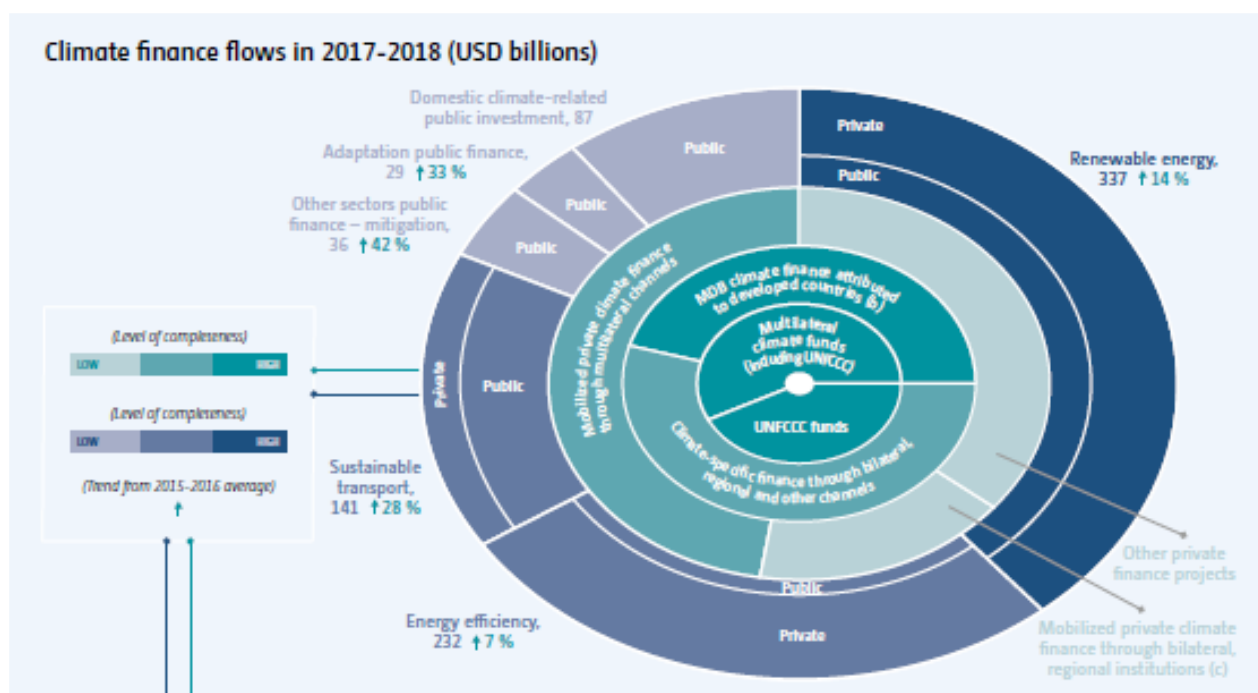
23. **Continued decreases in renewable energy technology costs mean new investment goes further.** Renewable energy technology costs continued to decline in 2017-2018 compared with those in 2015-2016, with a 29 per cent decrease for solar PV, an 18 per cent decrease for offshore wind and a 10 per cent decrease for onshore wind, emphasizing how greater impacts are achieved for each new dollar of investment. In 2018, 100 per cent more renewable energy capacity was commissioned than in 2012 with only a 22 per cent increase in investment.

24. For the fourth BA, several new data sources have been used to track climate finance in areas that were not previously included such as EV charging infrastructure, transport, water, waste and municipal investments. Wherever possible, the data has been integrated in the time series retroactively to allow for trend comparisons.

25. **Climate finance from developed to developing countries increased through various channels.** Total public financial support reported by Annex II Parties in their BRs submitted (as at October 2020) amounted to USD 45.4 billion in 2017 and USD 51.8 billion in 2018. The annual average (USD 48.7 billion) represents an increase of 2.7 per cent from the annual average reported for 2015-2016. Climate-specific financial support, which accounts for up to three-quarters of the financial support reported in the BRs, increased by 13 per cent on a comparable basis, to an annual average of USD 36.3 billion. Most of climate-specific financial support was reported through bilateral, regional and other channels with USD 28.1 billion in 2017 and USD 31.8 billion in 2018 respectively.

26. Mitigation finance constitutes the largest share of climate-specific financial support through bilateral channels at 65 per cent. However, the share of adaptation finance increased from 15 per cent in 2015–2016 to 21 per cent in 2017-2018 as it grew at a higher rate than mitigation finance.

Figure 2
Climate finance flows in 2017–2018
 (Billions of United States dollars, annualized)



		2017	2018	Sources of data and relevant section
Global total flows	Renewable energy	351.4	322.4	Section 2.2.2 CPI 2020 based on multiple sources
	Public	66.5	51.4	
	Private	284.9	271.0	
	Energy efficiency	229.9	234.6	Section 2.2.3 IEA Energy efficiency Market Reports/CPI
	Public	35.7	32.3	
	Private (a)	194.2	202.3	
	Sustainable transport	160.5	120.5	Section 2.2.4 IEA World Energy Investment reports/ CPI 2020 based on multiple sources
Public	118.1	70.9		
Private	42.4	49.7		
Other sectors public finance – mitigation	37.4	34.4	Section 2.2.5 (see notes) CPI 2020 based on multiple sources	
Adaptation public finance	24.7	34.1	Section 2.2.6 CPI 2020 based on multiple sources	
Domestic climate-related public investment	86.7	86.7	Section 2.3 BURs, CPEIRs, I4CE, IDB, UNDP; various government reports	
Flows to non-Annex I Parties	UNFCCC funds	1.5	2.4	Section 2.5.2
	Multilateral climate funds (including UNFCCC)	2.2	3.1	Fund financial reports, CFU
	Climate-specific finance through bilateral, regional and other channels	28.1	31.8	Section 2.5.1 Annex II Party Biennial Reports
	MOB climate finance attributed to developed countries (b)	24.1	25.8	Section 2.5.2 OECD 2020a
	Mobilized private climate finance through multilateral channels	10.8	10.8	Section 2.5.4 OECD 2020a
	Mobilized private climate finance through bilateral, regional institutions (c)	3.7	3.8	
Other private finance projects	5.3	11.0	Section 2.5.4 CPI 2020 based on multiple sources	

Abbreviations: BUR–Biennial Update Reports, CPEIR–Climate Public Expenditure and Institutional Reviews, CPI–Climate Policy Initiative, IEA–International Energy Agency, I4CE–Institute for Climate Economics, MOB–Multilateral Development Bank, OECD–Organisation for Economic Co-operation and Development, UNDP–United Nations Development Programme.

Notes: a) Value discounts transport energy efficiency estimates by 8.5% to account for overlap with electric vehicle estimates, same as in the previous years. b) From Annex II to non-Annex I Parties. Values derived from calculating equity shares of Annex II Parties per MOB multiplied by the climate finance provided to non-Annex I Parties from MOBs own resources. c) Estimates include private finance mobilized through public interventions from developed countries.

27. UNFCCC funds and multilateral climate funds approved USD 2.2 billion and USD 3.1 billion for climate finance projects in 2017 and 2018, respectively. The annual average for 2017-2018 (USD 2.7 billion) represents an increase of approximately 39 per cent compared with those in 2015–2016, owing primarily to increases in project approvals by the GCF Board and the GEF Council. In terms of inflows to the operating entities of the financial mechanism, the seventh GEF replenishment (GEF-7) resulted in USD 4.1 billion in pledges and USD 802 million allocated to the climate change focal area, compared to USD 4.4 billion in total pledges and USD 1.26 billion allocated to the climate change focal area in GEF-6. The first replenishment of the GCF-1 pledging conference in 2019 amounted to USD 9.8 billion, compared to USD 10.2 billion from the initial resource mobilization pledging conference in 2014.

28. MDBs provided USD 34 billion and USD 42 billion in climate finance from their own resources to developing and emerging economies in 2017 and 2018, respectively. The annual average (USD 36.6 billion) represents a 50 per cent increase since 2015-2016. The attribution of these flows to developed countries is calculated at between USD 23.3-24.1 billion in 2017 and USD 25.8-28.0 billion in 2018.

29. The uncertainty of the data on the geographic sources and destinations of private finance flows to developing countries remains significant. OECD estimates that private climate finance mobilized by developed countries through bilateral and multilateral channels amounted to USD 14.5 billion in 2017 and USD 14.6 billion in 2018.

30. Information on the recipients of climate finance remains limited. The growth in BUR submissions from non-Annex I Parties has resulted in a greater amount of information on finance received than for previous BAs. However, time lags in data availability for reporting make it difficult to provide updated or complete information on finance received in 2017-2018. Of the 63 Parties that have submitted BURs as of December 2020, 28 included some information on climate finance received in 2017 or 2018. In total, USD 7.8 billion was reported as received for projects starting in 2017 and USD 2 billion for projects starting in 2018. A total of 23 Annex II Parties included information on recipients of finance at either the country or project level in their BR4s.

31. **South-South climate finance flows have increased, but data availability and coverage remain limited.** While data availability and coverage of climate finance flows between developing countries remain limited, it is a growing area of global climate finance flows. Several countries voluntarily report to standardised reporting systems such as the OECD DAC. Up to 20 development finance institutions that are IDFC members are based in non-OECD countries, and MDBs led by developing countries such as AIIB and NDB continue to increase finance flows. Estimates of South-South climate finance flows amounted to USD 17.8-18.0 billion in 2017 and USD 18.0-18.2 billion in 2018.

C. Assessment of climate finance flows

32. Trends in public concessional climate finance, including bilateral flows, multilateral climate funds and funds from MDBs, point to increasing flows towards developing countries from multilateral sources, while bilateral climate finance flows have stagnated.

33. **Support for mitigation remains greater than support for adaptation.** Adaptation finance has remained at between 20 and 25 per cent of committed concessional finance across all sources (noting measurement differences), showing little movement since the previous BA (see figure 3). However, the continued rise in public climate finance flows contributing towards both adaptation and mitigation complicates this assessment. The rise is most obvious in flows from multilateral climate funds and through bilateral channels. While the GCF allocates climate finance for projects in this cross-cutting category to adaptation or mitigation, not all institutions do so in their programming or reporting. This makes it more difficult to track progress in scaling up adaptation finance and ultimately achieving balance between finance for adaptation and mitigation objectives.

34. **Grants continue to be a key instrument for adaptation finance.** In 2017–2018 grants accounted for 64 and 94 per cent of the face value of bilateral adaptation finance

reported to the OECD and of adaptation finance from the multilateral climate funds, respectively (see figure 3). During the same period, 9 per cent of adaptation finance flowing through MDBs was grant-based. These figures indicate no change since 2015–2016. Mitigation finance remains less concessional in nature, with 30 per cent of bilateral flows, 29 per cent of multilateral climate fund approvals and 3 per cent of MDB investments taking the form of grants. These figures, however, may not fully capture the added value brought by combining different types of financial instruments, or technical assistance with capital flows, which can often lead to greater innovation or more sustainable implementation.

Figure 3

Characteristics of international public climate finance flows in 2017–2018

	Annual average (USD billion)	Area of support				Financial instrument		
		Adaptation	Mitigation	REDD-plus ^a	Cross-cutting	Grants	Concessional loans	Other
Multilateral climate funds ^b	2.7	20%	48%	5%	27%	53%	40%	8%
Bilateral climate finance ^c	29.9	21%	65%	–	15%	64%	36%	<1%
MDB climate finance ^d	39.2	25%	75%	–	–	5%	75%	20%

Note: All values based on approvals and commitments. Abbreviations: MDB = multilateral development bank.

a In decision 1/CP.16, paragraph 70, the Conference of the Parties encouraged developing country Parties to contribute to mitigation actions in the forest sector by undertaking the following activities: reducing emissions from deforestation; reducing emissions from forest degradation; conservation of forest carbon stocks; sustainable management of forests; and enhancement of forest carbon stocks.

b Including Adaptation for Smallholder Agriculture Programme, Adaptation Fund, Bio Carbon Fund, Clean Technology Fund, Forest Carbon Partnership Facility, Forest Investment Program, Global Climate Change Alliance, Global Environment Facility Trust Fund, Green Climate Fund, Least Developed Countries Fund, Partnership for Market Readiness, Pilot Programme for Climate Resilience, Scaling Up Renewable Energy Program, Special Climate Change Fund and United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries.

c Bilateral climate finance data are sourced from biennial reports from Parties included in Annex II to the Convention (that further include regional and other channels) for the annual average and thematic split. The financial instrument data are taken from data from the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC), referring only to concessional flows of climate-related development assistance reported by OECD-DAC members. Section C of the summary and chapter III of the technical report uses ‘bilateral finance’ to refer only to concessional flows of climate-related development assistance reported by OECD-DAC members.

d The annual average and thematic split of MDBs includes their own resources only, while the financial instrument data include data from MDBs and from external resources, due to the lack of data disaggregation.

35. With regard to the geographic distribution of public concessional climate finance, Asia remains the principal beneficiary region. In 2017–2018, the region received on average, 30 per cent of funding commitments from bilateral flows, multilateral climate funds and MDBs. Sub-Saharan Africa received an average of 24 per cent of commitments across the sources in the same period, followed by Latin America and the Caribbean followed with 17 per cent and the remainder going to the Middle East and North Africa, Central, Eastern and South-Eastern Europe, the South Caucasus and Central Asia.

36. The LDCs and SIDS are particularly vulnerable to the adverse effects of climate change. Article 9 of the Paris Agreement emphasizes the importance of the provision of scaled up financial resources to these countries. In 2017–2018, funding committed to projects in the LDCs represented 22 per cent of bilateral flows and 24 per cent of finance approved through the multilateral climate funds. Funding committed to SIDS represented 2 per cent of bilateral finance and 10 per cent of finance approved through the multilateral climate funds. Of the finance provided to the LDCs and SIDS, the amount targeting adaptation fell slightly in 2017–2018, although the shares remained stable overall. MDBs channelled 11 per cent of their climate finance to the LDCs and 3 per cent to SIDS. As in previous years, adaptation

finance as a share of all climate finance to these countries was significantly higher than that of the overall climate finance spending by MDBs.

37. **In 2017–2018, there continued to be a push to diversify modalities of access to climate finance.** In a 2019 survey of 105 respondents from 45 developing countries, 73 per cent identified finance from multilateral climate funds as the most challenging source of finance to access compared with private finance (62 per cent), MDBs and DFIs (30 per cent) and bilateral sources (17 per cent). Institutions in developing countries are increasingly able to meet fiduciary and environmental and social safeguards requirements for accessing funds. Data show a continued increase in the number of national implementing entities of the multilateral climate funds as well as an increase in the accreditation of civil society and private entities, with both trends largely driven by the GCF. Significant shares of climate finance approvals from the multilateral climate funds are programmed through multilateral accredited and implementing entities.

38. The management of climate finance, as well as the development and implementation of projects that it supports, necessarily entails costs. Often recovered through mechanisms such as administrative budgets and implementing agency fees, the degree of such costs varies across institutions by nature of their different approaches and delivery models. In 2017–2018, major multilateral climate funds spent USD 217 million on administration costs, while implementing entity fees amounted to USD 231 million. In general, the administration costs of climate finance management have tended to decrease over time. The alignment of administrative functions between funds (e.g. the GEF administration of the LDCF and the SCCF) can streamline management and disbursement mechanisms. This is essential in order to retain the trust that contributors and beneficiaries place in the funds. However, it must be balanced by the above-mentioned rise in implementing entities and associated costs.

39. The capacity of institutions to make strategic choices to use climate finance has long been recognized as important. Both the Adaptation Fund and the GCF have developed readiness programmes, supporting countries to plan for, access and deliver climate finance. Together these funds have approved over USD 285 million in readiness support. The GEF has instead incorporated capacity-building objectives into existing project funding through “enabling activities”. Reviews of these programmes have endorsed the use of readiness support to build all aspects of the capacity required to mobilize finance for climate action, rather than a focus on supporting access to the multilateral climate funds.

40. **Ownership over the end-use of climate finance flows remains a critical factor in its effectiveness.** The broad concept of ownership encompasses the consistency of climate finance with national priorities, the degree to which national systems are used for both spending and tracking, and the engagement of a wide range of stakeholders. Financial needs are being increasingly articulated, but to date lack sufficient comparability of methods, including for costs, time frames and assumptions, in order to make an accurate assessment of the alignment of climate finance provision with such needs. Ministries of finance and planning are strengthening their commitments to engage in climate change planning, with national-level institutions playing a greater role through domestic tracking, monitoring and verification of climate finance.

41. **Impact reporting systems and practices for climate finance are maturing.** Mechanisms for monitoring the impact of climate finance may be relevant for the implementation of the enhanced transparency framework. While the reporting of results is slowly improving under the multilateral climate funds, MDBs do not include information on mitigation and adaptation outcomes in their joint reports and bilateral contributors have varied approaches to reporting on impacts. Emission reductions remains the primary impact metric for climate change mitigation, while adaptation impact continues to be measured primarily in terms of the number and type of people that benefit from projects. It remains difficult to accurately assess the quality of the impacts (i.e. outcomes) achieved, given that they are being presented in a multitude of formats and over varying timescales and are hard to verify.

42. **A number of decisions have strengthened the way in which gender issues are addressed in the UNFCCC process.** Gender-responsive public finance is likely to be more effective and efficient. Multilateral climate change funds have been front-runners in

mainstreaming gender considerations in governance and operations. Those under the Financial Mechanism now have a mandate to include information on gender considerations in their annual reports to the COP. While advances are being made, there is scarce information on gender-responsive budgeting, suggesting that work remains to be done in integrating gender considerations on the ground.

43. **The drivers of climate finance flows can consist of both demand- and supply-side actions but may differ in terms of mitigation or adaptation objectives.** For mitigation finance, policy targets and support mechanisms have played a major role in driving climate finance flows, such as in the role of long-term fixed prices in supporting renewable energy deployment to more recently purchasing incentives for EVs as well as bans on the sale of new combustion engine powered vehicles in the long term. Cross-cutting features of enabling environments have also proven to be significant drivers. These have been identified as currency stability of exchange rates, stability of policies and enforcement of contracts, particularly in driving finance toward sustainable land use, and maintenance of political will and support.

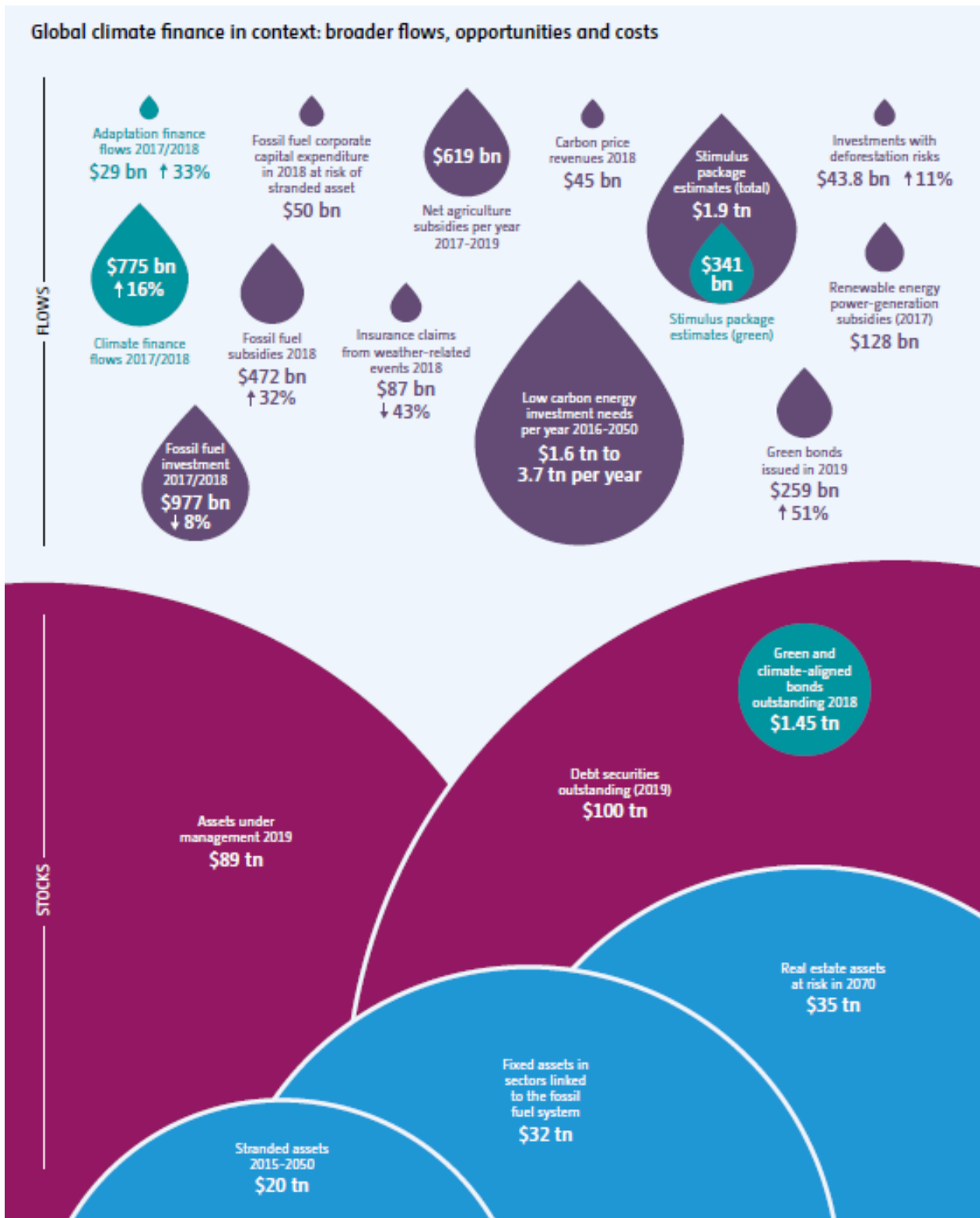
44. For adaptation finance, the role of national plans, standards and institutions take on more importance in driving finance flows than may be the case in mitigation finance. due to the importance of local, context-specific conditions. Building codes, design standards and disaster risk management guidelines play a role in furthering climate resilience within infrastructure and development investments. Furthermore, local and context-specific vulnerabilities require local-level data and information systems on risks to drive investment, particularly in agricultural adaptation activities.

45. **Although climate finance flows are increasing, they remain relatively small in the broader context of other finance flows, investment opportunities and costs.** Climate finance accounts for just a small proportion of overall finance flows as show in figure 4. The level of climate finance is considerably below what would be expected in view of the investment opportunities and needs that have been identified. However, although climate finance flows must obviously be scaled up, it is also important to ensure the consistency of finance flows as a whole (and of capital stock) with the long-term goals of the Paris Agreement, specifically with those set out in its Article 2.

Financial flows and stocks in GHG-intensive activities remain concerningly high. Fossil fuel investments amounted globally to USD 977 billion in 2017–2018, while fossil fuel subsidies amounted to USD 472 billion in 2018. Fossil fuel corporate capital expenditure at risk of becoming stranded amounted to USD 50 billion in 2018, while investments with deforestation risks amounted to USD 43.8 billion in 2017-2018, and net agriculture subsidies amounted to USD 619 billion per year on average from 2017-2019. Fixed assets in sectors linked to fossil fuel systems amounted to USD 32 trillion, real estate assets at risk in 2070 amounted to USD 35 trillion, and stranded assets worth USD 20 trillion are at risk out to 2050.

Given the scale and speed needed for the transformation to low-emission and climate-resilient development pathways, it is critical to consider climate finance flows within the context of broader finance flows. A sole focus on positive climate finance flows will be insufficient to meet the overarching objectives of the Paris Agreement. This does not mean that broader finance flows must all have explicit beneficial climate outcomes, but it does mean that they must integrate climate risks into decision-making and avoid increasing the likelihood of negative climate outcomes. Without this, the effectiveness of climate finance flows can be negated or even called into question.

Figure 4
Global climate finance in the context of broader finance flows, opportunities and costs



D. Mapping information relevant to Article 2, paragraph 1(c), of the Paris Agreement

46. Article 2 of the Paris Agreement sets out three interlinked goals aimed at strengthening the global response to climate change in the context of sustainable development and efforts to eradicate poverty: (1) limiting the increase in global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the increase to 1.5 °C above pre-industrial levels; (2) increasing the ability to adapt to and foster resilience against the adverse impacts of climate change; and (3) in Article 2, paragraph 1(c), “making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development”. Article 2 states that the Paris Agreement will be implemented to reflect equity, and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

47. Although there is no dedicated process for responding to the goal set out in Article 2, paragraph 1(c), some Parties have articulated policies and measures in their long-term strategies or domestic policy frameworks that speak to the goal. Furthermore, both public and private sector institutions in the financial sector have articulated in their strategies efforts to align with the Paris Agreement and the goal in Article 2, paragraph 1(c). In the absence of a common vision among Parties on what information may be relevant, the aim of the mapping exercise was to capture how their actions meet the goal in Article 2, paragraph 1(c) and therefore what they consider relevant from their perspective, and it provided a number of key insights.

48. Significant growth in relevant initiatives has been apparent since the Paris Agreement, particularly in coalitions fostering collective commitments on climate action. Activities relevant to Article 2, paragraph 1(c), in many instances, are found in practices, coalitions and initiatives that predate the Paris Agreement itself. Policy and regulatory measures on green finance have been recorded since 1980, although there has been a marked increase in such measures since the adoption of the Paris Agreement (see figure 5). This historical context is relevant as it provides evidence that even prior to adoption of the Paris Agreement, actors were developing sustainability- and climate-related financial instruments and regulations which represent foundations for action relevant to Article 2, paragraph 1(c), that is also integrated with national development goals. For example:

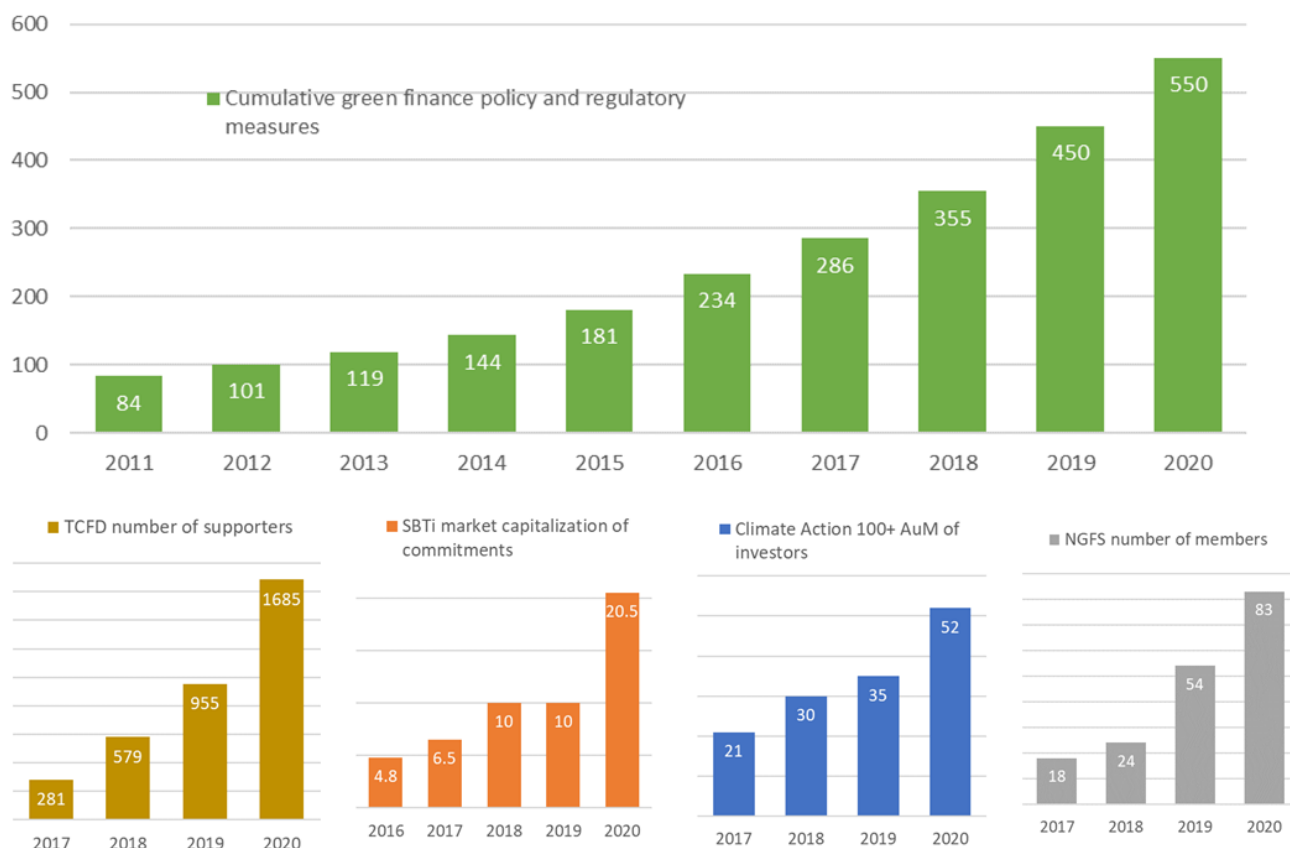
- (a) 34 of 103 stock exchanges have sustainable bond listing processes;
- (b) Investors managing USD 90 trillion have signed on to the Principles for Responsible Investment;
- (c) 53 banks, representing over USD 37 trillion in assets, a quarter of global banking assets, have pledged to align their lending and investment portfolios with net-zero emissions by 2050, as part of the Net Zero Banking Alliance; and
- (d) Over 40 institutional investors with USD 6.6 trillion in assets have pledged to align portfolios with net-zero emissions by 2050, as part of the Net-Zero Asset Owner Alliance

49. However, the Paris Agreement triggered a focusing of action whereby existing sustainability and climate-related finance initiatives sought to adopt objectives or activities that matched those of the Paris Agreement goals. At least 115 sustainability or climate-related financial initiatives exist that claim to be either directly or indirectly associated with contributing to the goals of the Paris Agreement. The majority relate to promoting new financial instruments that address funding needs for sustainable development and climate change. A smaller pool of approximately 31 initiatives are focused on greening financial systems – for example, the TCFD, the European Union High Level Expert Group on Sustainable Finance, and the NGFS.

50. Many activities across the stakeholder mapping exercise that explicitly refer to achieving the goals of the Paris Agreement and Article 2, paragraph 1(c), in particular are executed through collective initiatives and organizations. This highlights the importance of network effects, knowledge-sharing and common goal setting. In contrast, relatively few relevant actions by national Governments are framed their actions in the context of Article 2,

paragraph 1(c). Particularly in developing countries, the ability to access international climate finance in the context of Article 9 is mentioned, as well as directing domestic finance flows towards achieving NDCs.

Figure 5
Number of green finance policy and regulatory measures and growth of selected initiatives since the Paris Agreement



Note: AuM=assets under management; TCFD=Task force for climate-related financial disclosures; NGFS=Network for Greening the Financial System; SBTi=Science-based targets initiative.

51. **Assessing the real-economy impact and the risk of greenwashing remains a challenge.** Efforts relevant to Article 2, paragraph 1(c) are widespread across all actors within the financial sector, with actions concentrated on defining their exposure to climate risks, and the economic opportunities linked to climate response measures. However, achieving the goal in Article 2, paragraph 1(c) related to low GHG emissions and climate-resilient development, set in the context of Article 2, depends on real economy actions that reduce emissions in line with temperature goals and help to develop climate resilience. Many actors in the financial sector operate at a number of steps removed from real economy activities, either through stock or bond trading, portfolio allocations, or micro-prudential supervision, that have little direct effect on real economy investment decisions, relative to banks lending to projects, corporations approving capital expenditure plans or governments announcing support incentives. Therefore, measuring the effective role of financial actors, in the context of Article 2, paragraph 1(c), is notable as a topic of debate among initiatives, including to which metrics are most important as indicators of success.

52. Several researchers highlight the absence of any independent critique of the motives and impacts of the numerous finance-related initiatives that have emerged since the adoption of the Paris Agreement. Such critical engagement will assist in assessing the real-world contributions of these many initiatives towards achieving consistency of finance flows and combating greenwashing in this context. Further, a plethora of initiatives offers the potential for incoherence and different levels of ambition in articulating how the goal in Article 2, paragraph 1(c) may be met.

53. The most recent initiatives include efforts of respective stakeholders to align with net zero emissions or 1.5 °C temperature rise pathways, with a focus on commitments for target setting and reporting, in contrast to earlier initiatives that focused on advocacy and high-level commitments.

54. **Trend toward activities with more stringent minimum requirements or mandatory regulations over voluntary activities.** Actors are largely adopting approaches in line with their institutional mandates, geographic reach and interpretation of how climate risks and opportunities affect and benefit their operations. To date, initiatives with the widest coverage and scope among financial actors are voluntary in nature, with often non-prescriptive commitments to principles. More recently, some initiatives are including mandatory implementation requirements against common timelines. Furthermore, some Governments have already signalled that mandatory exclusions or obligations are being placed on the institutions although these remain limited in number and geographic scope.

55. **More work needed to promote inclusivity and geographic representation.** A number of initiatives relevant to Article 2, paragraph 1(c) include representation from different regions and both developed and developing countries. For private finance actors, such representation is important, and it reveals how different relative starting points, capacity and skills gaps exist within coalitions that make common commitments. Further, although a significant number of initiatives were identified, many have yet to combine networks to achieve greater effect. Of the 115 partnerships identified of relevance to supporting the goals of the Paris Agreement, with up to 5,181 constituent members, the vast majority (75 per cent) are connected to only one partnership.

56. Inclusive and broad geographic representation is even more critical among relevant initiatives targeted at public finance actors, regulators and other country-focused actors such as financial centres. In these forums, the perspectives of different regions, financial systems and country priorities is important to be reflected in how common goals are articulated, particularly as the activities of these actors support and facilitate the achievement of the goal in Article 2, paragraph 1(c) as well as their country NDCs.

57. **Pursuing consistency requires consideration of how finance targeted at currently GHG-intensive activities can support pathways.** A focus on individual financing or investment decisions that are consistent with a pathway towards low GHG emission and climate-resilient development is not straightforward owing to the significant potential range of what pathways may be followed for achieving the broader goals in Article 2. The trend toward developing climate, green or sustainable finance taxonomies, as seen across multiple public actor initiatives, can support the identification of activities that are consistent with such pathways, but may risk excluding necessary investment in high-GHG emission sectors or activities that can support the overall transition to such pathways. These may be in areas where activities that are consistent are not yet available at scale owing to technological innovation (e.g. steel and/or cement processes), where activities are needed to enable the transition (e.g. financing of mining activities, road building), or where financing is needed to wind down or responsibly manage the retiring of high GHG emissions activities and transition communities away from their reliance (e.g. coal phase-out policies and subsidies).

58. Transition finance taxonomies and transition bonds are being developed for private finance actors to finance for example, transitional activities in the context of financing just transitions, which implies projects that meet certain conditions, such as displacing more carbon-intensive options compared with industry norms; and enabling wider application or integration of less carbon-intensive options.

59. **Further consideration of climate-resilient development pathways are necessary to complement existing approaches.** The mapped approaches include a strong focus on actions linked to achieving the goal in Article 2, paragraph 1(a) of the Paris Agreement, namely financing low greenhouse gas related investments, and to mitigating the physical and transition related risks of shifting from high- to low-GHG development trajectories. There appears to be limited evidence of the degree to which financial actors are aligning their investment mandates with climate resilience goals linked to Article 2, paragraph 1(b) of the Paris Agreement. There is a view that focusing on proper climate-related risk disclosure should result in better, more resilient investment and financing decisions as an end in and of

itself, while other views have recognized the existing gaps in guidance and understanding on how to proactively engage on this element.

60. Stakeholders may take action across a number of areas to support advancing efforts in relation to the goal in Article 2, paragraph 1(c). These include:

(a) In public policy and finance, promoting opportunities to make sustainable recovery packages consistent with the goals of the Paris Agreement in the short term and setting in place financial policies and regulations for achieving net zero commitments in the long-term.

(b) Ensuring that just transition financing is incorporated into approaches to align action with the goals of the Paris Agreement or into classifications of consistency with those goals, including in supporting vulnerable developing countries at risk of climate impacts in gaining access to capital to support their climate-resilient development, and in supporting the shift of trade flows away from economic activities that are inconsistent with those goals.

(c) Further clarifying the differences or complementarities between climate finance related to Article 9 of the Paris Agreement and the long-term goal under Article 2, paragraph 1(c).
