

Climate finance and COP-26

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1. Climate change and finance: some key facts

- The Global North has the key responsibility for the climate crisis since the countries of the Global North has produced the majority of cumulative **greenhouse emissions**.
- On top of it, **climate change** is not affecting in an equal way the Global North and the Global South.
- In other words, there is a fundamental issue of **climate justice**.

	Country or region	Gigatonnes of CO ₂	Proportion of total (%)
1	USA	420	28%
2	EU-28	377	25%
3	China	160	11%
4	Russia	105	7%
5	Japan	70	5%
6	India	43	3%

Table 3: Cumulative territorial (1850–1969) and consumption-based (1970–2015) CO₂ emissions by rank

	Gigatonnes of CO ₂	Proportion of total (%)
Global North vs Global South		
Global North	1032	68%
Global South	484	32%
Total	1516	100%
Annex I vs non-Annex I nations		
Annex I	1073	71%
Non-Annex I	443	29%
Total	1516	100%

For the purposes of this analysis, the term Global North refers to the USA, Canada, Europe, Israel, Australia, New Zealand, and Japan, whereas the term Global South refers to the rest of the world: Latin America, Africa, the Middle East, and Asia.

Table 4: Cumulative territorial (1850–1969) and consumption-based (1970–2015) CO₂ emissions by region

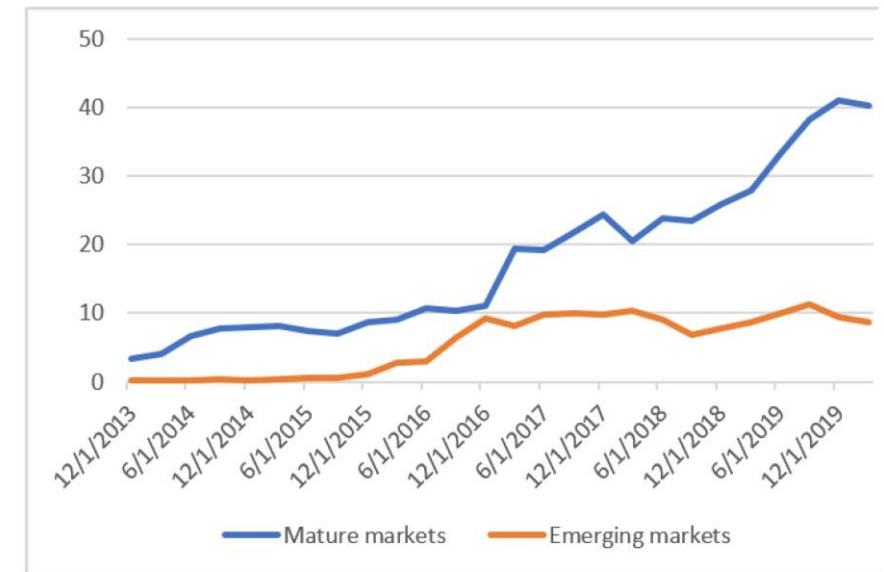
1. Climate change and finance: some key facts

- The achievement of the **targets of the Paris Agreement** requires the rapid implementation of a variety of mitigation policies.
- The term **mitigation** refers to efforts to cut or prevent the emission of greenhouse gases - limiting the magnitude of future warming.
- Climate change **adaptation** refers to the actions taken to manage the unavoidable impacts of climate change.
- **Adaptation measures** include, for instance, the building of defences to protect against sea-level rise and the growing of new crops in areas that were previously unsuitable.

1. Climate change and finance: some key facts

- There are various estimates of the amount of climate **investment** that is necessary to limit global warming to less than 1.5 °C (for example, IPCC (2018) suggests that \$1.6tn-\$3.8tn annual investment is required by 2050).
- Broadly speaking, **climate finance** refers to the financing of green projects via different types of financial instruments (e.g. loans and bonds) and the reduction of carbon-intensive projects.

Green bond issuance, \$ billion



Source: Institute of International Finance (IIF)

Source: Lehman (2020)

2. The emerging consensus in climate finance

Climate change as a source of financial risk

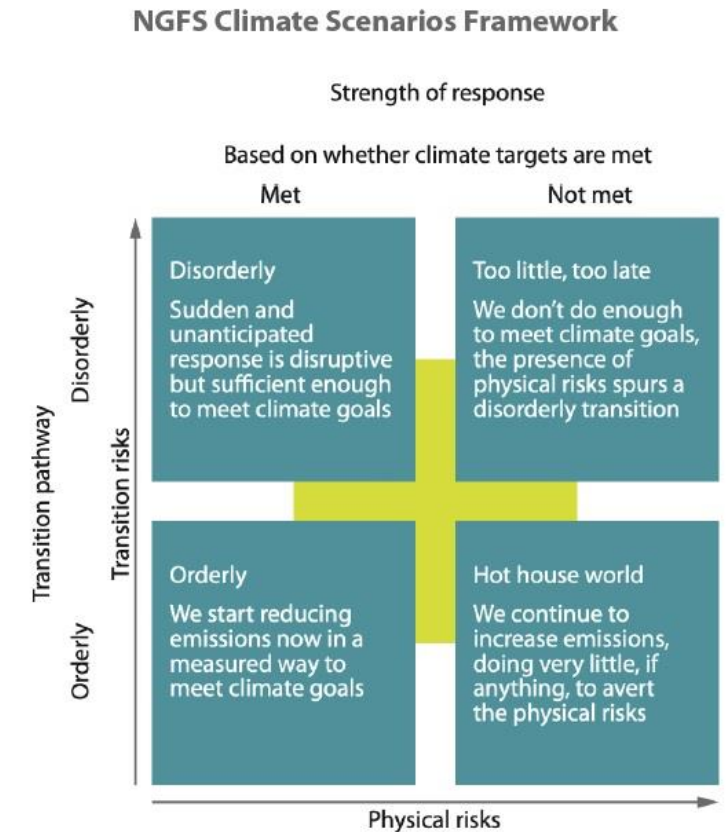
- Central banks (primarily in high-income countries) and financial supervisors have recently paid attention to the **risks** that climate change poses to the financial system.
- Two **types of risks** have been identified:
 - i. Transition risks**, which can be defined as the financial risks that stem from an abrupt transition to a lower-carbon economy.
 - ii. Physical risks** can be defined as those financial risks that arise from the effects of climate-related including events and trends (like hurricanes, floods and typhoons) on the financial position of borrowers and lenders.

Question: According to your view, which of the NGFS scenarios is more likely to materialise?

2. The emerging consensus in climate finance

Climate change as a source of financial risk

- According to the emerging consensus in financial circles, measures have to be taken to **protect** the financial system from these risks.
- **Measures** that have been suggested:
 - i. Climate stress tests
 - ii. Climate-related financial disclosures
 - iii. Climate-adjusted credit ratings that can be incorporated in monetary policy decisions and financial regulation



Source: NGFS (2019a).

3. Alternative approaches to climate finance

1. Debt relief and climate reparations

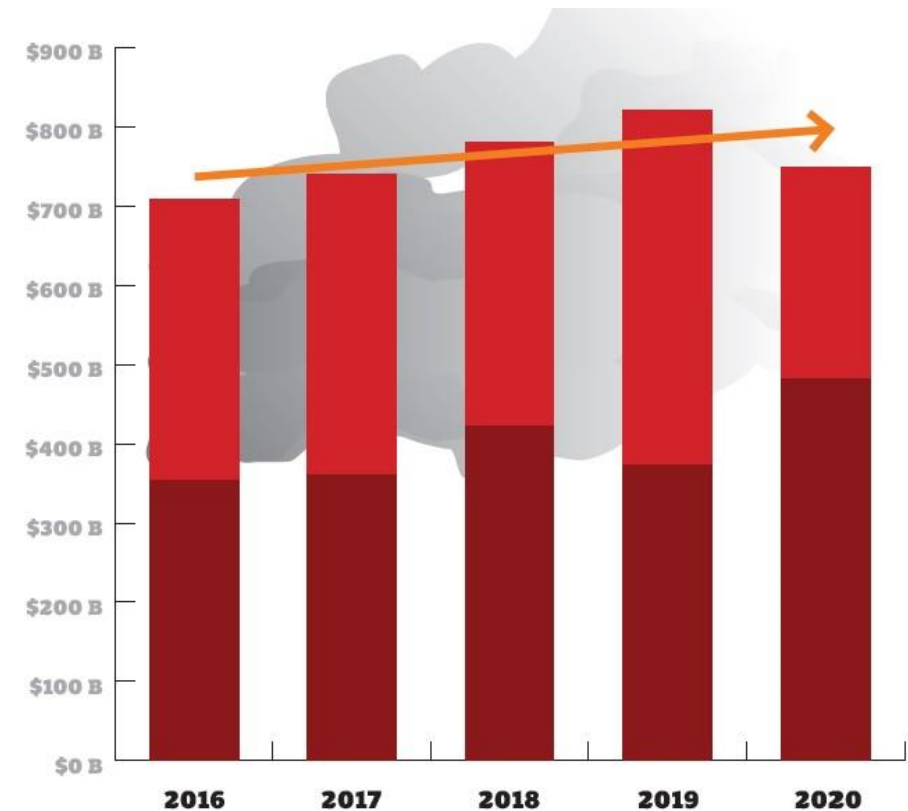
- The **IMF** and the **World Bank** generally provide debt relief or lending in concessional terms to low and middle-income countries.
- Because of **COVID-19**, the IMF supported these countries by using the Catastrophe Containment and Relief Trust and suspend official bilateral debt repayments until 2021.
- Due to urgent needs for climate mitigation and adaptation, the IMF and the World Bank need to provide more systematic support to emerging and developing countries, including the possibility for **private investors** to participate in the debt relief programmes and the longer duration of the debt relief (Bonizzi and Laskaridis, 2020; Laskaridis, 2020).
- **Climate reparations:** Countries in the Global North need to pay for the climate crisis that they have caused to the Global South (Perry, 2020).

3. Alternative approaches to climate finance

2. Green credit guidance

- The current financial system finances a significant amount of **high-carbon investments**. By doing so it contributes to climate change.
- Central banks can induce commercial banks to reduce dirty lending and support green lending.
- For example, the **Central bank of Bangladesh** has required banks to allocate a specific proportion of their portfolio to green loans.
- The **Central Bank of Brazil** intends to introduce the 'Green Rural Credit Bureau' to consider operations with green characteristics.

Global fossil fuel financing, 2016-2020



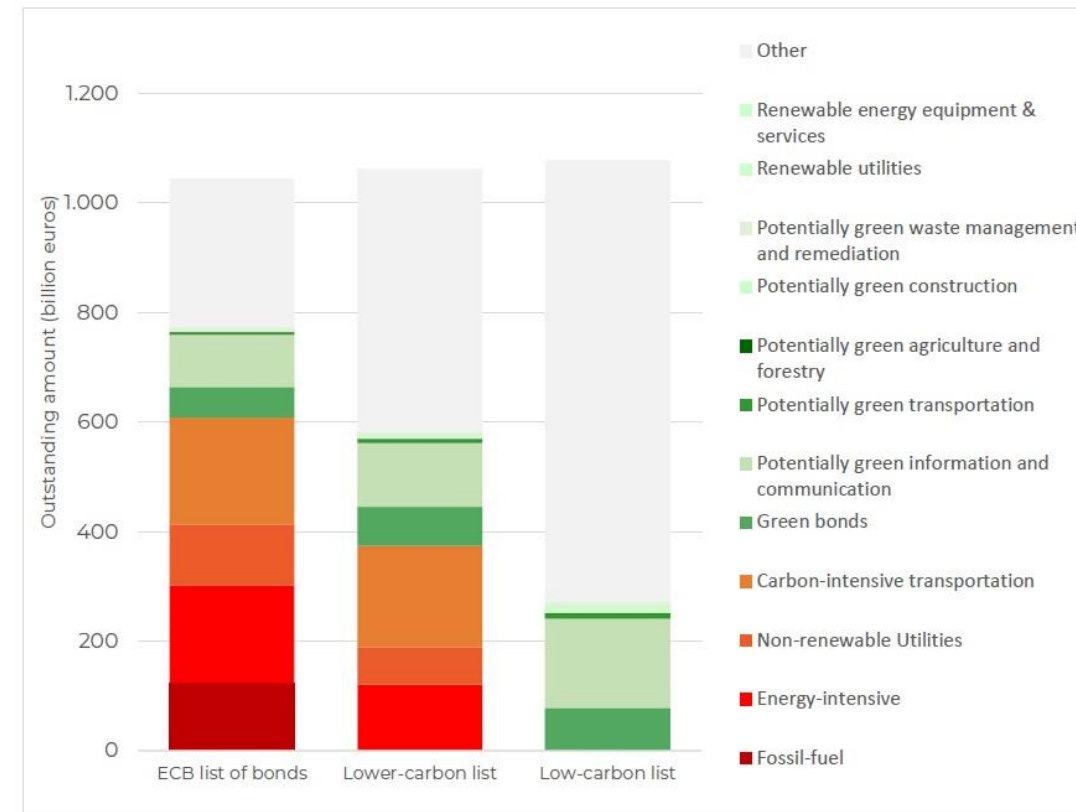
Source: RAN et al. (2021)

3. Alternative approaches to climate finance

3. Decarbonising QE programmes

- The decarbonisation of the Quantitative Easing (QE) refers to the idea that QE could be directed towards the purchase of green financial assets (like green bonds) and away from ‘dirty’ assets.
- A decarbonised QE could reduce the interest rate on **green bonds**, allowing firms to undertake green investment at a lower cost.
- There are some **developing countries** which their central banks employ a QE programme (e.g. Colombia and Indonesia) and they could potentially introduce climate criteria in their QE.

Existing ECB list of bonds held under CSPP/PEPP (outstanding amount) vs lower-carbon lists

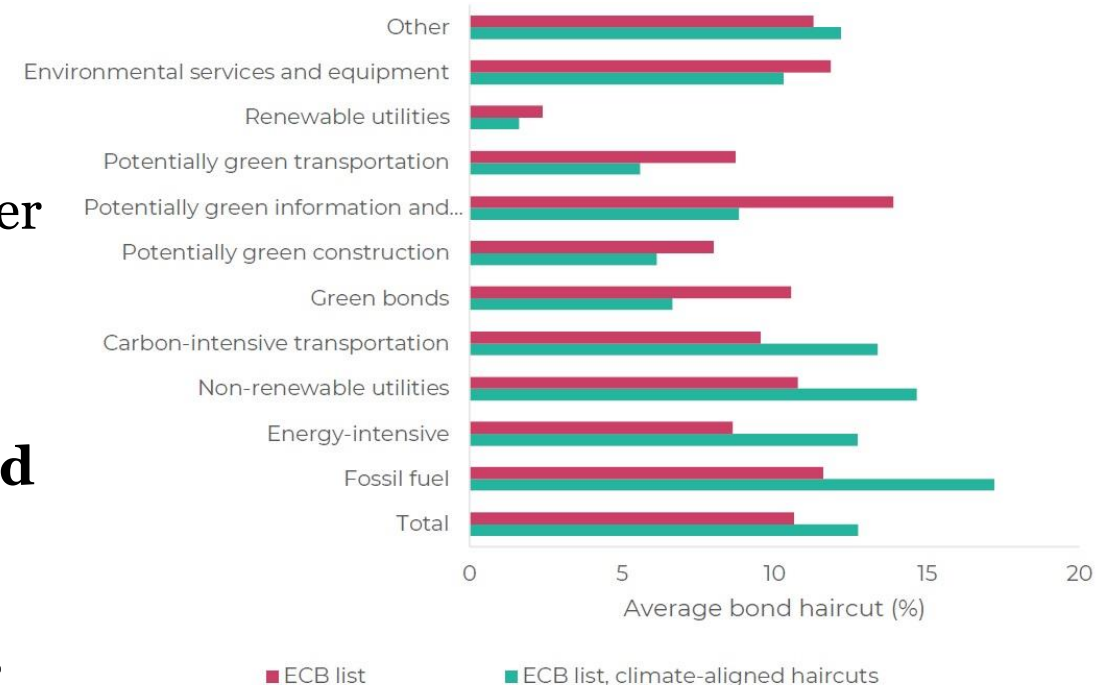


3. Alternative approaches to climate finance

4. Decarbonising the collateral framework

- In some countries, commercial banks can receive **liquidity from central banks** by using specific financial assets as collateral.
- The assets that can serve as **collateral** are determined by Central Banks based on a number of criteria that reflect credit quality.
- However, currently these criteria do not take into account the role of climate change.
- Central banks could introduce **climate-related criteria** for the assets that can serve as collateral.
- For example, the **Central Bank of Brazil** has announced the creation of a ‘Green Liquidity Facility’.

Average bond haircut, ECB list of eligible bonds with and without climate-aligned haircuts



Source: Dafermos, Gabor, Nikolaidi, Pawloff and van Lerven (2021)

4. COP26

- Under the **2015 Paris Agreement** countries agreed to cut greenhouse gas emissions to reduce atmospheric temperature well below 2° C.
- In **COP26** (Conference of the Parties), which is taking place from 31 October until 12 November in Glasgow, countries will agree on how to accelerate action towards achieving the Paris Agreement goal.
- In the context of **COP26, climate finance** refers to financing from developed to developing countries that aims at supporting climate mitigation and adaptation.



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4. COP26

Source: Financial Times, available at <https://www.ft.com/content/d9e832b7-525b-470b-89db-6275853315dd>

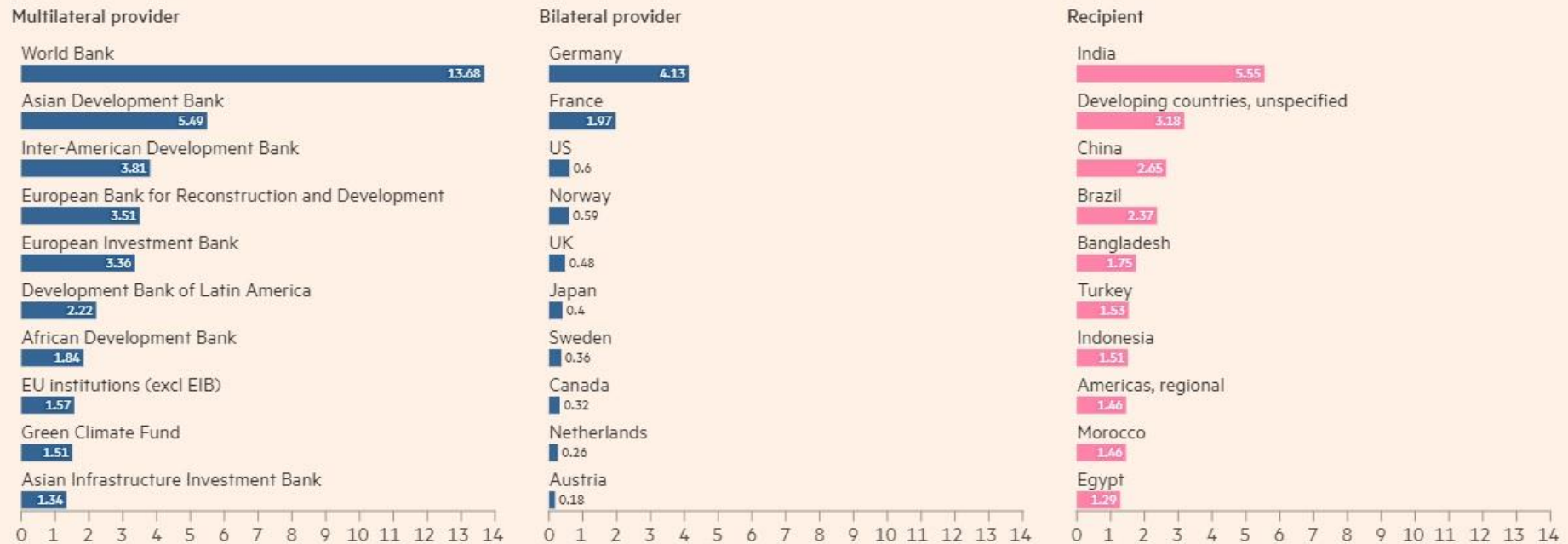
The \$100bn target has not yet been met



4. COP26

Top providers and recipients of climate-related finance

Total commitments of climate-related development projects (\$bn, in 2019 prices)

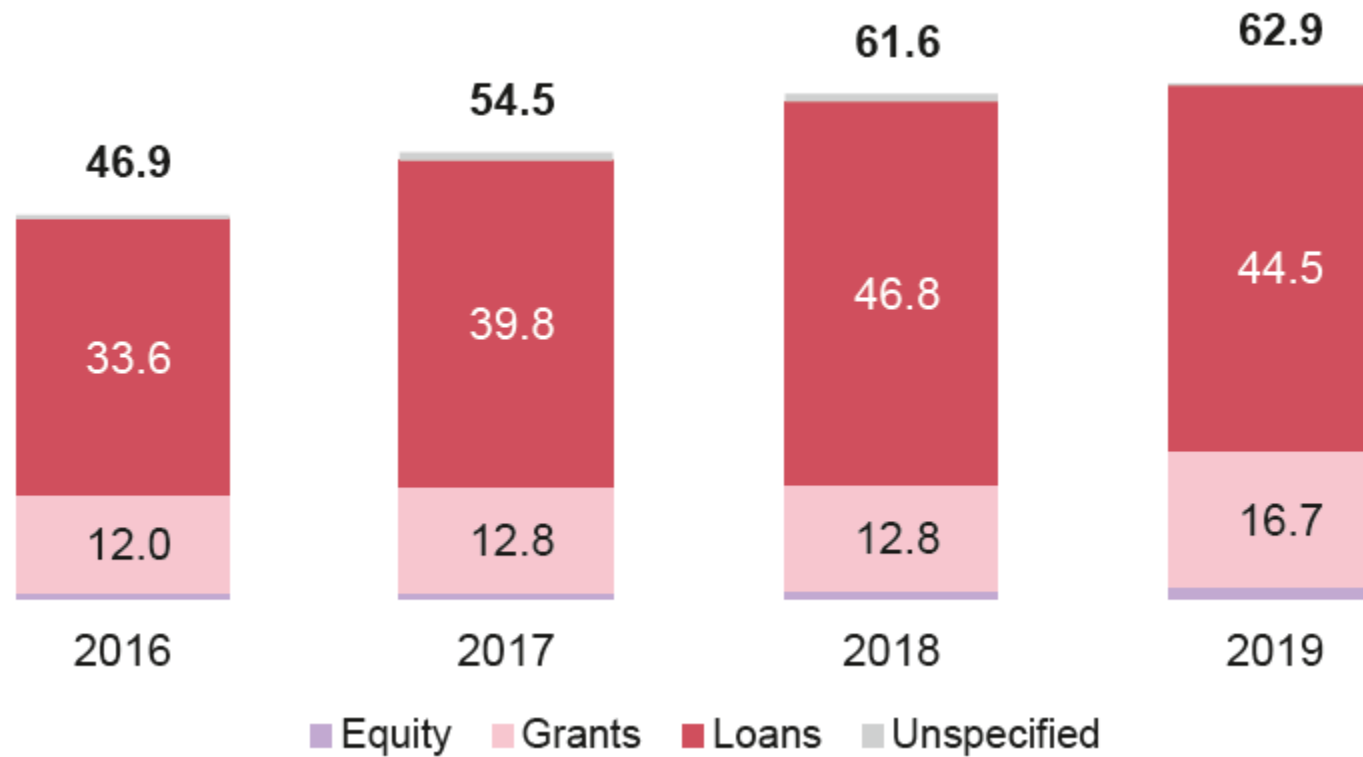


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Source: FT calculations based on OECD data • Average of 2018 and 2019 commitments. Estimates only include activities that are exclusively climate-related (with a principal climate objective or climate component only). Data and graphics by Joanna S Kao

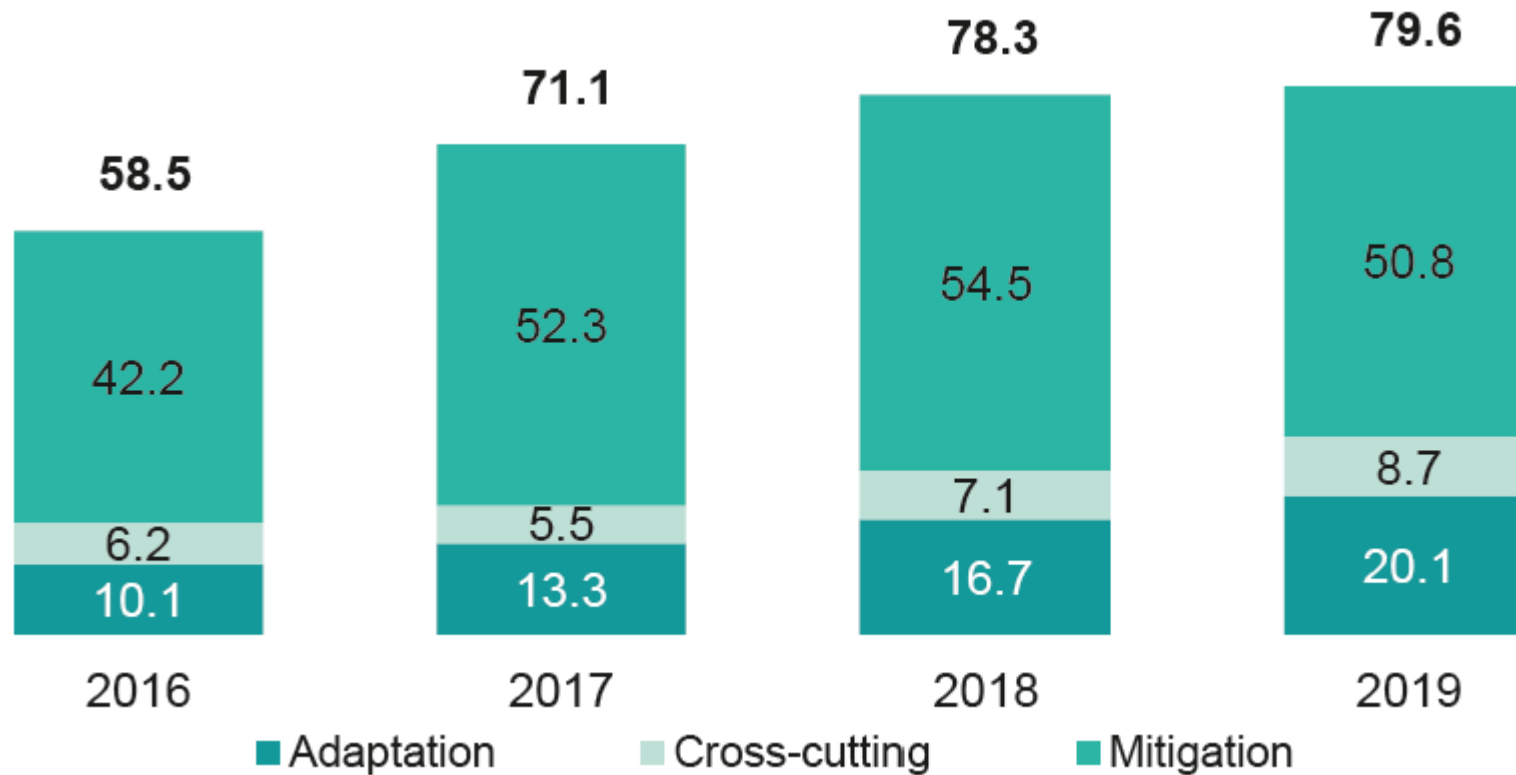
4. COP26

Public finance by instrument (USD billion)



4. COP26

Thematic split of climate finance (USD billion)



5. Beyond green finance

- **Green financial policies** are necessary but **not sufficient** to ensure the transition to a low-carbon economy.
- Fiscal policies have a stronger and more substantial role to play for achieving such a transition quickly.
- There are various forms of **green fiscal policies** that can reduce global warming more than green monetary policies (see e.g. Dafermos and Nikolaidi, 2019). Some examples:
 1. Carbon taxes
 2. Green subsidies
 3. Green public investment
- **Green industrial policies** and changes in **consumption patterns** have also a very important role to play in achieving the low-carbon transition.



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