

Agenda item 15

Climate and Health Strategy

For Information **For Review and Advice** **For Approval**

1. Executive summary

Climate change intersects with Unitaid's mission in two crucial ways. Firstly, it exerts a profound impact on diseases, populations and health systems that are at the core of Unitaid's work. Secondly, there's a reverse impact from health product supply chains, contributing to fuelling climate change and exacerbating broader environmental issues.

This Climate and Health strategy, which fits under Unitaid's broader 2023-2027 Strategy and builds on extensive analyses and consultations, sets out Unitaid's response – spanning both adaptation and mitigation. Its overall ambition is to turn health products into “climate-smart health products”, which are not harmful to the environment, resilient, responsive to climate change and locally adapted. Such enhanced products will deliver greater health impact for communities affected by climate change and will contribute to more sustainable supply chains that are not harmful to the environment.

Unitaid's model is particularly well suited to advance progress towards climate-smart products. Specific priorities have been identified, from product-level improvements that Unitaid can drive, to more systemic interventions that could catalyse broader change. Partnerships with communities and countries that are affected by climate change will be essential, as well as strong coordination with existing and new partners that can complement Unitaid's own expertise, influence and financing.

As part of this strategy, Unitaid is also committed to demonstrate exemplarity in its own operations. This is reflected in an ambitious objective to reduce the carbon footprint of both the Secretariat and the 1.5b\$ portfolio of investments, in line with the Paris Agreement.

The implementation of this strategy will span the 2023-2027 strategic cycle, with a strong focus on learning during the initial period. The resources needed are part of Unitaid's broader funding requirement for the 2023-2027 Strategy and correspond to at least US\$ 100m cumulatively over the strategic period.

2. Introduction

In 2022, Unitaid's Executive Board approved a new 2023-2027 Strategy for the organization, with a vision to achieve “Equitable access to health innovations to ensure healthy lives and promote wellbeing for all”, a goal of introducing 30 key health products by 2030, and a focus on equitable access for those who need these products most. This Strategy identified climate change as a threat to the health and livelihoods of hundreds of millions around the world, eroding previous health gains and creating an ever more difficult environment in which Unitaid would operate. As a response, it outlined the importance of contributing to resilient health systems and greener health care.

This part of the Strategy has since been further elaborated, building on several years of incubation of this topic internally, supplemented by extensive analyses, partner landscaping and partner consultations. This is now summarized in this **Climate and Health strategy**. This document includes an overview of the multiple and deep connections between climate change and Unitaid's mission and work. It then articulates Unitaid's response, with a focused role aligned with Unitaid's comparative advantage, and a concrete set of priorities for the coming years.

3. Climate change: impacting the core of Unitaid's mission

Climate change intersects with Unitaid's mission in two crucial ways. Firstly, it exerts a profound impact on diseases, populations, and health systems that are at the core of Unitaid's work. Secondly, there's a reverse impact from health product supply chains, contributing to fuelling climate change and exacerbating broader environmental issues.

The impact of climate change on health has been unequivocally underscored by the world's leading institutions on climate change and health. Building on decades of scientific assessments, the 2023
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Synthesis Report of the Intergovernmental Panel on Climate Change (IPCC) stated that “*The cumulative scientific evidence is unequivocal: climate change is a threat to human well-being and planetary health. Any further delay in concerted anticipatory global action on adaptation and mitigation will miss a brief and rapidly closing window of opportunity to secure a liveable and sustainable future for all*”. In a report¹ published in 2021 at the occasion of UNFCCC’s 26th Conference of the Parties (COP 26), WHO stated that “*Climate change is the single biggest health threat facing humanity. While no one is safe from the health impacts of climate change, they are disproportionately felt by the most vulnerable and disadvantaged*”. The same report outlined the many ways in which climate change impacts health outcomes directly and indirectly – through exposure pathways such as extreme weather events, heat stress, air quality, water quality and quantity, food security and safety, and vector distribution and ecology.

These impacts are wide ranging. The nature of diseases, vectors and pathogens is changing fast. A recent study identified over 1000 pathways in which climatic hazards lead to pathogenic diseases and concluded that over half of known human pathogenic diseases can be aggravated by climate change.² Changing temperatures and precipitations could lead to tens of millions more people exposed to malaria and over 2 billion people exposed to dengue. Communities around the world are exposed to new and cumulated vulnerabilities, affecting their physiology, immune systems, health, economic and social conditions; these factors exacerbate pre-existing inequities. IPCC estimates that 3.3 to 3.6 billion people live in contexts that are highly vulnerable to climate change. Every 1°C of warming in Africa and Asia is projected to cause an increase of 7% in diarrhea. By 2050, between 31 and 143 million people could be displaced due to climate change and 8 to 80 million people could be put at risk of hunger.³ Furthermore, access to health innovations and services is already disrupted by extreme climate events such as cyclones in Mozambique or 2022 floods in Pakistan, and climate change will make these events increasingly frequent.

¹ COP26 special report on climate change and health: the health argument for climate action (<https://www.who.int/publications/i/item/9789240036727>)

² Mora, C., McKenzie, T., Gaw, I.M. *et al.* Over half of known human pathogenic diseases can be aggravated by climate change. *Nat. Clim. Chang.* **12**, 869–875 (2022). <https://doi.org/10.1038/s41558-022-01426-1>

³ All the statistics quoted in this paragraph are sourced from the Technical Summary section of the IPCC 2022 report: https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryVolume.pdf
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The diseases and conditions that are at the core of Unitaid's mission are deeply impacted. As a vector-borne disease, malaria is poised to evolve significantly as a consequence of climate change. Our analysis also identified a wide range of adverse impacts, which are often more indirect but are nevertheless very pronounced, on HIV and HIV co-infections, tuberculosis, maternal and child health. This is illustrated in Box 1 through the example of maternal health. Critically, the analysis also shows that the populations and communities that are already lacking access to essential medicines and health services are also the most vulnerable to the impacts of climate change – including children⁴, women, low-income households and marginalized communities. Lastly, financial resources for health are already constrained in many countries and programs, leaving limited fiscal space for the necessary climate adaptation efforts. From that perspective, climate change can be seen as a fundamental threat to Unitaid's mission, but also an opportunity to innovate and adapt products, and evolve interventions and approaches to make them more relevant for future needs.

Box 1: Mapping of the causal pathways between climate change and key disease areas – the example of maternal health

Why does adaptation matter when it comes to maternal and newborn health?

The biology of pregnancy makes pregnant women, fetuses and newborns more vulnerable to climate change. Climate change is especially detrimental to the health of pregnant women living in resource limited settings, exacerbating existing inequities in maternal health outcomes. Both WHO and the International Federation of Gynaecology and Obstetrics (FIGO) have recognised the links between the climate crisis and poor maternal health and birth outcomes.

What are the links between climate change and maternal health?

The impacts of climate change on maternal and newborn health are numerous and wide-ranging, direct and indirect, and occur through all the exposure pathways described by WHO (extreme weather events; heat stress; air quality; water quality and quantity; food security and safety; vector distribution and ecology). For instance, climate change: 1) creates variations in vector distributions impacting the spread of malaria, dengue, zika or chagas disease, all dangerous diseases for mothers and fetuses; 2) affects air quality, and high concentrations of particles in the air (e.g. small particles under 2.5 micrometre in diameter – PM2.5) have been associated with negative birth outcomes and newborn respiratory infections; and 3) also affects maternal and newborn health through other climate-related consequences such as malnutrition, overcrowding, hyperthermia, altered feeding practices, dehydration, high-risk sexual behaviors, contamination of water sources by sea water, altered distribution of waterborne and foodborne diseases, increased forced migration, etc. Additionally, weakened or destroyed health infrastructure due to climate-related issues and disasters, cannot provide the lifesaving prevention, support and care that pregnant women and newborns need. The consequences for pregnant women and newborns are an increased risk of morbidity and mortality.

What is Unitaid already doing?

Oxytocin, the most frequently used medicine for preventing and treating Post-Partum Hemorrhage (PPH), requires cold chain storage to remain effective, which is difficult to maintain, particularly in a hot climate and in places with unreliable power systems. Difficult access to lifesaving quality uterotonic broadens inequities already exacerbated by geography, economy and climate. Heat-stable carbetocin (HSC) is an alternative product with adequate high-quality supply and no cold chain requirements. As part of a new portfolio of investments on PPH initiated in 2022, Unitaid is working on broadening the use and access of HSC.

⁴ It is estimated that 90% of the burden of disease attributable to climate change is borne by children under 5; Sheffield, P. E., & Landrigan, P. J. (2011). Global climate change and children's health: threats and strategies for prevention. *Environmental health perspectives*, 119(3), 291-298; Unicef also estimates that over one billion children are at extremely high risk to climate and environmental impacts (<https://www.unicef.org/documents/liveable-planet-every-child>)
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It is also important to acknowledge the reverse effect: health care, and health products supply chains in particular, are a significant contributor to greenhouse gas (GHG) emissions and broader environmental degradation. The health sector contributes globally 5.2% of GHG emissions⁵, including 71% that are primarily derived from the health care supply chain⁶. Unitaid has conducted a specific study of 10 key products that are part of its 2023-2027 Strategy (cf box 2⁷). The study has confirmed the significant GHG emissions levels driven and has identified a broader set of environmental impacts from product manufacturing and disposal. It has also outlined a concrete set of potential solutions to mitigate these impacts and risks. As

Box 2: climate and environmental assessment of 10 key health products

During 2023, Unitaid has conducted an assessment of 10 key products from its “30 by 2030” list from three perspectives: (i) the Green House Gases emitted by these products during their entire life cycle; (ii) the environmental impacts of these products during their life cycle; (iii) the climate risks and vulnerabilities, to which these products and their supply chains are exposed. The assessment covered a wide range of products, including five different medicines, several types of diagnostics, and other technologies such as bed nets and medical oxygen production facilities. An Expert Sounding Board gathering experts from over 20 partner organizations was involved throughout the assessment to triangulate findings and build collective ownership around these issues and potential solutions.

The assessment has shown that by 2030, these 10 products will generate several million tons of CO2 equivalent emissions every year – the equivalent of the emissions from a medium-size pharmaceutical company. The largest emissions come from Active Pharmaceutical Ingredients (API), plastic manufacturing and industrial use of carbonized energy. Applying the full range of economically viable decarbonization levers (e.g., process improvements, circularity improvements, use of renewable power / on-site generation) to these products could yield substantial reduction of their footprint – although feasibility varies across these levers.

Significant nature impacts have been identified as well, notably water pollution and leakage of hazardous materials at the place of manufacturing (e.g., release of toxic solvents used for API manufacturing like chloroform), and plastic waste at the place of product use and disposal (e.g., dual active ingredient bed nets could result in 57,500 tons of plastic waste by 2030). Key solutions identified include improved manufacturing practices (upstream) and circularity approaches as part of program delivery (downstream).

Climate also poses an important risk to these supply chains, especially upstream when manufacturing is concentrated geographically in regions with high and increasing exposure to climate hazards including floods, heatwaves and wildfires – which could be mitigated through systemic changes across supply chains and asset hardening. In-country supply chains are also particularly vulnerable to climate hazards, affecting availability and access – which calls for climate-informed adjustments to distribution and delivery models. Some critical medicines like malaria treatments have also been identified as particularly sensitive to high temperatures.

an organization focused on product introduction and market shaping, and already working with a wide range of partners who develop, manufacture, procure and use these products, Unitaid can play a key role in advancing these solutions. This work is guided by the objectives and principles outlined in the Paris Agreement for climate mitigation, as well as other relevant frameworks such as the Global Biodiversity Framework adopted in 2022 at the UN Biodiversity Conference COP 15.

⁵ 2022 report of the Lancet Countdown on health and climate change

⁶ https://noharm-global.org/sites/default/files/documents-files/5961/HealthCaresClimateFootprint_092319.pdf

⁷ *Note to Executive Board members: at the point of writing this pre-read, this study is going through its final phase of analysis; the content of box 2 may be subject to slight revisions when the final results of the study become available*
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Based on these findings and feedback received from a wide range of partners, Unitaid's response to climate change combines adaptation and mitigation elements. Tackling both aspects concurrently will foster innovation, enable synergies and yield a more impactful outcome than addressing them in isolation.

4. Unitaid's overall ambition: climate-smart health products

Unitaid's Climate and Health work is anchored in a simple concept: climate-smart health products⁸. Figure 1 outlines an initial definition of what Unitaid considers to be a climate-smart product. This definition, shaped through consultations with partners and drawing from existing literature and frameworks, aligns with WHO's comprehensive approach to "Climate-resilient health systems"⁹. Moreover, it encompasses broader environmental considerations beyond climate impacts.

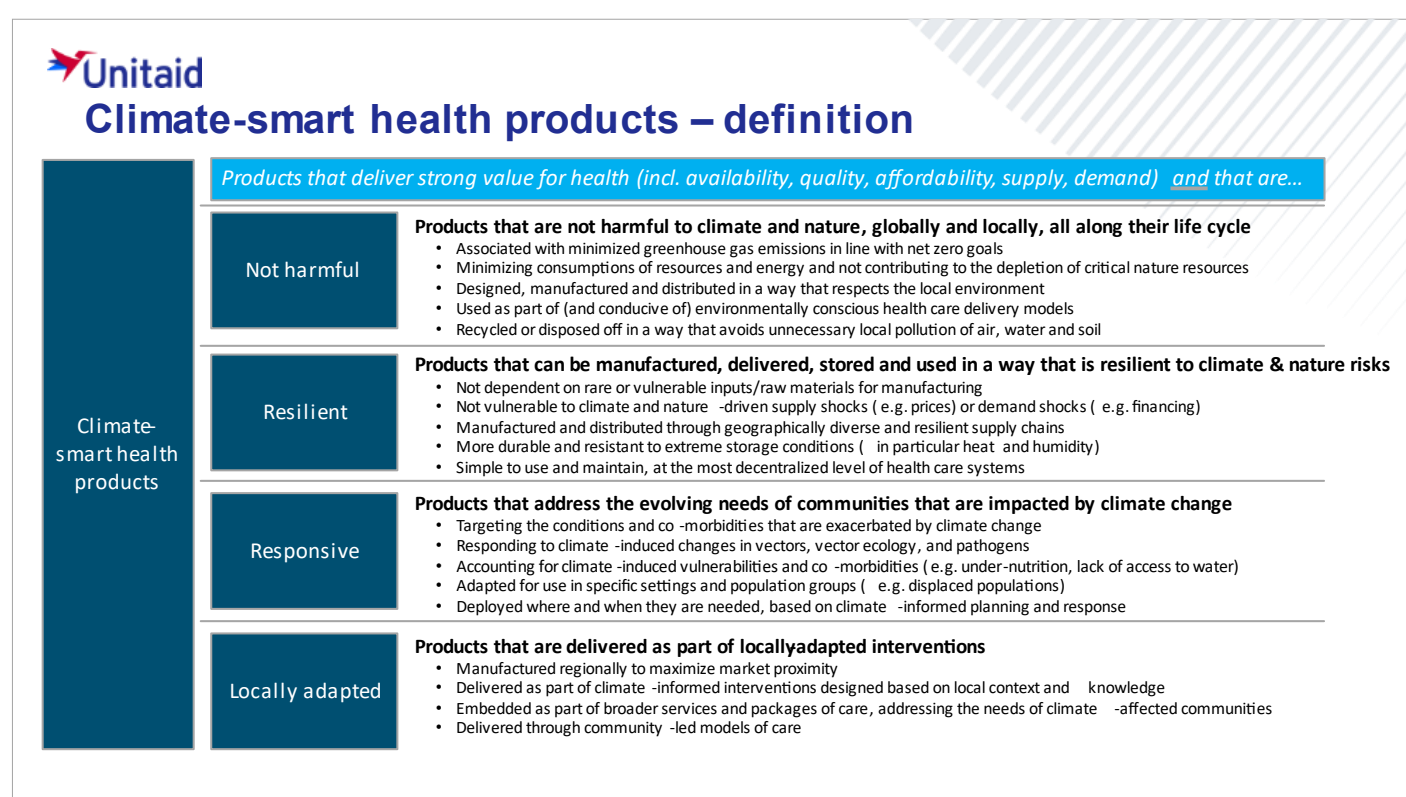


Figure 1 - Definition of Climate-smart health products

Under this proposed definition, a health product is considered climate-smart if, in addition to having strong public health value and meeting Unitaid's core access criteria (availability, affordability, quality, supply, demand), it is: not harmful to the environment, resilient to climate risks, responsive to new needs, and delivered as part of locally adapted interventions. These added characteristics, which embody both climate

⁸ To our knowledge, there is no established definition of "climate-smart health products". However, "climate smart" is a commonly used terminology to refer to integrated approaches that encompass a comprehensive set of developmental and climate objectives, including mitigation and adaptation. It has been used for over a decade in agriculture by FAO and other partners. It is also increasingly used in the health sector: for instance, IPCC's 2022 Working Group II report highlighted "climate smart health programs" as a key element of the health sector response, and over 50 countries committed to "climate smart health care" during COP 26 (<https://www.who.int/news/item/09-11-2021-countries-commit-to-develop-climate-smart-health-care-at-cop26-un-climate-conference>).

⁹ <https://www.who.int/publications/i/item/9789241565073>
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mitigation and adaptation objectives as well as broader environmental considerations, will translate into health products that are better, more relevant for affected communities and more sustainable. They will be essential to realize Unitaid's vision of "equitable access to health innovations to ensure healthy lives and wellbeing for all", as part of SDG 3. They will also support progress towards other SDGs such as SDG 1 (No poverty), SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action).

Striving towards having 30 health products climate-smart is an ambitious aspiration. It will demand considerable time and efforts, likely beyond the current strategic period. However, significant progress can be achieved from taking concrete steps in the coming years supported by strong partner collaboration. Using this climate smart product framework as a systematic compass will enable the identification of gaps and concrete steps Unitaid and partners can take towards this ambition. It will guide efforts to enhance existing products and can help inform the choice and design of health interventions. Because it is centered on products, this framework will allow Unitaid to focus on what we do best: catalyzing the introduction of better health products and care models that meet the needs of communities in resource limited settings. Furthermore, the wide and diverse range of "entry points" to products outlined in this definition (e.g., product design, supply chain and distribution, delivery models, product use, community engagement) will empower Unitaid and its partners to select the most promising, effective and complementary solutions for advancing towards climate-smart products.

5. Unitaid's priorities in Climate and Health

Unitaid's 2023-2027 Strategy includes a general aspiration towards "greener and more sustainable health care" and "resilient health systems". This Climate and Health strategy transforms this overarching aim into a concrete set of technical, investment and partnering priorities, all directed towards climate-smart health products that enable sustainable and equitable access to health for all.

These specific priorities cut across Unitaid's existing model and are framed in the context of each Strategic Objective (SO) of the 2023-2027 Strategy in Figure 2.

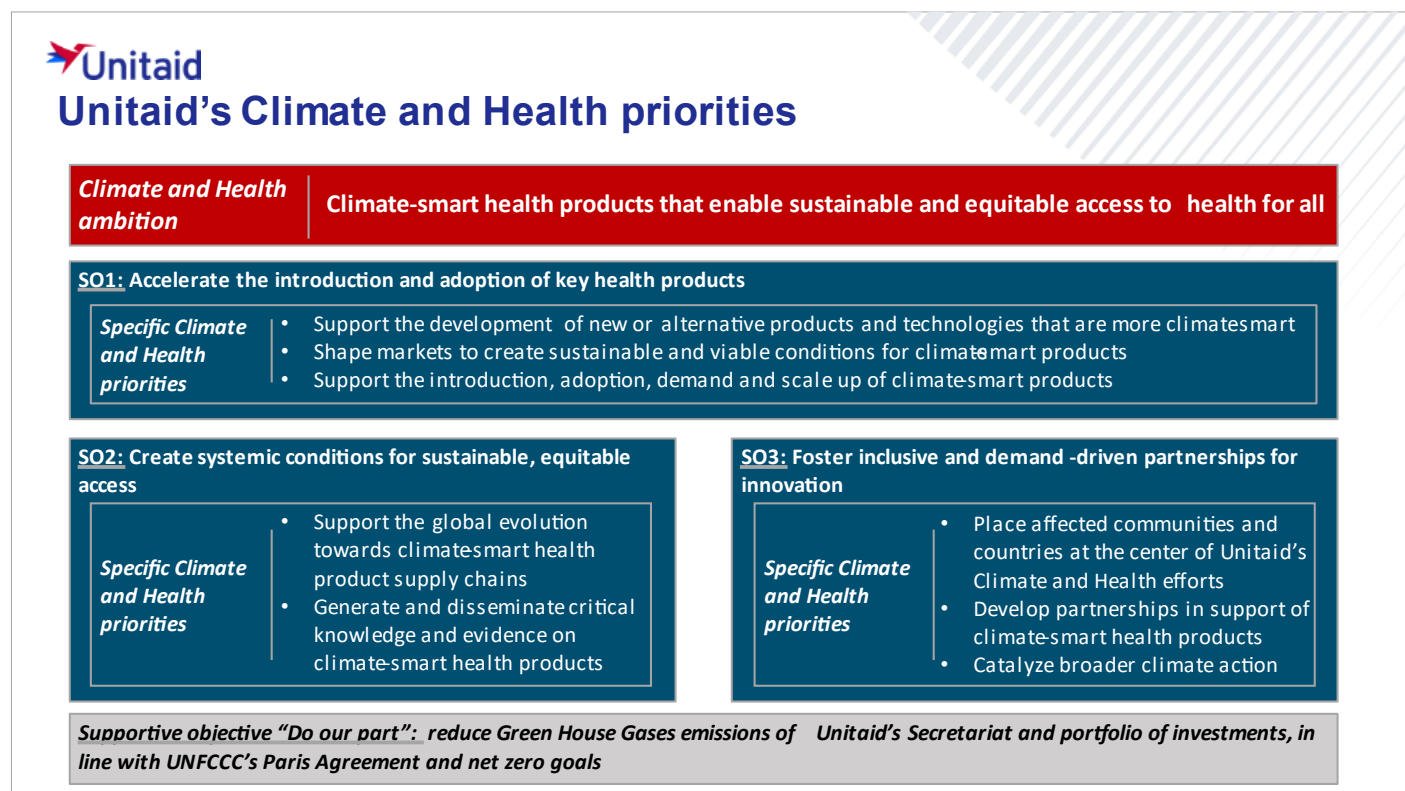


Figure 2 - Unitaid's Climate and Health priorities

As part of SO1 “Accelerate the introduction and adoption of key health products”, Unitaids’ priority is to:

- **Support the development of alternative products and technologies** that are more climate-smart than existing options. As per Unitaids’ general focus on late-stage product development and reformulation, the emphasis is placed primarily on short- to medium-term investments that can lead to products that more effectively meet the needs of communities impacted by climate change and/or enhance the resilience and sustainability of product supply chains. This may include for instance adapting a product for use with displaced populations, improving the heat stability of a product, reducing the plastic content of a product, or transitioning to green chemistry.
- **Shape markets to create sustainable and viable conditions for climate-smart products.** Unitaids’ comprehensive access ‘toolbox’, complemented by partner interventions, is leveraged to improve supply-side conditions in service of climate-smart objectives. This may encompass initiatives for embedding new criteria in procurement tenders in collaboration with key partner agencies and institutions¹⁰, establishing market incentives for suppliers, or adopting synergistic approaches with partners that have complementary investment models (e.g. blended finance).
- **Support the introduction, adoption, demand and scale up of climate-smart products.** The emphasis is placed in particular on producing evidence regarding the most optimal health interventions, integrating products in climate-informed and locally adapted programs and generating demand for these products. For example, this can entail leveraging climatic and meteorological data to support a climate-informed deployment of vector control tools, raising demand for products more attuned to community needs, or piloting innovative waste management models within communities.

As part of SO2 “Create Systemic conditions for sustainable, equitable access”, Unitaids’ priority is to:

- **Support the global evolution towards climate-smart health product supply chains**, by promoting relevant standards, regulations, business models and procurement practices. This work builds on, and expands upon, Unitaids’ strong footprint in regulatory systems, intellectual property, procurement and regional manufacturing¹¹. This may include targeted work to promote the inclusion of environmental factors in regulatory frameworks, utilizing voluntary licensing mechanisms to incentivize better manufacturing practices, or supporting regional manufacturing initiatives aimed at bolstering climate resilience of supply chains.
- **Generate and disseminate critical knowledge and evidence on climate-smart health products.** Unitaids has long been instrumental in disseminating critical evidence concerning health products and equitable access through market reports, landscapes and research supported by its investments. Under this strategy, this role is extended with a new focus on climate-smart health products, for instance through publishing climate assessments of key products, evidence derived from climate-focused implementation studies and lessons learnt from our Climate and Health work.

As part of SO3 “Foster inclusive and demand-driven partnerships for innovation”, Unitaids’ priority is to:

- **Place affected communities and countries at the center of Unitaids’ Climate and Health efforts.** This is essential to understand how climate is affecting health needs and to develop pertinent solutions. Direct engagement occurs within the projects that Unitaids invests in, and directly through a continuous dialogue between Unitaids’ Secretariat and communities and countries focused on Climate and Health, emphasizing the role of climate-smart products in the response.
- **Develop key partnerships in support of climate-smart health products**, to maximize complementarity, synergy and impact across the ecosystem. This starts by reinforcing, where applicable, Unitaids’ longstanding partnerships (such as with WHO and the Global Fund) and initiatives to incorporate relevant Climate and Health priorities. It also entails new alliances with crucial partners

¹⁰ Unitaids is a member of the UN informal Interagency Task Team on Sustainable Procurement in the Health Sector (SPHS) hosted by UNDP and a member of the Supply Chain Working Group of ATACH (WHO’s Alliance for Transformative Action in Climate and Health).

¹¹ Unitaids is one of the funders of WHO’s Pre-Qualification program for Medicines and Diagnostics, and is the founder of the Medicines Patent Pool, an innovative approach to voluntary licensing and patent pooling.

in the Climate and Health space to bring specialized expertise, build the necessary cross-sectoral collaborations and devise innovative approaches for programming and financing.

- **Catalyze broader action within Unitaid’s partner ecosystem;** in particular, climate action is encouraged within Unitaid’s grant implementer network through specific Climate and Health priorities reflected in Unitaid’s calls for proposals and investment focus, and through the promotion of climate-smart programming in projects.

The above objectives describe the implications of this Climate and Health strategy in terms of **what** Unitaid does. As an actor in the response to climate change, Unitaid also intends to lead by example and take ambitious steps to evolve **how** it is working. These supportive objectives are encapsulated under the term “**Do our part**”, and involve two key commitments:

- **A commitment to reduce Unitaid’s Secretariat Green House Gas emissions by 50% by 2030** (from the 2019 baseline), in line with UNFCCC’s Paris Agreement and net zero targets. This is monitored as part of a Board-approved Key Performance Indicator (KPI B).
- **A commitment to progressively reduce Green House Gas emissions from Unitaid’s portfolio of investments** (~1.5b\$ in active investments in 2023), in line with UNFCCC’s Paris Agreement and net zero targets. This effort is envisioned as a progressive evolution and gradual refinement of Unitaid’s investment practices, with a balance of requirements and support towards grant implementers. It takes into account the wide and diverse range of grant implementers collaborating with Unitaid (e.g., in terms of operating model and capacity), and will seek to align with other funders where possible.

Taken together, these Climate and Health priorities enrich Unitaid’s established Strategic Objectives and make Unitaid’s broader work better aligned with, and responsive to, climate change and environmental priorities.

6. Implementation and learning

This Climate and Health strategy will be implemented as part of the 5-year cycle of Unitaid’s 2023-2027 Strategy. The resources needed for its implementation are part of Unitaid’s broader funding requirement for the 2023-2027 Strategy and correspond to at least US\$ 100m cumulatively over the strategic period based on an initial estimate. It is anticipated that the outlined Climate & Health priorities will be implemented either as standalone investments or as part of a broader scope of work.

Implementation will initially focus on mainstreaming key elements of this strategy into Unitaid’s programmatic priorities and operating model. Explicit linkages will also be established with other cross-cutting initiatives, such as “Pandemic Prevention Preparedness and Response” and “Regional Manufacturing”, leveraging already identified synergies. A first portfolio of Climate and Health investments will be developed with a view to delivering initial results while maximizing learning potential. Key learning areas include: (i) testing the extent to which the climate-smart health product definition can effectively guide the identification of gaps and opportunities for action, (ii) confirming the feasibility, cost and potential for impact of typical investments in Climate and Health, (iii) exploring existing and new partnership models, and the extent to which they can support this strategy, and (iv) refining our understanding of how Unitaid can contribute the most value in a fast-moving partner landscape.

The mid-term review of Unitaid’s 2023-2027 Strategy (in 2025) will be an opportunity to take stock of the progress of this Climate and Health strategy’s implementation, identify key lessons and make adjustments if and where needed for the remainder of the strategic period.