

Too Little, Too Slow

Climate adaptation failure
puts world at risk

Executive Summary



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Adaptation Gap Report 2022

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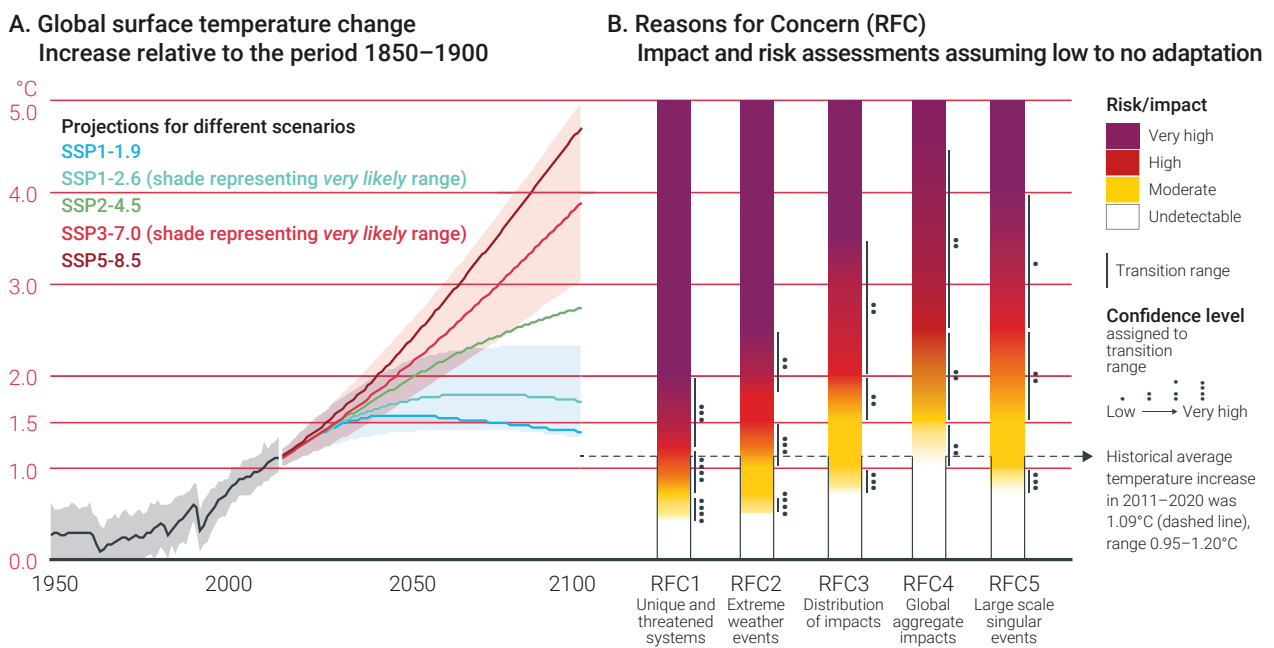
Climate risks are increasing as global warming accelerates. Strong mitigation and adaptation are both key to avoiding hard adaptation limits.

Climate impacts are increasing across the globe. A multi-year drought in the Horn of Africa, unprecedented flooding in South Asia, and severe summer heat and record-breaking droughts across multiple regions of the northern hemisphere, among others, point to mounting and ever-increasing climate risks. According to the recent Intergovernmental Panel on Climate Change (IPCC) Working Group II *Sixth Assessment Report* (IPCC WGII AR6),

the world will face severe climate risks before the end of this century, even under low-emission scenarios (figure ES.1).

Ambitious, accelerated action to adapt to climate change is therefore paramount, together with strong mitigation efforts. However, even ambitious investment in adaptation cannot fully prevent climate change related impacts. Hence, dealing with losses and damages cannot be avoided and must be addressed adequately at the United Nations Framework Convention on Climate Change (UNFCCC) and at national levels.

Figure ES.1 Reasons for Concern as assessed in IPCC WGII AR6



Source: IPCC (2022). *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.* Pörtner, H.-O., Roberts, D.C., Tignor, M., Poloczanska, E.S., Mintenbeck, K., Alegría, A. et al. (eds.). Cambridge, UK and New York, NY, USA: Cambridge University Press. 3056. doi:10.1017/9781009325844.

Adaptation must not be sidelined because of large-scale, non-climate and compounding factors.

The war in Ukraine, global supply shortages and the global COVID-19 pandemic have all contributed to an evolving energy and food security crisis, with the cost of living as well as inflation surging in many countries across the world. However, unprecedented political will and many more long-

term investments in adaptation are urgently needed to avoid the adaptation gap from widening. It is critical that the international climate community build on the Glasgow Climate Pact, agreed during the twenty-sixth session of the United Nations Climate Change Conference of the Parties to the UNFCCC (COP 26) in 2021, and deepen collective commitments on net-zero, adaptation, climate finance, and loss and damage.

Global efforts in adaptation planning, financing and implementation continue to make incremental progress but fail to keep pace with increasing climate risks.

This calls for groundbreaking acceleration in scientific research, innovative planning, more and better finance and implementation, increased monitoring and evaluation, and deeper international cooperation. Current processes under the United Nations climate negotiations, including the Glasgow–Sharm el-Sheikh work programme on the global goal on adaptation and the global stocktake, present an important opportunity to act upon the conclusions of this report and the IPCC WGII AR6.

More than eight out of 10 countries now have at least one national adaptation planning instrument, and they are getting better and becoming more inclusive of disadvantaged groups.

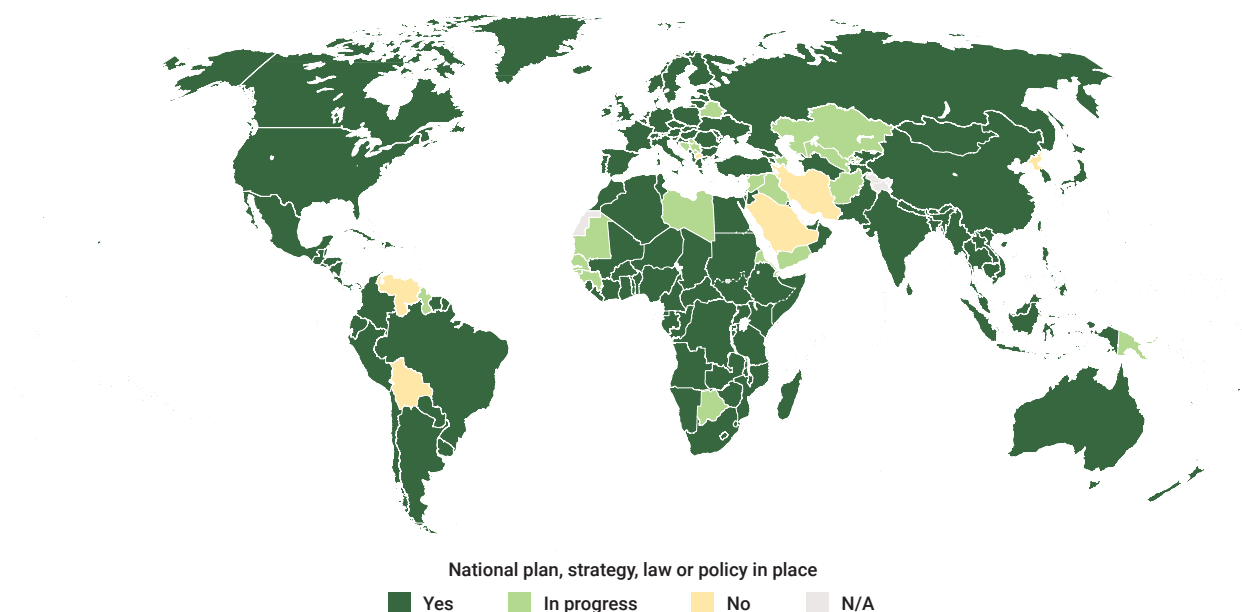
At least 84 per cent of Parties to the UNFCCC, up 5 per cent from last year, have established adaptation plans, strategies, laws and policies, and about half of those have two or more planning instruments in place (figure ES.2). More than a third of all 198 Parties to the UNFCCC have incorporated quantified and time-bound targets, which are an increasing part of national adaptation planning. However, the majority of these targets do not capture the outcomes of adaptation action, such as the degree to

which people and ecosystems are more resilient or less vulnerable to climate change. Countries are also increasing the implementability of adaptation planning instruments by defining objectives, determining time frames, considering future climate change, strengthening the science base, and improving the capacity and partnerships needed to ensure effective implementation. Moreover, nearly 90 per cent of planning instruments analysed display consideration for gender and/or historically disadvantaged groups, such as indigenous peoples.

The adaptation finance gap in developing countries is likely five to 10 times greater than current international adaptation finance flows and continues to widen.

International adaptation finance to developing countries continues to rise, reaching US\$28.6 billion in 2020. This represents a 34 per cent share of total climate finance to developing countries in 2020 and is a 4 per cent increase from 2019. Combined adaptation and mitigation finance flows in 2020 fell at least US\$17 billion short of the US\$100 billion pledged to developing countries, even by climate finance providers' own accounting. If the annual increase from 2019 persisted in the coming years, the US\$100 billion target would not be met until 2025. This calls for significant acceleration in adaptation finance, especially if doubling of 2019 finance flows by 2025 is to be met, as the Glasgow Climate Pact urges.

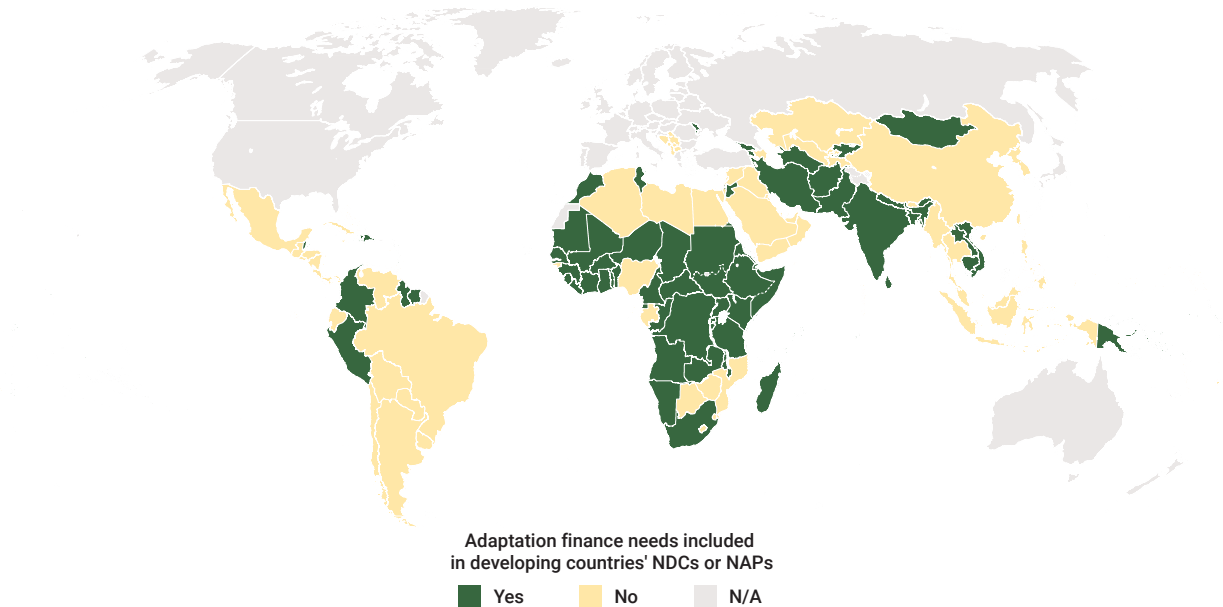
Figure ES.2 Status of adaptation planning worldwide, as at 31 August 2022



Accounting for inflation, estimated annual adaptation costs/needs are in the range of US\$160–340 billion by 2030 and US\$315–565 billion by 2050. This range is in line with new findings estimating finance needs of US\$71 billion per year between now and 2030 based on 76 developing countries' nationally determined contributions (NDCs)

and national adaptation plans (NAPs) (figure ES.3). Based on this assessment, estimated adaptation cost/needs are currently between five and 10 times higher than international adaptation finance flows, and the adaptation finance gap continues to widen.

Figure ES.3 Information on adaptation finance needs included in developing countries' NDCs or NAPs

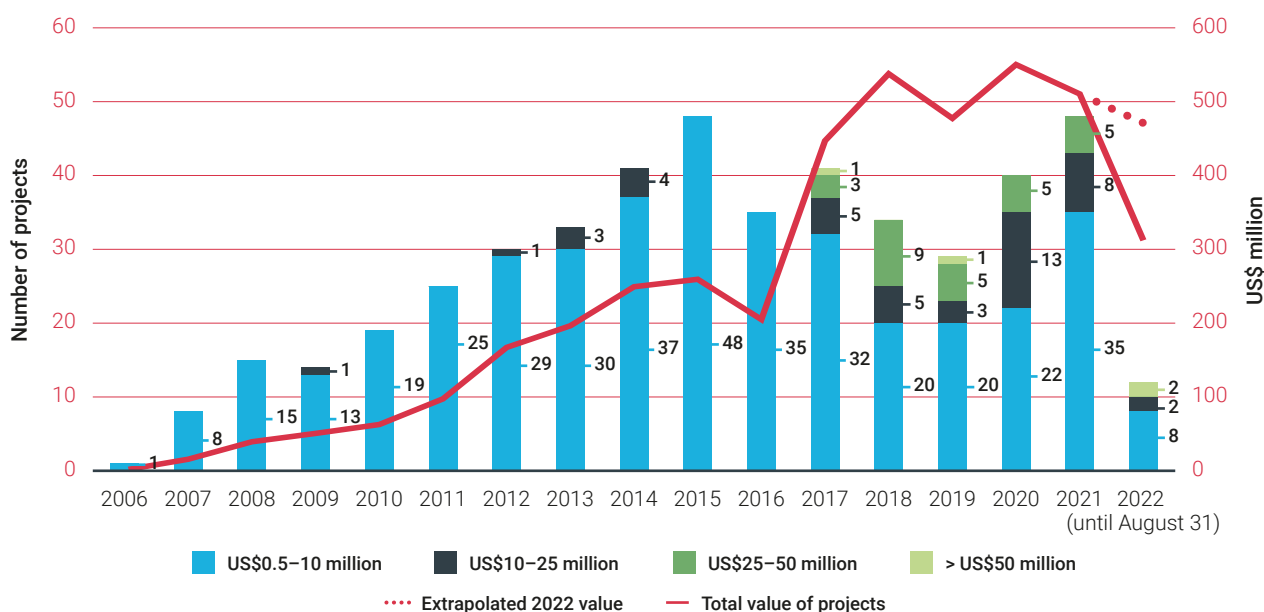


Adaptation implementation is increasing but not keeping up with climate impacts.

The number and volume of adaptation actions supported through international climate funds (Adaptation Fund [AF], Green Climate Fund [GCF], and the Global Environment Facility's [GEF] Least Developed Countries Fund [LDCF] and Special Climate Change Fund [SCCF]), multilateral finance and bilateral donor support continue to increase, though the rate may be slowing (figure ES.4). Actions are concentrated in the agriculture, water, ecosystems and cross-cutting sectors and primarily address rainfall variability, drought and flooding.

However, without a step change in financial support, adaptation actions could be outstripped by accelerating climate impacts, which would further widen the adaptation implementation gap. In addition, only three out of 10 principal adaptation actions (reflecting around 40 per cent of the funding volume) reported by climate finance providers to the Organisation for Economic Co-operation and Development (OECD) are explicitly targeting climate risk reduction, while the degree to which all other actions address adaptation is unclear. Better labelling of financial support could help clarify its contribution to adaptation.

Figure ES.4 Number of new adaptation projects per start year, size and combined annual funding value under the Adaptation Fund, Green Climate Fund and the Least Developed Countries Fund and Special Climate Change Fund of the Global Environment Facility, as at 31 August 2022



Current adaptation practice falls woefully short of what is required, but following best practices in adaptation planning and implementation can improve effectiveness.

Adaptation actions remain largely incremental in nature, typically do not address future climate change, and may reinforce existing vulnerabilities or introduce new risks, particularly for the most vulnerable. The main reasons for these shortcomings are:

- inadequate involvement of stakeholders through elite capture of resources and exclusion of marginalized groups, including women, indigenous peoples and local communities
- inadequate attention to local contexts and ownership through genuine local participation in adaptation design and implementation
- retrofitting development activities as adaptation actions without specifically addressing climate risks, often resulting in marginal resilience benefits or maladaptation
- short-term focus and neglect of future climate risks resulting in inadequate attention to the long-term viability of adaptation solutions
- narrow definitions of adaptation success that neglect diverse views regarding the purpose and effectiveness of adaptation interventions among those targeted and that miss elements encompassing social transformation and climate justice

- inadequate metrics reflecting what is easily measurable but often difficult to validate and interpret in terms of climate risk reduction.

Data to quantify adaptation effectiveness and adequacy are limited yet urgently needed, especially for higher levels of warming and complex or cascading risks. However, existing evidence shows that hybrid solutions addressing multiple dimensions of climate-related risks – for example by bringing together climate information, infrastructure, and nature-based and institutional solutions – tend to be more effective than single solutions. To be effective and adequate in the longer term, solutions must also be context-specific and address the root causes of vulnerability, such as underlying structural inequities and gendered disadvantages, in addition to reducing climate-related exposures and vulnerabilities to climate hazards.

There are a number of general principles of good adaptation practice to ensure that adaptation actions are relevant, appropriate, sustainable, equitable and effective. These principles are quite consistent across the literature and can broadly be summarized as:

- genuine inclusion of stakeholders as well as local communities, indigenous peoples, women and other marginalized groups into decision-making and co-development of adaptation planning and implementation to reflect differing values, perspectives and interests and to produce equitable, fair and just adaptation outcomes
- transparency, accountability and predictability of support and integration of adaptation into national development priorities, strategies and the Sustainable Development Goals (SDGs)

- flexible programming and adaptive management of implementation to consider feedback and learnings and to enhance efficiencies
 - investment in local capabilities, capacity-building and democratic governance structures in support of climate risk management and empowerment for long-term sustainability
 - consideration of future risks, including climate trajectories and uncertainties, to minimize unintended consequences and maladaptation, while enhancing adaptation ambition
 - integration of local, traditional, indigenous and scientific knowledge into design, implementation and monitoring and evaluation to enhance buy-in and ownership
 - tackling inequalities and structural drivers of vulnerability in addition to reducing exposure and/or vulnerabilities to climate hazards to embark on climate-resilient development pathways.
- Paying attention to these principles when designing, implementing and assessing adaptation interventions increases the likelihood of effective, adequate and sustained outcomes (figure ES.5).

Figure ES.5 An ‘architecture’ of risk reduction, including principles, actions and outcomes that can be used as a basis for assessing actual or likely adaptation effectiveness



Considering interlinkages of adaptation and mitigation action from the outset in planning, finance and implementation can enhance co-benefits.

Strong mitigation action is needed to limit global warming to 1.5°C above pre-industrial levels and avoid reaching most hard adaptation limits. Enhanced adaptation support is needed to minimize climate impacts, and more losses

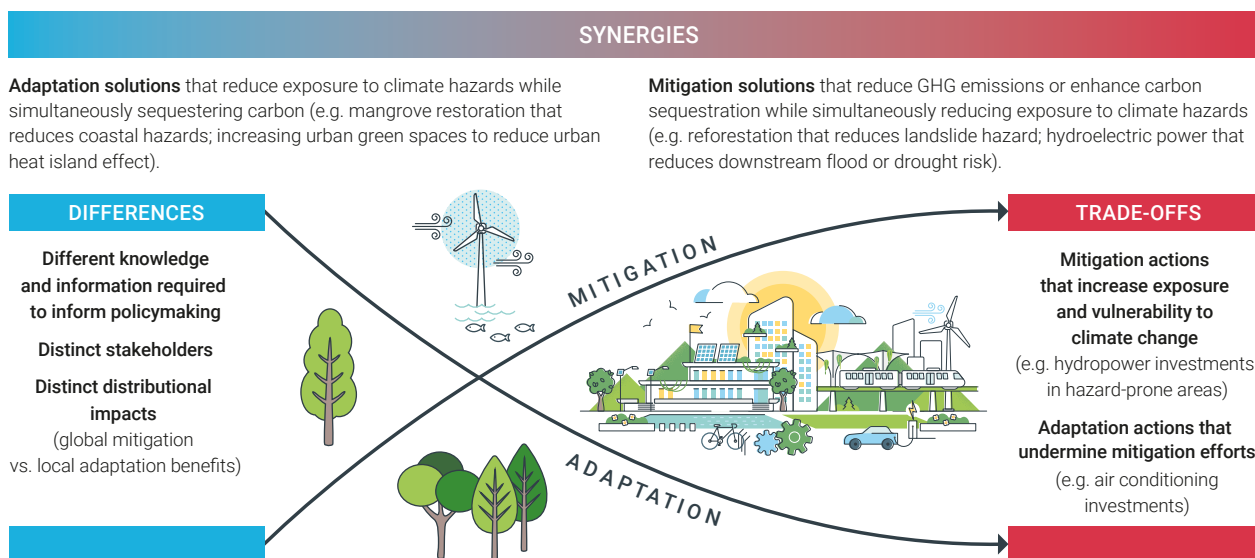
and damages will occur if mitigation is insufficiently ambitious. Given this interrelationship and to enhance synergies while limiting trade-offs, this report devotes a section in the planning, finance and implementation chapters to adaptation–mitigation interlinkages.

Taking adaptation and mitigation jointly into account in planning, finance and implementation enhances opportunities for co-benefits, including ancillary and non-

market benefits, and limits trade-offs and maladaptation (such as hydropower reducing food security or irrigation increasing energy consumption). Moreover, some climate solutions effectively reduce climate risk and contribute to mitigation simultaneously (figure ES.6). However, while nature-based solutions such as planting and conserving mangroves, restoring salt marshes or protecting peatlands effectively reduce climate risks and remove carbon from the atmosphere, accelerating climate change is also heavily affecting their ability to provide these climate services.

Data from planning, finance and implementation show that adaptation–mitigation co-benefits are mainly sought in the agriculture, forestry, ecosystems, water and energy sectors. However, possible barriers, trade-offs and risks are frequently missed, and adaptation and mitigation actions are often implemented independent of each other. Addressing these shortcomings will be important to contribute to the Paris Agreement’s article 2.1(c) goal of making finance flows consistent with low greenhouse gas (GHG) emissions and climate-resilient development.

Figure ES.6 Aligning climate change mitigation and adaptation action: differences, synergies and trade-offs



Source: Adapted from OECD (2021a). Strengthening adaptation-mitigation linkages for a low-carbon, climate-resilient future. OECD Environment Policy Papers, No. 23. Paris: OECD Publishing. <https://doi.org/10.1787/6d79ff6a-en>.

In summary, despite positive signs we must do much more towards net-zero climate-resilient development.

- Accelerating global warming is increasing climate impacts and puts countries at serious risk of experiencing adaptation limits and intolerable losses and damages.
- Avoiding hard adaptation limits requires the urgent scaling-up of mitigation and for adaptation to go beyond incremental change.
- Although efforts in adaptation planning, finance and implementation are continuing to increase, significant acceleration and shifts in scale are needed to avoid the adaptation gaps from widening further.
- Current adaptation practice falls woefully short of what is required, and following best practices in adaptation planning and implementation is needed to improve effectiveness.
- Despite the potential for substantial co-benefits to be realized when considering adaptation-mitigation interlinkages from the outset, more must be done to overcome silos and avoid potential trade-offs.
- Large-scale, non-climate and compounding factors continue to jeopardize adaptation investments and outcomes, and strong political will is needed for the international climate community to build on the Glasgow Climate Pact, agreed during COP 26 in 2021, and to deepen collective commitments on net-zero, adaptation, climate finance, and loss and damage.



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