



SUSTAINABLE  
FINANCE  
LAB

# LEAVING NO COUNTRY BEHIND

A monetary contribution to close the climate  
finance gap

## In this paper

To preserve the global public good of a stable climate, investments in climate mitigation need to grow the most in developing countries.

However, many low-income countries are struggling with high debts and face a challenging economic environment. Fiscal transfers from high-income countries are stagnating, as are private financial flows.

Climate finance for developing countries can be scaled up quickly through the use of the IMF's Special Drawing Rights and its Resilience and Sustainability Trust.

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November 2022

WORKING  
PAPER

## Colofon

Utrecht, November 2022.

The Sustainable Finance Lab (SFL) is an academic think tank whose members are mostly professors from different universities in the Netherlands. The aim of the SFL is a stable and robust financial sector that contributes to an economy that serves humanity without depleting its environment. To this end the SFL develops ideas and provides a platform to discuss them, thus bridging science and practice.

The authors are grateful to all members of the SFL for the plenary discussions. We extend a special word of gratitude to SFL members prof. Ewald Engelen, prof. Mark Sanders, prof. Dirk Schoenmaker, prof. Irene van Staveren and Kees Vendrik for guiding the research. We also thank Jasper Blom, Yousra Chaábane, Leonie Ernst, Kevin Gallagher, Frank van Gansbeke, Patrick Kosterink, Marcos Poplawski Ribeiro, Marc Reinke, Isabelle Tiems, Saskia de Vries and Ying Qian either for taking part in interviews for this research or for their comments on draft reports. Furthermore, we thank Dieuwertje Bosma for the graphic design.

### Working Paper

Sustainable Finance Lab publishes different types of publications.

This is a Working Paper. In our working papers, SFL members, employees or associates work out ideas that have a more reflective and academic nature.

These publications typically do not contain concrete (policy) proposals

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# SUMMARY

A stable climate is possibly the greatest global public good that we have and it is one that can only be preserved if all countries are able to make the necessary investments. This is not the case currently, as evidenced by the large global climate finance gap, which is estimated to be around USD 3.5 trillion. USD 1 trillion of this is the climate finance gap for developing countries (excluding China). This means that climate investments need to grow the strongest – by four to seven times – in developing countries.

The current global debt and cost of living crisis threaten to seal the fate of our global climate as they make it impossible for low- and middle-income countries to invest sufficiently in climate mitigation and adaptation, thereby further increasing the future climate impact on their economies, and thus also undermining their debt sustainability.

Urgent and unprecedented actions are needed at the global level. This paper discusses the rationale for accelerating action and also charts different methods for closing the climate finance gap, focusing especially on the contribution that the global monetary instrument – the IMF's Special Drawing Right (SDR) – can make.

To fully utilise the potential of SDRs we make the following recommendations:

1. **Quickly fulfil the pledge** to rechannel USD 100 billion of SDRs from high-income countries to developing countries, USD 50 billion of which should be through the Resilience and Sustainability Trust (RST).
2. **Use SDRs** that are currently still sitting idle on the balance sheets of high-income countries' central banks for rechanneling to the RST. To this end, increase the current pledged amount from USD 100 to

400 billion.

3. **Examine the remaining climate investment gap** every three years, allowing for reasonable expectations for the growth of all other sources of financing. Based on this a new SDR allocation can be made and rechannelled to the RST.
4. **Replace the current dual interest rate system** (interest on SDR holdings and on SDR allocations) by a single interest rate which is levied on unutilised SDRs. This would incentivise the rechanneling of SDRs and also encourage the bilateral transactions.
5. **Speed up debt restructuring initiatives**, as SDRs can only fund lending and many developing countries are already highly indebted.

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# LIST OF ABBREVIATIONS

CDM	Clean Development Mechanism
CEPR	Center for Economic Policy Research
CGD	Center for Global Development
COP	Conference of the Parties
CSO	Civil Society Organisation
DRM	Domestic Resource Mobilisation
DSSI	Debt Service Suspension Initiative
ECB	European Central Bank
EIB	European Investment Bank
EU	European Union
F2C2	Finance Facility against Climate Change
GDP	Gross Domestic Product
GHG	Greenhouse Gas
G20	Group of Twenty
IEA	International Energy Agency
IMF	International Monetary Fund
LIC	Low-Income Country
MDB	Multilateral Development Bank
NDC	Nationally Determined Contributions
NGO	Non-Governmental Organisation
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PRGT	Poverty Reduction and Growth Trust
RRST	Recovery, resilience and sustainable transition bonds
RST	Resilience and Sustainability Trust
SDR	Special Drawing Right
SeyCATT	Seychelles Conservation and Climate Adaptation Trust
TCDIMF	Task Force on Climate Development and the IMF
UNCTAD	United Nations Conference for Trade and Development
UN	United Nations
UNEP	United Nations Environment Program
USA	United States of America
USD	United States Dollar
VTA	Voluntary Trade Agreement

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# 1. THE CHEAPEST OPTION IS NOT AFFORDABLE FOR EVERYONE

The costs of dealing with the consequences of climate change are much higher than the cost of limiting it. Currently, however not all countries are able to make the necessary investments to reduce greenhouse gas emissions (mitigation finance) and to adapt to the current and predicted physical effects of climate change (adaptation finance).

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This is despite the fact that clean energy infrastructure is already, in most places, the cheapest option when measured over the whole life cycle. However, because the installation costs of clean infrastructure are often, currently, still higher than for fossil fuel infrastructure, liquidity-constrained governments may be forced to choose the fossil fuel option. This makes it impossible to preserve the global public good of a stable climate, especially in the current tough economic environment (Roser, 2020; Way et al., 2022).

## **The first lost years of the decisive decade**

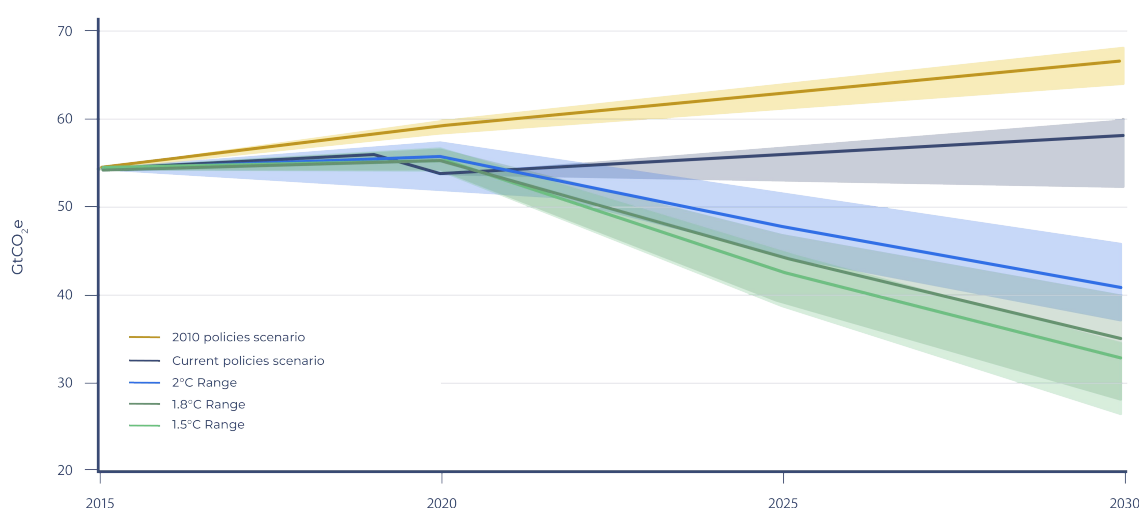
The costs – both economic and in terms of human suffering – of climate change beyond 1.5 degrees Celsius will significantly outweigh the costs of preventing this from happening. This has been clear since the 2007 Stern report and has been confirmed by many studies since then (Hof et al., 2014; Stern, 2007).

Most recently, an IMF study has estimated that phasing out coal exploitation, replacing it with an equivalent capacity in renewable resources, and compensating the coal companies could deliver social net benefits of USD 78 trillion globally in avoided costs (costs that would be incurred by climate change damages in the future), while the necessary upfront investment would be equivalent to USD 29 trillion (Adrian et al., 2022).

This is a decisive decade as it is the last moment in which long-running trends, with regard to the heating of our planet and destruction of nature, can still be

reversed. This must be done to avoid passing critical thresholds and tipping points, beyond which the damage will accelerate and much of it will be irreversible. However, despite the global 2015 Paris climate accord to limit climate change to 1.5-2 degrees Celsius, the trends are still not going in the right direction, let alone at the pace needed (see Figure 1 below).

**Figure 1. Greenhouse gas emissions projections (in gigatons) for different scenarios.**



Source: UNEP (2022a)

In addition, although most emissions currently come from the US, China and Europe, much of the future growth in emissions is expected to come from the developing countries, where population and economic growth are expected to remain at a high level in the coming decades.

For instance, if Africa's population projections come materialise and there are 2.8 billion people on the continent by 2060, and if the average consumption per person in Africa becomes equivalent to that in India today, then Africa might reach US levels of emissions (Pilling, 2022).

### The global climate finance gap

The lack of sufficient progress on limiting climate change is also visible when looking at investments being made in climate mitigation and adaptation globally. These remain far below what is necessary to achieve the stated climate goals. A recent report by the Climate Policy Initiative shows that the funding gap is around USD 3.5 trillion in 2022 (see Figure 2 below) (Climate Policy Initiative, 2022).



**Figure 2. Current finance flows and the total financing need until 2050.**



Source: Climate Policy Initiative (2022)

The IMF and the OECD have arrived at comparable estimates for annual global investment needs. The IMF estimates global mitigation and adaptation investments are needed in the range of USD 3 to 6 trillion per year until 2050 (Prasad et al., 2022). The OECD estimates an annual climate finance need of between USD 5 and 7 trillion per year by 2030 (Boehm et al., 2021; OECD, 2018).

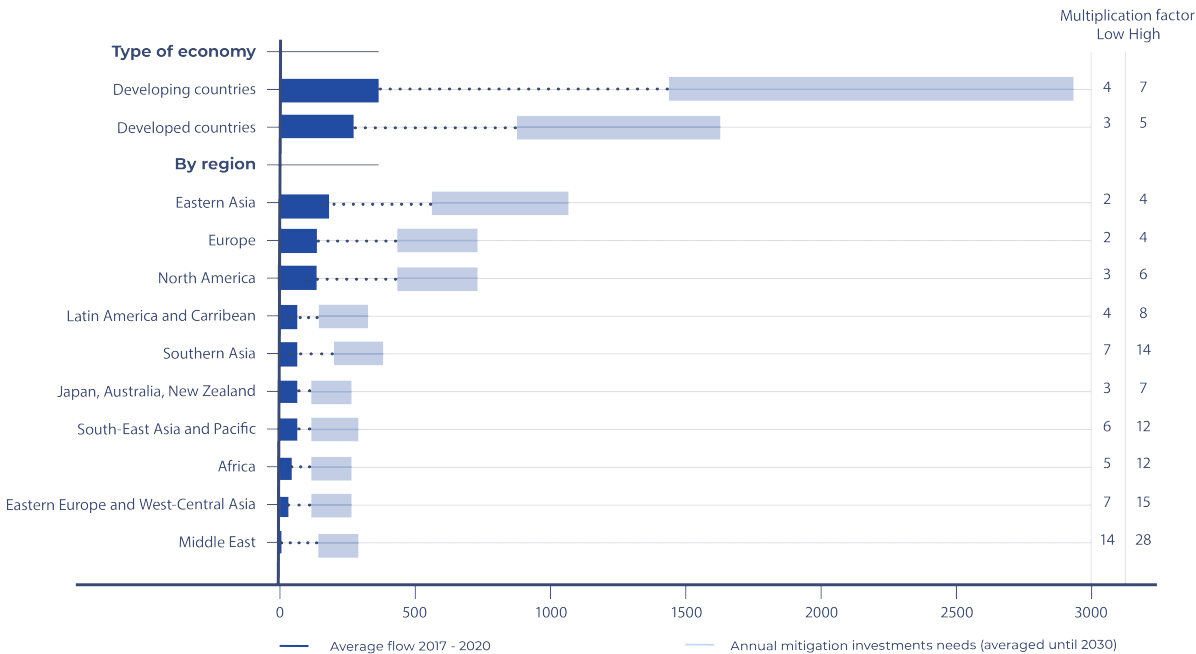
Although the investment need is significantly lower in lower-income countries, the availability of finance there is even more limited. While climate investments in Europe and North America need to increase substantially – by 2-4 times and 3-6 times respectively – the challenge is even greater in lower-income regions like South Asia and Africa, which require 7-14 times and 5-12 times more investment respectively (see Figure 3 below). In terms of GDP, while in developed countries extra climate mitigation investments are needed of between 2-4% GDP, for developing countries this figure is 4-9% GDP (UNEP, 2022b).

It is estimated that emerging markets and developing countries (excluding China) will need to invest an extra USD 1 trillion per year by 2025 and close to USD 2.4 trillion per year by 2030 (Songwe et al., 2022). Developing economies alone will require up to USD 300 billion a year by 2030 for climate adaptation (UNEP, 2021). If climate change is not limited, the need for adaptation financing will rise sharply for emerging markets and developing economies. Estimates range from USD 520 billion to USD 1.75 trillion annually after 2050 depending on the emission pathway (Chapagain et al., 2020).

Despite such large funding needs, the growth of clean energy investments has

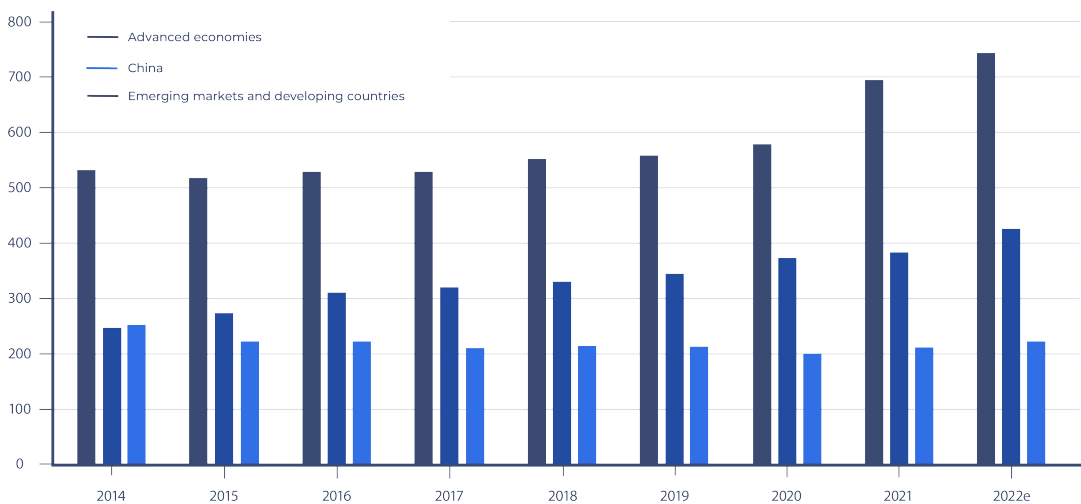
remained subdued, even in the relatively benign economic environment before the 2020 COVID-19 pandemic. Growth in these investments has been limited to the advanced economies and China, with the rest of the world not able to reach even the level of investments attained in 2014 (see Figure 4 below).

**Figure 3. Current mitigation financing flows and their needs until 2030, broken down by level of development of the economies and region.**



Source: UNEP (2022b)

**Figure 4. Clean energy investments by region in 2021 USD. Data for 2022 are estimates.**



Source: IEA (2022) and authors.

This climate finance gap is even more remarkable when we realise that nowadays clean energy infrastructure is often the cheapest option on the table, when looking at the whole life cycle. However, the installation costs of clean infrastructure are often still higher than those for fossil fuel infrastructure (Roser, 2020; Way et al., 2022).

This also makes clean infrastructure more vulnerable to the rising interest rates that we are currently witnessing (Guénette et al., 2022; Voldsgaard et al., 2022). For liquidity-constrained governments this can mean that they are forced to choose the fossil fuel option, thereby not only locking themselves in to an extra long-term financial burden, but also harming the global public good of a stable climate.

### **An unaffordable transition for many**

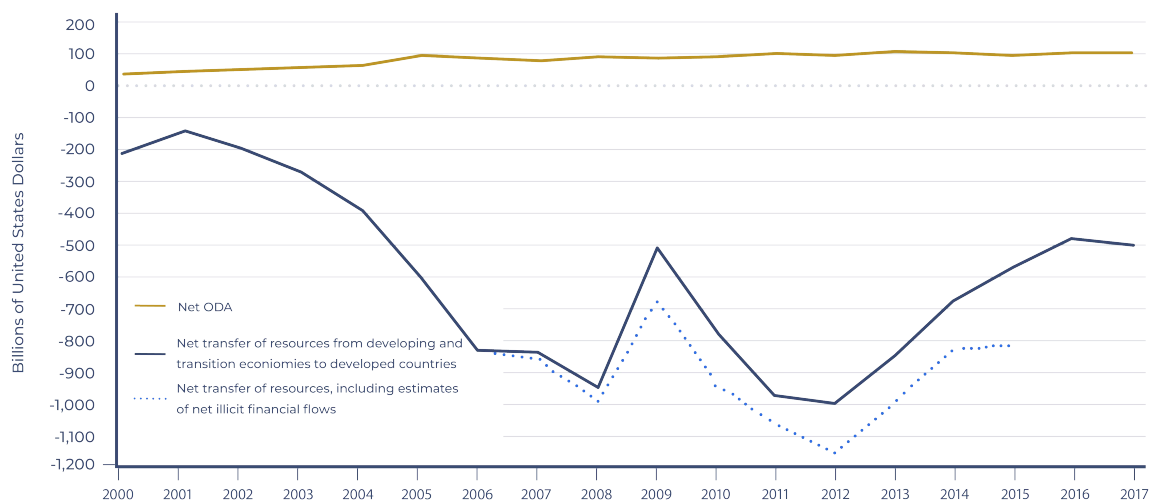
Many developing and emerging economies are struggling to provide for the basic needs of their citizens. Even in 2019, before the COVID-19 crisis, 54 countries spent more on debt repayments than on healthcare, and 25 countries spent more on debt repayments than on healthcare, education and social welfare combined (Federspiel et al., 2022; UN, 2021). The COVID-19 crisis has made this development worse. For example, developing countries paid 1.6 times more for their debt repayments than for health expenditures in 2020 (Munevar, 2021), with some countries paying up to six or seven times more (Watkins, 2020).

Climate change is increasingly adding to the burden. One study estimated that the cost of borrowing of the 55 most vulnerable developing countries has already increased by 117 basis points, solely as a result of climate risk (Buhr et al., 2018). The costs of the recent flooding in Pakistan alone are estimated to have reached a total of close to USD 50 billion or 13% of GDP (World Bank, 2022).

Emerging and developing countries are also facing much higher costs of capital (IEA, 2022). For example the cost of capital for a solar PV project in advanced economies and China is around 4%, whilst for emerging and developing economies this figure is around 12% (IEA, 2022). In addition, the required rates of return from solar PV projects vary considerably between developed and developing countries, predominantly due to different macroeconomic (and solar sector related) risks. This value varies from 7% for Germany and 9% for the USA to 38% for Zambia and 52% for Argentina (Songwe et al., 2022).

This bleak picture is the result of decades in which net money flows have been from the low- and middle-income countries to the high-income countries, as shown in Figure 5 below.

**Figure 5. Net resource transfers from developing to developed countries, in USD billions.**



Source: UNCTAD (2020)

This net position of money flowing uphill, despite the existence of remittances from migrant workers and Official Development Assistance (ODA), results initially from debt repayments and profit repatriation by companies from high-income countries. Since 1980 a total of USD 4.2 trillion has been paid back in interest by developing countries (Hickel, 2017). However, developing countries have also simultaneously been lending money to the US through their holdings of US treasuries for reserve purposes. These US Treasuries pay hardly any interest. Furthermore, there are the illicit and grey-area payments. For instance, through manipulating the true value of goods (so-called 'trade mis-invoicing'), the developing countries are assessed to have lost USD 700 billion in 2012 alone (Global Financial Integrity, 2016). Multinationals can also illegally shift profits from the developing countries to tax havens, further avoiding tariffs and harming those countries (Hickel, 2017).

As a result, the poorest countries are now carrying large sovereign debt overhangs, which hurt much more now that the dollar is rising and capital is being withdrawn. IMF data shows that the number of countries in high debt distress has doubled from 30 to 60 since 2015. Even middle-income countries have not been spared, as the data shows that 72 out of 120 low- and middle-income countries are vulnerable to high debts (Volz et al., 2022).

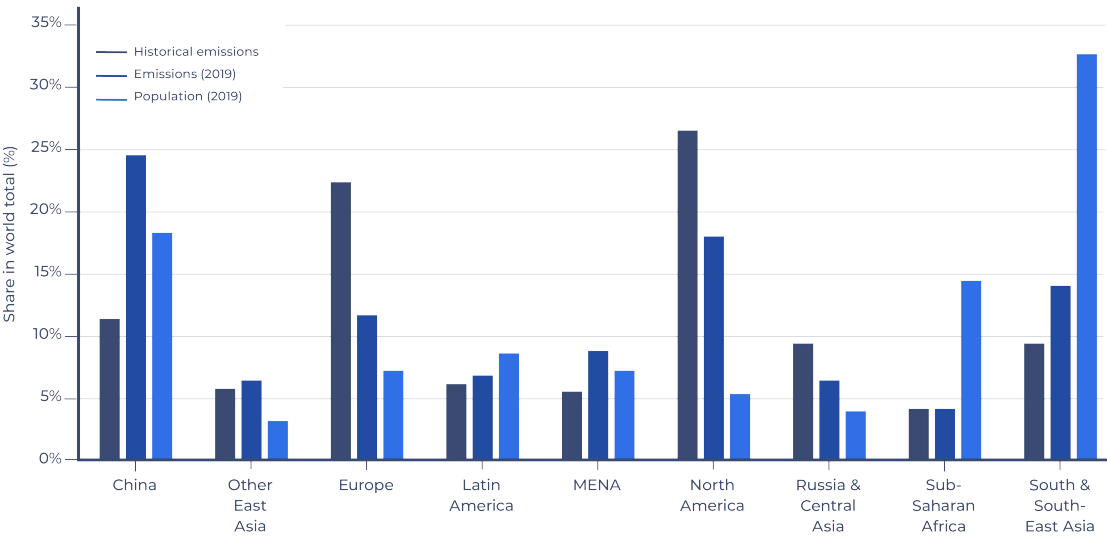
### The economic and moral imperative

High-income countries will also pay a high price for runaway climate change. A stable climate, therefore, is a global public good. It is, thus, also in the economic interest of high-income countries that low- and middle-income countries are able to make the necessary investments in both climate adaptation and mitigation.

Without these investments, the global economy will be severely impacted and, consequently, many countries will no longer be able to service their debts.

However, this economic self-interest is not the only reason why high-income countries should consider ways to allow low- and middle-income countries to make the necessary investments. There is also an ethical angle to this, starting from the widely accepted ‘polluter pays’ principle. As Figure 6 below shows, the share of Sub-Saharan Africa and South and South-East Asia in the global population is much larger than their share in both current and historical emissions.

**Figure 6. Historical and current GHG emissions and population by world region.**



Source: Chancel et al. (2022)

Nevertheless, despite having not contributed much to climate change, many low- and middle-income countries are highly vulnerable to its effects (Edmonds et al., 2020).

**The African climate finance gap**

Despite having 17% of the current global population, Africa has accounted for a negligible 3% of cumulative worldwide CO2 emissions historically. However, climate change and extreme weather events disproportionately affect Africa, with severe economic, social and environmental consequences for its people. It is estimated that between 1986 and 2015 climate change and variability caused damage to African countries’ economies of, on average, annual losses in GDP per capita growth of 5–15% (African Development Bank Group, 2022).

So not only have these countries not contributed to climate change, but they are also already being hit the hardest and have the least capacity to shield themselves from its effects. One recent publication assessed that the costs span from USD 116-435 billion in 2020 to a predicted USD 290-580 billion in 2030 and USD 1-1.8 trillion by 2050 (Bhandari, Warszawski, Cogan, et al., 2022).

This has started the loss and damage (L&D) debate. While at COP26 in Glasgow no commitments were made on compensation from rich to poor countries for current loss and damage from climate change, this issue is now squarely on the agenda of global climate negotiations. Scotland, Wallonia and Denmark have recently earmarked sums of GBP 2 billion, EUR 1 million and USD 13 million respectively. It is, as of yet, unclear to what extent other high-income countries will follow this lead (Bhandari, Warszawski, & Thangata, 2022; The Economist, 2022).

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## 2. POLICIES FOR CLIMATE INVESTMENTS IN DEVELOPING COUNTRIES

In recent years many policy initiatives have been set up to alleviate the financial burden of developing countries and to enable them to invest in climate adaptation and mitigation. Here we present the most important ones. We start with those initiatives aimed at reducing the burden of debt, followed by initiatives to provide governments with more fiscal room and the role of private finance.

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### Reducing the debt burden

#### Debt Service Suspension Initiative

Some relief was provided by the Northern countries. In the wake of the COVID-19 pandemic, the G20 countries launched the Debt Service Suspension Initiative (DSSI) which offered 73 countries a respite by pushing back the deadline for some of their repayments. For the 48 countries that applied, DSSI delivered USD 6 billion of relief in 2020 and USD 7 billion in 2021 (Ahmed & Brown, 2022). DSSI expired in December 2021.

#### The common framework

In November 2020 the Common Framework for Debt Treatments Beyond the DSSI ('Common Framework') was launched to provide the countries covered by the DSSI with some form of debt restructuring (Volz et al., 2021). The innovation in the Common Framework expands the club of creditors involved in debt restructuring beyond the Paris Club (consisting of predominantly developed countries), most notably by including China and India, and also includes private sector lenders into restructuring talks (IMF, 2021b).

However, of all the eligible countries, only three – Chad, Ethiopia and Zambia – have applied for restructuring through the common framework and none have reached a definitive agreement. Possible reasons for the low interest are: firstly, low interest and lack of incentives from the private sector, especially when multilateral

agreements are included; secondly, a lack of transparency and clarity around the restructuring process has been mentioned; and lastly, in the face of the multiple crises, sovereign debt problems may have been low on the agenda of the G20 (Ahmed & Brown, 2022; Fresnillo, 2021).

### Debt-for-climate and debt-for-nature swaps

Currently small but interesting developments are the so-called debt-for-climate or debt-for-nature swaps. These instruments entail debt forgiveness in exchange for investment in climate mitigation/adaptation in the debtor country. The sponsor for these transactions has traditionally been an environmental NGO that lends money to the debtor country to buy back a share of the sovereign country debt at a discount. The loans are repaid to the lender (NGO) and invested in a predetermined mitigation or adaptation program (Qian, 2021; The Economist, 2021; Walsh, 2010; World Ocean Initiative, 2020; Yue & Nedopil Wang, 2021).

#### Recent examples of debt-for-climate swaps

Debt-for-climate swaps went through a dormant phase in the 2000s but have recently resurfaced. Two prominent examples are the Seychelles and Belize. In 2018, the Seychelles partnered with The Nature Conservancy's investment arm NatureVest and with their donation bought back a USD 21.6 million debt at a discount. The money was repaid to the Seychelles Conservation and Climate Adaptation Trust (SeyCCAT) which finances marine conservation activities. Under the scheme, the Seychelles committed to keeping 30% of its marine resources protected (World Ocean Initiative, 2020).

More recently, in 2021, Belize repurchased a part of its foreign debt valued at USD 553 million at a 45% discount with the help of The Nature Conservancy who provided a loan of USD 364 million. A part of the savings, USD 23 million, has been dedicated to maintaining marine life and, similarly to the Seychelles, protecting 30% of its waters (The Economist, 2021). As a result of the transaction, Belize's credit rating was increased (TCDIMF, 2022).

These debt-for-climate swaps have been plagued with various issues. Firstly, they required high transaction costs in terms of lengthy negotiations with multiple stakeholders and high upfront costs for legal fees (Steele & Patel, 2020). Secondly, the amounts restructured have been low relative to country's total public debt, although the example of Belize shows this need not be the case. Lastly, and partly as a result of the previous issues, they are difficult to scale up (Steele & Patel, 2020).



## Public money flows

### Official development assistance (ODA)

ODA is government aid from high-income countries that flows directly to developing countries as a grant or is loaned on concessional (non-commercial) terms. The size of ODA stood at USD 178.9 billion in 2021. The share of ODA supporting climate objectives reached 33.4% of all ODA flows in 2020 (OECD, 2020). Although the UN set a target of 0.7% of the donors' combined gross national income for ODA, the current level is only 0.33%, which is where it has been since 2005 (OECD, 2021).

### Multilateral development banks

MDBs play a key role in giving financial aid to developing countries. Some of the largest MDBs include the European Investment Bank, the African Development Bank and the Asian Development Bank. In 2021, MDB's joint climate finance to low- and middle-income countries reached USD 51 billion. This amount was comprised of more than USD 33 billion targeted at climate change mitigation and more than USD 17 billion for climate change adaptation. In addition USD 13 billion was raised from mobilised private finance. With USD 51 billion being provided in 2021, financing by MDBs already surpassed the 2025 target of USD 50 billion for low- and middle-income countries set by the UN General Climate Action Summit (EIB, 2022).

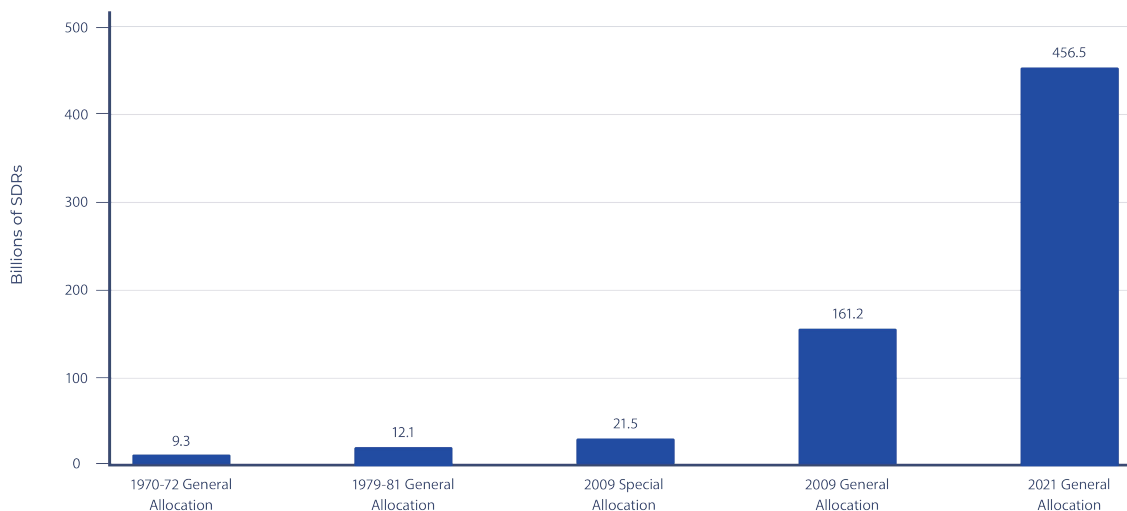
### Global climate commitment

In 2009 the high-income countries pledged to help fund energy transition in developing countries with an annual commitment of USD 100 billion. However, up until now this figure has not been reached. In 2020 the overall figure was only USD 83 billion (OECD, 2022). There are some important caveats to this figure. Not all of it is considered 'new' money, as former development assistance (ODA) money has been relabelled as climate finance for developing countries. There is also criticism that only a third of the funds committed are in the form of grants (Oxfam, 2020).

### IMF Special Drawing Rights (SDRs)

SDRs are a reserve asset created by the IMF in 1969. They are potential claims on the currencies of other IMF Member countries. SDRs can be freely exchanged for these currencies. SDRs are not currencies, neither are they claims on the IMF. The original purpose of SDRs was to give aid to IMF member countries to help with balance of payments crises (IMF, 2022b). There have been four rounds of general SDR allocations, as well as a one-time special allocation (see Figure 7 below) (IMF, 2022b).

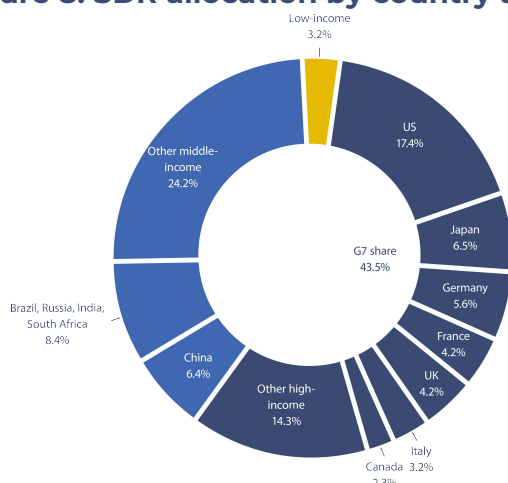
**Figure 7. SDR Allocations. General and Special, in billions of SDRs.**



Source: IMF (2022b).

SDRs are allocated according to the country's IMF quota. The quota is determined by the country's GDP (50%), openness (30%), economic variability (15%) and international reserves (5%) (IMF, 2022e). Thus, the wealthiest countries hold the largest quotas. The largest quota of 17.43% of the total share belongs to the USA, followed by Japan with 6.48% and China with 6.41% (IMF, 2021c). Developing countries excluding China received USD 250 billion of the 2021 issuance of the USD 650 billion, with USD 53 billion going to lower-middle-income countries and USD 9 billion to low-income countries. Within the first year of this pandemic relief issuance, most developing countries had used up all of their SDR holdings, whilst many rich nations had barely touched theirs (IMF, 2022a). Figure 8 below shows the SDR allocations by country group.

**Figure 8. SDR allocation by country and country group.**



Source: Wolf (2021), adapted from the IMF (2021c)

## IMF trusts

The IMF has two trusts that are financed through the rechanneling of SDRs from high-income countries: the Poverty Reduction and Growth Trust (PRGT) and the Resilience and Sustainability Trust (RST).

The PRGT was established in 1999 with the aim of providing financial aid to low-income countries (LICs) in the form of zero-interest loans to PRGT-eligible countries in the event of natural disasters or other events causing fragile situations.

The RST has a similar aim as the PRGT. The PRGT and RST also share a similar governance and financial structure (IMF, 2022i). As is the case with all IMF trusts, both the RST lending and the PRGT include conditionality. PRGT lending is done through three concessional lending facilities (Extended Credit Facility, Standby Credit Facility and the Rapid Credit Facility), all of which come with their own conditionality (see IMF, 2022c for all of the conditions). The three conditions for receiving RST lending are high quality policy reforms, a concurrent IMF supported program and sustainability of debt including the adequate capacity to repay (IMF, 2022h).

There are, however, some key differences between the PRGT and the RST:

1. The PRGT loan repayment periods vary from 8-10 years, with grace periods varying from 4.5-5 years (IMF, 2022c). In contrast, the RST has a longer maturity period (20 years) and a longer grace period (10.5 years).
2. The RST loans are not zero-interest loans, instead the interest is slightly above the three-month SDR rate. However, for the poorest countries concessional financing terms are given (IMF, 2022f).
3. The PRGT is only able to accommodate for commitments up to SDR 1.4 billion annually (IMF, 2022c).
4. The current target of fundraising for PRGT loan resources is SDR 12.6 billion. The RST funding target is much higher, being set at SDR 33 billion to meet the expected loan demand, and SDR 29.2 billion of this has already been raised (by October 2022) (IMF, 2022d).
5. The loans from the RST are available to a larger number of countries as there are 69 PRGT-eligible countries and 143 RST-eligible countries (IMF, 2022f; IMF, 2022g).

It is also important to note that although many rich countries have pledged to rechannel their SDRs, many have fallen short of their promise. In September 2022, the value of national pledges appeared to accumulate to only around USD 59.5

billion. The US government's proposal to contribute USD 21 billion to the PRGT and RST was rejected by Congress (CEPR, 2022).

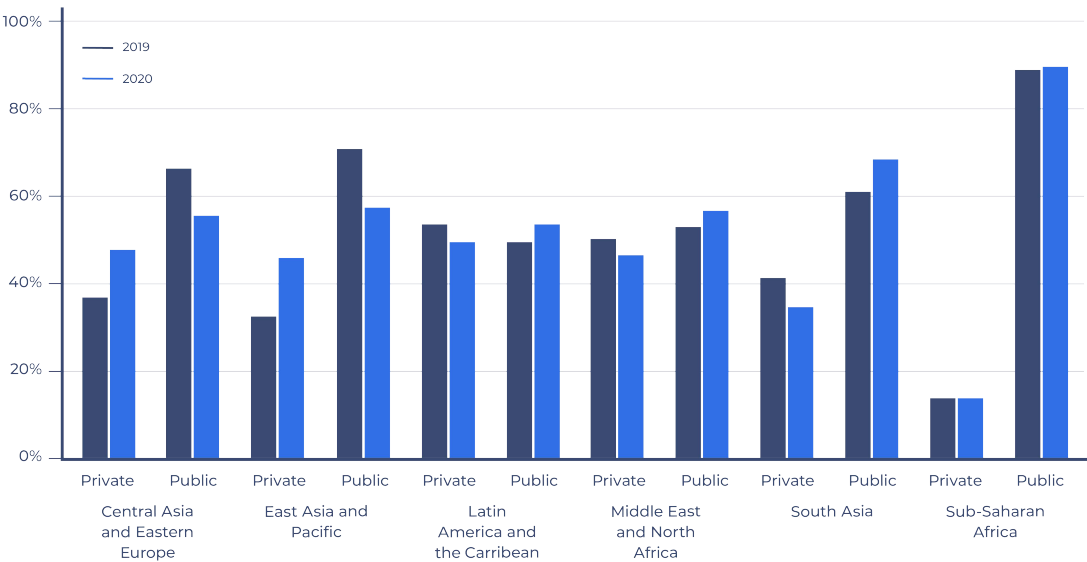
Private finance

Loan guarantees and blended finance

Climate investments can come from both private and public sources. More stringent climate policies, like carbon taxation and regulation, will stimulate more private finance. However, such instruments have proven to be politically difficult to implement. That is why public investments also have to play their role. Public investments can also aim to encourage private investments specifically through so-called public-private partnerships or blended finance. MDBs and national development banks have traditionally been important players in this, typically requiring a lower investment return and/or having a higher risk tolerance, and they can participate in various de-risking schemes. However, despite their potential, private investments through blended finance actually decreased in developing countries from USD 150 billion in 2012 to less than USD 100 billion in 2019 (Gallagher& Kozul-Wright, 2022). Between 2019 and 2021, there was only USD 14 billion of blended finance deals for poor countries, less than half the volume seen in the previous three years (Tett, 2022). A recent report shows that MDBs raised USD 71.1 billion in private finance for lending to low- and middle-income countries in 2016, but only USD 63.3 billion in 2019 (Attridge, 2022). Similarly, the Global Infrastructure Facility, a body facilitating public-private partnerships supported by the G20 and the World Bank, has attracted only USD 47 billion since its establishment in 2014 (Global Infrastructure Facility, 2022).

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Figure 9. Climate finance by region and funding source.



Source: African Development Bank Group (2022)

Most of these funds have been directed towards large middle-income countries, with the 24 poorest countries having only one privately funded project between 2011 and 2015. Another study found that only 2% of private funds went to the least developed countries in 2016 (Gallagher & Kozul-Wright, 2022).

We also see that the mix of public and private funding for climate investments differs starkly across regions (see Figure 9 above). While in Latin America and the Caribbean and the Middle East and North Africa public and private finance almost balance out, in Sub-Saharan Africa private finance is less than 20% (African Development Bank Group (2022).

### Carbon credits

Another way to leverage private funds for climate finance in developing countries is to further develop voluntary carbon markets. These are markets for carbon offsets, instruments that put a price on CO<sub>2</sub> emissions mitigated or avoided. This market is expected to grow strongly in the coming years after agreement was reached at COP26 in Glasgow in 2021 on the carbon markets mechanisms enshrined in Article 6 of the Paris Agreement. According to the agreement carbon credits can be bilaterally traded between two countries in order to help one of them reach their Nationally Determined Contributions (NDCs). Project developers need to register with the UN-established Supervisory body before being able to issue carbon credits (Carbon Market Watch, 2021).

However, Africa, for instance, has not benefited much from the earlier Clean Development Mechanism (CDM)<sup>1</sup> programmes, with African countries accounting for only 3% of all carbon reductions under CDM. It is estimated that carbon offsetting projects could generate USD 2 billion a year in Africa (African Development Bank Group, 2022). This figure could be further increased by strengthening the legal framework, expanding the market for carbon offsets and its transparency. These efforts might benefit Africa greatly as the market for voluntary offsets is expected to grow to between USD 5 billion and USD 30 billion globally by 2030 (McKinsey, 2021).

<sup>1</sup> CDM was established as a part of the Kyoto Protocol in 1997 and was the first emissions trading scheme. However, CDM credits are considered to be of low quality due to the loose rules of enforcement (Carbon Market Watch, 2021).

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## 3. PROPOSALS FOR CLOSING THE CLIMATE FINANCE GAP

To close the climate finance gap much more financing is needed to enable low- and middle-income countries to invest in climate adaptation and mitigation. Here we discuss the proposals currently on the table for scaling up climate finance in developing countries. We consider what they are and how likely they are to work within the short time span we still have. Given the proven difficulties of scaling up both private financial flows and fiscal transfers, we focus on the contribution that a monetary instrument at a global level can provide through the IMF's issuance of SDRs.

### **Both private and public funding are necessary**

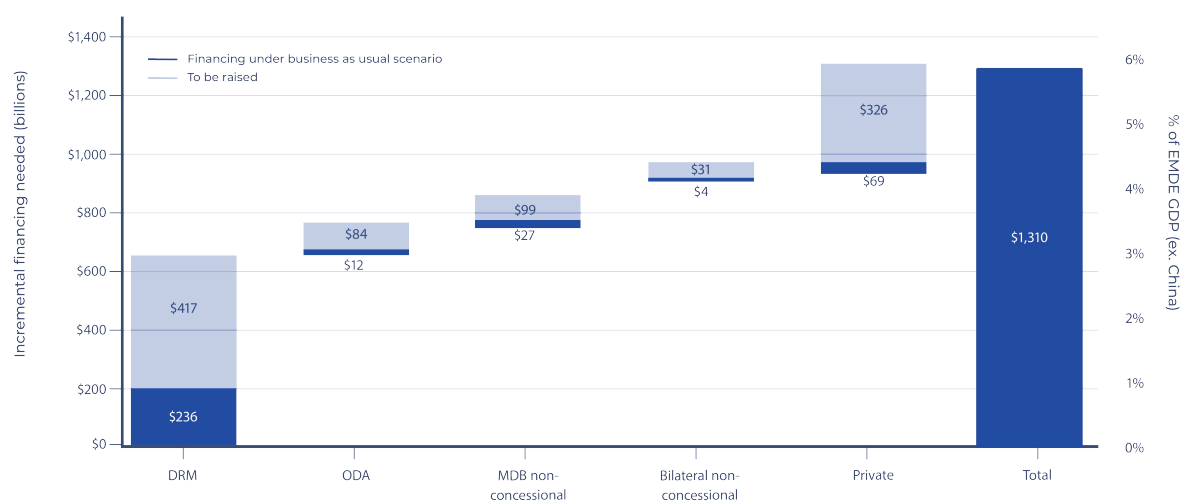
Multiple routes have been suggested for closing the climate finance gap in developing countries. It is generally understood that a mix of public and private finance will be necessary to achieve this. According to the Independent High-Level Expert Group on Climate Finance, by far most of the growth, in absolute numbers, needs to come from the developing countries themselves (domestic resource mobilisation (DRM)) and from the private sector (see Figure 10 below).

The numbers are, by their authors' admission, very ambitious (Songwe et al., 2022). Firstly, it is unclear to what extent it will be possible to scale up DRM threefold, given the historically low capacity of developing countries for increasing their taxation rate considerably (Gupta & Liu, 2020; Gupta & Plant, 2019). This is even more the case now with the very challenging economic environment. Secondly, while the total amount of private money available globally is substantial and swift scalability could in theory be achievable, recent history shows that engaging this capital for developing countries has not been possible (see discussion above).

Possibly the surest way to scale up climate finance for developing countries is through MDBs. One proposal put forth suggested that MDBs can increase their lending by between almost USD 600 billion and almost USD 2 trillion (Gallagher &

Kozul-Wright, 2022). Recent proposals on behalf of the G20 have put forth the idea that MDBs can increase their risk tolerance and thus expand their lending. As they are not under the supervision of any global authority and depend mostly on the political appetite of their shareholders, this expansion could be relatively straightforward (G20, 2022). That appetite seems to be present, as evidenced by the fact that US Treasurer Janet Yellen recently asked for more initiative on climate lending on the part of MDBs (US Department of the Treasury, 2022). In addition, Germany, with the support of other large shareholders, has done the same for the World Bank (Mathiesen & Weise, 2022).

**Figure 10. Current climate financing and the financing gap by 2025, by types and sources of finance, in 2019 USD billions.**



Source: Songwe et al. (2022)

Other proposals focus more on public funding from the high-income countries, such as the establishment of a modern-day Marshall Plan, similar to the one established in the US after World War II to support rebuilding a devastated, post-war Europe (Gallagher & Kozul-Wright, 2022). Needed as this may be, it will be very difficult politically to arrange the funding for such an initiative because it is sizeable (the original plan entailed around 1% of the US yearly national income for four years) and is issued mostly through grants and zero-interest loans.

Alternative ideas have been put on the table that would allow policymakers to shift part or all of the fiscal burden to later generations, who have much to gain by preventing the escalation of climate change. For example, the idea of scaling up loan guarantees that allow low- and middle-income countries to borrow at reduced rates. A recent proposal along these lines was made for the World Bank Group to direct the financial management of a newly established Finance Facility against Climate Change (F2C2). According to this proposal F2C2 would issue bonds targeted for green investments in the Global South countries and covered by the

richer nations. Because of this support, they would be assumed to 'inherit' the AA or AAA credit rating of their backers, making the bonds attractive to investors looking for safe financial assets (Kraemer et al., 2022).

A similar proposal calls for the establishment of a funding mechanism that would allow low-income and low-middle-income countries to issue long-maturity bonds at below-market rates called recovery, resilience and sustainable transition bonds (RRST). These bonds would need commitment from the private parties, represented by the Institute of International Finance, to provide liquidity for the countries issuing the RRSTs. In order to provide an incentive for the private sector, the plan is also projected to draw support from the IMF in the form of a 40% to 60% guarantee by the newly established RST. It is proposed that up to 20% of the financing raised by the RRST issuance is used for debt repayments, while the remaining 80% would be earmarked for sustainability investments aligned with the RST conditionality (al Tuwaijri et al., 2021; Ayadi, 2022).

### Scaling up through the use of special drawing rights

Linking instruments to scale up climate finance with the IMF's RST creates a link with the global monetary powers of the IMF, since the RST is financed mostly through the rechanneling of SDRs by high-income countries. Given the poor progress achieved with both private finance and public transfers, along with the urgency to quickly raise climate finance in developing countries, there is increasing support for making more use of the IMF's global money creation powers through SDRs. The COVID-19 crisis was an important driver for this, with academics calling for the issuance of USD 650 billion in SDR as an immediate response to the COVID-19 pandemic in March 2020 (Gallagher et al., 2020a, 2020b). Much higher figures have also been suggested. An open letter published in 2021, signed by more than 250 civil society organisations (CSOs) and academics called for an issuance of SDRs to the amount of USD 3 trillion (Latindadd, 2021). A more recent open letter signed by 14 civil society organisations calls for another USD 2.5 trillion in SDR allocations and improved rechanneling (Eurodad, 2022).

Such proposals are also reflected in the recently announced 2022 Barbados Agenda. In it, several multilateral instruments – with the purpose of financing mitigation, adaptation and loss and damage – have been put on the table. First is the establishment of the Climate Mitigation Trust that could start with seed money of USD 500 billion (either in the form of new SDRs or other funds) and leverage up to USD 5 trillion in new private lending. Secondly, the agenda calls for alignment with the G20's recommendations on raising the risk appetite of MDBs (see above) and asks for extra USD 1 trillion in new lending, including SDRs. The agenda also calls for USD 200 billion per year in loss and damage payments to those countries that are worst impacted by climate change. Last is a proposal for the conditionality



for concessional lending to be loosened for adaptation investments (Barbados Ministry of Foreign Affairs and Foreign Trade, 2022; Songwe et al., 2022).

The African Finance Ministers have put two additional proposals on the table aimed at helping SDRs reach their full potential in terms of aiding climate finance (Songwe et al., 2022). Firstly, they propose regular general allocations of SDRs every 5 years, in addition to special SDR allocations to be automatically issued when certain macro-critical thresholds are exceeded, such as force-majeure shocks or global recessions. Annual SDR allocations are motivated by the expected global need for international liquidity due to the climate crisis.

The second proposal is to reform the interest rate mechanism of SDRs. The current dual interest rate system, with interest on SDR holdings and on SDR allocations, disincentivises the rechannelling of SDRs and incentivises recipients to keep the SDR holdings on their balance sheets. The proposal is to instead have a single interest rate which is levied on unutilised SDRs. This would motivate IMF member countries to either use the SDRs themselves or to rechannel them to countries that need them more, instead of letting them sit idle on their balance sheets (ECA, 2021).

### Limitations of special drawing rights

Although the use of existing SDRs and the issuance of new SDRs both have great potential for quickly scaling up climate finance for developing countries, there are particular institutional limitations to SDRs. It is these limitations that we will now discuss. There are different ways for high-income countries to rechannel their SDRs to low- and middle-income countries. The three main ways are through:

- MDBs
- voluntary trade agreements (VTAs), and
- IMF trusts.

The mechanisms of all three are explained in more detail in Appendix A.

### No grants

For many central banks, including those of EU member states, it is necessary to preserve the SDR reserve asset status when rechannelling SDRs, as otherwise it is considered monetary financing. Liquidity and low credit risk need to be met for SDRs to preserve their reserve asset status (ECB, 2021). This is also the reason why SDRs cannot be given as grants or lent out as perpetual loans without a maturity date. The RST lends SDRs with a maturity of 20 years and a grace period of 10.5 years. Making this a perpetual loan could compromise the reserve asset status of the claim, as with perpetual loans the credit risk may increase. Therefore, SDRs cannot be used to aid poor countries without increasing their debt burden and so they are not a solution for poor countries in need of debt relief.

### No MDBs for EU countries

EU IMF member countries are also prohibited from directly recycling their SDRs to MDBs as this transaction is deemed to be incompatible with the monetary financing prohibition of the Treaty of the Functioning of the European Union. EU member central banks are therefore only allowed to channel SDRs to vulnerable countries through the IMF, including IMF sponsored trusts which operate on the sub-balance sheets of the IMF, such as the PRGT and the RST, or through VTAs (ECB, 2021).

One possibility could be for EU member states with SDRs to lend their SDRs to trusts, the IMF or other countries that do not face this issue of monetary financing prohibition. These SDR participants could then lend out the SDRs to MDBs. This may be a feasible, indirect way for European countries to rechannel their SDRs.

### The interest burden of voluntary trade agreements

In 2021, Christine Lagarde called for IMF members to sign more VTAs to aid developing countries and to ensure that the burden of recycling SDRs was spread across a wide set of countries (ECB, 2021). The main limitation to the VTA route from the perspective of the SDR creditor is the interest payment that comes along with giving out their SDR holdings and that rests with the creditor. The SDR interest rate (SDRi) is based on the sum of the currency amounts in the SDR valuation basket, the level of the interest rate on the financial instrument of each component currency in the basket, and the exchange rate of each currency against the SDR (IMF, 2022j). The current hike in interest rates (especially in the EU and the US) could, therefore, disincentivise wealthy countries from recycling their SDRs using VTAs. This interest rate is paid on SDR allocations and if a participant has more allocations on their balance sheet than holdings (which happens when they rechannel their SDR holdings) they will pay higher rates for this transfer (see Appendix A for further details).

### Solved through the IMF trusts

One way SDR creditors can avoid this cost of increased interest rates is by recycling their SDRs through the IMF trusts. The trust incurs the costs of these interest payments by providing subsidies to the SDR creditors. Therefore, recycling SDRs through a trust may be the preferred option for creditor nations. However, one limitation with trusts is the feasibility of their long-term ability to keep covering these subsidy costs, especially with the currently rising interest rates.

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# 4. CONCLUSIONS AND RECOMMENDATIONS

## Conclusions

### The biggest climate investment challenge is in developing countries

The costs of dealing with the consequences of climate change are much higher than the costs of limiting it. However, global emissions are not declining at the speed needed to preserve the global public good of a stable climate. Investments in climate mitigation need to increase sharply everywhere, but mostly so in developing countries, where the climate finance gap is estimated to be around USD 1 trillion. This excludes the cost of climate adaptation, predicted to rise to USD 300 billion in 2030, and the loss and damage caused by the climate change we are already experiencing, such as the flooding in Pakistan this year which is estimated to have cost USD 50 billion.

### Developing countries cannot fill this gap themselves

Given their low income and high debt burden, developing countries have been struggling to make these investments. The current tough economic environment only adds to this problem. That is why, despite the fact that clean energy infrastructure is nowadays the cheapest option in most places when measured over the whole life cycle, liquidity-constrained governments may still be forced to choose the fossil fuel option as this has lower installation costs.

### High-income countries have both an economic interest as well as a moral duty to help

It is not only in the economic interest of the richer countries to enable developing countries to make the necessary investments. There is also a moral obligation, given, for instance, that the US and Europe constitute only around 10% of the global population, yet they are responsible for almost 50% of all historical emissions.

## Current policies will not provide a solution

Looking at the current policies aimed at enabling developing countries to make the necessary climate investments shows that there is no realistic scenario in which the climate finance gap will be closed at the speed needed. While the high debt burdens are acknowledged, no definitive solution for them is yet in sight. This also means that domestic resource mobilization will be very difficult. Furthermore, the transfer of funds from rich to developing countries through ODA is not increasing. The USD 100 billion annually pledged in 2009 for climate investments in developing countries has yet to fully materialize, and only part of the funding is, in fact, new. The most credible source of extra funding comes from MDBs.

Much is also expected from private finance. However, the trends here are also not encouraging. Private investments through blended finance actually decreased in the developing countries from USD 150 billion in 2012 to less than USD 100 billion in 2019. In all developing countries the share of public sources of climate finance is larger than the private financial institutions. In Africa this is 80%. For that reason it seems improbable that private financial flows will be able to fill the investment gap in the coming years.

## SDRs allow for a quick scale up of climate finance in low-income countries

Where there is potential to quickly scale up climate finance is through the issuance of IMF SDRs and the utilization of IMF Trusts, which are resourced through the rechannelling of SDRs from high-income countries. USD 650 billion worth of SDRs were created in 2021 in response to the COVID-19 pandemic. USD 100 billion of these have been pledged to developing countries. This leaves around USD 300 billion still on the books of central banks in high-income countries, including China.

## Other options are needed as well

As the rechannelling of SDRs through the IMF trusts is in the form of low interest loans, this does not solve the debt problem many countries are currently facing. Therefore, a solution to this problem needs to be found urgently.

## Recommendations

In order to quickly close the climate finance gap in developing countries we recommend accepting that public finance will need to play an important role, definitely in this decade. For that reason we recommend making better use of the IMF's SDRs through the following actions:

1. Quickly fulfil the pledge to rechannel 100 billion of SDR's from high-income countries to developing countries, of which 50 billion through the RST.

2. Use the SDRs currently still sitting idle on the balance sheet of high-income countries central banks for rechannelling to the RST. To this end, increase the current pledged amount from USD 100 to 400 billion.
3. Examine every three years what climate investment gap remain allowing for reasonable expectations for the growth of all other sources of financing. Based on this a new SDR allocation can be made and rechannelled to the RST.
4. Replace the current dual-interest rate system (interest on SDR holdings and on SDR allocations) by a single interest rate which is levied on unutilised SDRs. This incentivises the rechannelling of SDR's and allows to also do this bilaterally.
5. Speed up debt restructuring initiatives, as the SDRs can only fund lending and many developing countries are already highly indebted.

# APPENDIX A. SDR (RE-)ALLOCATION AND TRANSFERS

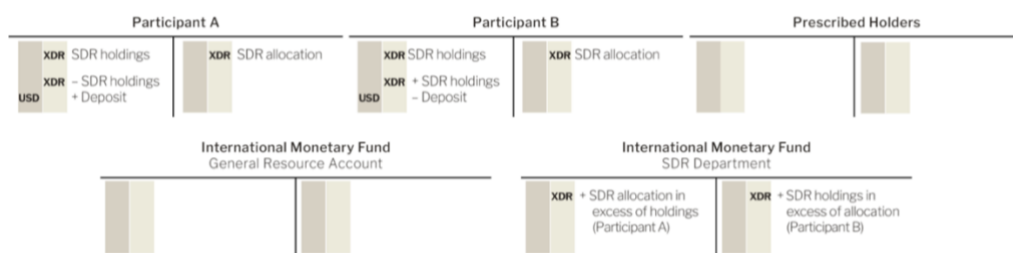
On a balance sheet SDRs are comprised of two financial instruments: ‘SDR holdings’ and ‘SDR allocations’. SDR holdings are a tradable asset whilst SDR allocations are non-tradable liabilities. SDRs can be traded by those who hold them on their balance sheets (most commonly central banks) for hard currency. SDRs can also be traded with other Prescribed Holders (including central banks and multilateral development banks). Currently SDRs can be traded for five currencies (most often into euros and US dollars).<sup>2</sup>

There are two transaction types that can be done with SDRs:

1. Conversion into usable currency and
2. Transactions with SDR holdings within the SDR system.

With the first transaction type Participant A (the initial holder of the SDR) sells SDR holdings to Participant B in exchange for their currency (deposits) (see Figure 11 below). This is functionally a loan, as anytime SDR holdings are given out interest has to be paid on it. Therefore, Participant A will pay interest to Participant B.

**Figure 11. Schematic representation of SDR conversion into hard currency.**



Source: Pforr et al. (2022)

There are three ways to use the second transaction type of SDR holdings within the SDR system (see Figure 12 below):

1. To discharge a debt,
2. To discharge a loan and

<sup>2</sup> The following relies on (Pforr et al., 2022).

3. To discharge a gift.

The first of which is one of the original purposes of the SDR system: for member countries to pay a portion of their IMF quota in SDR holdings. The second transaction type refers to when Participant A gives SDRs as a loan and expects it to be repaid. The third transaction can be used as a way for richer nations to aid poorer nations. However, solely gifting SDR holdings to another country would mean that the richer nation would need to keep paying interest on the SDR holding they gave out as long as this ‘loan’ exists as interest is paid on SDR allocations and received on holdings. This would also then reflect a real wealth transfer.

**Figure 12. Schematic representation of three different kinds of SDR usage: debt, loan, and gift.**

Participant A		Other member balance sheet	
XDR – SDR holdings	XDR – Debt	XDR – Debt XDR + SDR holdings	
XDR – SDR holdings XDR + Loan		XDR + SDR holdings	XDR + Loan
XDR – SDR holdings		XDR + SDR holdings	

Source: Pforr et al. (2022)

A special way for richer nations to help poorer nations is through a loan to IMF trusts. These are commonly IMF sponsored trusts such as the Poverty Reduction and Growth Trust (PRGT) and the new Resilience and Sustainability Trust (RST). These trusts are their own entity; however, they are functionally a sub-balance sheet of the IMF (who works as the ‘trustee’). Participant A (the richer nation) can lend either currency/deposits or SDR holdings to the trust.

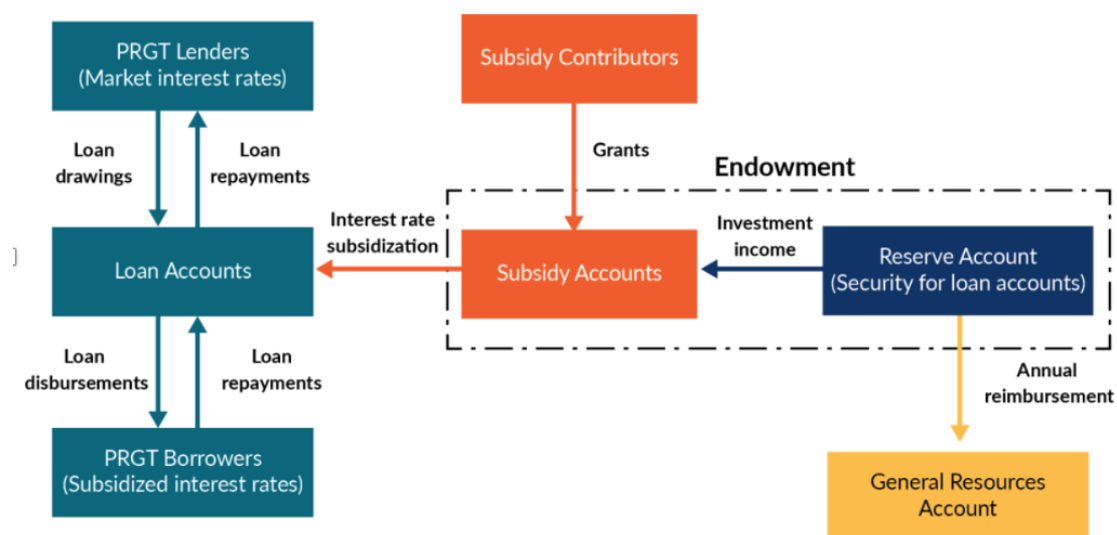
In the case of the loan being done with deposits, the trust passes the loan on to Participant B (the poorer nation). In the case the loan is in the form of SDRs, the trust then issues a loan as its liability and will repay the SDR holdings in the future at the SDR interest rate. The trust will then pass on the loan at a zero-interest rate to Participant B. Participant B can then exchange the SDR holdings into currency via transaction type 1 with a third participant (e.g., the Fed). Therefore, the trust incurs the extra costs of the interest on SDR holdings given by Participant A. The trust commonly gives Participant A subsidy to cover their interest payment.

In the case of the PRGT, this subsidy is made up of the difference between the market rates received by lenders (Participant A) and the concessional rates (currently at zero-interest) which are paid by the LIC borrowers (Participant B) (IMF,

2022c). The subsidy is financed through separate subsidy contributors, such as IMF member governments. Since 2015, the PRGT has become self-sustaining (operating under an endowment system) and from then on, the subsidy costs are also met by income generated from investments of resources in the PRGTs subsidy account (which is used to finance the subsidy payments) and the PRGTs reserve account (including windfall profits from IMF gold sales in 2009-2010). An overview of the PRGT structure and flow of funds is shown in Figure 13 below.

However, the self-sustaining mechanisms can only support annual commitments of SDR 1.4 billion over the next decade. Additionally, as the self-sustaining mechanism relies on endowments from the reserve account (see CGD, 2021a for more detailed explanation), lower commitments and lower subsidy costs enable the PRGT to accumulate higher returns, which in turn enhances the PRGTs future capacity (CGD, 2021a).

**Figure 13.: PRGT Structure and the flow of funds.**



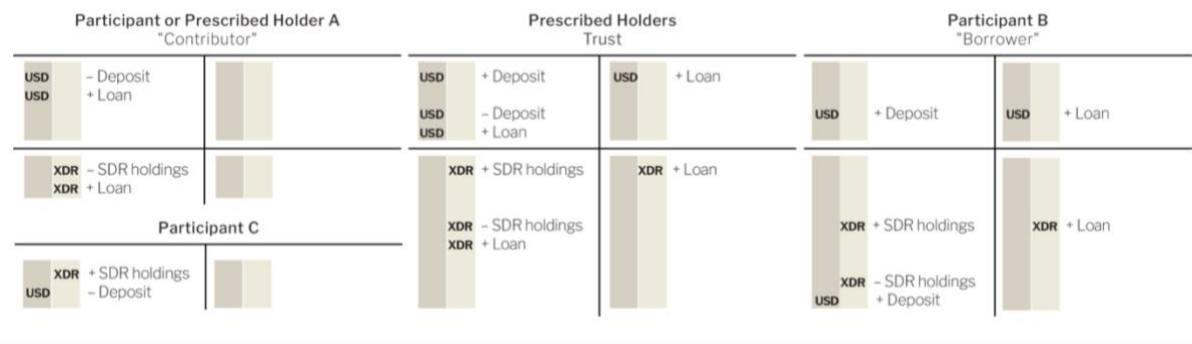
Source: CGD (2021a)

It seems that the RST will start out with their subsidy account being financed solely through separate contributors, like the PRGT was initially. This assumption is based on an IMF announcement stating that the two trusts have a similar financial structure (IMF, 2022i).

SDR transactions through multilateral development banks works the same as it would through a trust (see Figure 14 below). The main difference is that commonly when Participant A gives the MDB a loan of SDRs the MBD does not give a subsidy in return to offset the interest payments Participant A will need to pay. MBD can also establish a subsidy account to take care of this (CGD, 2021b).



Figure 14. Schematic representation of SDR channelling through Trusts.



Source: Pforr et al. (2022)

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