INNOVATIVE FINANCE SOURCES: A COMPLEMENT TO STRONG COUNTRY CONTRIBUTIONS FOR GCF REPLENISHMENT?

BRIEFING PAPER

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Executive Summary

The **Green Climate Fund (GCF)** is the world's largest dedicated fund for climate action. By the end of this year it will have distributed all USD 10.2 billion of its initial resource mobilisation to over 102 projects in 97 countries, and we hope have raised twice as much again in its first formal replenishment. It is vital that the GCF's efforts to increase finance for climate change are successful. Not just for the next four years, but for the period beyond when the need for climate finance is only going to increase exponentially. Estimates show that developing countries' financial needs for climate action may exceed \$5 trillion by 2030, potentially climbing higher as plans are developed, needs are better understood and as climate impacts become more severe.

Therefore it is essential that the GCF considers new, or 'innovative' sources of finance to help developing countries reduce their emissions, adapt to climate impacts, and to address the loss and damage when climate impacts go beyond adaptation capabilities. These new sources of finance must be genuinely new – not simply a replacement for commitments from rich countries, and it is essential that they not increase the debt burden on vulnerable countries. It will also be important that they be drawn from polluter pays sources of finance, and implemented in a fair way. International taxation options such as a Climate Damages Tax on the fossil fuel industry, and a levy on international air travel are two options that offer promise, and if designed well, could meet a significant portion of the climate finance needs of vulnerable countries whilst simultaneously providing an incentive to reduce emissions.

Key points

- The financial support needs of developing countries for climate action go way beyond the GCF's available resources.
- While significantly increased new contributions from developed (and other) countries are needed for the GCF's replenishment, innovative finance sources should be implemented to generate truly new and additional resources.
 - The GCF Board should develop a work plan for 2020 in order to explore and pursue such sources, in particular sources which make those particularly responsible for CO2 emissions pay.

The GCF is, of course, busy with the current replenishment round. However, it is essential

that the work on new sources of finance begin soon and the way be well prepared. We suggest that the GCF put in place a work plan to properly address truly new sources of finance beginning in 2020 that includes: establishing guiding principles, such as polluter pays and equity and fairness, and that new sources of finance should not increase indebtedness of vulnerable countries; exploring potential new sources of finance, with an emphasis on the taxation options included in this report, and identifying how much finance each could raise and for what purpose; credible plans of action for how to implement the most promising new sources detailing the steps that would need to be taken; and, identifying any additional architecture that would need to be put in place. The GCF should work with other bodies, such as the SCF and the WIM, to put in place such a work plan, which it should present in its annual report to the COP in 2020 with suggested steps to implement the identified source(s) that would ensure they are contributing to the GCF soon thereafter.

Introduction

The world's largest dedicated fund for climate change mitigation and adaptation, the **Green Climate Fund (GCF)'s initial resource mobilisation period (2015 to 2018)** netted USD 10.2 billion^[1]. In four years the GCF has approved USD 5 billion over 102 projects in 97 countries, 48 of which are already being implemented^[2]. By the end of 2019 all of the initial resources will likely be allocated^[3].

The initial USD 10.2 billion was made up of contributions mainly from developed countries, the group of countries with the highest historical emissions, and therefore the greatest responsibility for causing climate change, supplemented by contributions from some developing countries.

In October 2018, the GCF Board launched its first formal replenishment. Included in the mandate received from the COP was guidance to consider alternative, or innovative, sources of finance in the first replenishment^[4]. The replenishment process includes a series of consultation meetings, with a first meeting held on 4–5 April in Oslo, Norway, and will conclude with a pledging conference at the end of 2019^[5].

The core mandate of the GCF is as an operating entity of the Financial Mechanism of the United Nations Framework Convention

on Climate Change (UNFCCC), which focuses on meeting the additional costs of climate change-related interventions through concessional financing⁽⁶⁾. The GCF's Governing Instrument enables the Fund to accept contributions from alternative sources^[7], these are sources that aren't country contributions. At the two most recent GCE Board meetings (



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two most recent GCF Board meetings (B.21 and B.22 respectively held in October 2018 and

February 2019) the GCF Board deferred consideration of alternative sources to 2020, making it unlikely that alternative sources will be considered early in the current replenishment round, but very likely that alternative sources will be on the agenda from 2020^[8].

This briefing paper will consider alternative sources of finance that have the potential to play a significant role in increasing the pool of climate finance available to the GCF.

Potential resource needs for the coming years

Demand for GCF funding is strong, there is a USD 15 billion pipeline of funding proposals and concept notes, and a further USD 20 billion plus in project and programme ideas emerging^[9] – easily dwarfing the amount of the initial resource mobilisation, pointing to the need for this first replenishment to be at least double the initial mobilisation, and to plan for much greater increases in GCF finance in the future.

Considering the case of Africa for example, GCF funding in Africa is USD 2.3 billion, complemented by co-financing of USD 5.6 billion. But overall, many African coun-

tries do not have the resources or capacity to prepare a detailed national climate plan (called a Nationally Determined Contribution, or NDC). This has a critical impact on implementation in Africa. For example, it is estimated that Ghana would need USD 22.6 billion for the next 10 years from national and international, public and private sources to meet its pledged actions (Republic of Ghana, 2015). With an estimated national contribution of USD 6.3 billion, the remaining USD 16.3 billion will have to come from international support such as the GCF.^[10] An overview on assessments of investments, costs and potential funding needs, provides an idea of the scale of the challenge, noting that these cannot all be directly translated into funding demands to the GCF.

Mitigation

The IPCC's Special Report on 1.5 °C states that for a 1.5 °C pathway more than USD 2.38 trillion would need to be invested annually in mitigation through the energy system globally, and that taking into account transportation and other infrastructure would increase the investment by a factor of three^[11] with a portion of these overall needs coming in the form of international climate support to developing countries.

The specific international climate support needs expressed in Intended Nationally Determined Contributions (INDCs) from 80 developing countries (there are 154 developing countries in total) were for USD 5.475 trillion by 2030, of which it could be estimated that approximately USD 4.4 trillion was for mitigation^[12]. Developing countries are still assessing and articulating their mitigation support needs^[13], so it is possible this number will grow, while there are also trends like decreasing costs for renewable energies which may result in lower estimates for some parts of the equation.

Adaptation

Adaptation needs expressed in the Nationally Determined Contributions (NDCs) have been estimated at over USD 50 billion per year for 50 developing countries for the period 2020 to 2030^[14]. However, this is likely to be a significant under-estimation not just as there are 154 developing countries, but more importantly as few countries have a detailed understanding of what their adaptation costs are likely to be and many need finance to build their capacity to understand and plan for these needs.

The 2016 Adaptation Finance Gap Report estimates the annual costs of adaptation in developing countries could range from USD 140 billion to USD 300 billion by 2030 and from USD 280 billion to US\$500 billion by 2050. However, major information gaps exist which means that the costs of adaptation is potentially to be significantly higher^[15].

Loss and damage

The majority of needs estimates don't currently assess loss and damage – the impacts of climate change that go beyond adaptation. This is very important to consider despite the GCF not yet having addressed loss and damage in its various forms. Taking into account only extreme weather, like storms, floods and heatwaves, and not including slow onset impacts like rising seas, the 2018 Global Climate Risk Index shows that developing countries lost USD 92 billion on average for each of the last twenty years^[16].

The most recent modelling of loss and damage for developing countries shows damages ranging from USD 116–435 billion in 2020, rising to USD 290–580 billion in 2030. The authors of this study note that loss and damage costs will be much higher than adaptation costs – 4.8 to 7.8 times higher in 2020^[17].

Role of innovative finance sources and the GCF

As demonstrated above, the gap between needs and current GCF finance is enormous. The GCF is only roughly 2 to 6 % of all climate finance support^[18], but it is supposed to provide a "major share" of new multilateral, multi-billion dollar funding for climate action^[19]. There is therefore a need for the GCF to consider how to substantially increase the climate finance at its disposal. This is relevant for the current round of replenishment, and will be even more relevant for future rounds, as the costs

of climate change impacts bite more deeply.



GCFWatch – a CSO-led tool to track GCF activities

GCFWatch is a civil society led online portal for sharing information about GCF projects, programmes and activities. The platform aims to track policies and decisions by the Fund's Board, monitor countries' financial pledges, as well as promote and accelerate civil society's readiness to the GCF.

More about GCFWatch: www.gcfwatch.org/ home/ Predictable funding of the GCF is key to support developing countries' strategies and plans in the short and long term, and it will allow the GCF to undertake strategic planning to keep project and programme pipelines flowing with quality proposals^[20] – and, not detracting at all from the importance of country contributions, innovative sources have a role to play in enhancing this predictability.

New, alternative, or innovative finance sources offer a great deal of opportunity for the GCF. Using a "BAU" approach to raising finance should hopefully lead to significantly more climate finance from 'traditional' sources – that is, developed country contributions. But it is almost impossible to imagine the scale of increase in finance needed coming from country contributions alone, even if more capable developing countries would increase their contributions. Therefore, new sources of finance will be necessary.

State of play on innovative finance sources and their potential contributions to the GCF

In June 2018 the GCF Secretariat prepared a report on contributions from philanthropic foundations and other alternative sources. The report includes information on philanthropy, private sector entities such as property developers, private equity and venture capitalists, institutional investors such as sovereign wealth funds, pension funds and insurance companies and investors, issuing green bonds, and new global sources of taxation including air passenger duties, carbon taxes and a financial transactions tax^[21]. Some of these options are considered below.

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Private climate finance

Private financial investment – commitments made by institutional investors, financial institutions, corporations, and project developers – accounts for over 60 percent of current climate finance, averaging USD 270 billion annually during 2015 and 2016. However, this makes up only a small portion of total assets under management by institutional investors of USD 100 trillion. There is growing interest from these investors as they look to shift investments away from traditional commodities such as oil and gas towards sustainable and green investments^[22]. It must be noted that any finance from such sources is an investment that requires a financial return. This source of finance is most likely to be relevant for mitigation projects, especially those in relatively advanced economies, which can offer returns, or interest, for investors.

The recent GCF replenishment report identified a role for the GCF, including through its Private Sector Facility, to shift broader financial flows from commercial lending and institutional investors into investing in low-emissions, climate-resilient development pathways^[23]. However, it will be essential that the GCF does not forget its core purpose, to provide concessional finance, i.e. grants or similar, and to recall that it is mandated to be country-focused, rather than focused on the profit requirements of the private sector.

Philanthropy



Philanthropic giving for development was approximately USD 24 billion for the period 2013–2015, of which only USD 0.8 billion was for environmental protection^[24]. The GCF report notes this as an opportunity,

with the prospect to tap funds already provided across the range of development issues, e.g. health, gender and migration. It identifies the major foundations already working in this area, such as the Gates Foundation, ClimateWorks Foundation and the European Climate Foundation (ECF).

Green bonds



Bonds are a form of debt, or loan. Green bonds – fixed-income financial instruments to fund projects that have positive environmental and/or climate benefits, are a relatively new asset class that has seen enormous

growth in recent years. Green bond issuances were forecast to grow to USD 250 billion in 2018, with investment in renewable energy the most common area of interest. The GCF could act as a facilitator for green bonds or have green bonds issued on its behalf^[25].

Taxation



There are a number of proposed international taxes that have the potential to both raise revenue and add to the momentum to reduce emissions and phase out fossil fuels. Below we examine the proposed sources

of finance that offer the most potential to raise funds for the GCF.

Climate Damages Tax



The Climate Damages Tax is a proposal for a tax on the fossil fuel industry, via a charge on the extraction of each tonne of coal, barrel of oil, or cubic litre of gas, calculated at a consistent rate globally based on the greenhouse gas emissions embedded within the fossil fuel. It has been supported by a wide range of civil society^[26], and a number of vulnerable countries^[27]. The proponents suggest that the tax should be paid by the company or other entity that extracts the fossil fuel directly to a specific loss and damage facility, or window, of the GCF.^[28] However, the Climate Damages Tax could in principle serve all types of broader climate action purposes funded by the GCF, beyond just addressing loss and damage, and e.g. fill up the overall pot of the GCF.

If it were introduced globally in 2021 at a low initial rate of USD 5 per tonne of CO2 equivalent, it would raise in the region of USD 210 billion in its first year, of which USD 69 billion would be allocated to international loss and damage support and USD 141 billion would be remitted for just transition, the latter being an important component for the countries in which the fossil fuel is extracted. The proponents propose increasing the rate of tax by USD 5 a year until 2030, and USD 10 per year after that, eventually reaching a carbon price of USD 250 per tonne. For 2030, this could overall generate ca. USD 900 billion in total, with 300 billion proposed to be used for loss and damage. Overall revenues would start declining only from 2038 due to the gradual phase-out of fossil fuel use^[29].

The Climate Damages Tax could be implemented at an international level^[30], or it could be introduced regionally, or by a combination of willing countries. The GCF could play a key role in working with the Standing Committee on Finance (SCF) to design such an approach, and an implementation plan. The SCF could work to provide GCF Board in conjunction with the Warsaw International Mechanism for Loss and Damage (WIM) guidance and oversight over a specific loss and damage facility, or window, within the GCF and the projects it would fund^[31].

International Aviation and Maritime Transport Levy



Emissions in the international aviation and maritime sectors are growing faster than any other sector globally, however the sectors are outside of the Paris Agreement, and the fuels used remain largely untaxed.

A number of proposals have been made to address this, including: applying a levy on the emissions schemes in planning by the International Civil Aviation Organization's (ICAO), the Carbon Offset and Reduction System for International Aviation (CORSIA) scheme, and the International Maritime Organization (IMO) scheme; or, charging airline passengers a fee or levy.^[32] The International Monetary Fund (IMF) modelling shows that a carbon tax on maritime fuel rising to USD 75 per tonne of CO2 in 2030 would raise revenues of about USD 75 billion in the same year. If it were to increase to USD 150 per tonne in 2040 it would raise USD 150 billion, whilst having a very small impact on shipping costs^[33]. Another option is to charge airline passengers a fee, such as the International Airline Passenger Levy (IAPAL) proposal. A fee of USD 5–10 on international airline tickets would raise about USD 5–10 billion per year if applied globally^[34]. It could also be applied on a country by country basis.

Carbon pricing (taxes or markets)



Existing and new carbon taxes and carbon markets could have a levy applied upon them or have a proportion of the income generated by these schemes, predicated to the GCF. Similar to how the Adaptation Fund (AF) received money from a levy on the Clean Development

Mechanism (CDM). The European Union's Emissions Trading Scheme (ETS) urges member states to allocate 50 % of revenues from the auctioning of emissions allowances for climate action, and in 2013 roughly 87 % of auction revenues, amounting to € 3 billion, was spent on predominantly domestic climate programs. Less than €500 million, or just 13% of revenues was allocated to international climate finance.^[35] This number could be increased substantially if a) the EU ETS scheme was tightened and/or a price floor applied, and b) the remittance of a proportion of funds raised to the GCF was made mandatory. Other countries have carbon prices in place as well. Allocations to the GCF could be based on an agreed formula based on per capita income and/or historical emissions.[36]

What barriers might have to be overcome to apply those innovative finance sources in an equitable manner

Overall considerations for alternative finance sources is to ensure: a) that they increase the pool of climate finance by being in addition to existing country contributions; b) that they raise money for adaptation and loss and damage, the two elements least likely to receive funding through existing channels or benefitting from significant cost decreases through market development; and c) that they raise finance in a fair way, from those that can afford it and from those who caused the problem, using the "polluter pays" principle.

Private finance and green bonds



In its June 2018 report on alternative sources of finance the GCF Secretariat identified a number of elements that would be important in attracting private finance including providing an acceptable risk and return to the investor, having speedy processing, low transaction costs, confidence and clarity in the arrangements and contingency plans^[37]. Whilst some of these conditions could be met by GCF projects and programmes in

middle income countries, they are otherwise not likely to be met by projects and programmes in low income countries. The GCF operates on the basis of the Convention which also highlights the provision of finance on a concessional basis - covering the additional costs of mitigation, and the full agreed costs of adaptation. Providing this finance as loans (which a bond is) runs the risk of increasing the indebtedness of vulnerable countries and increasing the burden on them to deal with the impacts of climate change, rather than transferring the cost to the polluter.

This approach is very unlikely to be suitable for either adaptation or loss and damage in vulnerable countries in particular when it comes to addressing the needs of the poorest and most vulnerable people, which the GCF according to its Result Management Framework, is supposed to focus on. The adaptation needs of low-income populations and countries are unlikely to attract private finance and will require significant new public finance. Likewise, for loss and damage incurred by vulnerable countries, new sources of public finance will be essential.

Philanthropy



To attract philanthropic organisations the GCF report identified improving, or honing, the reporting of project objectives and outcomes and establishing a sub-fund clearly defined as a charity. More controversially,

the report recommends allowing the ear-marking of funds and for philanthropic foundations to have some say over projects^[38]. This approach has not been supported by developing countries in the past, but if it were achieved via the creation of specific windows rather than control over projects, this might make it more acceptable.

The major problem with the GCF targeting such funds, is that it would be "robbing Petra to pay Paul". That is, taking money that is already benefiting developing countries and impoverished communities, in some cases already focused on resilience building at a grassroots level, in order to increase the proportion of funding channelled through the GCF. It would do little to increase the pool of funding available to vulnerable communities and might mean the end of some projects aimed to help communities build their resilience. This hardly seems the best use of the GCF's mandate and power. This would not be the case only if the focus would be on foundations (or wealthy individuals) which have not yet been actively supporting programmes in developing countries (including for climate action) and where there is a high probability of mobilising truly additional resources.

Carbon pricing (taxes or markets)



Carbon pricing is consistent with a polluter pays principle to climate finance. There is a political challenge in implementing a levy or tax on these schemes, and they would require countries to change their laws. It would

be especially challenging to ensure that these levies were provided in addition to country contributions, rather than replacing them, as the schemes are implemented country by country, or regionally, with income going via general treasury revenue. Where recipient countries have implemented carbon pricing, they might consider using revenues as co-financing for programmes which the GCF does not fund to 100 %.

International aviation and maritime levies



The ICAO and the IMO have been slow to act on controlling emissions, but it would be possible to implement such taxation or levy schemes in a fair way. For aviation it is predominantly relatively well-off people

from the upper and middle income classes who fly, and some have suggested a frequent flyer approach to aviation^[39]. For maritime a "no net incidence" system, or compensation for vulnerable countries, has been suggested as a way of ensuring that the impact of the tax falls on those that can afford it^[40]. The GCF may also think about creative ways how to allocate resources from such sources in a fair way, that e.g. resources from flights in specific developing countries might be allocated and thereby returned to those countries for specific projects they submit.

Climate Damages Tax

A Climate Damages Tax would be the quintessentially fair way to ensure that the industry most responsible for causing climate change, and that has done the most to lie and deceive the public about climate change,

pays for the damage it has caused. The main obstacle in the way of a tax on the fossil fuel industry to pay for climate damage, is the political power of the fossil fuel industry, which should not be underestimated^[41], and the lack of willingness of governments of key producing countries. Similar schemes exist in other fields, such as the International Oil Pollution Compensation Fund (IOPC), so there is no legal obstacle to creating such a Tax^[42].

Conclusions and recommendations



The GCF must acknowledge that a whole new scale of finance is needed to deal with climate change. The current replenishment round is focusing on an "enhanced business as usual" approach - seeking more contributions from countries. While it is absolutely right to demand more climate finance from rich countries whose inaction has caused the climate crisis, this incre-

mental approach is never likely to reach the level of finance that will be needed for mitigation, adaptation and loss and damage from climate change. Truly transformational sources of finance will be needed. New taxation - such as the Climate Damages Tax - that targets the fossil fuel industry, provides a price on carbon, as well as meeting a significant portion of the loss and damage costs being faced by vulnerable countries, will be needed.

The GCF should not explore sources of finance that will only result in shifting existing development and climate finance. It should, instead, focus on catalysing new finance to support its mandate.

It will be important for the GCF to put in place a work plan to properly address truly new sources of finance, especially the taxation options explored here. This work plan should begin in 2020^[43], and should include:

- Establishing principles to guide the work, including, polluter pays, equity and fairness, and that new sources of finance should not increase indebtedness of vulnerable countries;
- Exploring potential new sources of finance, with an emphasis on the taxation options included in this report, and identifying how much finance each could raise and for what purpose;
- Credible plans of action for how to implement the most promising new sources detailing the steps that would need to be taken;
- Identifying any additional architecture or governance processes that would need to be put in place, including, for example, opening a facility or window specifically for loss and damage;

- The GCF should identify other United Nations (UN) bodies to work with. In particular, the Fund should forge a partnership with the Standing Committee on Finance (SCF) to consider the additional finance architecture that may be required and the steps to implement new sources of finance; and the Warsaw International Mechanism for Loss and Damage (WIM), in order to work jointly towards generating new finance for loss and damage.
- Provide recommendations in its annual report to the COP (2020) on suggested steps to implement the identified source(s) in a manner that it can contribute to the GCF soon thereafter.

The timeframe for implementing new alternative sources of finance, primarily from taxation as a public source of finance, should be 2022, during the first replenishment period. Thereby a smooth introduction can be planned and the new sources of finance can be established and ready to ramp up as climate finance needs increase.

There is a lot of potential in new sources of finance and, in truth, they offer possibly the only way that the GCF can generate the kind of funds that will be required to tackle the climate crisis.

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Lead author: Julie-Anne Richards, with Inputs from Sven Harmeling, Jean Paul Brice Affana, David Eckstein

CARE Siemensstr. 17, D-53121 Bonn, Germany www.careclimatechange.org

Contact: Sven Harmeling sharmeling@careclimatechange.org

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ENDNOTES

- 1 GCF. How We Work. GCF website: <u>https://</u> www.greenclimate.fund/how-we-work/resource-mobilization
- 2 GCF. GCF at a glance. February 2019. https://www.greenclimate.fund/documents/20182/194568/GCF+at+a+glance/ b871dd57-4fea-b1e5-c1c8-ceb54ded9d5e
- Beate Antonich. GCF Board Paves Way for the Fund's First Replenishment, Looks Forward to Increasing Impact. IISD. 5 March 2019. <u>http://sdg.iisd.org/news/gcf-boardpaves-way-for-the-funds-first-replenishment-looks-forward-to-increasing-impact/</u>
- 4 UNFCCC. 2015. Decision 7/CP.21, para. 9. https://unfccc.int/resource/docs/2015/ cop21/eng/10a02.pdf
- 5 GCF. GCF in brief: the replenishment process. 2018. <u>https://www.greenclimate.fund/</u> <u>documents/20182/194568/GCF_in_Brief_</u> <u>The_Replenishment_Process.pdf/0fc018ad-</u> <u>1082-d11f-f72a-b1a07e02c9d4</u>
- 6 Liane Schalatek, Neil Bird, Charlene Watson. The Green Climate Fund. Heinrich Böll Stiftung and ODI. November 2017. <u>https://www. odi.org/sites/odi.org.uk/files/resource-documents/11851.pdf</u>
- 7 GCF. Resource Mobilization. Webpage. https://www.greenclimate.fund/how-wework/resource-mobilization/policies
- 8 GCF/B.21/30/Rev.01, p8. https://www.greenclimate.fund/documents/20182/1270184/ GCF_B.21_30_Rev.01_-_Arrangements_for_ the_first_formal_replenishment_of_the_ Green_Climate_Fund.pdf/5fbbed98-f735d801-d3bf-c57c39a86c6d
- 9 Beate Antonich. GCF Board Paves Way for the Fund's First Replenishment, Looks Forward to Increasing Impact. IISD. 5 March 2019. <u>http://sdg.iisd.org/news/gcf-boardpaves-way-for-the-funds-first-replenishment-looks-forward-to-increasing-impact/</u>
- William M. Fonta, Elias T. Ayuk & Tiff van Huysen (2018) Africa and the Green Climate Fund: current challenges and future opportunities, Climate Policy, 18:9, 1210-1225, DOI: 10.1080/14693062.2018.1459447. https://doi.org/10.1080/14693062.2018.145 9447

- 11 IPCC. Special Report on 1.5°C of Global Warming. 2018. Chapter 4. 4.4.5. P 86. <u>https://</u> www.ipcc.ch/sr15/
- 12 An approximate estimate extrapolating the breakdown provided by 54 countries to the financial need estimate from all 80 countries. Calculations authors, numbers sourced from: Noriko Shimizu and Alexis Rocamora. Analysis of Financial Components of Intended Nationally Determined Contributions (INDCs). IGES. 2016. https://pub.iges.or.jp/ pub/analysis-financial-components-INDC
- GCF. Strategic Programming for the Green Climate Fund First Replenishment. 1 February 2019. GCF/B.22/ Inf.12. P 16. https://www.greenclimate.fund/documents/20182/1424894/ GCF_B.22_Inf.12 - Strategic_Programming_for_the_Green_Climate_Fund_First_Replenishment.pdf/9933d93d-2673-022c-8c1b-cd5213973674
- 14 UNEP 2018. The Adaptation Gap Report
 2018. United Nations Environment Programme (UNEP), Nairobi, Kenya. p xiii
- **15** Ibid.
- 16 From a calculation in Julie-Anne Richards. 2018. Climate and Gender Justice. Rosa Luxemburg Stiftung. <u>https://www.rosalux.de/</u> en/publication/id/39802/climate-and-gender-justice/
- 17 The ranges are for warming of either 2.5oC or 3.4oC and for either high discount rates (3%) or low discount rates (0.1%). Anil Markandya and Mikel González-Eguino in R. Mechler et al. (eds.), Loss and Damage from Climate Change, Climate Risk Management, Policy and Governance. <u>https://doi.org/10.1007/978-3-319-72026-5_14 https://www.springer.com/gb/book/9783319720258</u>
- 18 Authors calculations, based on figures of GCF spending \$1.25bn in 2016, overall climate finance of either \$62bn according to the OECD & CPI, or \$20 billion according to Oxfam. Sourced from Jocelyn Timperley and Rosamund Pearce. 2017. Mapped: where multilateral climate funds spend their money. Carbon Brief. 6 November 2017. https:// www.carbonbrief.org/mapped-where-multilateral-climate-funds-spend-their-money

- **19** GCF. Resource Mobilisation. <u>https://www.</u> <u>greenclimate.fund/how-we-work/resour-</u> <u>ce-mobilization</u>
- 20 Waslander, J. and P. Quijano Vallejos. 2018. "Setting the Stage for the Green Climate Fund's First Replenishment." Working Paper. Washington, DC: World Resources Institute. Available online at <u>http://www.wri.org/</u> <u>publication/green-climate-fund-first-replenishment</u>
- 21 GCF. Policies for contributions from philanthropic foundations and other alternative sources. GCF/B.20/08/Rev.01 12 June 2018. https://www.greenclimate.fund/documents/20182/1087995/ GCF_B.20_08_Rev.01_- Policies_for_contributions_from_philanthropic_foundations_and_other_alternative_sources.pdf/ a794c163-cb0f-aac5-ba93-f24eec7fbfe2
- 22 Ibid. Pp 8-9.
- 23 GCF. Strategic Programming for the Green Climate Fund First Replenishment. 1 February 2019. GCF/B.22/ Inf.12. P20. https://www.greenclimate.fund/documents/20182/1424894/ GCF_B.22_Inf.12_-_Strategic_Programming_for_the_Green_Climate_Fund_First_Replenishment.pdf/9933d93d-2673-022c-8c1b-cd5213973674
- 24 GCF. Policies for contributions from philanthropic foundations and other alternative sources. GCF/B.20/08/Rev.01 12 June 2018. Pp 8-9. <u>https://www.greenclimate.fund/documents/20182/1087995/ GCF_B.20_08_Rev.01 - Policies for contributions from philanthropic foundations and other alternative sources.pdf/ a794c163-cb0f-aac5-ba93-f24eec7fbfe2</u>
- 25 Ibid. Pp 25-26.
- 26 Stamp Out Poverty. 'Climate Damages Declaration', November 2017. <u>https://www. stampoutpoverty.org/cdt/climate-damages-tax-declaration/</u>
- 27 Isaac, J., Jumeau, R., Mahmud, A. and Regenvanu, R. 'When Will the World's Polluters Start Paying for the Mess They Made?', Climate Home News, 2 May 2018. <u>http://www. climatechangenews.com/2018/05/02/willworlds-polluters-start-paying-mess-made/</u>

28 Julie-Anne Richards, David Hillman, Laurey Boughey. The Climate Damages Tax A guide to what it is and how it works. December 2018. <u>https://www.stampoutpoverty.org/</u> wp-content/uploads/2019/01/CDT_guide_ web23.pdf

The report from the GCF also suggests new windows could be created if there is demand for specific thematic areas#, opening the door to a loss and damage facility, or window. Such a facility or window would require agreement across Parties to the UNFCCC, likely being mandated at a Conference of Parties (COP), but given the costs of loss and damage mount and become more obvious, this option must be explored and come on the agenda. The review of the WIM planned at COP25 offers an opportunity here.

- 29 Stamp Out Poverty. CDT Data Tables. December 2018. <u>https://www.stampoutpoverty.org/cdt-tables/</u>
- **30** Similar to how the International Oil Pollution Compensation Fund (IOPC) currently works. For more see: Richards, Hillman and Boughey. Op cit.
- 31 Ibid.

- 32 Julie-Anne Richards. Climate and Gender Justice: What's needed to finance loss and damage? December 2018. Pp 21-24. <u>https:// www.rosalux.de/en/publication/id/39802/ climate-and-gender-justice/</u>
- 33 Ian Parry, Dirk heine, Kelley Kizzier, and Tristan Smith. Carbon Taxation for International Maritime Fuels. IMF Working Paper. WP/18/203. September 2018. <u>https:// www.imf.org/~/media/Files/Publications/ WP/2018/wp18203.ashx</u>
- **34** Roberts, J.T., Natson, S., Hoffmeister, V., Durand, A., Weikmans, R., Gewirtzman, J. and Huq, S. (2017) 'How Will We Pay for Loss and Damage?', Ethics, Policy & Environment. http://dx.doi.org/10.1080/21550085.2017.13 42963
- 35 Climate Action Network. Submission. 2018. http://climatenetwork.org/sites/default/ files/can_loss_and_damage_submission_022018.pdf
- 36 GCF. 12 June 2018. Op cit. P 27.
- 37 Ibid.
- 38 Ibid.
- 39 Stephen Devlin and Sandra Bernick. Managing aviation passenger demand with a frequent flyer levy. New Economics Foundation. 2015. <u>https://neweconomics.org/uploads/files/58e9fad2705500ed8d_hzm6yx1zf.pdf</u>

- 40 Ian Parry, Dirk heine, Kelley Kizzier, and Tristan Smith. Carbon Taxation for International Maritime Fuels. IMF Working Paper. WP/18/203. September 2018. <u>https://</u> www.imf.org/~/media/Files/Publications/ WP/2018/wp18203.ashx
- 41 See for instance: Centre for International Environmental Law (CIEL). Smoke and Fumes. 2017. https://www.ciel.org/news/smoke-and-fumes-2/; Joe Romm. Fossil fuel industry spent nearly \$2 billion to kill U.S. climate action, new study finds. 19 July 2018. https://thinkprogress.org/fossil-fuel-industry-outspends-environment-groups-on-climate-new-study-231325b4a7e6/; Union of Concerned Scientists (UCS). Fossil fuel industry climate science deception. 29 March 2016. https://www.ucsusa.org/press/2016/ fossil-fuel-industry-climate-science-deception
- 42 Richards, Hillman and Boughey. Op cit.
- 43 In accordance with the recent BM22 decision to defer policies and procedures for contributions from philanthropic foundations and other non-public and alternative sources to the work plan for 2020. GCF Decision B.22/02.