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Recommended citation

UCSF Institute for Global Health Sciences and Open Consultants. (2023). Improving investments in climate change and global health: Barriers to and opportunities for synergistic funding. San Francisco: University of California, San Francisco Institute for Global Health Sciences and Open Consultants. Produced in the United States of America. March 2023.

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Acknowledgements

Special thanks goes to Sebastian Martinez and Margot Neveux for their research support. We thank all key informants for their time and effort. We thank the Glaser Progress Foundation for their generous support of this work.

Abbreviations

AF	Adaptation Fund	LMICs	Low- and middle-income countries
ATACH	Alliance for Transformative Action on Climate and Health	LT-LEDS	Long-term Low Emission Development Strategies
CCE	Cold Chain Equipment	MDB	Multilateral Development Banks
CCEOP	Cold Chain Equipment Optimization	NAP	National Adaptation Plan
	Platform	NDCs	Nationally Determined Contributions
CCM	Country Coordinating Mechanism	NGO	Non-governmental organization
CRS	Creditor Reporting System	PV	Photovoltaic systems
C19RM	COVID-19 Response Mechanism	RSSH	Resilient and sustainable health systems
COP27	27th Conference of the Parties, UNFCCC	SDD	Solar direct drive
DAC	Development Assistance Committee	SPHS	Sustainable Procurement in the Health
Gavi	Gavi, the Vaccine Alliance	0.110	Sector
GCF	Green Climate Fund	SSCF	Special Climate Change Fund
GEF	Global Environmental Facility	ODA	Official Development Assistance
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria	OECD	Organisation for Economic Co-operation and Development
HCWM	Health care waste management	UNFCCC	United Nations Framework Convention on
KII	Key informant interview		Climate Change
KPI	Key performance indicator	WHO	World Health Organization
LDCF	Least Developed Countries Fund		

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Executive summary

This white paper analyzes the current state of "synergistic" finance for health and climate change. We define synergistic investment as health finance that integrates climate considerations and goals, and climate finance that addresses health needs and goals. This includes both efforts within the health sector to integrate climate adaptation and mitigation goals, and efforts within adaptation and mitigation investments across all sectors to maximize health co-benefits. The paper first looks at the level of and approach to such synergistic funding. and then identifies key barriers and opportunities for improving the volume, efficiency, and impact of this funding. The study focuses on three questions:

- To what extent do multilateral health funds adopt a climate lens to their health financing, and climate funds a health lens to their climate financing?
- What are the main opportunities and barriers for leveraging more synergistic funding to advance health and climate change goals at the same time?
- To what extent does Official Development Assistance (ODA) for health benefit climate adaptation and mitigation, and climate ODA target health co-benefits?

The paper is based on a document review, interviews, and a financial database analysis. It assesses six funding mechanisms - three global health and three climate change funds: Gavi, the Vaccine Alliance; the Global Fund to Fight AIDS, Tuberculosis and Malaria; UNITAID; the Adaptation Fund; the Global Environmental Facility, and the Green Climate Fund. In addition, it gives a brief overview on the role of other funding mechanisms and technical organizations in advancing synergistic investment, and it analyzes the levels of bilateral ODA provided in a synergistic manner.

Key findings

Global health funding landscape

opportunity for climate-focused investments including low-carbon health systems and enhanced climate adaptation and resilience - through both standard grant-making processes and special investment initiatives (e.g., catalytic investments). Realizing these opportunities

The mandates of multilateral health funds provide

will require that donors fully fund these multilateral health institutions and prioritize climate-related investments, as well as build awareness and climate expertise at all levels, including in governance mechanisms, the secretariat, and at country level.

Multilateral health funds have begun to reflect climate change in their strategies and policies. Yet given the multiple intersection points between climate and health, there is opportunity to further integrate climate change within organizational strategies and policies. To date, translation of strategic ambitions into climate-related investment targets and performance measures has been limited. Current efforts largely focus on reducing carbon emissions from secretariat-level operations and in procurement and supply chains.

Guidance from funds on how to integrate climatesensitive approaches in country programs is limited, and there is potential to build country demand for and coordinate action on climate at the country level. Increasing synergistic investment requires stronger cross-sectoral partnership and coordination to build country demand and capacity, as well as enhanced country guidance to support applicants in identifying and pursuing best practice strategies to integrate climate considerations in health proposals.

Synergistic health and climate investments are at a nascent stage. Certain climate-related activities are eligible for funding through country grants, such as health care waste management and the use of renewable energy to power health and storage facilities. While there are existing mechanisms to dedicate funding to specific climate-related priorities, this has been leveraged primarily for climate emergencies through emergency response mechanisms. These examples demonstrate the capacity of health funds to directly invest in climate preparedness, resilience, and response within their mandates, yet also highlight that such synergistic investments are limited.

The health sector has not leveraged the opportunity to mobilize climate funding. Sectors such as agriculture and water have been much better able to access climate finance. Although the linkages between these sectors and climate change may be more immediately evident, the health sector is also energy-intensive and highly impacted by climate change. Thus, there is urgent need to articulate the case for investing in the health-climate nexus. This requires enhanced capacity of health stakeholders to engage in resource mobilization processes and climate change policy discussions at the national and international level. This is particularly important as climate change rises on the agenda of many donors, including those that advocate for aligned approaches such as One Health. Concrete opportunities include the negotiations towards the establishment of the loss and damage fund and the new global climate finance goal (the New Collective Quantified Goal), and the Bridgetown Initiative that advocates for reform of the global financing architecture to address climate change.

Recommendations for global health funds

- Increase strategic emphasis on climate-related investments within the scope of existing mandates and translate strategic ambitions into policies that support larger investments for the intersection of climate and health. Establish performance targets to track progress and incentivize the integration of climate considerations across investment areas.
- 2. Leverage influence on global procurement and supply chains to contribute to and accelerate climate mitigation within the health sector. This could include, for instance, preferential procurement from suppliers that disclose emissions and have ambitious decarbonization targets. The application of tools to track carbon emissions and measure the economic returns of operational and supply chain mitigation measures can further drive decarbonization efforts across organizations.
- 3. Develop guidance for country partners on strategies and opportunities to leverage investment in climate-sensitive activities through standard funding processes and specific funding mechanisms.
- 4. Support the meaningful and strategic integration of climate-related activities in health investments. This should include: facilitating cross-sectoral partnerships and coordination to create country demand and capacity for integrated climate and health investments; involving climate experts in the design and implementation of programs; more prominent reference to and engagement of technical partner guidance; and recommendations or guidelines for the share of different investments that should be dedicated to climate-related activities or those with climate co-benefits.
- 5. Engage in resource mobilization efforts for climate change and health:
 - Explore the opportunity to launch targeted mobilization efforts to support investment in synergistic programming, including through greater engagement and coordination with climate funds.
 - At country level, encourage and provide support to country partners to work toward inclusion of health in national climate policy documents and foster access to information on available funds for climate change and health, enabling health to better leverage sources climate finance.
 - At global level, leverage advocacy opportunities, such as on-going dialogues regarding the establishment of a loss and damage fund and the new global target for climate finance, to strengthen the inclusion of health co-benefits in the climate finance arena.

Climate change funding landscape

Multilateral climate funds have flexible mandates that allow for direct health investment. While climate funds also have specific mandates that shape the scope of their operations, they do not face the same level of funding constraints as health funds in regards to cross-sector investment.

Across climate funds there is little strategic emphasis on investing in health through direct health sector investments. To date, only the GCF has provided relevant guidance on health-related opportunities within its mandate and portfolio. Awareness of the need and opportunities for investment in health is limited as compared to the attention that health funds give to climate change, including both the opportunities to directly support the health sector and to leverage cross-sector investments to enhance health co-benefits.

The absence of accredited health organizations able to access climate finance inhibits investment in health. This is despite clearly established linkages between health and climate adaptation and mitigation.

As a result, the health sector does not benefit from the investments of multilateral climate funds. Our study shows that investments in the health sector by climate funds are close to zero despite a clear opportunity for both large scale climate adaptation and mitigation projects in the health sector.

At country level, health stakeholders do not participate sufficiently in climate finance and policy processes. Many governments remain unaware of the opportunity to request funding for health from institutions like the GCF and the Adaptation Fund. An increasing number of countries mention health in national climate policy documents like the NDCs, which form the basis to request funding from global climate funds, yet more work is needed to translate this into funding proposals and implementation.

Recommendations for global climate funds

- 1. Leverage existing flexibilities of mandates and prioritize health in organizational investment strategies.
- Create the conditions that allow for greater direct investment in the health sector, including through the development of specific guidance for health sector investments and the accreditation of health organizations.
- 3. At country level, proactively request and incentivize additional project proposals from the health sector, encourage inclusion of health benefits in proposals from other sectors, and raise awareness of the linkages between health and climate change adaptation and mitigation among the country level partners. Expand mechanisms to facilitate cross-sector collaborations between health and other sectors to enhance synergies across climate funding portfolios.

- 4. Develop clear guidance on opportunities to maximize health benefits within investments made across all sectors. Work towards evaluation and other performance measures that incentivize the inclusion and maximization of health benefits across proposals and investment portfolios in other sectors.
- Intensify dialogue and collaboration with health funds to support resource mobilization and expand synergistic investment capacity, as well as to support the development of climate-friendly policies, guidance, and investment frameworks within counterpart health funding mechanisms.
- Strengthen the inclusion of health in the climate finance arena by leveraging opportunities, such as the loss and damage fund and the new global target for climate finance.

Cross-cutting recommendations

 Technical agencies from both the climate change and global health sectors should help to create demand for synergistic health-climate funding at country-level, including by building awareness and capacity among

- country stakeholders and facilitating the development of the evidence base for synergistic investment opportunities, funding requests, proof of concept programs, and an expanded project pipeline.
- Cross-cutting financing mechanisms (e.g., development banks and bilateral donors) should invest more strongly in projects with strong synergistic benefits for health and climate change, and apply their expertise to build country demand and project pipelines of fundable and impactful synergistic programs. These investments can expand the evidence base on effective synergistic investment and catalyze investment by other funds.
- 3. Donors should work with the DAC secretariat to improve the tracking and reporting of financial data, enabling greater accountability over time for donors to meet emerging climate change and health goals.
- 4. Additional investment should be made to strengthen data collection and research on evidence-based opportunities for synergistic investments in climate change and health.

Introduction

Climate change is already harming the physical and mental health of people around the world, and these impacts are projected to increase as greenhouse gas emissions continue to rise. Each year, millions of people die due to fossil fuel-related air pollution. Rising temperatures, more frequent and severe extreme weather events, and intensifying droughts – among other climate impacts – each have significant negative consequences for human health. Climate change also poses a significant threat to health systems infrastructure and health care delivery. Thus, the World Health Organization (WHO) calls climate change "the single biggest health threat facing humanity."²

Responding to the existing health impacts of climate change and minimizing future health threats demands urgent attention by the global community to advance rapid and large-scale action across health and other sectors. Yet progress towards implementing effective solutions to address climate change, and its impacts on health, remains slow and does not meet the scale of the challenge. Siloed finance, policy, and programs are major barriers to action. This includes both a lack of awareness of health needs and co-benefits within climate action and finance across sectors, and limited attention to climate change within the health sector.

This paper focuses on one particularly critical gap: the near absence of international development finance for work at the intersection of climate change and health. While it is broadly understood that climate action can benefit health and health action can benefit climate, there is, to our knowledge, very little empirical evidence on how much funding is available for climate change and health, how well global health and climate change finance is leveraged for cross-sector benefit, or the strategies that may exist for expanding funding at this intersection and enhancing the achievement of cross-sector goals within climate and health finance. This study begins to close this knowledge gap and to build the evidence base that can support efforts to expand much-needed development financing for climate change and health.

Study objectives

Recognizing the need for both more, and more effective, global funding for health and climate change, this white paper assesses the current state of "synergistic" finance: health finance that integrates climate considerations and goals, and climate finance that addresses health needs and goals. This includes both efforts within the health sector to integrate climate adaptation and mitigation goals, and efforts within adaptation and mitigation investments

across all sectors to maximize health co-benefits. This study first looks at the current level of and approach to such synergistic funding, and then identifies the main barriers and opportunities for improving the volume, efficiency, and impact of this funding. The aims of this study were to:

- Review the current strategic approaches of six climate change and health funding mechanisms to understand existing approaches for providing mutual funding to address climate change and health challenges (i.e., to what extent do health funds adopt a climate lens to their health financing and climate funds adopt a health lens to their climate financing?).
- Identify barriers and opportunities for leveraging key financing instruments to respond to both climate change and global health challenges (i.e., what are the main barriers for leveraging more synergistic funding to advance health and climate change goals at the same time?).
- Provide an overview on the role of other potential funds and technical agencies (i.e., how can other players foster synergistic investment in climate and health?).
- Estimate the levels and nature of official development assistance (ODA) that is provided in a synergistic manner (i.e., to what extent does health ODA benefit climate adaptation and mitigation, and climate ODA target health co-benefits).
- Summarize lessons learned and provide actionable recommendations to help maximize synergistic climate and health goals across investments and direct more financing to activities at the intersection of climate change and health.

The findings presented draw from a mixed-methods study that combined document review, semi-structured key informant interviews (KIIs), and a financial database analysis. A detailed description of the study methodology is in Annex 1. A list of institutions included in the study is in Annex 2. This study was led by the Climate Change and Global Health Initiative of the University of California San Francisco (UCSF) Institute for Global Health Sciences, and Open Consultants, Berlin.

In this report, we provide an analysis of six multilateral health and climate funds and of bilateral ODA for climate and health. We then summarize our findings on key barriers and opportunities and provide recommendations for advancing synergistic finance.

Synergistic action by six multilateral funds

The landscape of climate change and global health financing institutions is complex, and financing institutions in both sectors can address the linkages between health and climate change across multiple levels and dimensions. In this section, we assess six major funding mechanisms three global health and three climate change funds: Gavi, the Vaccine Alliance (Gavi); the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund); UNITAID; the Green Climate Fund (GCF); the Adaptation Fund (AF); and the Global Environmental Facility (GEF).

To understand and compare opportunities for synergistic finance within multiple types of financing institutions, we assessed each mechanism across five dimensions:

- Mandate: How does the mandate of the funding mechanism relate to health and climate change and which opportunities and barriers result from the mandate.
- Strategy and policy: How are the linkages between and health and climate change reflected within the strategies and policies of the funding mechanisms.
- Funding approaches: What are the main processes for the provision of funding, and which guidelines are in place to encourage and incentivize synergistic investment in health and climate change.
- Country-level partnership: How are countries being supported with the implementation of synergistic climate change and health work, and what is the role of other global stakeholders in supporting countrylevel action.
- Synergistic investment: To what extent do the funding institutions support synergistic health and climate financing across levels of operation.

Mandates

Multilateral financing institutions are guided by specific mandates that determine the scope of their funding. Understanding the mandates, and flexibilities within these mandates, provides insight into opportunities for incorporating synergistic cross-sector goals and funding.

Global health funds increasingly recognize that climate change impacts their core mission. However, the mandates of dedicated health funds limit the ability to directly finance climate-related projects.

The Global Fund provides funding for HIV, TB, and malaria programs, and for the strengthening of health systems. Through its COVID-19 Response Mechanism (C19RM), it also supports the COVID-19 response. UNITAID supports innovative solutions to HIV, TB, and malaria, to improve women's and children's health, and to enhance response to global health emergencies. Gavi aims to expand access to new and underused vaccines and coordinates the COVAX Facility (Annex 2). These three health funding institutions have focused mandates limited to a narrow subset of health areas, thus climate change is unlikely to be a primary investment focus for these funds.

However, there is growing acknowledgement that climate change directly and negatively affects the ability of these institutions to deliver on their strategic objectives, such as by affecting disease dynamics and inhibiting the ability to deliver essential health commodities and services. Stakeholders at multiple levels, including secretariat staff and donor and recipient countries, are driving rising attention to climate change within these institutions. This includes donors that advocate for a greater consideration of climate change in health investments as part of aligned frameworks, such as the One Health approach.3





The focused mandates of health funds represent a barrier to large-scale investment in climate change. However, there is an opportunity for them to do more to address the health-climate nexus, including in their support for disease programs and health care systems strengthening. For example, the three focus diseases of the Global Fund (HIV, malaria, and TB) are heavily affected by climate change and air pollution. Partnerships with climate funds to expand targeted investments in climate-resilient health systems could help to strengthen the Global Fund's efforts related to their primary mandate. In 2022, the Global Fund disbursed US\$173.3 million in dedicated grants to strengthen resilient and sustainable health systems (RSSH).4 Combined with RSSH-related investments integrated within US\$5 billion disbursed through disease grants, there are opportunities to further integrate climate mitigation and adaptation elements within these investments, for instance, building low-carbon health systems or enhancing climate adaptation and resilience. The Global Fund's 7th Replenishment Investment Case estimated that one-third of the US\$18 billion ask for 2024-2026 will be investments in RSSH. However, as the replenishment outcome of US\$15.7 billion fell short of the ask, increasing investments in RSSH while also delivering on other strategic objectives will be challenging.^{5,6} This shows that it is critical for donors to fully replenish existing health funds to enable them to leverage opportunities to integrate aligned cross-sectoral objectives within their mandates, including for climate change adaptation and mitigation.

The mandates of multilateral climate funds provide greater flexibility in terms of sectoral investment areas and thus allow more opportunity for investment in health.

Climate finance institutions – like the major global health funding mechanisms – have specific mandates that shape the scope of their operations. However, broadly speaking, they do not face the same level of mandate-related constraints as health funds.

The GCF is the world's largest climate fund, with the mandate "to support developing countries raise and realize their NDCs ambitions towards low-emissions, climateresilient pathways." The GCF's investment framework includes eight mitigation and adaptation results areas,7 one of which is health, food and water security.8 As such, the GCF's mandate opens the possibility to invest in health as a sector that is both energy-intensive and highly affected by climate change.

The AF finances adaptation projects in countries that are particularly vulnerable to the adverse effects of climate change. The AF is driven by the principle of country ownership, and funds projects that are shaped by countries. As such, the mandate and structure of the AF would enable it to receive and consider health-related proposals. Its mission to support the most vulnerable populations provides further opportunity to direct investments towards health programs, as climate change disproportionately

harms the health of women, children, Indigenous, and other marginalized and highly vulnerable communities.

The GEF's mandate is more restrictive and less flexible with regards to financing health as compared to the GCF and the AF. 10 According to its mandate. The GEF allocates funding in four-year funding cycles, each with specific focal areas. 11,12 Climate change is a focal area in the current cycle (2022–2026), which further specifies eleven integrated programs through which funding will be delivered. Health is not one of the specified integrated programs, although some of the programs do have relevance for health (e.g., food systems, sustainable cities, and clean and healthy oceans).

Strategy and policy

Financing institutions have strategies and policies that govern their activities and enable them to achieve their mandates. There are opportunities to integrate climate change and health within strategy and policy across these levels.

Global health funds are beginning to integrate climate change into their strategies and have adopted mitigation policies to reduce their organizational carbon emissions. To date, evolving strategic attention has been translated into measurable performance targets only at the secretariat level.

Climate adaptation and mitigation are explicitly addressed within the most recent strategies of several health funds, often for the first time (Annex 3). This shows an increasing interest by these funds to focus on climate change and gives them greater agency to develop work and partnerships at the intersection of climate change and health.

- Global Fund's 2023-2028 strategy: climate change is included in as a sub-objective under three parts of the strategy - malaria, people-centered integrated systems for health, and pandemic preparedness and response.¹³ The strategy's "partnership enablers" section also encourages climate sensitive approaches throughout the grant lifecycle, including through representation of and partnership with climate experts in Global Fund operations. The Global Fund's 2021 Statement on Climate Change and Environmental Sustainability outlines actions and commitments within the secretariat, product sourcing and procurement, supply chain, and country operations levels.¹⁴
- Gavi's 5.0 2021-2025 strategy: 15,16 "adaptive, resilient" is an operational principle of the current strategy and includes support to countries to leverage immunization to address climate change.
- Unitaid's 2023-2027 strategy: two of Unitaid's four strategic principles directly refer to climate, including making health systems resilient to future threats, and making health care greener and more sustainable.¹⁷ Emphasis is placed on reducing the climate impact of health products and supply chains.

Health funds face challenges defining climate-related outcomes that they can be directly accountable for and that they can achieve simultaneous to advancing their specific health mandate. Thus, to date, current climaterelated goals and key performance indicators (KPIs) largely focus at the secretariat level, while translation of strategic ambitions into climate-related targets and KPIs has been limited for other areas of the funds' activities. For example, the Global Fund's 2021 Statement on Climate Change and Environmental Sustainability includes a commitment to a yearly carbon footprint assessment of secretariat operations, and outlines steps to minimize environmental impact. 18 Unitaid's Climate Action Roadmap includes a goal, and associated Board KPI, to reduce secretariat-level carbon emissions by 50% by 2030, using offsets to reach net-zero from 2022. Going forward, Unitaid aims to broaden its climate-related targets by launching a climate assessment to determine net zero trajectories for all of Unitaid's grants, with the ambition to extend emissions reductions in its investments.19

While secretariat-level initiatives and targets are important signals of organizational interest in climate change, there is potential to drive broader prioritization of climate-related policies and investments at all levels.

Fully realizing these strategic ambitions requires broad awareness of the need for climate-sensitive investments, as well climate expertise at all levels, including in governance mechanisms, the secretariat, among partners, and at country level. As part of recent efforts, some global health funds are seeking to incorporate senior climate expertise in their secretariat to support the operationalization of their climate ambitions.

Climate funds mention health in their strategies, yet awareness of the need and opportunities for investment in the health sector and in health-protective projects is limited as compared to the attention health funds give to climate change.

Health is explicitly mentioned in the current strategies of some climate change financing institutions, yet the extent to which health is considered varies widely, suggesting there is an opportunity to clearly define areas for integration:

- GCF's 2020–2023 strategy: health is included in one of adaptation-focused results areas which aims to increase the "resilience of health, water and food security."²⁰
- **AF's Medium-Term Strategy for 2023–2027**: health is not identified as a specific priority area (nor is health explicitly mentioned in its previous 2018–2022 strategy).²¹ However, the 2023–2027strategy mentions health in several places, for example, health is discussed as an opportunity under the strategic focus area on "capturing co-benefits" for resilience.²²
- GEF's 2022 Healthy Planet, Healthy People
 Strategy (GEF-8): this new strategy aims to provide

a more flexible and integrated funding approach.²³ Investments made under this framework are intended to generate global environmental benefits while also creating pathways to transform health, food, natural, urban and energy systems to make them more sustainable and resilient. The *Healthy Planet, Healthy People* framework recognizes the dependency of human health and well-being on healthy environments. However, health is not one of the GEF's target focal areas and is not included as one of eleven integrated programs determining the allocation of GEF funding. Despite the fact that the strategy is framed around 'Healthy Planet, Healthy People,' investment in health is not clearly a priority.

Funding approaches

The funding mechanisms and approaches of each institution shape the opportunities available to integrate cross-sectoral concerns and prioritize synergistic climate change and health investments within their portfolios.

The three global health funds are driven by the principle of country ownership. Specific guidance from the funds on cross-sector integration is important to translate policy into investment directions. However, guidance to countries on how to adopt climate-sensitive approaches is nascent.

The Global Fund, Gavi and Unitaid are driven by principles of country ownership and partnership, with the development of funding requests and prioritization of investment areas primarily led by country health stakeholders. Focused health mandates and limited climate and health expertise may limit the integration of climate considerations or activities into proposals. The Global Fund and Gavi have developed some guidance to encourage and support climate-sensitive approaches:

Global Fund: country funding requests are assessed by the Technical Review Panel to ensure alignment with the Fund's strategic objectives. Review criteria for the 2023–2025 Allocation Period²⁴ will assess whether program design accounts for measures needed to prepare for, prevent, and respond to a range of threats, including measures to mitigate, respond and adapt to climate change. Guidance notes and technical briefs provided to countries to support the preparation of funding requests vary in their consideration of climate change. For instance, guidance on RSSH²⁵ and TB²⁶ highlight the need to pay attention to the impact of climate change on human health and refer to the Global Fund's Statement on Climate Change and Environmental Sustainability, yet offer little specificity on how to address climate within these programs. The malaria information note²⁷ includes a section on environment and climate change, which outlines an expectation to routinely incorporate climate data in malaria data repositories, and to integrate malaria into emergency plans - including for climate disasters

- where relevant. Additional guidance is provided to countries on health care waste management (HCWM), which encourages grant applicants to allocate at least 1% of the funding they receive to health care waste management interventions.²⁸
- Gavi: guidance is provided to help countries assess their HWCM system and prioritize sustainable interventions when developing funding requests.²⁹ Gavi's Vaccine Funding Guidelines³⁰ include the need to consider climate variability when applying for support for the Meningococcal A vaccine, but they do not include guidance on climate considerations for other vaccines.

Another aspect of the funding approach of Gavi and the Global Fund is pooled procurement, which these funds leverage to help reduce emissions in production and supply chains (Panel 1).

Like the health funding mechanisms, the three climate funds emphasize country ownership in their approach to funding. Country guidance thus plays a critical role in advancing synergistic investment, yet only the GCF has developed guidance to foster investment in health.

Guidance from the funds on investment areas is critical to shape funding which predominantly supports countrydriven and led projects. There is limited guidance from climate funds on if and how countries could integrate health into the range of programs they support.

GCF: sectoral guides to support the development of funding proposals³³ include a specific guide on health and wellbeing.34 This health sectoral guide identifies two pathways towards climate adaptive, low emissions health systems: (1) promoting climateresilient, nature positive health systems and services and (2) facilitating climate-informed advisory and risk

Panel 1: Greening supply chains through pooled procurement

Global health funds are leveraging their influence in global health commodity markets to strengthen the environmental sustainability of production processes and supply chains. Current evidence indicates that these global level policies can have substantial impact on climate mitigation.

Global health funds can reduce emissions through their procurement and supply chain strategies and activities. The Global Fund and Gavi are the top procurers of global health medicines and health products, with the Global Fund alone investing over US\$3 billion in procurement in 2021. These organizations are also implementing efforts to reduce the environmental impact of the production processes and supply chains of health products by setting expectations for their suppliers.

Global Fund: the Responsible Procurement Framework enables the setting of sustainability thresholds for suppliers, aims to make suppliers more accountable for their upstream supply chains, and incentivizes them to strengthen sustainable practices throughout their production processes and supply chains. The Global Fund Code of Conduct for Suppliers sets expectations with suppliers to actively participate in the United Nations Global Compact, which is a UN sustainability initiative that outlines social and environmental principles for company strategies and operations.31

- **Gavi**: the *Immunization Supply Chains Strategy* 2021–2025 includes an impact goal on supply chain sustainability which includes environmental sustainability.32
- Unitaid: the new organizational strategy aims to reduce suppliers' environmental footprint, move production closer to need, and make production facilities more environmentally friendly. Examples of efforts include optimizing procurement and supply chains to reduce air shipments, reducing plastic packaging, encouraging innovation such as the use of green solvents, and sustainable waste management.

These global level policies can have sizeable impact. For example, the Global Fund's recommendation to remove plastic bags in the distribution of long-lasting insecticidal nets has resulted in a reduction of 2,700 metric tons of plastic waste since 2018.

The Global Fund, Gavi and Unitaid are part of the UN informal Interagency Task Team on Sustainable Procurement in the Health Sector (SPHS), focused on reducing the environmental and social impact of its members' procurement activities.

management services and community action. This guidance signals GCF's openness to health projects and can be used by country partners to develop a stronger pipeline of proposals that target health. This guidance is an important step forward, yet has been critiqued by some civil society organizations for its heavy focus on infrastructure and financialization approaches, with an emphasis on leveraging private sector investment, that may not target the health of the most vulnerable communities and populations.35

- **Adaptation Fund**: The AF offers broad support for activities that "reduce vulnerability and increase adaptive capacity and resilience." The AF does not restrict funding by sector and encourages "maximizing multi-sectoral or cross-sectoral benefits," as per its Medium-term Strategy (2023-2027). However, AF guidance and learning materials do not include specific information on health sector investment.36 As a result, countries may not be aware of the ability to request funding for their health systems, or of strategies that could meet health and adaptation goals.
- **GEF**: the Climate Adaptation Programming Strategy includes "agriculture, food security and health" as one of five themes, though health is not one of the GEF's target focal areas. Programs within this theme are intended to support "adaptation in the context of food security and health";37 however, the focus is predominantly on water and agriculture rather than investment in health. Thus, while the GEF reflects that investments of some of its target areas can improve health, it does not provide specific guidance on investing in the health sector to achieve its climate change goals, or on how countries could maximize health improvements within its other target areas.

The lack of accredited health agencies that can apply for and implement projects is a major barrier to synergistic investments by the climate funds.

The GCF operates through a network of over 200 accredited entities and delivery partners who work directly with developing countries on project design and implementation.^{38,39} Partners include international and national commercial banks, multilateral, regional and national development finance institutions, equity funds institutions, UN agencies, and civil society organizations. For example, in the agriculture sector, IFAD and FAO are both accredited entities and run GCF projects. 40 In contrast, WHO is the only dedicated health organization that is an accredited partner. Furthermore, WHO is a "readiness delivery partner" – a partner that helps countries to get ready to receive GCF funding. Readiness funds amount to a maximum of US\$3 million per country for the formulation of national adaptation plans and processes in each country (for renewables, up to US\$1 million).41 While this focus corresponds with WHO's mandate and expertise as a technical and normative organization, the lack of accredited health entities inhibits health sector leadership in developing and implementing larger health-focused projects. Efforts by other health organizations (e.g., PAHO) to become

accredited have not yet been successful. Some accredited entities – like the World Bank – work closely with health partners and directly fund health projects. There may be opportunities to leverage the World Bank to channel GCF funds towards the health sector, however these organizations and funding mechanisms were not set up to manage this type of financing arrangement so operational challenges will need to first be addressed.

The AF and GEF similarly work through accredited implementation entities, the majority of which are organizations working in the environmental, water, agriculture, and nutrition sectors. WHO is undergoing the accreditation process for the AF, yet to date there are no accredited health agencies under the AF or the GEF.

Country-level partnerships

Given the above-described approaches of the climate and the health funds - which emphasize country ownership - greater demand from countries for more synergistic or cross-sectoral funding, paired with a more well-developed project pipeline of synergistic and multi-sector projects will be critical to accelerating finance at this intersection.

Technical and civil society partners have a key role to play building country capacity in climate change and health and supporting the development of a robust project pipeline for fundable projects at this intersection.

Given the country-driven approaches of the major funding partners, there is a clear need for greater capacity building and technical assistance within health and climate sectors to expand development of synergistic and multi-sector projects. This technical assistance should support integration of health in climate funding proposals and vice versa.

Technical assistance – from WHO or other partners – to national health entities could enhance the incorporation of climate change considerations into their health funding proposals and projects. At the same time, there are opportunities for, and the need to, involve climate experts - technical agencies and partners - in the processes established by health funds to guide proposal development. For example, Country Coordinating Mechanisms (CCMs) are national committees that submit funding applications to the Global Fund and oversee grants on behalf of their countries, and include representatives involved in disease response. CCMs provide opportunity to involve climate experts, and to integrate climate adaptation and mitigation, in the development and implementation of grants. The Global Fund's strategy includes the suggestion to adjust CCM membership to include expertise relevant to the strategy's goals and objectives, including with regards to "climate adaptation" (Annex 3).

Likewise, engagement by health stakeholders in the development of climate funding proposals could foster both the integration of health co-benefits within cross-sector

investments and direct health sector support. As climate finance is largely driven by national climate plans and policies such as NDCs and NAPs, the inclusion of health in these documents is an important step for mobilizing finance towards aligned climate and health goals. Institutions such as the WHO, bilateral funds, and multilateral development banks can play key roles in providing technical support in the development of national health

and climate change plans and policies, establishing relevant governance structures and partnerships that link climate and health, strengthening national surveillance and early warning systems, and generating and disseminating knowledge and awareness. Panel 2 discusses the role of other partners in fostering country demand as well as their role in contributing to synergistic financing for climate and health more broadly.

Panel 2: Fostering synergistic investments through other actors

A wide range of stakeholders can play a role in fostering country demand and capacity for synergistic climate and health finance, and in building a pipeline of evidence-based and fundable project proposals at this intersection.

Technical agencies

Technical agencies at all levels have a key role to play with respect to cross-sectoral action, including in demand creation, project development, and capacity building. Technical agencies can increase awareness of climate change and health among national entities, provide guidance to health and climate partners on the integration of climate and health into funding proposals, and support the development of a multi-sector project pipeline. For example, WHO's 2019–2023 Global Programme of Work aims to address the health effects of climate change in small island developing states and other vulnerable states under its "healthier populations" strategic objective. 42 WHO also recently launched the Alliance for Transformative Action on Climate and Health (ATACH), which aims to build low-carbon and sustainable health systems and to integrate the climate change and health nexus into respective national, regional, and global plans.43 PAHO's Strategic Plan 2020–2025,44 and its Sustainable Health Agenda for the Americas 2018–2030, include climate change and related goals, such as strengthening national and regional capacity to prepare for, prevent, detect, monitor, and respond to disease outbreaks and disasters. PAHO has contributed to synergistic action in the region, through for example, providing technical support to countries on climate and health (e.g., sustainability assessments and greening health infrastructure). In the region, 29 countries have dedicated climate and health staff within their Ministry of Health, and 31 of 35 country NDCs include health. These examples highlight the role technical agencies can play in laying the groundwork for synergistic financing.

Multilateral development banks

Multilateral Development Banks (MDBs) provide funding and technical assistance across multiple sectors and are therefore well positioned to support cross-sectoral action at the country level. Due to their broad sectoral focus, their presence in regions and countries, and their access to and partnership with national treasuries and diverse national ministries, MDBs have substantial opportunity both to fund synergistic projects and to provide technical support for cross-sectoral action. MDBs are the main source of climate infrastructure and resilience finance, with an estimated annual investment in climate adaptation and mitigation of more than US\$30 billion in 2020 – a level of funding that has increased in recent years. The World Bank Group delivered a record US\$31.7 billion in climate finance in fiscal year 2022, a 19% increase from 2021 (this comes from support to developed and developing countries).⁴⁵ The Bank, in its 2021-2025 Climate Change Action Plan also established a target to increase the share of financing that meets both development and climate change targets (so called climate co-benefits). Several MDBs have established targets and programming specifically for adaptation, for instance, the African Development Bank, launched the African Adaptation Acceleration Program, which received US\$55 million at the Africa Adaptation Summit in 2022. The MDBs are also large funders of health projects. Thus, these organizations can leverage their funding and technical expertise to advance synergistic funding across their portfolios.

Bilateral donors

Government donors made substantial financial commitments to support climate adaptation and mitigation globally, providing opportunity for more synergistic health-climate programming. Like the MDBs, bilateral donors provide significant financing and technical support for both health and climate change work and are thus well-positioned to support greater synergistic finance. Bilateral donors - including large donors like Germany, France, Norway, and the European Union – have made

substantial commitments in support of climate change adaptation and mitigation in developing countries. The US announced its intention to scale-up US international public climate finance four-fold to at least US\$11 billion per year by 2024 (however this requires congressional approval and current spending is far short of this goal). However, bilateral climate funding is currently not channeled through the health sector. Likewise, bilateral donors' substantial investments in health largely do not integrate climate change. Thus, there is an opportunity to strengthen bilateral programming from a health-climate perspective. In addition, large donor agencies have offices in multiple countries and through their presence can contribute to enhanced coordination between health and climate stakeholders at country level.

Philanthropies

Philanthropies can play leading and critical roles in catalyzing new domains of funding through activities such as global agenda setting and through support for 'proof of concept' projects. Philanthropies can play a guiding and leadership role to mobilize and direct funding, and many have portfolios in both climate change and global health, offering opportunities to leverage expertise and finance at this intersection. There are a growing number of philanthropic organizations operating at the intersection of climate change and health. This includes funds specifically focused on dimensions of health and climate, like the Clean Air Fund, and health philanthropies, like the Wellcome Trust, which have established dedicated climate change and health programs within their strategies. 46,47 Initiatives that advise and direct philanthropic funding can also shape donor priorities. For example, the Climate Leadership Initiative, supports leading philanthropies with navigating the climate space and prioritizing climate investments. However, to date, few health philanthropies have made climate an organizational priority and few

climate philanthropies have made health an organizational priority, while philanthropies that fund both climate and health continue to be largely siloed in their approaches rather than funding specifically at the climate-health nexus.

Non-governmental organizations

Non-governmental organizations (NGOs) can advance synergistic finance through advocacy, technical assistance, and the adoption and scale of innovative climate and health approaches within their own programs. NGOs managing their own health facilities may adopt new climate-sensitive approaches more rapidly than governments and can use these innovations to advance more widespread action. For example, Aga Khan Health Services (AKHS) developed a tool - based on innovations developed within AKHS facilities - to help operations across eight countries reduce health facility emissions and reduce the cost of health care provision through energy efficiencies. 48 This tool was endorsed by WHO and shared with its member states with technical assistance provided through a collaboration with the AKHS to help countries measure and reduce emissions in the delivery of universal health care. NGOs can also play a key role in advocacy vis-à-vis governments, parliaments, and other health care providers, and as such can help to push for synergistic climate-health action at the country and global level. For example, Health Care Without Harm developed the Global Road Map for Health Care Decarbonization, a tool supporting countries to achieve zero emission targets within their health sector. NGOs can also help with preparation of with project proposals to that integrate mutual climate change and public health goals across multiple sectors and sources of finance. For example, the Climate Finance Access Network worked with countries to develop project concepts amounting to US\$50 million of funding support.

Synergistic investment

While global health and climate change funds are beginning to consider cross-sectoral approaches at the policy and strategy level, this for the most part has yet to translate into significant levels of synergistic investment.

Global health funds can support climate-responsive health sector investments both through their principal country grant mechanisms and through dedicated funding streams such as those designed for emergency response.

However, while technically possible to dedicate such funding streams for climate activities, this has not been prioritized to date, and at this stage, climate-responsive health investments remain limited.

Certain climate-related activities are eligible for country grants provided by health funds. Examples include:

related activities. For example, activities to reduce the environmental impact of malaria interventions (e.g., vector control, mass bed net campaigns) can be included in malaria funding requests. Health care waste management as well as green technologies, such as solar panels, are eligible for Global Fund support. An example of this is the United Nations Development Programme's Solar for Health initiative, for which the Global Fund is one of the funders. 49 This initiative supports the installation of solar energy photovoltaic systems (PV) to ensure constant and cost-effective access to electricity for health facilities. The initiative, which has installed solar PV in over 400 health facilities in Zimbabwe, 60 health facilities in Sudan,

- and a medical warehouse in Zambia, was highlighted by the GCF as a best practice to expand energy access in the health sector. 50,51
- Gavi: Gavi has invested US\$400 million52 in its Cold Chain Equipment Optimization Platform (CCEOP), a co-investment funding scheme that supports the purchase of solar direct drive (SDD) refrigerators and freezers to store vaccines. From 2017 to 2020, 54,000 units of cold chain equipment (CCE) were procured, including 31,000 solar refrigerators.⁵³ Gavi estimates that SDD refrigerators and freezers provided through CCEOP reduce carbon emissions by up to 1.25 tons annually.⁵⁴ CCE are also more reliable than electricity and can extend vaccine availability in remote areas. Going forward, Gavi is exploring whether spare energy can be harvested from these fridges for power supply for basic diagnostic capacity and other digital medical devices. In addition, they aim to mobilize funding from other donors to allow expansion from dedicated solar panels with a fridge to the provision of larger solar panels that are able to generate power supply for the entire health facility.

For both the Solar for Health and the CCEOP initiative, country demand and technical capacity have been essential for the prioritization of climate-related activities and inclusion in funding proposals. Further engagement with and support to countries, both by health funds and technical partners, is important to generate awareness that such activities are eligible for funding from health financers, shape meaningful investments, and increase synergistic funding.

In addition to country grant mechanisms, boards determine priorities to target through special funding modalities. These dedicated initiatives offer additional opportunity to spur synergistic investment. To date, opportunities for climate integration are predominantly available in emergency response mechanisms:

Global Fund: catalytic investments are funds set aside for activities that are essential to achieve the aims of the strategy but not adequately addressed through country grants. For the 2023-2025 period, US\$400 million (3% of total funding) is available for catalytic investments.55 The Emergency Fund is a catalytic investment that can be rapidly mobilized to address the health impact of emergency situations, including climate-related emergencies. This mechanism has been used to respond to health crises resulting from climate disasters, such as ensuring access and distribution of essential medicines and health services in Pakistan after the 2022 floods. Emergency funding was also leveraged to respond to droughtlinked displacements in Somalia, which affected TB services. The Global Fund has committed to continue to be responsive to emergency situations caused by climate-related disasters through the Emergency Fund or grant reprogramming.56

Gavi: Gavi funds emergency vaccine stockpiles, including for cholera and Yellow Fever vaccines, that can be rapidly deployed when there is a high risk of outbreaks, for example after natural disasters.

These examples demonstrate the capacity of health funds to directly invest in climate preparedness, resilience, and response within their mandates, yet also highlights that such synergistic investments are limited and not mainstreamed within country grants. Dedicated funding that targets specific priorities, such as catalytic investments, is an important mechanism to enable rapid responses to climate emergencies and provide an opportunity for dedicated investments in climate-sensitive approaches. Leveraging this opportunity requires prioritization by the board among competing priorities in a resource-constrained environment. However, such dedicated funding streams are small compared to country grants. The greatest impact on climate change through health financing can be made by strategically and explicitly integrating climate goals within programmatic investments.

Investments made by climate funds in the health sector are essentially non-existent. Climate funds predominantly invest in other sectors, some of which have health-co-benefits, yet explicit attention to maximizing these co-benefits is lacking.

Despite the opportunities laid out above enabling the major climate funds to invest in health projects, health remains significantly underrepresented in the portfolios of these donors.

- GCF: GCF approved US\$867.7 million (public) and US\$189.4 million (private) in funding for the results area "health, food, and water security" (9.3% of all approved funding).57 However, there are currently no projects that focus specifically on the health sector. Within the GCF's adaptation portfolio funding also focuses on food and water security, with no projects solely focused on health.58
- Adaptation Fund: Since 2010, the AF has committed US\$923.5 million to projects and programs. The five largest sectors account for almost two-thirds of all funding: agriculture (15%), food security (14%). disaster risk reduction and early warning systems (12%), rural development (11%) and water and sanitation (11%). Although projects in these areas can yield important health co-benefits, to date the AF project portfolio does not include any direct health sector investments or explicit prioritization of health co-benefits in its investments in sectors with such health potential (Annex 4).
- **GEF**: The GEF funds climate adaptation primarily through the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SSCF).59 From their inception in 2001 to date, less than 2% of projects supported by the LDCF and the SCCF have focused specifically on health. The LDCF has supported over 1,200 projects (with US\$2 billion in

pledges and contributions), ⁶⁰ the majority of which focused on agriculture (16.6%), water (13.6%), climate information services (12.6%), ecosystem protection, restoration, management (11.9%) and sustainable alternative livelihoods (9.9%). The SCCF has supported 250 projects (US\$ 356.94 million)⁶¹ the majority of which focused on water (16.4%), climate information (12.8%), agriculture (12.4%), ecosystem protection, restoration and management (10.8%) and disaster risk management (10%).

Climate funds invest in multiple sectors with the potential for significant health co-benefits. For example, investment in agriculture may contribute to food security for vulnerable groups, clean water systems will contribute to the reduction of infectious diseases, and energy sector investments can improve air quality in the most affected communities. However, existing evidence indicates that there is still ample room for integrating health objectives into the projects of climate funds. Only 15% of Green Climate Fund adaptation funding went to projects with clear health co-benefits while none specifically targeted the health sector. Thus, engaging health partners in the design and implementation of climate investment decisions may maximize these co-benefits across the portfolios of climate funds. A summary of opportunities and barriers for multilateral health and climate funds to provide synergistic health and climate investments is included in Table 1.

Table 1: Summary of multilateral landscape of synergistic investment

Dimensions	Multilateral health funds	Multilateral climate funds
Mandate	 Increasingly recognize impact of climate change on core missions Mandates limit ability to support climate adaptation/mitigation Ample room to make health sector investments more climate-responsive (e.g., invest in low-carbon health systems; enhance climate adaptation and resilience) – requires full donor support 	Mandates provide flexibility in terms of sectoral investment areas and would allow for investment in health
Strategy/ policy	 Begin to integrate climate change into organizational strategies, and have adopted mitigation policies to reduce organizational carbon emissions Strategic attention needs to be accompanied by performance targets to translate policy into practice 	 Health mentioned in strategies but need to clearly identify health as a key focus for investment Low awareness for need to invest in the health sector Health perceived as an outcome of investments in other sectors (e.g., water; agriculture), without explicit attention to maximizing synergistic benefits
Funding approaches	 Climate considerations to some extent reflected in funding requests and some guidance on climate-sensitive approaches but more emphasis needed Contributions to mitigation through pooled procurement approach 	 Only the GCF has recently developed guidance to foster investment in the health sector Health sector organizations cannot access funding (not accredited)
Country level partnerships	 Country partnerships critical to make health investments more climate-sensitive, i.e., to create demand for climate-sensitive health grants Requires inclusion of climate experts in proposal development and implementation, and coordination with technical agencies, MDBs, and civil society to identify joint funding opportunities 	 Health insufficiently reflected in policy documents that guide funding (e.g., NAPs and NDCs) Need to engage health actors in national climate policy development and funding proposal processes to integrate health co-benefits and direct health sector support
Synergistic investment	 Limited climate-sensitive investments Opportunities to make investments more climate-friendly through grant-making process and special initiatives 	 Essentially no investments in the health Substantial opportunity to fund health sector and synergistic projects

Bilateral ODA for health and climate change

This section presents the results of a quantitative analysis of ODA. We used the Creditor Reporting System (CRS) of the OECD Development Assistance Committee (DAC) to assess synergies between health and climate ODA. The CRS includes bilateral ODA data for specific sectors (e.g., health, education, agriculture), making it straightforward to analyze health sectoral ODA. Tracking climate ODA requires a different approach – donors use a "policy marker" to indicate if their ODA contributes to climate adaptation and/or mitigation:

- An ODA project/program can be marked as "principal" when climate change mitigation or adaptation is explicitly stated as a fundamental objective in the design of, or motivation for, the project.
- An ODA project/program can be marked as "significant" when climate change mitigation or adaptation is explicitly stated but is not the fundamental driver or motivation for undertaking the project. Instead, the project has other prime objectives, but it has been formulated or adjusted to help meet the relevant climate concerns.
- The ODA project/program does not target climate adaptation and mitigation.

For example, based on the policy marker, a donor would have to report to what extent a water and sanitation project contributes to climate adaptation and/or mitigation. The project could be principally focused on climate change, it could make a significant contribution to it, or it could not target climate considerations at all.

We provide three interlinked analyses: Using the policy marker, we first provide an overview on total climate ODA and its distribution by sector. Second, we assess to what extent health projects contribute to climate adaptation and mitigation. Third, we conducted a key-term search to assess to what extent ODA projects with a principal focus on climate adaptation and mitigation refer to health outcomes in the project descriptions. We conducted this analysis to show how climate ODA contributes to health outcomes in non-health sectors, such as agriculture, water, energy, etc. Given that we already cover the linkages between health sector projects and climate funding in the initial two assessments, we limited this analysis to projects outside the health sector (see Annex 1 for methodological details). All data presented below are for the year 2020.

There are limitations: First, while the CRS in general provides data on all bilateral ODA, DAC policy markers only apply to bilateral allocable ODA. ODA for which

donors' intention is considered as impossible to identify is excluded - for example general budget support, core contributions to multilaterals, and debt relief. For the ease of reading, we decided to refer to bilateral ODA in the sections below. Second, only DAC donors – 30 governments and the European Commission – use the policy markers. 62 Multilaterals and non-DAC donors do not use policy markers and thus do not report on the climate-sensitivity of their investments. Third, policy markers in general and for climate funding specifically are considered an imprecise instrument because the total project amounts are included rather than specific climate components. 63,64 This may lead to over-reporting. Fourth, CRS project descriptions are often vague which can make it difficult to understand why donors have attributed projects as contributing to climate mitigation and adaptation.

Sectoral distribution of climate ODA

Adaptation

Donors classified US\$5.8 billion of bilateral ODA as principal for climate adaptation, and US\$23.7 billion as significant for climate adaptation. Adaptation ODA was channeled through multiple sectors, with key sectors being agriculture, water, general environmental protection, and transport and storage. In addition, multi-sectoral projects accounted for a substantial share of adaptation ODA (Figure 2).

Mitigation

Donors classified US\$11.1 billion and US\$14.5 billion as principal and significant for mitigation, respectively. The main sectors through which funding was channeled include: general environmental protection, transport and storage, and agriculture. Additionally, mitigation ODA was channeled through energy-specific subsectors, namely energy generation, energy distribution, and energy policy (Figure 3).

This analysis of bilateral climate ODA confirms the findings from the above assessment of multilateral climate funds. Much of the bilateral adaptation ODA is channeled through non-health sectors, such as agriculture, water, environmental protection. While the distribution of mitigation ODA is more diversified, agriculture, water and environmental protection still account for a sizeable share. In contrast, the health sector is severely underrepresented in bilateral climate investments and has largely not taken advantage of opportunities to mobilize climate ODA.

Figure 2: Adaptation ODA by sector

a. principal objective

Total: US\$5.8 billion

b. significant objective

Total: US\$23.7 billion

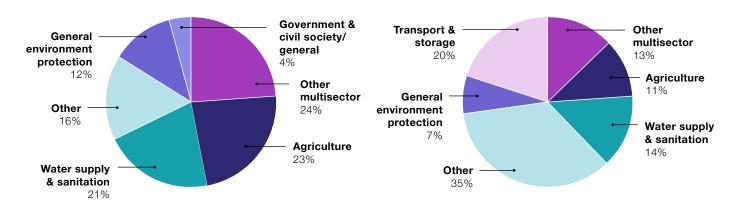


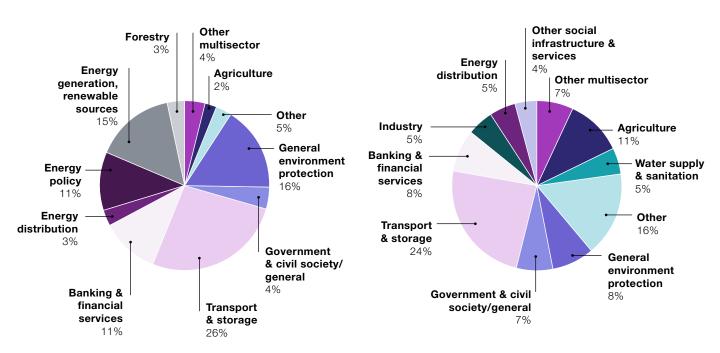
Figure 3: Mitigation ODA by sector

a. principal objective

Total: US\$11.1 billion

b. significant objective

Total: US\$14.5 billion



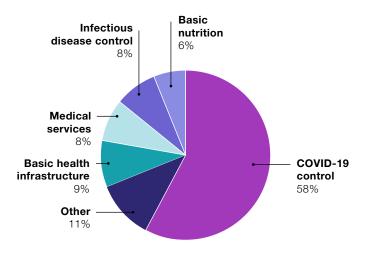
Synergistic ODA for health and climate adaptation and mitigation

Donor tracking suggests that about 7% of bilateral health ODA contributes to climate adaptation. However, there appears to be significant misreporting, which suggests that much less health ODA contributes to climate adaptation than is reported.

In 2020, bilateral health ODA amounted to US\$21.1 billion. Of this amount, 7% (US\$1.58 billion) was classified as "significant" for climate adaptation. This represents a substantial increase since 2016, when only 2% (US\$209.1 million) of bilateral health ODA was marked as significant for climate adaptation (Annex 4).

Over half of the bilateral health ODA marked as significant for climate adaptation came from COVID-19 control activities, most of which were activities focused on the general COVID-19 response and the provision of equipment. The remaining bilateral health ODA marked as significant for climate adaptation came from basic health infrastructure (9%), medical services (8%), infectious disease control (8%), basic nutrition (6%) and other sectors (11%).

Figure 4: Distribution of bilateral health ODA marked as significant for climate adaptation by health subsector (CRS code)



Project examples of health ODA for adaptation include projects to strengthen the resilience of health systems and services in support of populations disproportionately affected by climate change, to improve access to sexual and reproductive health services for women affected by climate-related emergencies, to improve climate-related maternal and child health conditions through health and nutrition promotion interventions, and to increase the climate resilience and energy efficiency of health facilities. However, our portfolio analysis indicates that there may be substantial misclassification. In 2020, 82% of all health ODA marked as significant for climate adaptation came from one donor (US\$1.3 billion). The CRS project descriptions of this donor included little information on the projects, and they did not provide any details on climate-relevant components. It is thus unclear how these projects contributed to climate adaptation. When the funding of this donor is removed, only US\$276 million in health ODA (~1% of bilateral health ODA) is marked as significant for adaptation.

Only US\$48.6 million of the bilateral health ODA - a negligible percentage of total health ODA - was tagged as having a principal focus on climate adaptation.

Very little synergistic investment is made in health and climate mitigation.

Little health ODA is tagged as either principal or significant for climate change mitigation. Few health projects (74) classify climate mitigation as the principal project goal, accounting for only 0.2% of total bilateral health ODA (US\$26.3 million). Only 0.7% (US\$102.5 million) of bilateral health ODA is classified as "significantly" contributing to climate change mitigation. Project examples include activities to improve maternal and child healthcare to reduce climate vulnerability, or the purchase of medical materials to help treat respiratory diseases that arise as a consequence of severe climatic conditions.

Contributions of climate change ODA to the health sector

There is very limited climate adaptation funding focusing on the health sector. Health is supported more indirectly, for example through water and sanitation projects. With the exception of two donors, mitigation projects hardly mention health.

In 2020, the total value of adaptation projects that included health outcomes amounted to US\$337 million. The majority of the funding (79.4%) of projects came from three sectors:

- Multisector (37.0%, US\$ 125 million): strengthening urban resilience in the face of climate change; behavior-change activities to improve climate smart activities, improve nutrition and reduce inequalities; expanding health product distribution.
- Water and sanitation (35.0%, US\$120 million): improving access to safe drinking water, sanitation services, and water irrigation systems.
- Agriculture (7.4%, US\$25 million): strengthening resilience to climate disaster and strengthening food systems/food security.

Our analysis of bilateral ODA for climate mitigation found that in 2020 just US\$ 644 million principally focused on health. Germany and France were responsible for 82% of all funding targeting this intersection, and a single project, described as 'COVID-19 – Green Recovery Program in Peru' within the banking and financial services sector, funded by Germany, accounted for 43.9% of total contributions (US\$ 283 million).

Opportunities and barriers

Our study has assessed the current state of synergistic international development finance investments for health and climate change. With climate change leading to accelerating threats to health and health systems - and given the opportunities for mutual benefit of global health and climate change investments - it is increasingly critical to expand financing for climate change and health, a currently severely underinvested nexus. In this section, we summarize the identified opportunities and barriers for a more integrated financing approach moving forward.

A health fund perspective

Synergistic health and climate investments are at a nascent stage. Global health funds have begun to reflect climate change, to some extent, in their strategies and policies. Yet given the multiple intersection points between climate and health, there is a need for, and opportunity to, further integrate climate change within organizational strategies. Furthermore, strategic and policy-related efforts have yet to translate into meaningful levels of synergistic investment at the intersection of climate change and health.

The predominant action taken by global health funds to date are measures to reduce carbon emissions resulting from their operations, including in procurement and supply chains. These secretariat-level initiatives are important signals of organizational commitment to climate change and can be further expanded and strengthened. However, alone they are unlikely to have significant impact unless leveraged to drive broader policy and investment decisions by the funds.

The mandates of global health funds provide opportunity for climate-focused investments – including low-carbon health systems and enhanced climate adaptation and resilience - through both standard grant-making processes (e.g., country funding requests) and special investment initiatives. Both types of investments are key to mobilize synergistic funding. This is also critical to ensure that sufficient capacity and resources are available for the poorest and most marginalized communities to become and stay resilient to the health challenges that climate change brings. However, fully realizing these opportunities will require that donors fully fund these mechanisms. The global health funds themselves need to provide adequate guidance on these opportunities, and work with multiple partners to build country demand and capacity for such synergistic investment.

There are a number of barriers that inhibit a more climate-forward approach by health financing institutions, related both to the operational structures of these funds and to the overall funding landscape for health. From an

operational perspective, health funds may experience challenges in defining climate-related outcomes that they can be directly accountable for and that they can achieve simultaneous to advancing their specific health mandate. Thus, greater exploration of evidence-based strategies and opportunities for integrating climate into the core funding streams of these funds will be critical. The lack of country presence also likely limits their ability to create country demand and coordinate action at the country level. It will be difficult to increase synergistic investment without stronger cross-sectoral coordination at the country level, and donors can explore opportunities to leverage their relationships with country governments, technical partners, civil society, and other donors to build country demand and capacity. From a funding perspective, the comparatively limited funding specifically for health systems activities is a barrier to climate change integration, given the substantial potential to address the intersection of health and climate change through health system strengthening activities. Moving forward it will be critical that donors fully fund such health systems mechanisms. By giving more strategic attention to climate considerations, multilateral health funds may also be able to attract additional donor funding or establish new funding partnerships with climate funds specifically at the climate-health nexus.

There are concrete actions that health funds can take to make their future investments more climate-friendly. These opportunities include: (1) the creation of more specific guidance to countries and grant recipients regarding the opportunities and strategies for including climate considerations across the range of fundable programs and activities. (2) the development of climate-related performance targets to facilitate the translation of strategy and policy into investment decisions. (3) recommendations or guidelines to influence the share of funding allocated at the intersection of climate and health. (4) stronger cross-sectoral coordination across levels, for example through the hiring of climate experts at the secretariat level and particularly at country level through the involvement of climate experts in the design and implementation of grants. (5) adding carbon emission tracking as a requirement for health investments alongside reward schemes for operations that reduce emissions and track associated financial savings.

We further find that there are likely opportunities for the health sector to advance synergistic finance through engagement with climate and other funds. Our analysis of bilateral ODA shows that the health sector has insufficiently leveraged the opportunity to mobilize climate funding, unlike other sectors such as agriculture, water, and environment. Although the linkages between these sectors and climate change may be more immediately evident, the

health sector is also energy-intensive and there is urgent need to invest in health adaptation. Going forward, articulating this investment case and building the capacity to engage in funding proposals to climate funds will become an important area for health stakeholders consider. This is particularly important as climate change rises on the agenda of many donors, and donors indicate growing investment targets for climate. Opportunities to advocate for synergistic finance may be particularly present in bilateral donor agencies and multilateral development banks, whose existing technical expertise and funding portfolios in climate change and health, respectively, could be leveraged for cross-sector purpose.

There is additionally a need for targeted advocacy to position health in the broader global climate agenda, particularly as it relates to ongoing finance discussions. Several points are relevant. COP27 ended with a historic agreement to establish a fund to respond to loss and damage. 65 As the details of this fund are negotiated, including for instance the mandate, mechanisms, and access criteria, it will be important that the health sector is engaged if health is to be reflected. Over the next two years, countries are also negotiating a new global climate finance goal - the New Collective Quantified Goal replacing the prior goal for developed countries to provide and mobilize US\$100 billion of climate finance per year for climate action in developing countries, which was initially due to be reached by 2020 and will finally expire in 2025. These negotiations will establish the amount, and importantly, the qualitative criteria for climate finance. Thus, it is essential that the health sector engage in these negotiations to explore the development of sub-goals or targets related to health. This could include dedicated funding for health and stronger targets for maximizing health co-benefits in cross-sector finance. The 2022 Bridgetown Initiative is a proposal to reform the global development finance architecture and may offer another entry point for global health organizations.66 Successful engagement in these dialogues will require stronger leadership and coordination, alongside an expanded evidence base on which to guide investments.

A climate fund perspective

Compared to the health funds, the overall picture is different for the multilateral climate financers. These funding mechanisms have flexible mandates that more easily allow for direct investment in the health sector. For instance, the mandate of the Adaptation Fund emphasizes the need to invest in vulnerable groups and to achieve co-benefits from adaptation investments - a clear opportunity for investing in health and for facilitating partnerships between health and climate funds. Despite this, across the climate financers there is little strategic emphasis on investing in health, and only the GCF has recently provided relevant guidance. As a result, the health sector does not benefit from the investments of multilateral climate funds, and there is a lack of attention

to developing strategies and policies that would increase synergistic finance in the future.

Another key barrier of the funding approach is the absence of health sector organizations on the list of agencies accredited to access climate finance. This inhibits direct investment in the health sector, despite clearly established linkages between health and climate adaptation and mitigation. Moving forward, it will be critical for climate financers to understand and create the conditions that allow for greater direct investment in the health sector. At the same time, climate funds can contribute to health outcomes through investment in other sectors, such as water, energy, and agriculture. However, presently, only a small share of projects include health objectives, representing a missed opportunity to leverage potential health co-benefits in multisector investments. Greater collaboration with health partners and clear guidance for health targets in climate financing will help to maximize these co-benefits.

Going forward it will also be critical that health stakeholders become more involved in climate finance and climate policy processes at the national level (e.g., through participation in NAP and NDC processes and in the development of funding proposals) to ensure that health is identified as a key sector for investment and that health co-benefits are prioritized across all investments. This is a precondition for investments in the health sector. Many governments remain unaware of the opportunity to request funding for health from financing institutions like the GCF and the AF. National climate policies that form the basis of funding requests to these institutions often do not adequately address health. If countries do not prioritize health in these policy documents, climate funds will continue to fund more traditional sectors. There is a wide range of stakeholders – from WHO to bilateral agencies, multilateral development banks, as well as civil society and philanthropies - that can engage in advocacy and technical assistance for including health in national climate plans and funding proposals. More generally, there needs to be more awareness-raising and capacity building to create the necessary funding demand at country level. For example, there is the opportunity for large scale health adaptation projects; however, ministries of health infrequently play a leadership role in envisioning and advocating for such projects. GCF projects are often of significant scale, so it will be critical that national health agencies receive the support required to develop such projects.

Finally, many of the largest climate financers, like the World Bank, multilateral development banks, and bilateral development finance agencies, also are large health funds and work with multiple sectors at the country level. Greater attention to the opportunities for integrating these currently siloed programs will be important for synergistic finance.

Recommendations

There are many opportunities for a more integrated approach to health and climate financing, including the following recommendations.

Recommendations for global health funds

- Increase strategic emphasis on climate-related investments within the scope of existing mandates and translate strategic ambitions into policies that support larger investments for the intersection of climate and health. Establish performance targets to track progress and incentivize the integration of climate considerations across investment areas.
- 2. Leverage influence on global procurement and supply chains to contribute to and accelerate climate mitigation within the health sector. This could include, for instance, preferential procurement from suppliers that disclose emissions and have ambitious decarbonization targets. The application of tools to track carbon emissions and measure the economic returns of operational and supply chain mitigation measures can further drive decarbonization efforts across organizations.
- 3. Develop guidance for country partners on strategies and opportunities to leverage investment in climate-sensitive activities through standard funding processes and specific funding mechanisms.
- 4. Support the meaningful and strategic integration of climate-related activities in health investments. This should include: facilitating cross-sectoral partnerships and coordination to create country demand and capacity for integrated climate and health investments; involving climate experts in the design and implementation of programs; more prominent reference to and engagement of technical partner guidance; and recommendations or guidelines for the share of different investments that should be dedicated to climate-related activities or those with climate co-benefits.
- 5. Engage in resource mobilization efforts for climate change and health:
 - Explore the opportunity to launch targeted mobilization efforts to support investment in synergistic programming, including through greater engagement and coordination with climate funds.
 - At country level, encourage and provide support to country partners to work toward inclusion of health in national climate policy documents and

- foster access to information on available funds for climate change and health, enabling health to better leverage sources climate finance.
- At global level, leverage advocacy opportunities, such as on-going dialogues regarding the establishment of a loss and damage fund and the new global target for climate finance, to strengthen the inclusion of health co-benefits in the climate finance arena.

Recommendations for global climate funds

- 1. Leverage existing flexibilities of mandates and prioritize health in organizational investment strategies.
- Create the conditions that allow for greater direct investment in the health sector, including through the development of specific guidance for health sector investments and the accreditation of health organizations.
- 3. At country level, proactively request and incentivize additional project proposals from the health sector, encourage inclusion of health benefits in proposals from other sectors, and raise awareness of the linkages between health and climate change adaptation and mitigation among the country level partners. Expand mechanisms to facilitate cross-sector collaborations between health and other sectors to enhance synergies across climate funding portfolios.
- 4. Develop clear guidance on opportunities to maximize health benefits within investments made across all sectors. Work towards evaluation and other performance measures that incentivize the inclusion and maximization of health benefits across proposals and investment portfolios in other sectors.
- Intensify dialogue and collaboration with health funds to support resource mobilization and expand synergistic investment capacity, as well as to support the development of climate-friendly policies, guidance, and investment frameworks within counterpart health funding mechanisms.
- Strengthen the inclusion of health in the climate finance arena by leveraging opportunities, such as the loss and damage fund and the new global target for climate finance.

Cross-cutting recommendations

- Technical agencies from both the climate change and global health sectors should help to create demand for synergistic health-climate funding at country-level, including by building awareness and capacity among country stakeholders and facilitating the development of the evidence base for synergistic investment opportunities, funding requests, proof of concept programs, and an expanded project pipeline.
- 2. Cross-cutting financing mechanisms (e.g., development banks, bilateral donors, and philanthropic funds) should invest more strongly in projects with strong synergistic benefits for health and climate change, and apply their expertise to build country demand and project pipelines of fundable and impactful synergistic programs. These investments can expand the evidence base on effective synergistic investment and catalyze investment by other funds.
- 3. Donors should work with the DAC secretariat to improve the tracking and reporting of financial data, enabling greater accountability over time for donors to meet emerging climate change and health goals.
- 4. Additional investment should be made to strengthen data collection and research on evidence-based opportunities for synergistic investments in climate change and health.

Annexes

Annex 1: Methods

Data collection and analysis

The study is based on a mixed-method design. Three methods were used to collect data: A database analysis, a document review, and semi-structured key informant interviews (KIIs).

Financial database analysis

We conducted a quantitative database analysis, using the International Development Statistics online databases of the OECD Development Assistance Committee (DAC). The Creditor Reporting System (CRS) provides information on sectors-specific flows and ODA recipients. We used 2020 constant US\$ disbursements for the years 2016–2020 (as of July 2020, the CRS included data through 2020).

Health ODA: Health sector funding is defined as DAC5 codes 120 and 130, and the specific CRS purpose codes under these two DAC5 codes (the DAC secretariat provides a list of the CRS purpose codes, which allows analysis of ODA by subsector).

Climate ODA: The OECD DAC also allows calculating development finance for climate change mitigation and adaptation. However, funds use a different approach to report on climate-related ODA, which also means that the tracking method differs from ODA for health and other sectors. To report on ODA for climate adaptation and mitigation, donors need to use "policy marker(s)" – the environmentally-related markers are also known as the "Rio markers." The policy markers allow donors to report on the extent to which their "aid activities" (ODA programs and projects) target climate adaptation and mitigation. A scoring system of three values is used, in which ODA reported to the DAC CRS are screened and "marked" by donors:

- Principal (score 2): An activity can be marked as principal when the objective (climate change mitigation or adaptation) is explicitly stated as fundamental in the design of, or the motivation for, the activity. Promoting the objective will thus be stated in the activity documentation as one of the principal reasons for undertaking it. In other words, the activity would not have been funded (or designed that way) but for that objective.
- Significant (score 1): An activity can be marked as significant when the objective (climate change mitigation or adaptation) is explicitly stated but it is not the fundamental driver or motivation for undertaking it. Instead, the activity has other prime objectives, but it has been formulated or adjusted to help meet the relevant climate concerns.

Score 0: The score "0" means that the activity
was examined but found not to target the objective
(climate change mitigation or adaptation) in any
significant way. For activities that have not been
assessed, the marker field should be left empty.

While the CRS in general provides data on all bilateral ODA, DAC policy markers only apply to bilateral allocable ODA. Bilateral allocable ODA excludes general budget support, core contribution to multilateral organizations, imputed student costs, debt relief, administrative costs, development awareness, and refugee costs in the donor country – where donors' intention is considered as impossible to identify.

We provide three interlinked analyses: Using the policy marker, we first provide an overview on total climate ODA in 2020 and its distribution by sector. Second, we assess to what extent health projects contribute to climate adaptation and mitigation. Third, we conducted a keyterm search to assess to what extent ODA projects with a principal focus on climate adaptation and mitigation refer to health outcomes in the project descriptions. We conducted this analysis to show how climate ODA contributes to health outcomes in non-health sectors, such as agriculture, water, energy, etc. Given that we already cover the linkages between health sector projects and climate funding in the initial two assessments, we limited this analysis to projects outside the health sector.

Document analysis:

We assessed the strategies and other relevant policy documents of multiple global health funds and multilateral climate financers to understand how these multilateral financers reflect on and respond to the multiple intersection points of climate change and health.

Key informant interviews (KIIs)

We conducted KIIs with 23 representatives from multilateral health and climate funds and experts working on the interface of climate change and health. We conducted these interviews between July and November 2022. Interviews were conducted based on a semi-structured questionnaire, tailored to different stakeholders, and focused on synergistic funding strategies utilized by financing institutions and barriers and opportunities for mobilizing additional synergistic international development finance for climate change and health.

Table A1.1: Key informants

Expert	Affiliation
Rishikesh Ram Bhandary	Boston University Global Development Policy Center
Daniel Buss	PAHO
Aaban Butt	Gavi, the Vaccine Alliance
Saliha Dobardzic	Adaptation Fund
Alison Doig	Health & Climate Network
Stephen Dorey	World Bank
Anisa Ghadrshenas	UNITAID
Nicole Gorman	Global Fund to Fight AIDS, Tuberculosis and Malaria
Aki Kachi	NewClimate Institute
Ida Kenny Le Duc	European Climate Foundation
Caroline Maxwell	WaterAid
Kedar Mankad	Gates Foundation
Emma Navarro	European Climate Foundation
Julien Pouille	UNITAID
Tamer Rabie	World Bank
Fawzia Rasheed	Aga Khan Health Services
Loreta Rufo	World Bank
Marc Sadler	World Bank
Liane Schalatek	Heinrich Böll Stiftung
Joe Thwaites	Natural Resources Defense Council
Fumihiko Tominaga	Green Climate Fund
Charlene Watson	Climate Leadership Initiative
Johannah Wegerdt	WHO Asia-Pacific Centre for Environment and Health

Annex 2: Institutions included in analysis

Global health t	inancing institutions	Green	The world's largest climate fund,	
Gavi, the Vaccine Alliance	Public-private partnership focused on improving equitable and sustainable access to vaccines. Hosts COVAX Facility.	Climate Fund	financial mechanism of the UNFCCC and element of the Paris Agreement, mandated to support developing countries raise and realize their Nationally Determined Contributions (NDC) ambitions towards low-emissions, climate-resilient pathways.	
The Global Fund to	Public-private partnership that provides funding for HIV, TB and malaria			
Fight AIDS, Tuberculosis	programs in low- and middle-income countries. Largest multilateral pro-	Multilateral de	velopment banks	
and Malaria	vider of grants for strengthening systems for health. Created COVID-19 Response Mechanism to support response to COVID-19 pandemic.	The World Bank	Largest multilateral financier of climate action in developing countries as well as one of the largest multilateral financers of global health.	
Unitaid	Global health agency that provides	Bilateral donor	'S	
	funding for innovative solutions to prevent, diagnose, and treat diseas- es in low- and middle-income coun-	Government organizations that give direct assistance to a recipient country for development purposes.		
	tries. Focus on HIV TB, and malaria.	Philanthropic funds and development agencies		
	The 2023–2027 strategy also covers HIV co-infections and co-morbidities, women's and children's health, and the response to global health emergencies.	Aga Khan Foundation and Aga Khan Health	Private not-for-profit international agency investing and implementing in areas including health, environment and climate change, and	
Climate financ	ing institutions	Services	disaster preparedness and response.	
Adaptation Fund	Financial instrument under the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol, which finances projects and programs that help vulnerable communities in developing countries adapt to climate change.	World Health Organization (WHO)	United Nations agency mandated with providing technical guidance and normative guidance on health, providing countries with technical assistance, and shaping the global health research agenda.	
Global Environment Facility	Largest funder of biodiversity protection, nature restoration, pollution reduction, and climate change response in developing countries. Includes two climate-specific funding funds: the Least Developed Countries Fund and the Special Climate Change Fund.	Pan American Health Organization (PAHO)	Specialized international health agency for the Americas as well as regional office for WHO, that engages in technical cooperation with its member countries to fight diseases and their causes, strengthen health systems, and respond to emergencies and disasters.	

Annex 3: Climate in global health fund strategies, policies, and guidance

Table A3.1: Climate and environment within core organizational strategies and KPIs

	Inclusion	of climate i	1	
Strategy document	Main organi- zational Strategy	Primary strategy goals	Strategy (sub)objectives or principles	Strategy targets and KPIs
Gavi 5.0 – Phase V (2021–2025)	Yes	No	One of the operating principles of Gavi 5.0 is 'adaptive, resilient' – helping countries to leverage immunization to address challenges including climate change.	No reference to climate in the Gavi 5.0 measurement framework
Global Fund Strategy (2023–2028): Fighting Pandemics and Building a Healthier and More Equitable World	Yes	No	Climate is part of three subobjectives – under malaria,¹ people-centered integrated systems for health,² and pandemic preparedness and response.³ Climate is also embedded in the Strategy's 'Partnership Enablers.'⁴	No reference to climate in the 2023–2028 M&E Framework, KPI Framework and Evaluation Calendar
Unitaid Strategy 2023–2028	Yes	No	 Two of the four strategic principles include reference to climate: Make health systems more efficient and resilient to future threats Make health care greener and more sustainable – which includes reducing the impact of product manufacturing and supply on the climate and environment Climate is also mentioned under programmatic priorities, highlighting that Unitaid's emphasis will extend under the new strategy to the climate impact of health products and supply chains. 	KPI measures Secretariat carbon footprint. Target is "50% reduction by 2030" (and 40% reduction by 2025 as a midway target). Commitment to Paris agreement goals and contribute to global net zero by 2100.

¹ End malaria goal – sub-objective to "Account for the impact of climate change on malaria transmission as well as the impact of malaria interventions on the environment"

² Contributory objective Maximizing People-centered Integrated Systems for Health to Deliver Impact, Resilience and Sustainability – sub-objective to "Champion environmentally sustainable sourcing and supply – as part of our efforts to encourage climate, environmentally sensitive, and ethical approaches"

³ Evolving Objective on Pandemic Preparedness and Response – sub-objective to "Address the threat of drug and insecticide resistance, and encouraging climate, environmentally sensitive and One Health approaches"

⁴ CCMs to "update representation to ensure alignment with the Strategy's primary goal and objectives, such as by making temporary or permanent membership adjustments, updating of bylaws and sub-committees in areas such as...climate adaptations" Secretariat, in collaboration across the partnership, to "engage with new partners at global and regional levels to support the delivery of the Strategy's aims in areas such as... climate" and "encourage climate, environmentally sensitive and One Health approaches through the grant lifecycle."

Table A3.2: Climate and environment within other strategies, policy documents, and guidance

	Strategy or policy document	Inclusion of climate
Gavi, the Vaccine Alliance	Immunization Supply Chains Strategy 2021–2025	The strategy includes an impact goal on supply chain sustainability (incl. environmental sustainability). The risk annex mentions environmental risks under waste management.
	Vaccine Investment Strategy (2021–2025)	One of the assessment criteria to determine which vaccines to include in the Vaccine Investment Strategy is whether disease burden is likely to increase due to climate change.
	Fragility, Emergencies and Refugees policy	The policy provides programmatic flexibilities and higher funding to cater for unique challenges in countries, including the impact of climate change. Resilience to climate change is one of the contextual factors that helps determine chronic fragility of a country.
	Vaccine Funding Guidelines	Include the need for consideration of climate variability when applying for support for the Meningococcal A vaccine.
	Health Care Waste Management in Immunization Programs	Guidance to help countries assess their health care waste management (HCWM) system and prioritize sustainable HCWM interventions when developing funding requests.
	Gavi commitment to the UN Climate Action Summit 2019	Scale up investments in proven interventions for climate-resilient health systems in 2020–2025, focused on (1) increasing access to immunization to protect populations from the effect of climate change, particularly climate-sensitive diseases, (2) system-level investments and emergency vaccine stockpiles and (3) supporting countries to reduce their health-care related footprint through scaling up more energy-efficient refrigeration and improves waste management practices.
The Global Fund to Fight AIDS, Tuberculosis	Global Fund Statement on Climate Change and Environmental Sustainability	Includes three levels of actions and commitments related to climate change and environmental sustainability: secretariat, health product sourcing and procurement, and country operations and supply chain.
and Malaria	Sustainable Procurement Framework	Sets sustainability thresholds suppliers need to meet, aims to make suppliers more accountable for their upstream supply chains, and incentivizes suppliers to continuously strengthen sustainable practices throughout their production processes and supply chains.
	Technical Brief on Sustainable Health Care Waste Management	Supports countries with the preparation of their funding requests by outlining interventions related to sustainable HCWM.
	Technical Review Panel review criteria for the 2023– 2025 Funding Requests	The review criteria assess whether program design accounts for measures needed to prepare for, prevent, and respond to a range of threats, including measures to mitigate, respond and adapt to climate change.
	Malaria Information Note for the Allocation Period 2023–2025	Includes a dedicated section on environment and climate change, outlining the expectation that countries routinely incorporate climate data in malaria data repositories to guide program planning, and that malaria should be integrated into emergency plans, including for climate disasters, where relevant. Highlights the importance of multilateral partnerships to address the impact of climate change on malaria as well as the impact of malaria interventions on the environment.

	Funding Request Instructions. Full Review. Allocation Period 2023–2025	Funding request asks countries to consider any environmental or climate change-related events that impacted health systems and about the steps that will be taken to address the potential environmental impact of the requested programs.
	Information Note Resilient and Sustainable Systems for Health (RSSH) Allocation Period 2023–2025 January 2023	Mentions climate change in context of health care waste and supply chains
Unitaid	Climate Action Roadmap	Reduce carbon emissions of the secretariat by 50% by 2030 and offset carbon footprint to effectively achieve net-zero emissions from 2022, by decarbonizing procurements through net-zero and environmental pledges, reducing travel and prioritizing green modes of transportation, and closing emissions gaps through high-quality certified carbon offset programs.

Annex 4: Financial analysis

Figure A4.1: Adaption fund investments

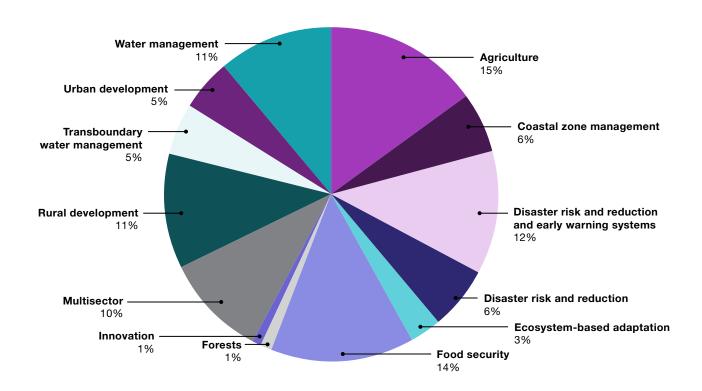


Table A4.1: Health ODA contributions to climate adaptation

Sector	Score	2016	2017	2018	2019	2020
Total All Sectors	Principal	\$4,671 millions	\$5,585 millions	\$3,292 millions	\$5,315 millions	\$5,811 millions
Total All Sectors	Significant	\$11,168 millions	\$13,712 millions	\$13,198 millions	\$15,048 millions	\$23,692 millions
Total All Sectors	Screened, not targeted	\$108,500 millions	\$106,631 millions	\$100,506 millions	\$100,165 millions	\$99,035 millions
Total All Sectors	Not screened	\$4,573 millions	\$3,623 millions	\$8,775 millions	\$7,510 millions	\$11,051 millions
Health	Principal	\$126.3 millions (3%)	\$152.6 millions (3%)	\$15.1 millions (0%)	\$42.7 millions (1%)	\$46.5 millions (1%)
Health	Significant	\$209.1 millions (2%)	\$177.2 millions (1%)	\$302.8 millions (2%)	\$780.4 millions (5%)	\$1582.4 millions (7%)
Health	Screened, not targeted	\$16,074.4 millions (15%)	\$15,256.5 millions (14%)	\$14,396.4 millions (14%)	\$12,667.4 millions (13%)	\$18,713.8 millions (19%)
Health	Not screened	\$172.5 millions (4%)	\$227.7 millions (6%)	\$318.4 millions (4%)	\$255.3 millions (3%)	\$768.4 millions (7%)

Table A4.2: Health ODA contributions to climate mitigation

Sector	Score	2016	2017	2018	2019	2020
Total All Sectors	Principal	\$9538.6 millions	\$9261.6 millions	\$7844.9 millions	\$9094.7 millions	\$11100.8 millions
Total All Sectors	Significant	\$14785.2 millions	\$12526.3 millions	\$16735.1 millions	\$14578.6 millions	\$14466.4 millions
Total All Sectors	Screened, not targeted	\$100255.5 millions	\$104575.3 millions	\$92824.8 millions	\$97683.0 millions	\$102997.0 millions
Total All Sectors	Not screened	\$4332.2 millions	\$3188.1 millions	\$8365.7 millions	\$6681.3 millions	\$11023.7 millions
Health	Principal	\$117.5 millions (1%)	\$119.4 millions (1%)	\$76.5 millions (1%)	\$39.4 millions (0%)	\$26.3 millions (0.2%)
Health	Significant	\$51.4 millions (0%)	\$187.7 millions (1%)	\$199.5 millions (1%)	\$230.1 millions (2%)	\$103.8 millions (0.7%)
Health	Screened, not targeted	\$16241.0 millions (16%)	\$15300.9 millions (15%)	\$14449.9 millions (16%)	\$13222.2 millions (14%)	\$20242.8 millions (19.7%)
Health	Not screened	\$172.5 millions (4%)	\$206.0 millions (6%)	\$306.8 millions (4%)	\$254.2 millions (4%)	\$738.1 millions (6.7%)

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