

# Adaptation Policy Proposal



**SUBJECT:** Climate Adaptation in the Anthropocene:  
Safeguarding Our Future Through Collaborative and Unified Adaptation Approaches

**TO:** Climate Policy Makers, Influencers, and Stakeholders

**FROM:** Adaptation Team, Emerging Leaders for Climate Action

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## Executive Summary

The uncontrolled acceleration of climate change has forged a polycrisis requiring creative, robust adaptations. Holistic place-based goals, actions, and globally-minded strategies are imperative for climate adaptation in the face of a changed and still changing climate. With record-breaking climate impacts worldwide, we must break the “wait and see” status quo and acknowledge that climate change-related decisions (or abstentions from decisions) affect the whole Earth system, with consequences for us all. The following memo provides a wavetops overview of challenges regarding climate adaptation with specific recommendations to bolster and streamline implementing adaptation solutions that meet present and future communities' needs.

Recommendations are tailored for US government policymakers while recognizing the goals and needs of our partners in the international community. The policy proposal herein prescribes developing national adaptation plans with indicators that inform climate adaptation and resilience for a climate-ready future rooted in the local and cultural needs of subnational actors.



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## Background

Though climate mitigation is the fastest, most straightforward way to prevent extreme weather and climate impacts, the collective global failure to reduce greenhouse gas (GHG) emissions expeditiously and lack of financial support for proactive adaptation solutions, leaves millions vulnerable to climate change and its impacts. According to the World Meteorological Association, four of the past eight years since ratification of the Paris Agreement have broken global heat records, with 2023 projected to be the hottest year since records began. Climate impacts are destroying infrastructure and compromising human security (App A. Fig 1, Fig 2). Extreme weather displaced 43.1 million children in the last six years. Projections indicate river flooding alone will displace another 96 million children by 2053; accounting for family units, this total is even higher. Behind every statistic are human lives and biodiversity harmed.

Some countries, like the United States, have reconciled a largely reactive and disaster response-based approach to climate impacts by relying on emergency allocations through FEMA for catastrophic natural disasters and promoting insurance as satisfactory response measures. As climate impacts intensify, tolerating "wait and see" approaches permits permanent damages, unacceptably high costs for future repair, and exposing people and nature to otherwise avoidable losses.

A nation's actionable approaches to adaptation should be in a Nationally Determined Contribution (NDC) submitted under the terms of the United Nations Framework Convention on Climate Change (UNFCCC). However, many NDCs lack comprehensive metrics for achieving climate adaptation goals, cohesive adaptation indicators, and adequate funding mechanisms. Rather than waiting for delayed funding sources or for communities to face irrevocable losses from climate impacts, the global community must actualize proactive investments in climate adaptation solutions.

In addition to NDCs, National Adaptation Plans (NAPs) enable collaborative development of effective, action-oriented climate adaptation goals across governance levels. Unlike existing, siloed agency-wide plans, a NAP facilitates collaboration to integrate adaptation into new and existing programs rapidly. NAPs promote cohesion and consistency across individual agency initiatives while providing policy throughlines between government administrations and guidelines for subnational actors.

Continuing to delay climate action risks faster, unparalleled biodiversity, environmental, economic, and human losses, including loss of the ecological systems that allowed humanity to thrive and rise to industrial dominance. We can no longer engineer our way out of the climate crisis. We must prepare now at unprecedented speed to match the unprecedented rate of climate change for a safer, healthier, and more secure tomorrow.



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## Existing Policy Landscape

Climate mitigation policies often receive more attention than climate adaptation, the responsibility for which governments and corporations generally push to individuals by encouraging lifestyle changes and “sustainable habits.” Few agencies or subnational governments have dedicated substantial resources to climate adaptation and resilience, leaving local jurisdictions to scramble for project funding (App A. Fig. 3). Recent drastic increases in climate impacts and extreme weather events across the nation and globe have forced an acceleration in the attention paid to climate adaptation.

As of October 2023, the National Oceanic and Atmospheric Administration (NOAA) confirmed 24 climate change-related weather disasters in the US costing at least \$1 billion, a six-event increase from the 2018-2022 average and a 16-event increase from the 1980-2022 average. The Federal Emergency Management Agency (FEMA) has borne the burden of disaster response, spending record amounts from the Disaster Relief Fund (DRF) and other Hazard Mitigation Assistance grant programs. Relief and assistance programs cannot bear the brunt of addressing climate change, though they could evolve through coordinated actions to ensure the most vulnerable communities receive support before, during, and after climate emergencies. Compared to the \$24 billion total estimated to rebuild communities post-climate event, investing in hazard mitigation and resilience saves up to \$6 in response per \$1 invested. While the work of emergency managers to strengthen resilience is crucial, their limited personnel capacity and lack of experience with nature-based solutions or urban planning will not be enough to prevent more billion-dollar disasters and lives lost. To safeguard our future, adaptation planning must focus on preparing our communities for acute climate shocks and long-term climate stresses.

Article 4 Paragraph 2 of the Paris Agreement requires parties to articulate national adaptation goals in Nationally Determined Contributions (NDC). Many NDCs fall short of stating concrete indicators and actions, mainly declaring adaptation finance needs for non-specific policies. The US NDC only mentions “adaptation” five times without detailing adaptation indicators, activities, or metrics. The US Adaptation Communication to the UNFCCC in November 2021 outlined five cross-cutting adaptation priorities:

1. Improving community resilience planning
2. Promoting the design and construction of resilient infrastructure
3. Measuring, disclosing, managing, and mitigating climate-related financial risks to communities and the US economy
4. Conserving and restoring lands and waters, and
5. Advancing innovative and measurable resilience solutions.



Adaptation Communications do not get reviewed at scale like NDCs, nor do they articulate implementation plans or indicators, making them insufficient vessels for planning comprehensive international climate adaptation. Countries must provide detailed, proactive, robustly funded strategies for community resilience preparations against climate impacts and their consequences at home and abroad.

## **Policy Recommendations**

The United States should develop a domestic NAP and set an aggressive pace for funding adaptation efforts in local communities. A NAP provides the baseline for Adaptation Communications by coordinating effective, goal-oriented, and equitable programs to reduce community-level climate vulnerabilities, including evolving existing programs not necessarily designed to address climate change. By doing so, the US can emerge as a Global North leader in safeguarding communities and nature from climate impacts at home. To implement this effort, we propose the creation of a National Climate Resilience Office within NOAA, the EPA, and FEMA that would lead planning efforts for a collaborative National Adaptation Plan, identifying indicators of climate resilience, and commitments to finance adaptation solutions.

To unite domestic adaptation efforts with the international urgency of addressing the climate crisis, the United States must aggressively support the Global Goal on Adaptation (GGA) and equitable considerations for human security by acknowledging the critical need for climate adaptation. We must outperform the principles agreed upon under the Sendai Framework and join the efforts of our partners in the Global South (App A Fig. 4, Fig. 5, Fig. 6). We urge the US COP28 delegation to support annual dialogues on the GGA for continuous evaluation against real-time climate data. We also urge the United States to consider the following climate adaptation indicators rooted in lived experiences and calls to action from frontline communities (e.g., small island developing states (SIDS), least developed countries (LDCs)) at home and abroad for inclusion in the GGA and a US NAP.

## ***Existing Policy Landscape***

All people deserve the right to a safe, healthy, and climate-resilient future despite the lack of codification in international law. The most vulnerable populations, including young people, low-income communities, unhoused community members, historically disadvantaged minorities, and Indigenous and Traditional Communities, must have a voice in making climate adaptation decisions.



To account for the needs of the most vulnerable frontline communities experiencing climate change first and worst, NAPs must not rely only on indicators of vulnerability. NAPs must incorporate indicators of adaptive capacity, including highlighting community-led solutions. Moreover, critical indicators of justice and equity must include planning and response measures for communities with the least adaptive capacity and high risk of climate impacts, verified by their local leaders. Indicators specifically to address climate equity include, but are not limited to:

- Adaptation Pathways that support continual evaluation of community-level climate change priorities and preparedness to strengthen resilience nationwide.
- Adaptation training for emergency service providers, care workers, and outdoor workers to recognize the health impacts of climate change.
- Number of community-based organizations facing climate risks receiving capacity-building workshops.
- Number of vulnerable and frontline community leaders empowered with executive rights in climate risk and adaptation solutions decision-making.

## ***Critical Baseline Indicators for Inclusion in a NAP and GGA at COP28:***

### *Infrastructure:*

- Reduce disaster damages by implementing resilient design standards for critical infrastructure to withstand moderate to extreme climate impacts.
- Moratoriums on new development in flood zones.
- Percentage of species range connected by wildlife corridors.

### *Natural Lands:*

- Greater proportion of green-blue to gray infrastructure in urban centers with extreme weather mitigation and resilience co-benefits.
- Greater percentage of nature-based projects per available land, appropriate to the local culture(s) and community.

### *Health and Well-Being:*

- Number of climate-impact-related deaths and displacements per year.
- Establish national heat thresholds that trigger emergency response actions.
- Availability and use of Early Warning Systems to warn populations about immediate dangers including severe weather.
- Number of new development and retrofitted buildings that meet or exceed the most recent International Building Code or International Residential Code.



### *Finance:*

- Percentage of subsidies to incentivize regenerative agriculture solutions.
- Presence and use of a national adaptation fund to distribute on-demand adaptation project funding to subnational and local actors.
- Perform a national financial risk assessment for adaptation.

### *Subnational Action:*

- Amount of funding awarded to high-risk, low-adaptive capacity communities for climate adaptation initiatives.
- Number of subnational action reports submitted on climate adaptation projects.

### *Capacity-Sharing and Education:*

- Number of subnational governments receiving technical, capacity-sharing, and/or funding from their national governments for climate adaptation plans.
- Development of a national adaptive capacity index for access by governmental entities for adaptation planning.
- Number of individuals who complete education programs focused on school-aged children and service industries experiencing significant rates of climate-related impacts.

## **Conclusion**

Climate change affects us all, demanding global cooperation. Embracing innovative, forward-leaning actions allows nations to prepare their communities for the present and looming threats. We must enhance resilience, safeguard communities, protect natural ecosystems, and preserve the very existence of human civilization.

Governments must prioritize proactive, place-based, globally connected strategies to navigate challenges in the Anthropocene. We should have begun mitigating climate change over seventy years ago. We did not, and climate impacts are forcing us to adapt to the consequences. Robustly funding mitigation and adaptation strategies will improve our chances of turning the juggernaut of climate change before Earth passes irreversible turning points and no longer supports life as we know it (App A. Fig. 7).



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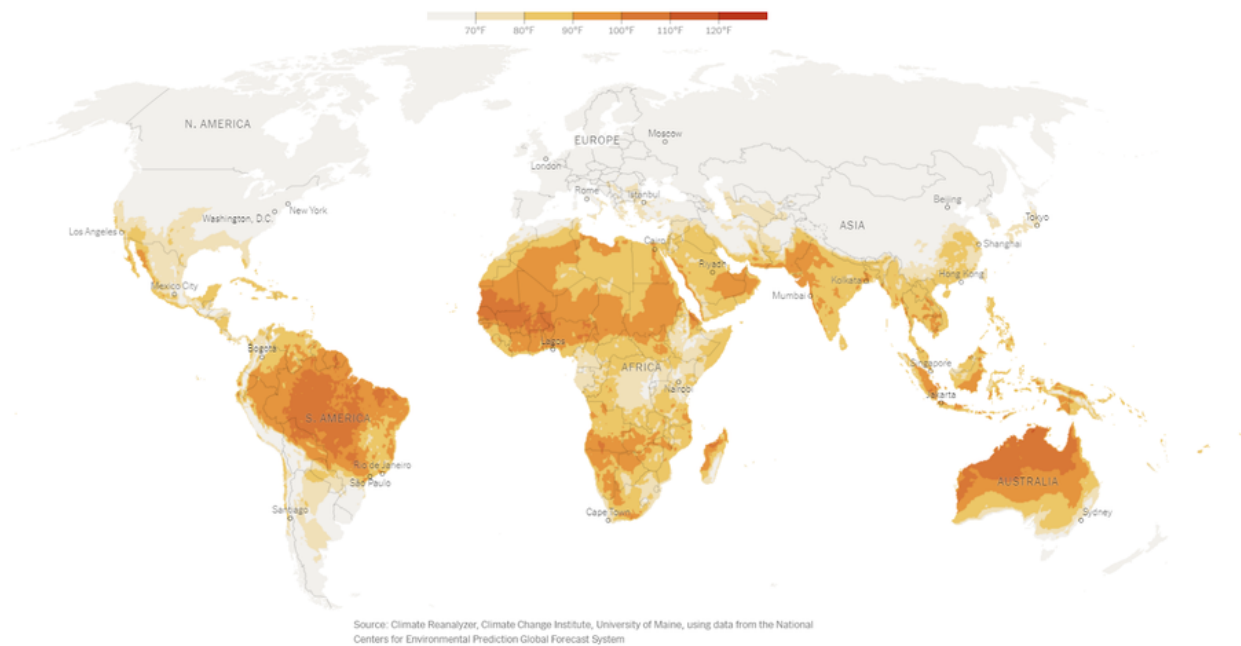


# Appendix

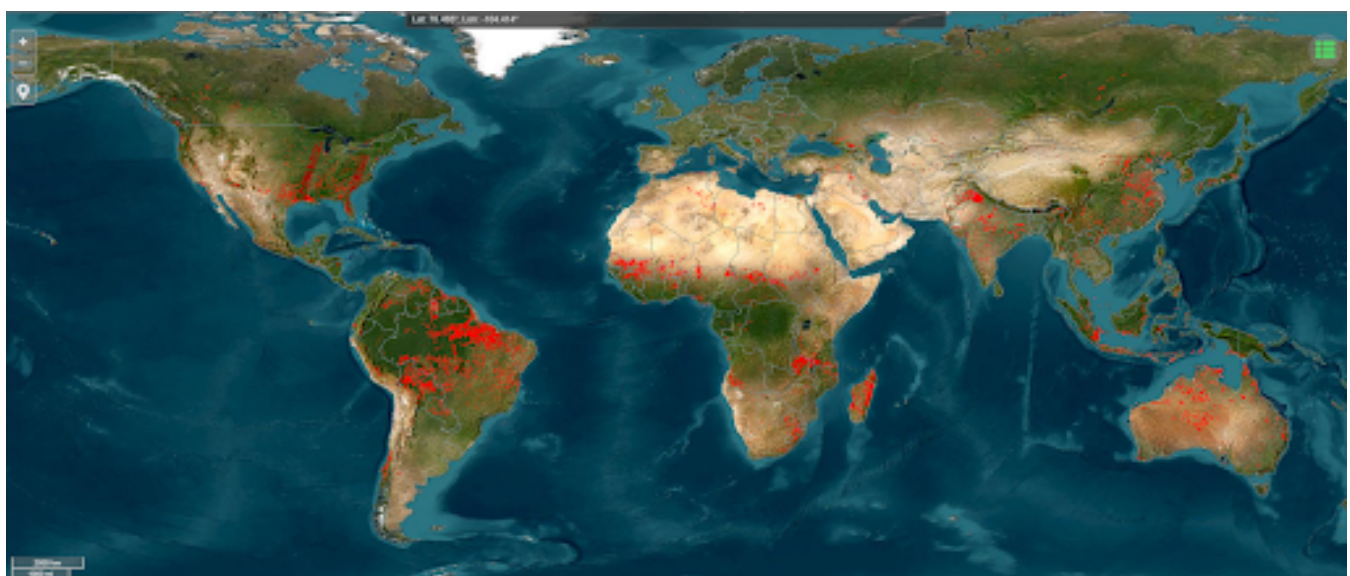
## Appendix A: Graphics, Charts, & Visualizations

All graphics and charts are copyright of the United Nations Environment Programme, Adaptation Gap Report 2023 (see Appendix C: References), unless otherwise indicated, and have been reproduced here in an educational and nonprofit context.

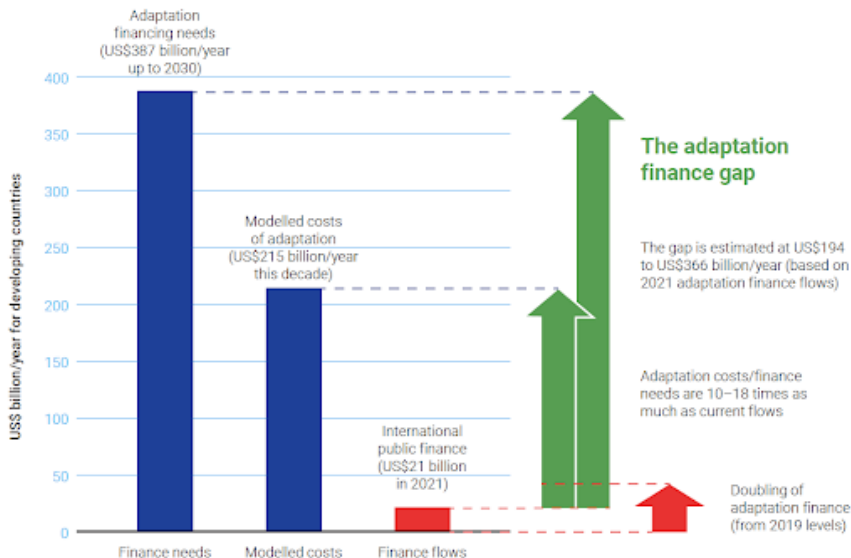
**Figure 1.** Extreme heat map, updated November 3, 2023. Source: The New York Times, <https://www.nytimes.com/interactive/2023/world/global-heat-map-tracker.html>.



**Figure 2.** Global wildfire map, November 3, 2023. Source: NASA FIRMS database, <https://firms.modaps.eosdis.nasa.gov/map>.

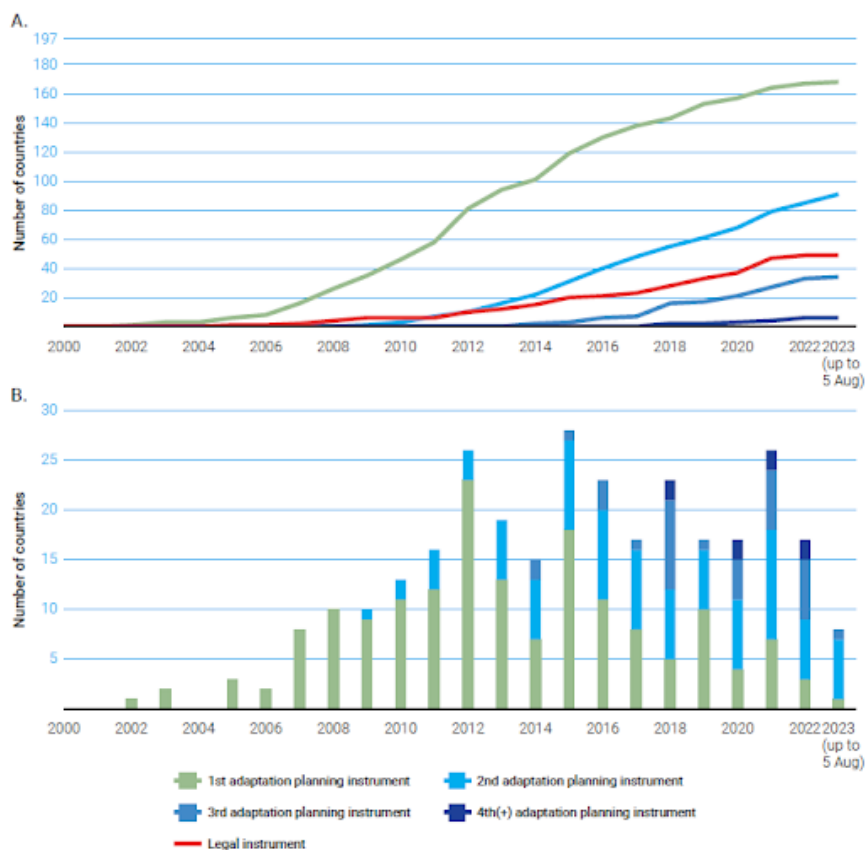


**Figure 3.** Comparison of adaptation financing needs, modeled costs and international public adaptation finance flows in developing countries.



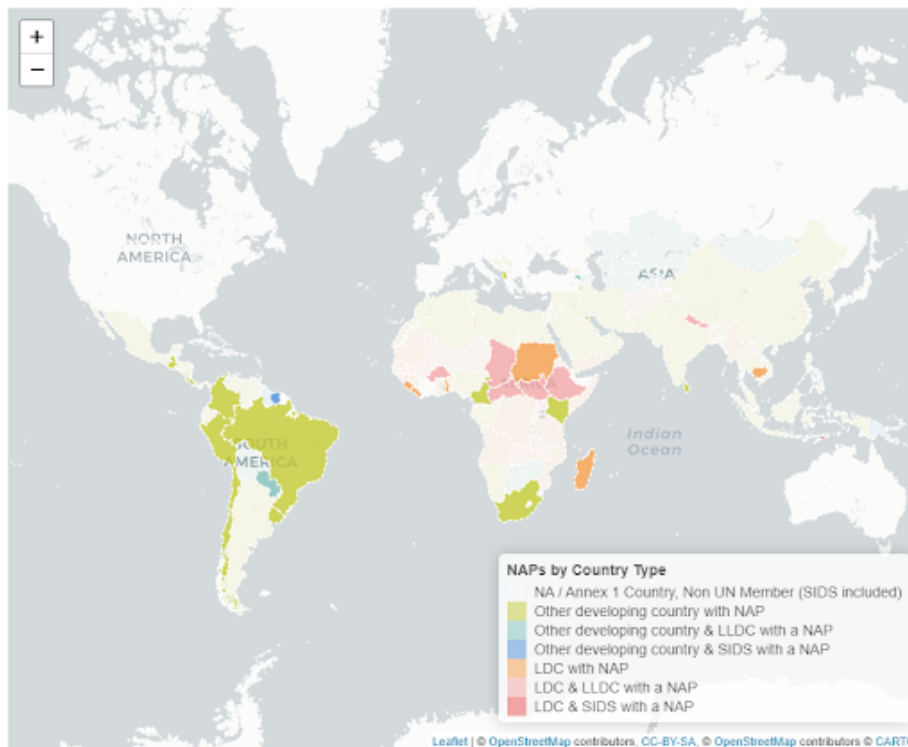
*Note:* Values for needs and flows are for this decade, while international public finance flows are for 2021. Domestic and private finance flows are excluded.

**Figure 4.** Global progress in national adaptation planning since 2000. **Panel A:** cumulative number of countries that have prepared a first, second, third or fourth national planning instrument or a legal instrument since 2000. **Panel B:** Number of national planning instruments published globally each year.

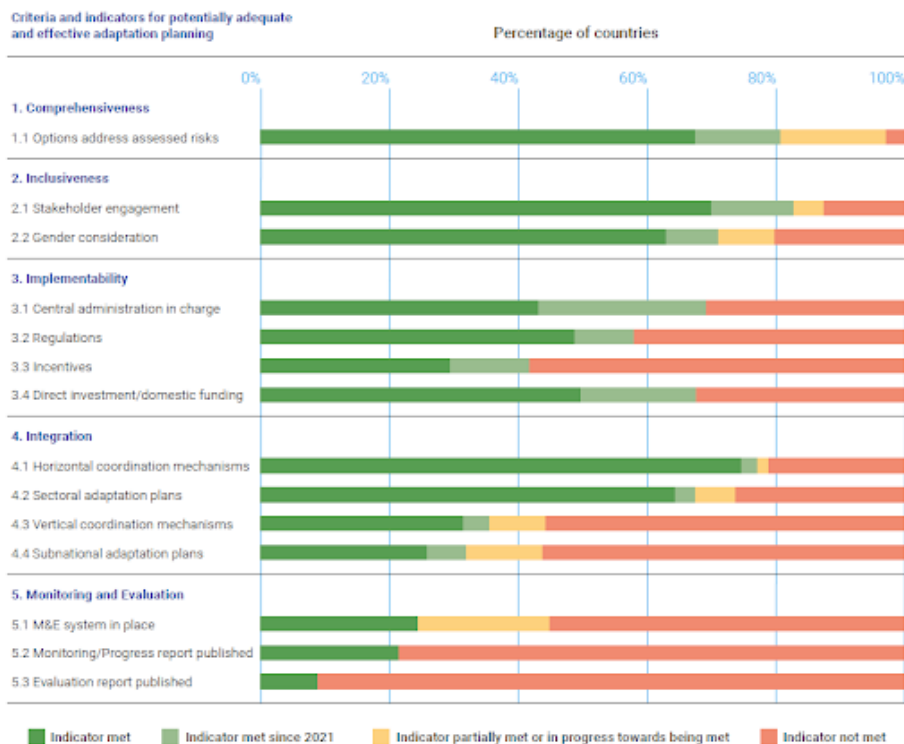




**Figure 5.** Map of countries with National Adaptation Plans, as of 5 August 2023. Source: UNFCCC, <https://napcentral.org/submitted-naps>.

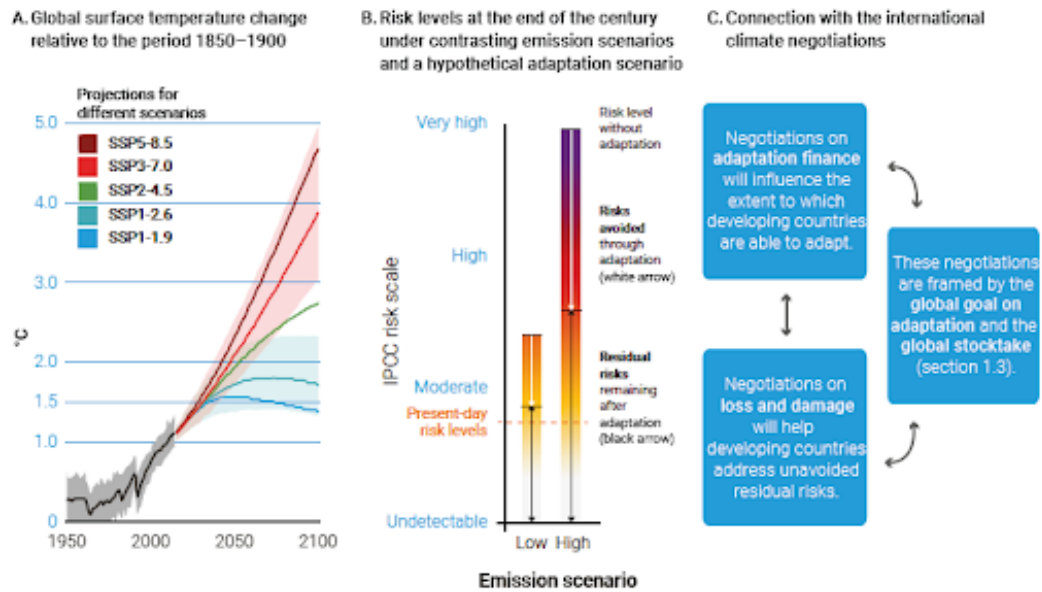


**Figure 6.** Potential adequacy and effectiveness of adaptation planning in 2023.



Note: As the criteria for allocating the "Indicator met" and "indicator in progress towards being met" metrics were tightened for indicators 5.1–5.3, changes in the allocation of the "Increase in indicators being met" since 2021 metric cannot be displayed in this figure.

**Figure 7.** Connecting temperature change and levels of climate risk and adaptation with the international climate negotiations.



Source: Panel A inspired by IPCC (2022, 2023). <https://www.ipcc.ch/report/ar6/syr/figures/figure-spm-4> and <https://www.ipcc.ch/report/ar6/wg1/figures/summary-for-policymakers/>. Panels B and C: Authors' own elaboration.  
 Note: SSP stands for shared socioeconomic pathway.

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