



THE CLIMATE DISASTER FUND

Ralph Alexander



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About the author

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Dr Alexander has been a researcher at major laboratories in Europe and Australia, a professor at Wayne State University in Detroit, the co-founder of an entrepreneurial materials company, and a market analyst in environmentally friendly materials for a small consulting firm.



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1. Introduction

As reported at the start of 2024,¹ an estimated 3.6 billion people globally hope to benefit from a new, historic loss-and-damage fund for climate disasters, created by an agreement at the UN's COP28 (the 28th Conference of the Parties) in November 2023. Nations had accepted the principle of such a fund at COP27 the year before.

While many details of the fund remain to be settled, it will most likely be hosted by the World Bank in Washington DC for the first four years. Management and disbursement of the money will be supervised by an independent governing board comprising 12 members from developed countries and 14 from developing nations. According to the COP28 agreement, the money is expected to flow to low- and middle-income countries that are 'particularly vulnerable to the adverse effects of climate change'. Those effects include extreme weather events or slow-onset disasters such as sea-level rise. However, the new fund cannot be used for mitigation or for adaptation projects, both of which are already covered by existing climate funds.

Leaving aside the fact that little evidence exists of any connection at all between natural disasters and climate change, as I have demonstrated in several GWPF reports,^{2,3,4,5} the creation of this new fund risks turning the climate disaster issue into a massive boondoggle. It is not clear that climate funding over the past 15–20 years has been effective, or even directed to the people who needed it most. And, as we will see, there has been a shocking lack of transparency and accountability in distribution of that funding.

This Note will address the questions of where the money from the proposed disaster loss-and-damage fund will go; on what basis; and who should be paid. To help answer these questions, I first review the history of past funding.

2. Review of past climate funding

2.1 Funding sources

The concept of public funding to compensate for the effects of climate change dates from COP7 in 2001, when the UN created three small funds – the Least Developed Countries Fund (LDCF), the Special Climate Change Fund (SCCF) and the Adaptation Fund (AF) – to help the poorest countries in adaptation efforts. The funds were to be provided by more developed countries; the SCCF is targeted toward small island states, while the AF caters to especially vulnerable countries.

In 2009, however, funding on a much larger scale was proposed at the UN's contentious COP15 in Copenhagen. Wealthy nations reluctantly agreed to give \$100 billion annually to poorer countries to help them combat climate change, the stated goal being to reach the target amount by 2020; the donor nations resisted calls for direct compensation. The pledge was reaffirmed by the Paris Agreement at COP21 in 2015.⁶

As one of the mechanisms to distribute the money, the UN in 2010 set up the flagship Green Climate Fund (GCF),⁷ which was to support mitigation and adaptation efforts in vulnerable nations. Nevertheless, the GCF is currently running short of money to hand out.

A climate finance fund independent of the UN is the Global Facility for Disaster Reduction and Recovery (GFDRR),⁸ which was established in 2006 and whose donors include the World Bank Group, national governments and other development partners. A similar fund is the Global Risk Financing Facility (GRiF), established by the World Bank in 2017 in collaboration with key private partners from Germany and the UK, with the goal of empowering nations to manage the financial impacts of unpredictable catastrophes. The GRiF has more recently evolved into the Global Shield Financing Facility (GSFF).⁹

Smaller funds include two subsidiaries of the International Red Cross (IFRC): the Global Climate Resilience Platform (GCRP)¹⁰ and the Disaster Response Emergency Fund (DREF).¹¹

2.2 Funding amounts

Estimates of past climate funding amounts vary,

largely because of the difficulty in distinguishing between climate-related projects and more general development projects. As mentioned in Section 1, most previous funding has gone to mitigation and adaptation efforts, with relatively little earmarked for disaster losses and damage.

The World Resources Institute (WRI) estimates that in 2019 and 2020, average annual global financing for climate action came to \$632 billion. Of this total, about 90.3% went to mitigation and 7.2% to adaptation, while the remaining 2.5% went to activities that covered both.¹² By 2024, the UN's GCF, the world's largest climate fund, had contributed \$53 billion, including co-financing. This amount was divided almost equally between mitigation and adaptation, and was spread over 253 projects, mostly in Africa and Asia.¹³

Since 2015, the independent GFDRR has helped mobilise \$42 billion in financing for both disaster and climate resilience operations;¹⁴ more than 200 projects are currently funded. GRiF/GSFF has assembled over \$1 billion in finance support since its inception in 2017.¹⁵

The lion's share of all this funding came from national and local governments. The Organisation for Economic Co-operation and Development (OECD) estimated public climate financing at \$56.7 billion in 2017. This in turn leveraged a further \$14.5 billion in private finance, for a total of \$71.2 billion. In the years before that, the UN's Framework Convention on Climate Change (UNFCCC) calculated that developed nations had directed a total of more than \$70 billion in climate finance to developing countries, of which about \$56 billion was public money.¹⁶

On a smaller scale, the UN's LDCF and SCCF together had, by 2024, provided more than \$2 billion in grant financing and mobilised more than \$10 billion from other sources, with 488 adaptation projects funded.¹⁷ The UN's AF has committed over \$1 billion since 2010 for 175 climate change adaptation and resilience projects in the most vulnerable countries.¹⁸ Small amounts of potential climate funding include the intention of the Red Cross agency GCRP to raise at least \$1 billion by 2027 to support

locally-led climate action,¹⁹ and a commitment by charity World Central Kitchen (WCK) to raise and spend \$1 billion by 2031 to help families impacted by extreme weather.²⁰

The nations which have made the largest contributions to climate funding, both to the funds described above and on an individual country basis, are Japan, Germany and France (Table 1).

Table 1: Climate financing contributed by members of the G7, 2011–18

Country	Reported climate finance		
	\$bn	\$bn per capita	As share of GNI*
Canada	2.8	10	0.02
France	33.7	64	0.16
Germany	45.8	70	0.15
Italy	4.5	9	0.03
Japan	67.8	68	0.16
UK	15.0	29	0.07
USA	16.8	7	0.01
G7	186.4		0.06

*GNI, Gross National Income. CARE Denmark.⁴⁸

Pledges to the UN GCF total \$33 billion to date. This comprises an initial pledge of \$10.3 billion in 2014 from 45 countries, 3 regions and one city, including 9 developing countries; a first replenishment of \$10 billion in 2019 from 32 countries and 2 regions; and a second replenishment of \$12.8 billion in 2023 from 33 countries.²¹ The total falls well short of the goal of \$100 billion by 2020, declared at COP15 in 2009.

The initial \$10.3 billion in 2014 included a pledge from the US Obama administration of \$3 billion. However, the Trump administration in 2017 reneged on \$2 billion of this amount, reducing the US commitment to \$1 billion. Subsequently, in 2023, the Biden administration increased that commitment to \$2 billion – still \$1 billion short of the original pledge in 2014. European and other donors have doubled their pledges to the fund since 2014.²²

After announcing in 2017 that it would no longer ‘tip money’ into the GCF, beyond the \$200 million it had already donated between 2015 and 2018, in 2023 Australia reversed its decision and rejoined the fund.²³

2.3 Who received the funds?

Pinpointing where the funding outlined in Section 2.2 actually went is a difficult task because of vague reporting and inadequate documentation, according to an in-depth investigation by the news agency Reuters.²⁴

Reuters and Big Local News, a data-gathering project of Stanford University,²⁵ sought details on funding that 27 nations had reported to the UN from 2015 to 2020. They also examined public documents and talked to NGOs and others involved in the reported projects. In addition, journalists cross-checked UN reports against information recorded by other agencies, such as the OECD, which represents mostly wealthy nations.

The investigation covered about 10% of total reports to the UN. It discovered at least \$3 billion spent, not on renewable energy, but on coal-fired power, airports, crime fighting or other programs unrelated to global warming.²⁶ Five climate specialists – including university professors, researchers, and government officials focused on climate finance – agreed that the projects Reuters identified had little or no direct connection to climate change.

Furthermore, the 2022 report by CARE Denmark, cited in Table 1, found that commitments from wealthy nations for climate mitigation and adaptation in poor countries have often resulted in climate change action funds being diverted from development programs in health, education, women’s rights and poverty alleviation. With much of the public climate finance reported by rich countries taken directly from development aid budgets, those countries over-report how much climate finance they really deliver. The CARE report estimates that as much as 55% of the global North’s reported climate finance is actually ‘rebadged’ development finance.

On the issue of finance for adaptation versus mitigation, the Climate Policy Initiative (CPI) has estimated that in 2021–22, global mitigation activities such as building solar power

plants received \$1,150 billion, while adaptation projects were funded very poorly, receiving just \$63 billion.²⁷

The absence of a uniform system of accountability contributes to shortcomings in climate finance reporting and documentation. Without uniform standards, many countries have made up their own, prompting Mark Joven, the Philippines Department of Finance undersecretary, to remark that: 'Essentially, whatever they call climate finance is climate finance.'²⁸

Lack of transparency, concludes the Reuters and Big Local News investigation, also hinders efforts to discern where and how climate finance funds are being spent. Recipients are not required to report project details, and no

UN mechanism exists to ensure that funds are spent appropriately. 'You cannot really follow the money, track the money, track the impact,' says Romain Weikmans, who specialises in climate finance at the Finnish Institute of International Affairs.²⁹

Reuters' analysis of the \$182 billion in climate finance that nations reported to the UN from 2015 to 2020 is displayed in Figure 1. An additional \$24 billion went to projects where the destination was either unclear or spanned multiple continents. A mere \$5.6 billion was for projects to help countries prepare for or respond to climate-related disasters.

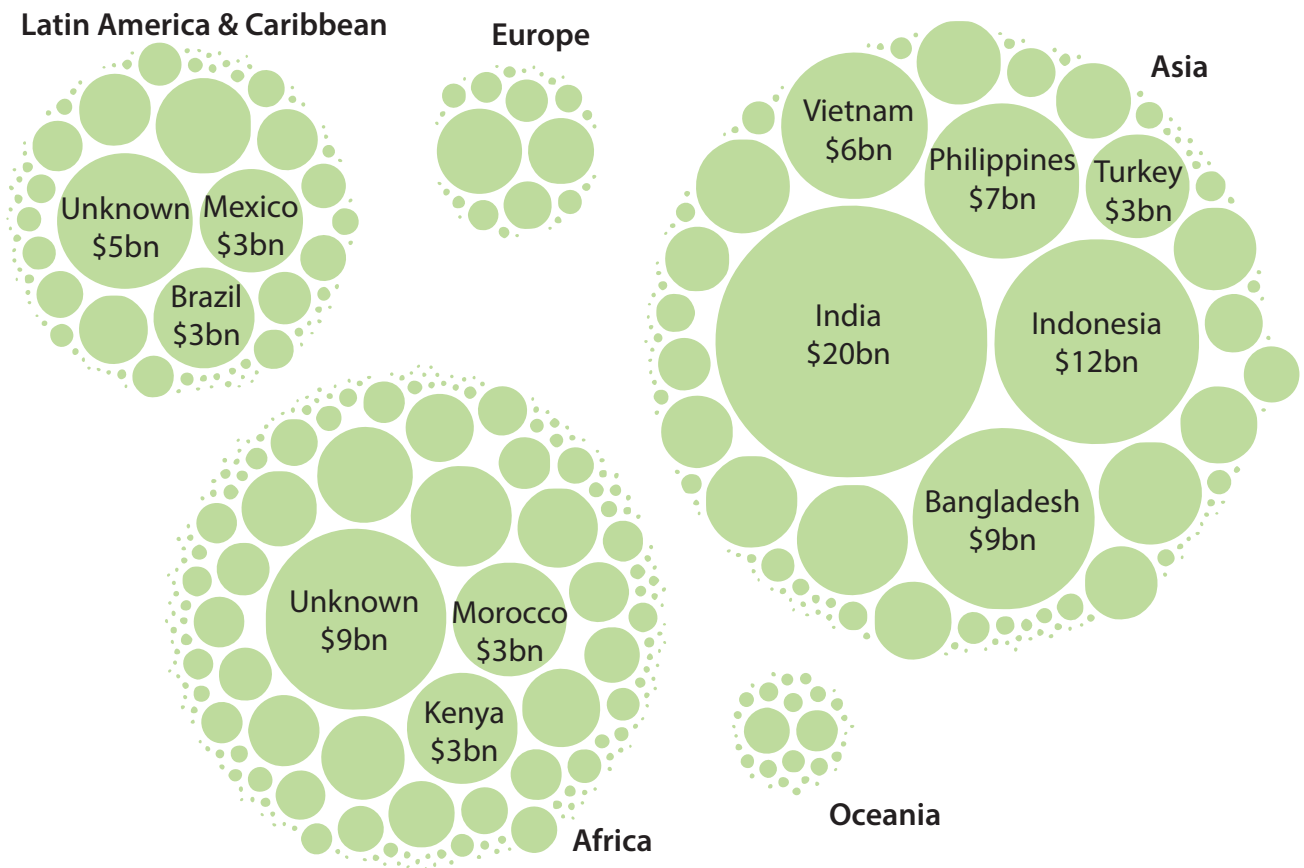


Figure 1: Climate financing reported to the UN by country, 2015–20.

The area of the individual country circles is proportional to the finance amount. Source: Reuters.

3. The concept of loss and damage

One of the main obstacles to disbursing money from the UN's newly created loss-and-damage fund is that no official definition for loss and damage exists. Although the UN itself established the 'Warsaw International Mechanism for Loss and Damage' in 2013,³⁰ the mechanism appears to be just that, and nowhere in the documentation is the concept of loss and damage defined. The World Resources Institute, however, offers this generalised definition:

Addressing loss and damage covers a wide range of circumstances, from extreme weather events to slow onset events [such as sea-level rise] and economic to non-economic loss and damage.³¹

Many authors have attempted to come up with something more specific, and a substantial body of literature exists: earlier papers were reviewed in a 2015 article by the International Centre for Climate Change and Development (ICCCAD).³² Most of the literature sources define loss and damage as climate impacts that could not have been prevented by adaptation and mitigation measures.

One author states that loss and damage 'is incurred when the costs of adaptation are not recuperated; or when adaptation efforts are ineffective, maladaptive in the long term

or altogether impossible.' Another interprets losses as irrevocable losses that are 'lost forever and cannot be brought back once lost,' with the examples of human lives, habitats and species; he describes damages as harm to something 'that can be repaired, such as a road or building or embankment.'

Such interpretations are embraced in the slightly broader definition of the United Nations Development Program (UNDP):

'Loss and damage' refers to the adverse consequences brought about by climate change, and resulting in a range of impacts, such as loss of human lives, damage to infrastructure and buildings, loss of property and crops, as well as the deterioration of ecosystems. These impacts extend beyond the purely economic realm to encompass a broader spectrum of both economic and non-economic losses.³³

An especially contentious issue is whether any particular disaster and its associated losses were caused by climate change alone, or whether other factors – related to the climate or not – were instrumental. For example, a flood may be caused by a combination of climate change and unsustainable land use; isolating how much of the event is attributable to climate change may prove difficult.

4. Where will the new money go?

4.1 Past bad actors

The countries that called for the new climate disaster fund at COP28, particularly those highly vulnerable to climate change, hope that it will eventually reach at least \$100 billion per year,³⁴ although this figure is probably unrealistically high. Initial commitments totaled just \$661 million, the largest single pledges being \$100 million each from the UAE and Germany.

In assessing where the money is likely to go, it is instructive to examine in more detail the findings of the Reuters investigation into past climate funding described in Section 2.3. As mentioned there, a number of the reported projects had little or no direct connection to climate change. At least \$6.8 billion was spent on the following examples of double-dealing:

- *Coal-fired power stations:* Japan financed a new coal-fired power plant in Bangladesh through a \$2.4 billion loan and reported the amount to the UN as climate finance. The new plant will help eliminate ongoing power shortages but, according to the Japan International Cooperation Agency, will add 6.8 million tons of CO₂ to the atmosphere every year. The agency considers the coal plant a climate change project because it uses Japanese technology that generates more energy with less coal. However, a spokesman at the nation's Ministry of Foreign Affairs declined to explain why the coal plant was counted as a climate project in the UN report. Japan also reported loans for three more coal projects totalling another \$3.6 billion, one in Vietnam and two in Indonesia, as well as the

lending of \$776 million for airport expansions in several countries. A Japanese official justified the airport spending – which is normally regarded as economic development – as climate finance by saying that construction would include ‘environmentally sustainable’ features.

- *Hotels*: The US lent \$19.5 million to developers of a Marriott hotel franchise in Cap-Haitien, Haiti and declared that sum as climate finance. A US State Department spokesperson said the loan was legitimate climate finance because the project included stormwater control and hurricane protection measures. Nevertheless, although the hotel overlooks the sea, it is not threatened by sea-level rise or flooding because it is situated on a hillside, and it has not suffered any storm damage in the past.
- *Chocolate stores*: When Italian chocolatier Venchi opened dozens of new stores in Asia, Italy claimed the \$4.7 million equity investment in the venture as climate finance. A spokesperson for Italy’s Ministry of Environment and Energy Security, responsible for the country’s UN reports, said the project had a climate component but did not elaborate.

Such instances of ‘greenwashing’ not only artificially inflate the amount of funding actually spent on combating climate change, but they also reduce the finance available for genuine climate-related needs. Their frequent occurrence does not augur well for distribution of the UN disaster fund.

4.2 Funding basis

How to allocate money from the new loss-and-damage fund for climate disasters is a difficult question, especially in light of the poor track record of disbursing past climate funding, discussed in the previous sections.

One proposal is to decide a maximum amount that countries can receive, irrespective of their vulnerability – an approach used by the small AF, which has set a ceiling of \$20 million per country for projects. Alternatively, the basis could be a nation’s level of vulnerability – the approach used by the much larger GCF, which earmarks half of its adaptation funds for small island nations, the poorest countries and Africa.

The International Institute for Environment and Development (IIED) recommends a trigger-

based funding mechanism for delivering funds directly to communities. Such a mechanism is based on early warnings or predefined risk thresholds for impending climate disasters, which can automatically trigger swift and predictable payments to those affected. The IIED remarks that trigger funding has already proved effective in the global South. As an example, the Caribbean Catastrophe Risk Insurance Facility has used a trigger-based mechanism to disburse \$268 million since 2007 for disaster relief and recovery following catastrophic hurricanes, earthquakes and excess rainfall events in the Caribbean.³⁵

Similarly, since 2009, DREF has used triggers to allocate \$472 million for fast and effective support following small- and medium-sized disasters. DREF’s triggers are based on a detailed risk analysis of natural hazards, impact assessments for previous disasters, vulnerability data, and weather forecasts.³⁶

Another proposal is to use extreme-event attribution analysis. Attribution studies use a newly developed statistical method and climate models to assign specific extremes to either natural variability or human causes. However, such studies involve a highly questionable methodology,^{37,38} in reality, they are unsuitable for decision making, states climate scientist Andrew King at the University of Melbourne, Australia. Moreover, they are generally unsuccessful in more vulnerable countries, where data are more limited, he says.³⁹

In any case, adds Zoha Shawoo, a researcher at the Stockholm Environment Institute in Somerville, Massachusetts, it is not in the interests of either rich or poor countries for attribution science to be the basis of allocating funds. Doing so would increase the number of disasters that rich countries could be asked to compensate for, she says, and sets too high a bar for developing nations to access the money.⁴⁰

Yet another possibility is to use indices that attempt to gauge a country’s vulnerability to shocks. The European Commission’s INFORM Risk Index, for example, assesses the risk of humanitarian crises and disasters in 191 nations using data such as the frequency of droughts, and socioeconomic factors, such as inequality and access to healthcare.⁴¹ But very few countries have a complete data set for all

of INFORM's indicators, and some nations are so small that they are unable to even collect data. Shawoo dismisses vulnerability indices as 'subjective and political.'

Nonetheless, socioeconomic factors are as relevant to the assessment of climate disaster vulnerability as are physical losses and damage. As the WRI points out, socioeconomic status determines the impact of economic burdens resulting from climate-induced losses and damage, and can also establish who has access to social welfare following an extreme weather event. One dollar of loss and damage has a very different effect on a poor family than on a wealthy one.⁴²

The UNDP emphasises the importance of humanitarian assistance in assessing how to disburse money from the UN's climate disasters fund:

Particular attention in the organization of the fund is planned to be paid to gaps in existing mechanisms for financing the response to loss and damage. This also includes financing humanitarian assistance in the immediate aftermath of a disaster, as well as addressing medium – and long-term impacts.⁴³

Finally, no less important than the basis for climate disaster funding is the delivery mechanism. Traditionally, climate financing has been awarded to national or local government entities, in the form of loans, grants, bonds, equity investments or other contributions. This method of disbursement, however, is unsuited to climate disasters, where the need for assistance is much more urgent than it is for mitigation or adaptation projects. Nonetheless, agencies that focus their efforts solely on disaster funding, such as the GFDRR and DREF, still hand out their money in the form of loans or grants.

A new type of aid is to give the money in cash, directly to vulnerable people affected by the disaster – in the form of bank transfers, prepaid credit cards or vouchers. While this method is potentially open to abuse because of the lack of accountability, it has already been successful in the aftermath of recent disasters in Africa, as documented by Time magazine.⁴⁴ A similar experience following the 2023 earthquakes in Turkey has been described by charity GiveDirectly.⁴⁵

A variation of this approach is to pay people cash before a disaster occurs, as described in a 2023 *New York Times* article.⁴⁶

4.3 Who should be paid?

A recent *Nature* news article commented:

It's hard to work out which disasters can be attributed to climate change, who is the most vulnerable and how to measure the losses they face. Some researchers worry that the fund will perpetuate the troubled history of development and climate finance, in which decisions made by elites in international and national governments and non-profit organizations have sometimes failed to address or have even compounded the losses experienced by people on the ground.⁴⁷

Several possible criteria for determining who is most deserving of payouts from the UN loss-and-damage fund were set out in Section 4.2. However, the available pot of money for the fund is likely to fall well short of the \$100 billion per year target – just as pledges to the more general UN climate fund total only \$33 billion to date, compared with an annual goal of \$100 billion. So it may not be possible to meet even the COP28 goal of having the money flow to all low- and middle-income countries that are 'particularly vulnerable to the adverse effects of climate change.'

Who, then, should be paid?

A key question will be whether a particular disaster was caused by climate change, as mentioned in the quote above. But extreme-event attribution analysis is not a good option for various reasons, as noted above. And currently, no other method of establishing a connection between climate change and natural disasters exists. In any case, as noted in Section 1, there is little evidence of any connection at all.

Deciding who is the most vulnerable is subjective and equally difficult. As is costing the loss and damage from a natural disaster, especially when socioeconomic factors are taken into account.

It is likely, therefore, that the loss-and-damage fund will have to use existing practices and mechanisms for handing out disaster money. This means that the people who most need support – local communities and the actual disaster

victims – will have little say in directing the flow of recovery funding. Most of the money, as now, will probably go to governments and bureaucracies.

The best vehicles for disbursement, how-

ever, would be agencies with direct experience in disaster funding such as the GFDRR, DREF and WCK. The UN's LDCF and SCCF, both targeted at the countries most vulnerable to climate change, could also play an important role.

5. Conclusion

It should now be clear that money from the newly created UN loss-and-damage fund for climate disasters will probably be managed no better, or end up in no more deserving hands, than existing schemes designed to compensate for the effects of climate change. In fact, management and disbursement of money specifically dedicated to disaster relief is likely to be a boondoggle on an even larger scale than that exemplified by the climate change funding of coal-fired power plants and hotels, described in Section 4.1. Furthermore, a proposed governing board for the fund of 26 members will be unwieldy and bureaucratic.

It is also unlikely that the loss-and-damage fund will ever reach its intended goal of at least

\$100 billion per year. What that means is that there will be intense competition for the available finance, which will lead to infighting and delays in getting funding to those in the most need.

To avoid such problems, a trigger-based funding mechanism for delivering funds directly to communities is an obvious choice. This could be implemented most effectively through smaller, more agile agencies with direct experience in disaster funding such as the GFDRR, DREF and GCRP, and even the tiny WCK. And cash payments should be considered as an alternative to traditional loans and grants.

Table 2: Acronyms used

AF	Adaptation Fund
COP	Conference of the Parties
CPI	Climate Policy Initiative
DREF	Disaster Response Emergency Fund
G7	Group of Seven
GCF	Green Climate Fund
GCRP	Global Climate Resilience Platform
GEF	Global Environment Facility
GFDRR	Global Facility for Disaster Reduction and Recovery
GRiF	Global Risk Financing Facility
GSFF	Global Shield Financing Facility
ICCCAD	International Centre for Climate Change and Development
IFRC	International Federation of Red Cross and Red Crescent Societies
IIED	International Institute for Environment and Development
LDCF	Least Developed Countries Fund
NGO	Non-governmental organization
OECD	Organisation for Economic Co-operation and Development
SCCF	Special Climate Change Fund
UAE	United Arab Emirates
UN	United Nations
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change
WCK	World Central Kitchen
WRI	World Resources Institute

Notes

1. Gayathri Vaidyanathan, 'A giant fund for climate disasters will soon open. Who should be paid first?', *Nature*, January 2024, <https://www.nature.com/articles/d41586-024-00149-x>.
2. Ralph Alexander, 'Weather Extremes in Historical Context', GWPF Report 60 (2024), <https://www.thegwpf.org/content/uploads/2024/03/History-Weather-Extremes.pdf>.
3. Ralph Alexander, 'Extreme Weather: The IPCC's Changing Tune', GWPF Report 54 (2022), <https://www.thegwpf.org/content/uploads/2023/02/IPCC-Extreme-Weather.pdf>.
4. Ralph Alexander, 'Extreme Weather in 2020', GWPF Report 49 (2021), <https://www.thegwpf.org/content/uploads/2021/04/Extreme-Weather-2020.pdf>.
5. Ralph B. Alexander, 'Weather Extremes: Are they caused by global warming?', GWPF Report 43 (2020), <https://www.thegwpf.org/content/uploads/2020/10/Alexander-Weather-Extremes.pdf>.
6. UNFCCC, 'The Paris Agreement' (2015), https://unfccc.int/sites/default/files/resource/parisagreement_publication.pdf.
7. GCF (2024), <https://www.greenclimate.fund/>.
8. GFDRR (2024), <https://www.gfdrr.org/en/feature-story/about-us>.
9. GSFF, 'From GRiF to GSFF' (2024), <https://www.globalshieldfinancingfacility.org/grif-gsff>.
10. IFRC, 'Global Climate Resilience Platform' (2024), <https://www.ifrc.org/our-work/disasters-climate-and-crises/climate-smart-disaster-risk-reduction/climate-platform>.
11. IFRC, 'Disaster Response Emergency Fund' (2024), <https://www.ifrc.org/happening-now/emergency-appeals/disaster-response-emergency-fund-dref>.
12. WRI, 'The Current State of Play on Financing Loss and Damage' (2022), <https://www.wri.org/technical-perspectives/current-state-play-financing-loss-and-damage>.
13. GCF, 'Project portfolio' (2024), <https://www.greenclimate.fund/projects/dashboard>.
14. GFDRR Annual Report (2023), <https://documents1.worldbank.org/curated/en/099836402122412500/pdf/IDU1296966181302414785188c41e3492095ce66.pdf>.
15. GSFF Annual Report (2023), <https://www.financialprotectionforum.org/publication/global-shield-financing-facility-annual-report-2023>.
16. Sophie Yeo, 'Climate Finance: The Money Trail', *Nature*, 573, 328–331 (2019), <https://www.proquest.com/docview/2306405300?sourcetype=Scholarly Journals>.
17. GEF, 'Climate Change Adaptation' (2024), <https://www.thegef.org/what-we-do/topics/climate-change-adaptation>.
18. AF, 'About the Adaptation Fund' (2021), <https://www.adaptation-fund.org>.
19. GCRP, 'Our ambition by 2027' (2024), <https://www.ifrc.org/our-work/disasters-climate-and-crises/climate-smart-disaster-risk-reduction/global-climate>.
20. WCK, 'WCK's response to climate-related disasters' (2024), <https://wck.org/climate>.
21. GCF, 'Status of Pledges and Contributions' (2024), <https://www.greenclimate.fund/sites/default/files/document/2024-status-pledges-mar-31.pdf>.
22. Climate Home News, 'US pledges \$1 billion to Green Climate Fund amid call to keep 1.5C in reach' (April 20, 2023), <https://www.climatechangenews.com/2023/04/20/us-pledges-1-billion-to-green-climate-fund-amid-call-to-keep-1-5c-in-reach/>.
23. *The Sydney Morning Herald* (October 5, 2023), <https://www.smh.com.au/politics/federal/australia-rejoins-global-climate-fund-reversing-morrison-decision-20231005-p5e9xh.html>.
24. Reuters Special Report, 'Rich nations say they're spending billions to fight climate change. Some money is going to strange places.' (June 1, 2023), <https://www.reuters.com/investigates/special-report/climate-change-finance/>.
25. Big Local News (2024), <https://biglocalnews.org/content/about/>.
26. Reuters Special Report, 'Search our database of questionable climate funding' (June 1, 2023), <https://www.reuters.com/graphics/CLIMATE-CHANGE/FINANCE/gdvzqlyjqpw/>.
27. CPI, 'Global Landscape of Climate Finance 2023' (2023), <https://www.climatepolicyinitiative.org/wp-content/uploads/2023/11/Global-Landscape-of-Climate-Finance-2023.pdf>.
28. Common Dreams, "'Utterly Absurd": Rich Nations Spending Climate Dollars on Coal Pro-

- jects and Chocolate Shops' (June 2, 2023), <https://www.commondreams.org/news/climate-finance>.
29. CBC Canada (June 1, 2023), 'What has climate finance paid for? Gelato shops, a coal plant and more', <https://www.cbc.ca/news/science/un-climate-finance-1.6861666>.
 30. UNFCCC, 'Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts' (2023), https://unfccc.int/topics/adaptation-and-resilience/workstreams/loss-and-damage/warsaw-international-mechanism#tab_home.
 31. Note #12, *ibid*.
 32. ICCCAD, 'Defining loss and damage: Key challenges and considerations for developing an operational definition' (2015), <https://www.icccad.net/wp-content/uploads/2015/08/Defining-loss-and-damage-Final.pdf>.
 33. UNDP, 'Loss and Damage Fund for Developing Countries' (2024), <https://www.undp.org/belarus/stories/loss-and-damage-fund-developing-countries>.
 34. Katharine Sanderson, 'First cash pledged for countries devastated by climate change: COP28 starts with historic decision', *Nature News*, November 2023, <https://www.nature.com/articles/d41586-023-03814-9>.
 35. IIED, 'Loss and damage fund: two funding frameworks reimagining climate finance delivery' (2024), <https://www.iied.org/loss-damage-fund-two-funding-frameworks-reimagining-climate-finance-delivery>.
 36. Note #11, *ibid*.
 37. William M. Briggs, 'The Climate Blame Game: Are we really causing extreme weather?', GWPF Note 25 (2021), <https://www.thegwpf.org/content/uploads/2021/04/Briggs-Climate-Attribution.pdf>.
 38. William M. Briggs, 'How the IPCC Sees What Isn't There', GWPF Note 27 (2021), <https://www.thegwpf.org/content/uploads/2021/10/Briggs-IPCC-Attribution.pdf>.
 39. Andrew King, cited in Note #1.
 40. Zoha Shawoo, cited in Note #1.
 41. European Commission, 'INFORM Risk' (2024), <https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Risk>.
 42. Note #12, *ibid*.
 43. Note #33, *ibid*.
 44. *Time Magazine* (December 8, 2023), 'The obvious solution to Loss-and-Damage Fund distribution', <https://time.com/6343991/loss-and-damage-cop28/>.
 45. GiveDirectly, 'Why too few disaster survivors get cash aid and what we can do about it' (2023), <https://www.givedirectly.org/prepositioning-cash/>.
 46. *The New York Times* (July 3, 2023), 'A New Kind of Disaster Aid: Pay people cash, before disaster strikes', <https://www.nytimes.com/2023/07/03/climate/cash-disaster-relief.html>.
 47. Note #1, *ibid*.
 48. CARE Denmark, 'That's Not New Money: Assessing how much public climate finance has been "new and additional" to support for development' (2022), https://www.care-international.org/sites/default/files/2022-06/That%27s%20Not%20New%20Money_FULL_16.6.22.pdf.

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People are naturally concerned about the environment, and want to see policies that enhance human wellbeing and protect the environment; policies that don't hurt, but help.

The Global Warming Policy Foundation (GWPF) is committed to providing a platform for educational research and informed debates on these important issues.

In order to make progress and advance effective policy assessments, it is essential to cultivate a culture of open debate, tolerance and learning.

Our aim is to raise standards in learning and understanding through rigorous research and analysis, to help inform a balanced debate amongst the interested public and decision-makers.

We aim to create an educational platform on which common ground can be established, helping to overcome polarisation and partisanship. We aim to promote a culture of debate, respect, and a hunger for knowledge.

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