

Sherri Ombuya, Max Schmidt, Igor Shishlov, Axel Michaelowa

Freiburg, Germany, 15.11.2023

Perspectives Climate Research gGmbH Hugstetter Str. 7 79106 Freiburg, Germany info@perspectives.cc www.perspectives.cc



Policy brief



Perspectives Climate Research

Perspectives Climate Research gGmbH (PCR) is an independent and internationally active research company based in Freiburg, Germany. PCR conducts research for both governments, international organizations, non-governmental organisations and the sector maintaining private high methodological standards. As the research branch of the renowned consultancy Perspectives Climate Group, PCR has extensive expertise in political science, economics and climate science and works on informing international climate policy as well as UNFCCC negotiations.

Authors

Sherri Ombuya, Max Schmidt, Igor Shishlov and Axel Michaelowa (Perspectives Climate Research)

Design and layout

Yuliya Romanyuk

Disclaimer

This policy brief was prepared by Perspectives Climate Research and reflects independent views of the authors who take sole responsibility for information presented in this research report, as well as for any errors or omissions. Neither Perspectives Climate Research nor sponsoring organisations can be held liable under any circumstances for the content of this publication.

Perspectives Climate Research Hugstetter Str. 7 79106 Freiburg, Germany info@perspectives.cc www.perspectives.cc

© Perspectives Climate Research gGmbH | November 2023 All rights reserved.



Contents

1.	BA	CKGROUND: MOBILISING FINANCE FOR LOSS AND DAMAGE (L&D)	1
2.	INI	NOVATIVE SOURCES FOR L&D FINANCE	2
3.	РО	SSIBLE WAYS TOWARDS IMPLEMENTATION OF L&D FINANCE	4
-	3.1.	Move forward with a coalition of the willing	5
-	3.2.	EMBED L&D IN DISCUSSIONS ON THE REFORM OF THE INTERNATIONAL FINANCE ARCHITECTURE	5
-	3.3.	JOINT EFFORTS BETWEEN THE UNFCCC AND OTHER SPECIALIZED UN AGENCIES	6
-	3.4.	Move towards a UN convention on tax	6
4.	со	NCLUSION	7
REFERENCES			8
ΔΝ	ANNEY: METHODOLOGICAL NOTE ON EIGHDE 1		



1. Background: mobilising finance for Loss and Damage (L&D)

The effects of climate change have been intensifying in 2023, with July marking the hottest month ever recorded on Earth (World Meteorological Organisation (WMO) 2023)). Recent extreme weather events, such as the destructive impact of Cyclone Freddy in Malawi, Mozambique, and Madagascar, severe heatwaves in Asia and the Mediterranean, and the aftermath of Cyclone Mocha in Myanmar and Bangladesh, among others, underscore the grim reality of loss and damages (L&D¹) caused by climate change. This highlights the pressing need to urgently seek solutions to support affected communities worldwide, especially those in developing countries who have contributed the least to the climate crisis yet bear the brunt of its consequences.

L&D is an emergent third pillar of the international climate regime in the 2015 Paris Agreement, alongside mitigation and adaptation, but without specific financial commitment (Schmidt et al. 2023). It is not included in the commitments for developed countries to collectively mobilise USD 100 billion per year by 2020 and beyond (Chhetri et al. 2021). At the 27th Conference of the Parties (COP 27) countries agreed to establish a dedicated fund for L&D acknowledging "the urgent and immediate need for new, additional, predictable and adequate financial resources" (UNFCCC 2022, p.2). The decision further stressed the need for "identifying and expanding sources of funding" by "recognising the need for support from a wide variety of sources, including innovative sources".

There is a large gap between current L&D financial flows and current needs, let alone future needs as climate change impacts continue to escalate. A widely cited study by Markandya and González-Eguino (2019) concludes that L&D finance needs range from USD 290 to USD 580 billion annually by 2030, rising to USD 1 trillion or more per year by 2050. Newman and Noy (2023) estimate that costs of USD 143 billion per year from 2000 to 2019 can be attributed to human-induced climate change. Based on conservatively estimated L&D costs for 2020, Richards et al. (2023) propose a floor of at least USD 400 billion in annual L&D finance.

In this policy brief, we discuss key proposals for innovative sources of L&D finance on the basis of principles that should govern L&D finance and propose pathways for mobilising these innovative finance sources.

Perspectives Climate Research gGmbH

1

¹There is no universal definition of L&D. We, use the following one: adverse effects of climate change that cannot or have not been avoided through climate change adaptation and mitigation or are unavoidable because the limits to adaptation have been reached. They arise from sudden extreme weather events, such as flooding and cyclones, and slow-onset processes such as sea level rise. L&Ds are experienced through economic (e.g., damage to infrastructure) and non-economic impacts (e.g., loss of life) (UNFCCC 2019; IPCC 2022).



2. Innovative sources for L&D finance

The Transitional Committee (TC) established at COP 27 tasked to oversee the operationalization of the L&D funding arrangements has been deliberating on recommendations for COP 28 on the structure of the L&D Fund, areas of funding and sources of finance. Regarding the latter, potential 'innovative' sources of finance that do not compete with existing with development aid budgets or climate finance commitments have been assessed (UNFCCC 2023a; UNFCCC 2023b). However, at the time of writing this brief, the TC has refrained from discussing these (see UNFCCC 2023c).

The search for "innovative" or alternative sources to Official Development Assistance (ODA) is not new; global solidarity levies² and fossil fuel taxation covering the aviation and shipping sectors have been proposed over a decade ago (Girishankar 2009). Politically, they have been 'non-starters' as the political economy of international taxes presents a unique set of challenges (Schmidt et al. 2023). Proposals for the implementation of a United Nations (UN) convention on taxation (Ellmers and Ryding 2022; Ryding 2022; OHRCR 2022) have not been followed up. But the Summit for a New Global Financing Pact held in June 2023 highlighted a growing support for taxes on some large emitting sectors, particularly the maritime (shipping) sector³.

Countries such as China have already voiced their opposition against the TC listing sources of L&D finance "that do not yet exist, such as international taxes and levies that have not been agreed" (UNFCCC 2023d). Conversely the EU and US are keen for the L&D Fund to "receive contributions from, inter alia (...) innovative sources, such as the voluntary carbon market or international carbon pricing mechanisms, including those that may be established or agreed" (UNFCCC 2023e, p.3). France, the host of the Summit for a New Global Financing Pact lists "taxation tools on globalization flows, such as levies on aviation and maritime shipping or fossil fuel trade and/or production, financial transaction tax, and international carbon pricing" in its submission to the TC (UNFCCC 2023f). Developing countries⁴ support the Fund receiving contributions from innovative and alternative sources of funding but see those as secondary sources of finance after developed country contributions (UNFCCC 2023g).

Schmidt et al. (2023) assess promising financial instruments⁵ that can act as sources of finance for L&D. Figure 1 below presents an overview of how much funding could be raised if these instruments were to be implemented immediately (see underlying assumptions in the Annex). Even under the most conservative assumptions, the USD 100 billion currently discussed for L&D by 2030 could

⁴ Representing Africa, Asia-Pacific, Latin America and Caribbean, Least Developed Countries, and Small Islands Developing States.

² Global solidarity levies are typically introduced to finance global public goods or to address international challenges that require collective action such as reducing global poverty, combating climate change, or responding to pandemics.

³ Although this is yet to be successfully adopted.

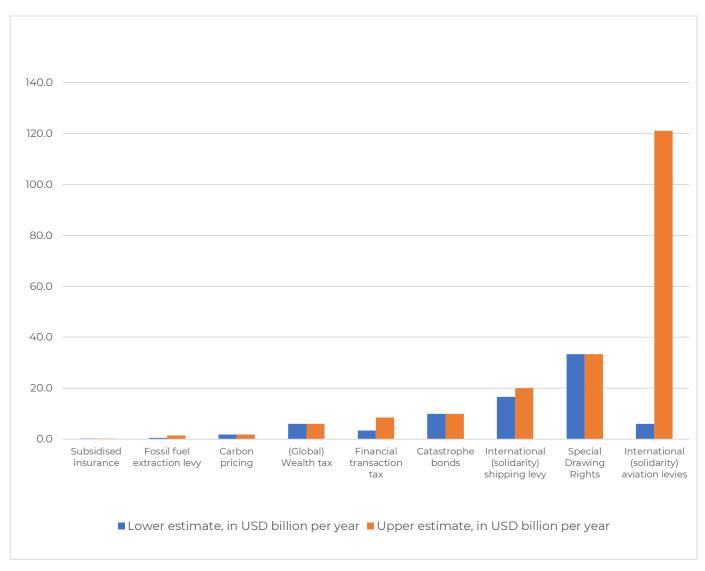
⁵ Based on taxes, levies and other instruments such as catastrophe bonds, subsidised catastrophe insurance and debt for climate swaps, that have been discussed in the context of L&D finance including in the meetings and workshops of the TC.

Perspectives Climate Research gGmbH www.perspectives.cc info@perspectives.cc 2



already be raised as early as 2025 if all nine instruments were to be implemented. Thus, by harnessing innovative sources the L&D finance gap could be closed much faster than what has been discussed at the TC meetings.

Figure 1: Contribution to filling the L&D finance gap per instrument per year, in USD billion



Source: Own illustration, based on Schmidt et al. (2023)

Note: For full explanation of the instruments' revenue potential to close the L&D finance gap, see the Annex.

Furthermore, significant efforts have been made in laying out principles to guide the mobilization of L&D finance building on existing principles for aid and development effectiveness, lessons from best practices in climate finance and are primarily rooted in the UNFCCC's foundational principles (Roberts et al. 2017; Richards et al. 2023; Schmidt et al. 2023). Textbox 1 below explains how innovative sources satisfy these principles.



Textbox 1: How innovative sources fulfil governance principles for L&D finance mobilisation

Adequacy

Hundreds of billions of dollars will be needed to sufficiently address the escalating climate change impacts as highlighted by the Intergovernmental Panel on Climate Change's (IPCC) Sixth Assessment Report (IPCC 2022). This cannot be harnessed by public sources alone.

Predictability

Financing should be provided in a way that it is known and predictable for recipient countries over the medium to long term and not subject to changing priorities of donor/contributing countries, especially to address slow onset events. Innovative sources can provide such predictability in contrast to, what have so far been, piecemeal voluntary contributions by developed countries.

Polluter pays principle

The UNFCCC principle of 'common but differentiated responsibilities and respective capabilities' (CBDR-RC) is consistent with a 'polluter pays' approach. Particularly the fossil fuel extraction levy (upstream) or a carbon tax (downstream) are ideal for operationalizing this principle.

Equity

This applies on all levels (contributions by countries but also privileged population groups, and recipients being most affected by climate change and irreversible L&D). A wealth tax or levy on international air travel would address many aspects of this principle.

Additionality

L&D finance should not substitute vital climate, development and humanitarian finance. Many innovative sources do not impact on such finance.

3. Possible ways towards implementation of L&D finance

Strong political commitment, and coordination across governments, industry, and associated institutions are needed to introduce innovative sources for L&D finance, as well as effective implementation processes once such sources have been agreed upon. This section discusses possible (non-mutually exclusive) ways for implementation of L&D finance based on Schmidt et al. (2023) and Richards et al. (2023) as well as the discussions within the TC. They do not include insurance as there is a high likelihood that we are approaching the boundaries of insurability over the medium- to long-term (Schäfer et al. 2018). Particularly slow onset events such as sea level rise are essentially uninsurable. Already now we see unaffordable premiums or a lack of coverage for specific climate-related events in particular regions. Key international initiatives such as the Global Shield against Climate Risks⁶ should thus expand their scope beyond insurance.

⁶ See: https://www.bmz.de/en/issues/climate-change-and-development/global-shield-against-climate-risks



3.1. Move forward with a coalition of the willing

An independent coalition of countries could unilaterally implement specific financial instruments such as air passenger levies or carbon pricing initiatives within their own jurisdictions and earmark the proceeds for the L&D Fund. Once the positive impact of these instruments is shown, other countries may want to join the initiative. The coalition's efforts should be underpinned by international agreements or treaties in which the members commit to implementing an instrument. The positive impact of the French (national) Solidarity Levy has been a compelling case for other countries to support the Uniting to Combat AIDS, Tuberculosis, and Malaria (UNITAID) initiative (UNITAID 2013).

Key founding members of such a coalition could be the governments of Barbados, Colombia, France and Kenya. The Bridgetown Initiative led by Barbados Prime Minister Mia Mottley aims to reform the global financial system and support countries' efforts to rebuild in the wake of climate-related disasters. Colombia has introduced a progressive wealth tax and taxes on windfall gains from coal and crude oil (Ocampo 2022, Vargas 2022). France and Kenya have launched a taskforce to examine possible new financial resources through taxation that could potentially discuss the use of such funds to respond to L&D (French Presidency 2023). The latter has called for global taxes including a global financial transaction tax (FTT), a tax on fossil fuels, and aviation and maritime fuel taxes. The coalition could collaborate with initiatives such as the Global Innovation Lab for Climate Finance funded by the governments of Canada, Germany, the United Kingdom, and the United States (The Lab n.d.) that aims to develop and introduce innovative finance instruments.

The European Union (EU) could join such a coalition if it were willing to earmark part of the EU Emissions Trading System (ETS) allowance auction revenues to L&D.

3.2. Embed L&D in discussions on the reform of the international finance architecture

The Bridgetown Initiative 2.0, the Vulnerable 20 (V20) Accra-Marrakech Agenda and other policy fora such as the recent Paris Pact aim to unlock new sources of finance for climate vulnerable developing countries (V20 2023; UN 2023a). These political processes are yielding some, albeit small, progress on new and additional financing to address L&D. For instance, at the Summit for a New Global Financial Pact, the World Bank announced an expanded toolkit that can cater for L&D response, and recovery, including pausing debt repayments and building enhanced catastrophe insurance without debt (World Bank 2023a). Some other MDBs such as the Asian Development Bank and the European Bank for Reconstruction and Development have also already expressed their interest in debt pauses post-disasters, most recently at the Ministerial Consultations on Funding Arrangements for Responding to L&D (UNFCCC 2023h).

Policy brief



At the deliberations of the TC In Egypt in October 2023 developed countries, led by the US, have proposed the World Bank as the host of the L&D Fund, opposed by developing countries on the grounds of being slow and inefficient, charging high hosting fees, and focusing on lending instead of grant making (UNFCCC 2023i). The World Bank, however, has expressed a readiness to adjust its processes to provide direct access modalities to facilitate funding for L&D for developing countries, through bypassing intermediaries (World Bank 2023b). The G77 and China have previously called for the setup of a standalone fund that can set its own rules (including receiving funds from a wide variety of sources), or one housed at a UN agency.

3.3. Joint efforts between the UNFCCC and other specialized UN agencies

The International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO) can principally adopt and implement policies related to their sectors including financial ones, as the exemption of airplane fuel from taxes shows. In the last years, implementation of an international (solidarity) shipping levy has been controversially discussed at the IMO (Harvey 2023). Prior to the introduction of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) by the ICAO, this was also the case for aviation. In the future, countries could negotiate a mandatory international aviation levy under the ICAO (Wemaëre et al. 2023).

3.4. Move towards a UN convention on tax

Several of the proposed instruments are levies and taxes that would need to be agreed at the international level and then implemented at the national level. Recently, African states demanding for an inclusive taxation framework, initiated a proposal that was featured in the Secretary-General report at the 78th General Assembly of the UN, which proposes a deepening of international tax cooperation under the umbrella of the UN through a specific convention (UN 2023b). This could serve as umbrella for efforts by other institutions, including those of the Organization for Economic Cooperation and Development (OECD) that has been at the forefront of international efforts to reform and modernize the global tax system⁷. Its work in collaboration with the G20 has helped address issues related to tax avoidance, profit shifting⁸, and digital taxation, thereby contributing to a fairer and more efficient international tax architecture (OECD n.d.).

While there is slow progress towards a UN Convention, the OECD is collaborating with the International Monetary Fund (IMF), the UN, and the World Bank through the Platform for Collaboration on Tax (PCT) Partners (PCT 2022). As a starting point, we recommend that this platform could be leveraged for both developed and developing countries to explore and exchange

⁷ This follows the 2009 G20 Leaders' Summit London, that took place in the midst of the global financial crisis, that set the stage for many important initiatives in the area of international taxation (OECD 2009).

⁸ See: <u>Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting</u> ("Multilateral Instrument" or "BEPS MLI") that helps lessen the opportunity for tax avoidance by multinational enterprises.

Policy brief



on ways to introduce and scale up international taxes that can support the financing of climate related activities including L&D.

4. Conclusion

The establishment and operationalisation of the L&D Fund at COP 28 - if well designed - can transform the international climate policy regime, especially if countries agree on innovative sources of funding.

The financial needs for L&D are expected to rise dramatically in the coming years, potentially reaching the range of hundreds of billions to even a trillion dollars per year by 2050. Therefore, innovative finance sources including international taxes are needed. However, these so far have faced implementation challenges in the political, economic, and practical realms. While some governments see insurance as key approach to address, we see severe limits of insurability. Thus, insurance can only be part of a wider risk layering approach to address L&D but never its key pillar.

We propose: (1) creating an independent "coalition of the willing", i.e., countries that pilot innovative sources in their jurisdictions and forward the proceeds to the L&D Fund. The founding members of this initiative could be Barbados, Colombia, France and Kenya; (2) embedding L&D in discussions on the reform of the international financial architecture; (3) Collaborating with specialized UN agencies, like the IMO and the ICAO, to raise funds from sectors, such as shipping and aviation, which significantly contribute to emissions. (4) a joint effort between the UNFCCC and the OECD, IMF, and regional country groups to move towards a UN convention on taxes that includes international taxes as a source of funding for L&D.



References

- Chhetri, Raju Pandit; Schäfer, Laura; Watson, Charlene (2021): Exploring loss and damage finance and its place in the Global Stocktake, https://www.climateworks.org/wp-content/uploads/2022/04/Loss-and-Damage-Finance-iGST.pdf (accessed October 20, 2023)
- Ellmers, Bodo; Ryding, Tove Maria (2022): The potential of a UN Tax Convention and a "Race to the Top Alliance", https://ny.fes.de/article/the-potential-of-a-un-tax-convention-and-a-race-to-the-top-alliance (accessed October 19, 2023)
- French Presidency (2023): Chair's summary of discussions at the Summit on a New Global Financing
 Pact,
 https://www.elysee.fr/admin/upload/default/0001/15/ae591f67adb68240e785486564ee0da587ff9
 b8e.pdf (accessed October 16, 2023)
- Girishankar, Navin (2009): Innovating Development Finance From Financing Sources to Financial Solutions, World Bank Policy Research Working Paper No. 5111, Washington D.C.
- Harvey (2023): Shipping emissions levy delayed but goals for greenhouse gas cuts agreed, The Guardian, July 7, 2023, https://www.theguardian.com/environment/2023/jul/07/shipping-emissions-levy-delayed-but-goals-for-greenhouse-gas-cuts-agreed (accessed October 19, 2023)
- IPCC (2022): Summary for Policymakers, in: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the IPCC, p.3-33, Cambridge University Press, Cambridge, New York
- Markandya, Anil; González-Eguino (2019): Integrated assessment for identifying climate finance needs for loss and damage: A critical review, in: Loss and Damage from Climate Change, Concepts, Methods and Policy Options, Springer Cham, p.343-362
- Newman, Rebecca; Noy, Ilan (2023): The global costs of extreme weather that are attributable to climate change, Nature Communications, 14, p. 1-13
- Ocampo, Omar (2022): How Colombia Will Tax the Wealthy, Inequality, December 13, 2022, https://inequality.org/great-divide/colombia-wealth-tax-petro/ (accessed October 19, 2023)
- OECD (n.d.): International Taxation, https://www.oecd.org/g20/topics/international-taxation/ (accessed October 17, 2023)
- OECD (2009): London Summit Leaders' Statement, https://www.oecd.org/g20/summits/london/G20-Action-Plan-Recovery-Reform.pdf (accessed October 18, 2023)
- OHRCR (2022): Human rights experts support call for UN tax treaty, https://www.ohchr.org/en/press-releases/2022/11/human-rights-experts-support-call-un-tax-treaty (accessed October 19, 2023)
- PCT (2022): The Platform for Collaboration On Tax: PCT Progress Report 2022, https://www.tax-platform.org/sites/pct/files/publications/PCT-Progress-Report-2022.pdf, (accessed October 20, 2023)



- Richards, Julie-Anne; Schalatek, Liane; Achampong, Leia; White, Heidi (2023): The loss and damage finance landscape: A discussion paper for the Loss and Damage community on the questions to be resolved in 2023 for ambitious progress on the Loss and Damage Fund, Heinrich-Böll-Stiftung Washington, DC
- Roberts, J. Timmons; Natson, Sujay; Hoffmeister, Victoria; Durand, Alexis; Weikmans, Romain; Gewirtzman, Jonathan; Huq, Saleemul (2017): How will we pay for loss and damage? in: Ethics, Policy & Environment, 20, p.208226
- Ryding, Tove Maria (2022): Proposal for a United Nations Convention on tax, https://assets.nationbuilder.com/eurodad/pages/2852/attachments/original/1654678410/un-tax-convention-final.pdf?1654678410 (accessed October 18, 2023)
- Schäfer, Laura; Warner, Koko; Kreft, Sönke (2018): Exploring and Managing Adaptation Frontiers with Climate Risk Insurance, in: Mechler, R.; Bouwer, L.; Schinko, T.; Surminski, S.; Linnerooth-Bayer, J. (eds) Loss and Damage from Climate Change. Climate Risk Management, Policy and Governance. Springer, Cham p. 317–341
- Schmidt, Max; Ombuya, Sherri; Shishlov, Igor, Michaelowa, Axel; Pássaro, Pedro (2023): loss and damage finance: An assessment of the most promising instruments, https://www.perspectives.cc/public/fileadmin/user_upload/L_D_Instruments_Final.pdf (accessed October 17, 2023)
- The Lab (n.d.): The Global Innovation Lab for Climate Finance: How it works, https://www.climatefinancelab.org/how-it-works/ (accessed October 18, 2023)
- UN (2023a): With clock ticking for the SDGs, UN Chief and Barbados Prime Minister call for urgent action to transform broken global financial system, Press release, April 26, 2023, https://www.un.org/sustainabledevelopment/blog/2023/04/press-release-with-clock-ticking-for-the-sdgs-un-chief-and-barbados-prime-minister-call-for-urgent-action-to-transform-broken-global-financial-system/ (accessed October 18, 2023)
- UN (2023b): Speakers Call for New Innovative Methods of International Tax Cooperation, Reform of Inequitable Global Financial System, as Second Committee Takes Up Reports, Press release, October 5, 2023, https://press.un.org/en/2023/gaef3586.doc.htm (accessed October 21, 2023)
- UNFCCC (2019): Loss and Damage: Online Guide, https://unfccc.int/sites/default/files/resource/loss_and_damage_online_guide.pdf (accessed October 19, 2023)
- UNFCCC (2022): Draft decision -/CP.27 -/CMA.4 Funding arrangements for responding to loss and damage associated with the adverse effects of climate change, including a focus on addressing loss and damage, https://unfccc.int/sites/default/files/resource/cp2022_L18_cma2022_L20E_0.pdf (accessed October 14, 2023)
- UNFCCC (2023a): Initial synthesis report on the existing funding arrangements and innovative sources relevant to addressing Loss And Damage associated with the adverse effects of climate change,





- https://unfccc.int/sites/default/files/resource/Initial_SR_25%20March%2025%201500hrs.pdf (accessed October 20, 2023)
- UNFCCC (2023b): Identifying and Expanding Sources of Funding, TSU working paper from working group 5 (c), Working Paper, Bonn
- UNFCCC (2023c): Proposal by the Co-chairs of the Transitional Committee on the Fund and the Funding Arrangements, Fourth meeting of the Transitional Committee on the operationalization of the new funding arrangements for responding to loss and damage and the fund established in paragraph 3 of decisions 2/CP.27 and 2/CMA.4, TC4/2023/9/Rev.1, https://unfccc.int/sites/default/files/resource/TC4_2023_CC_TextProposal_Draft_Rev1.pdf (accessed October 23, 2023)
- UNFCCC (2023d): Submission by the Asia-Pacific Constituency Member, https://unfccc.int/sites/default/files/resource/Submission%20by%20the%20Asia-Pacific%20Constituency%20member%20to%20the%20G77%28final%29.pdf (accessed October 20, 2023)
- UNFCCC (2023e): Submission on behalf of EU TC members (France, Germany-Ireland, Denmark-Netherlands) on Operationalizing New Funding Arrangements, Including a Fund, for Responding to Loss and Damage Associated with the Adverse Effects of Climate Change, https://unfccc.int/sites/default/files/resource/Submission%20of%20the%20EU%20TC%20membe rs%20%28France%2C%20Germany-Ireland%2C%20Denmark-Netherlands%29.pdf (accessed October 16, 2023)
- UNFCCC (2023f): Submission from France to the Transitional Committee on a new architecture to respond to Loss And Damage consequences, https://unfccc.int/sites/default/files/resource/FR%20Submission%20to%20the%20TC%20on%20L nD%20architecture.pdf (accessed October 18, 2023)
- UNFCCC (2023g): Outcomes of the work of the Transitional Committee: Proposal from developing countries on the launch of the Loss and Damage Fund and funding arrangements, https://unfccc.int/sites/default/files/resource/23_08_23_Final_Submission_TC_3.pdf (accessed October 18, 2023)
- UNFCCC (2023h): Ministerial consultations on funding arrangements for responding to loss and damage, September 22, 2023, https://unfccc.int/event/LandDministerial (accessed October 19, 2023)
- UNFCCC (2023i): Fifth meeting of the Transitional Committee (TC5), Novmeber 3, 2023, https://unfccc.int/event/tc5 (accessed November 5, 2023)
- UNITAID (2013): French levy on airline tickets raises more than one billion euros for world's poor since 2006, https://unitaid.org/news-blog/french-levy-on-airline-tickets-raises-more-than-one-billion-euros-for-worlds-poor-since-2006/#en (accessed October 19, 2023)
- Vargas, Carlos (2022): Colombian \$4 billion tax reform becomes law, duties on oil and coal hiked, Reuter, November 4, 2022, https://www.reuters.com/world/americas/colombia-congress-approves-39-bln-tax-reform-raising-duties-oil-2022-11-04/#:~:text=Americas-,Colombian%20%244%20billion%20tax%20reform%20becomes%20law,on%20oil%20and%20coa





l%20hiked&text=BOGOTA%2C%20Nov%203%20(Reuters),duties%20on%20oil%20and%20coal (accessed October 18, 2023)

V20 (2023): Accra-Marrakech Agenda, https://www.v-20.org/accra-marrakech-agenda (accessed October 19, 2023)

Wemaëre, Matthieu; Vallejo, Lola; Colombier, Michel (2023): Financing loss and damage: Overview of tax/levy instruments under discussion, https://www.iddri.org/sites/default/files/PDF/Publications/Catalogue%20Iddri/Autre%20Publication/202304-NOTE0223-financing%20loss%20and%20damage.pdf (accessed October 23, 2023)

WMO (2023): July 2023 confirmed as hottest month on record, https://public.wmo.int/en/media/news/july-2023-confirmed-hottest-month-record (accessed October 20, 2023)

World Bank (2023a): World Bank Group Announces Comprehensive Toolkit to Support Countries After Natural Disasters, https://www.worldbank.org/en/news/factsheet/2023/06/22/comprehensive-toolkit-to-support-countries-after-natural-disasters#:~:text=These%20will%20provide%20a%20pause,all%20stakeholders%20to%20expand %20coverage (accessed October 15, 2023)

World Bank (2023b): Note on Direct Access, https://unfccc.int/sites/default/files/resource/WB%20Submission_Direct%20Access%20Note.pdf (accessed October 24, 2023)



Annex: Methodological Note on Figure 1

Figure 1 is based on the following set of assumptions (for more details and sources see Schmidt et al. 2023). For instruments related to earmarking we use a value of 2% like the Share of Proceeds from the Clean Development Mechanism under the UNFCCC for adaptation⁹

Carbon pricing: Based on earmarking 2% of the instrument's current revenue (USD 95 billion in 2022) to L&D.

Catastrophe bonds: Based on the average annual issuance as of 2023.

Financial transaction tax: Based on earmarking 2% of the instrument's estimated revenue (USD 170-284 billion or EUR 162-270 billion per year, using the OECD exchange rate for 2022) to L&D (which are based on 0.3% and 0.5% as the nominal rate respectively) ('Conservative estimate'); Based on earmarking 2% of the instrument's estimated revenue that include intraday transactions (USD 256-426 billion or EUR 243-405 billion per year, using the OECD exchange rate for 2022) to L&D (which are based on 0.3% and 0.5% as the nominal rate respectively), ('Moderate estimate');

Fossil fuel extraction levy: Based on earmarking 2% of the instrument's estimated revenue to L&D (using the lower estimate of USD 30 billion for a tax per oil barrel alone, and USD 70 billion from taxing O&G extraction when starting with USD 5/t CO₂-equivalents.

(Global) Wealth tax: Based on earmarking 2% of the instrument's potential revenue (USD 300 billion per year) to L&D (in turn based on a progressive tax rate of 1.5-3.0% for wealth of over USD 100 million).

International (solidarity) aviation levies: Based on using all revenues from a new-to-introduce air passenger levy in the European Union of USD 10 per ticket (excluding potential, additional frequent-flyer levies) ('Conservative estimate'); Based on a new-to-introduce global, progressive tax depending on the number of flights per person per year (based on 2019 figures: either USD 25 on each one-way flight, or a scaled tax from USD 9 for a person's second flight to USD 177 for the twentieth flight per year) ('Moderate estimate').

International (solidarity) shipping levy: Based on the instrument's estimated revenue (USD 50-60 billion) which could be allocated annually and dedicated to - in three equal parts - climate mitigation, adaptation, and addressing L&D.

Special Drawing Rights: Based on the single special allocation of USD 100 billion promised as an outcome of the Summit on a New Global Financing Pact in June 2023 which could be allocated annually and dedicated to - in three equal parts - climate mitigation, adaptation, and addressing L&D.

Subsidised insurance: Based on the total amount mobilised by partners of the InsuResilience Global Partnership by June 2023. Debt-for-climate-swaps have been excluded since no estimates could be found or meaningfully calculated how much they could contribute to closing the L&D finance gap.

⁹ See: https://www.adaptation-fund.org/about/



Perspectives

Climate Research GmbH Hugstetter Str. 7 79106 Freiburg, Germany info@perspectives.cc www.perspectives.cc