

Acknowledgments

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Standard Chartered Bank has a presence in over 50 of the world's most dynamic markets and more than 85 per cent of our income and profits are derived from Asia, Africa and the Middle East. We are active in over 30 countries that receive official development assistance, including seven of the least developed countries.

Given the vulnerability of our markets and the lack of finance flowing towards them or towards much-needed adaptive measures – these will be the hardest hit by climate change. This will affect economies, productivity, livelihoods and health.

Adaptation has been a key area of focus for Standard Chartered Bank, and our 2022 adaptation economy report¹ noted the need for adaptation finance in 10 of our key markets, and also noted the multiplier effect on economies that such finance would have. This Guide will serve as the blueprint for how the private sector can help to do this. It is our hope that any institution wishing to define and drive capital towards adaptation and resilience can pick up this Guide and use it as their own.

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About UNDRR

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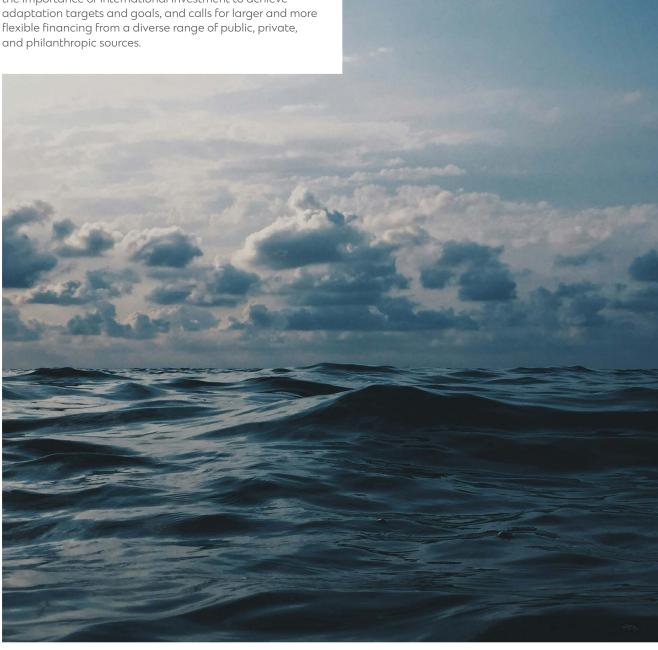
¹ https://www.sc.com/en/campaigns/adaptation-economy/

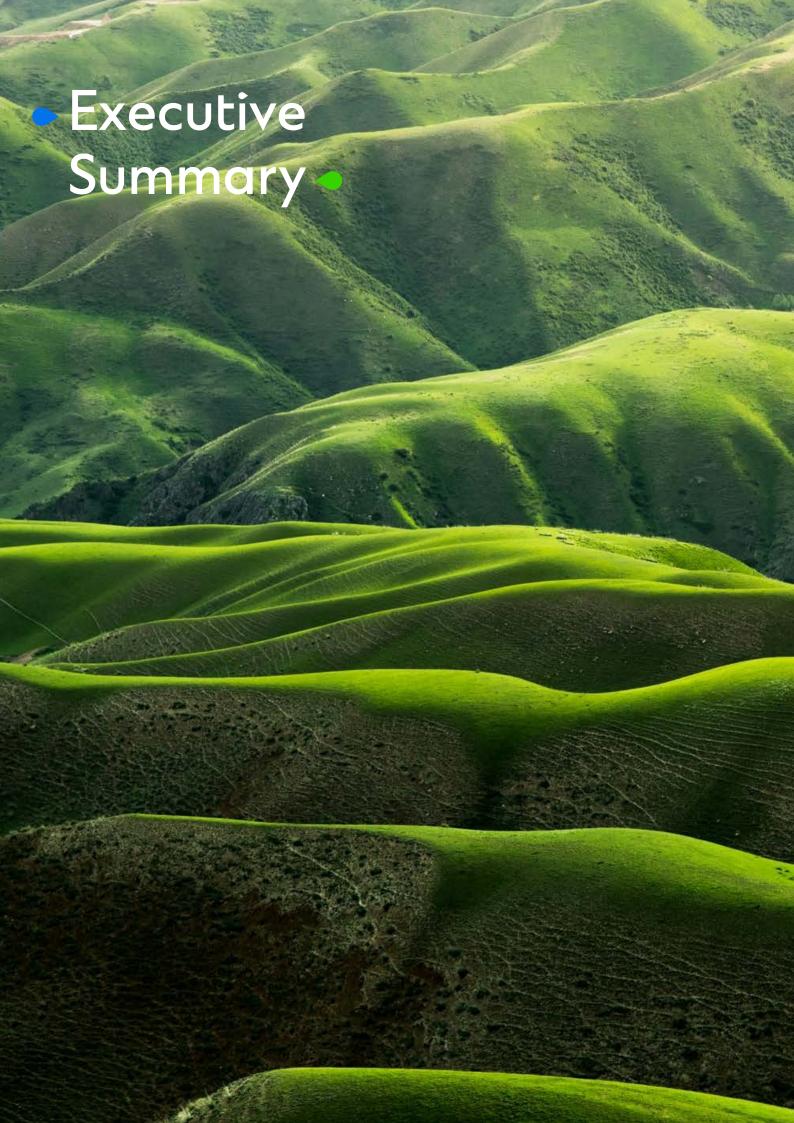
Foreword

Climate change is transforming the risk profile of nations, communities, natural systems, and businesses, creating an urgent need to address risks and impacts. Implementing measures that both directly and indirectly mitigate vulnerability and bolster resilience to natural hazards is critical. This urgency is particularly pronounced for vulnerable groups and populations in emerging markets and least developed nations.

Proactive measures offer substantial benefits and must not be postponed. However, adoption requires significant financial investment. The COP28 Global Stocktake established that current annual capital flows into natural hazard risk reduction and climate change adaptation constitute only a minor portion of the overall need. The UAE Framework for Global Climate Resilience recognizes the importance of international investment to achieve adaptation targets and goals, and calls for larger and more flexible financing from a diverse range of public, private, and philanthropic sources.

Becoming climate-aware and recognizing the potential of adaptation and resilience as an investable asset class is key for attracting and unlocking further investment from commercial banks, private equity, and asset managers. Market clarity on what qualifies as an adaptation-aligned investment comes through coherent, consistent, and standardized definitions and terminology. In creating this Guide, our aim is to provide confidence and assurance to investors looking to allocate capital to adaptation projects, as well as to companies seeking to raise capital for adaptation and resilience products, solutions, or measures.





Executive Summary

2023 was the hottest year on record. The world is experiencing more floods, heatwaves, droughts, and wildfires. The need for adaptation and resilience is urgently growing. With an increase in extreme weather, we are not only faced with the question of how we limit a rise in global temperature but, also, how we adapt to it to protect communities and economies from increasingly frequent and severe climate events.

All nations will need to adapt to climate change by building more resilient agriculture, industry and infrastructure, but the need is greatest in emerging and fast-developing economies. These economies have a disproportionate risk of exposure to the negative effects of rising temperatures and extreme weather and in many cases, fewer resources or less capacity to respond.

Despite the increase in economic costs, there has not been a corresponding rise in financing and investment. According to the 2023 edition of the UN Adaptation Gap Report, estimates suggest that the annual climate adaptation financing gap in developing countries is between USD 194-366 billion, approximately 10-18 times more than current financing flows. Without sufficient financing, the implementation of adaptation actions is stalling.

At COP28 held in Dubai at the end of 2023, a Call for Collaboration was issued by a broad stakeholder coalition with the objective of accelerating the mobilization of private finance for adaptation and resilience. A key recommendation is to ideate, pilot and promote existing frameworks and taxonomies to encourage assessment of physical climate risks and resilience, protection from physical climate risks and investments into adaptation and resilience³

Standard Chartered, KPMG and the United Nations Office for Disaster Risk Reduction (UNDRR) have collaborated to develop the market's first Guide for Adaptation and Resilience Finance ("the Guide"). It directly responds to this priority recommendation by addressing the need for a common language in financing adaptation and resilience to nature-related hazards. By creating the common reference, the Guide aims to accelerate the development and structuring of financial products by commercial banks, thus facilitating the increase in financial flows.



- The Guide's scope encompasses both climaterelated (including meteorological and hydrological events) and non-climate-related natural hazards (such as geophysical events).
- The Guide focuses on activities that can be financed through private lending and investment arrangements and public market capital raising. A set of gating criteria are suggested, including consideration of substantial contribution to adaptation and resilience objectives, risk of potential for maladaptation, avoidance of significant harm to other sustainability objectives, and consistency with national and local adaptation and resilience strategies.
- Page 17 to 25 reflects an indicative list of eligible financeable themes and activities, characterized by their associated environmental and social cobenefits. The list is not exhaustive and is intended to cover priority activities, financeable by the private sector, and focused on the needs of emerging markets and developing economies.
- While primarily designed for commercial banks, the Guide is also useful for other financial institutions and investors in engaging their clients on financing and investment opportunities related to natural hazard adaptation and resilience.

The Guide is intended to be dynamic and will continue to evolve over time in response to market developments, particularly those influenced by UNDRR and the Climate Bonds Initiative. The goal is to provide guidance to financial institutions to increase collaboration and scale up adaptation and resilience financing on a global basis.

 $^{^2 \}quad \text{UNEP (2023), Adaptation Gap Report, https://www.unep.org/resources/adaptation-gap-report-2023}$

Adrienne Arsht-Rockefeller Foundation Resilience Centre (2023), Call for Collaboration: Enhancing the enabling environment to accelerate the mobilisation of private finance for adaptation and resilience, https://onebillionresilient.org/wp-content/uploads/sites/2/2023/12/Call-for-Collaboration-COP28.pdf

Introduction

The intensification and increased frequency of natural hazards are having an escalating impact on people, assets and communities. Economic losses resulting from natural hazard events in 2023 are estimated to USD250 billion, 4 although the true toll of disasters is much higher than the insurers' economic estimates. Many of the impacts of disasters simply are not included in these estimates – such as those associated with slow-onset and small-scale events, and the knock-on effects of broken supply chains, losses in productivity, compromised physical and mental health, and the enduring impacts of disrupted education.5

Exposure and vulnerability to such hazards, along with their subsequent impacts, are being amplified by a combination of factors and interacting risk drivers. These include population growth and poorly planned urban development, weak governance, poverty and inequality, loss of biodiversity, regional conflicts, environmental degradation, mass migration and economic instability. Accelerating climate change⁶ is exacerbating and compounding these factors, resulting in increased risks, losses and making resilience efforts harder to implement. The cost of inaction is significant and rising.

Table 1. Definition of Natural Hazards

A hazard is a process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.

While a broad range of hazards exists, this Guide is concerned with those belonging to the following three categories as defined by the UNDRR:7

- 1. Meteorological and Hydrological: Extreme weather / climate events such as drought, heat (extreme heat, heatwave), cold, precipitation (riverine & pluvial flooding), wind (tornadoes, tropical storms), snow and ice, and coastal/oceanic (storm surge, ocean heatwave). Slow onset processes such as heat (increased average temperature, wet bulb temperature), increased aridity, variable precipitation, decreasing glaciers / snow cover / permafrost, and coastal/oceanic (sea level risk, ocean warming, acidification).
- 2. Geological / Geophysical: Rapid onset events such as earthquakes, landslides, tsunamis, and volcanic activity.
- **3. Environmental:** Slow onset processes such as biodiversity and ecosystem loss, deforestation, soil degradation, desertification, land salination, loss of permafrost and sea ice, and disturbance (wildfire, forest dieback, eutrophication).

Hazards may be single, sequential or combined in both their origins and their effects.

Climate change is considered an underlying driver of risk for meteorological, hydrological and environmental hazards and can exacerbate the impacts of these hazards as well as those which are geological / geophysical. Climate change is altering the frequency and intensity of hazard events, affecting vulnerability, and changing exposure patterns.

- 4 https://www.munichre.com/en/company/media-relations/media-information-and-corporate-news/media-information/2024/natural-disaster-figures-2023.html
- ⁵ https://www.undrr.org/explainer/uncounted-costs-of-disasters-2023
- 6 IPCC (2022), Climate Change 2022: Impacts, Adaptation and Vulnerability, https://www.ipcc.ch/report/ar6/wg2/
- https://www.undrr.org/publication/hazard-definition-and-classification-review-technical-report

Every region of the world faces natural hazard impacts and risks, but the impacts and response challenges are particularly acute in emerging markets and developing economies (EMDEs), especially in the Least Developed Countries (LDCs) of Asia, Africa, the Middle East, and Small Island Developing States (SIDS). This is due to these countries largely having both low adaptive capacity and high vulnerability.⁸

Even at levels under 1.5°C of global heating, worldwide the health-related risks of climate change are rapidly growing, costing lives and livelihoods worldwide, today. Health systems are increasingly strained, and failure to support equitable adaptation has left populations are unprotected in the face of the increased climate hazards. Those who contributed the least to global emissions are being hit the hardest.

Although the economic costs⁹ of natural hazard events have increased, there has not been a corresponding rise in financing and investment. Less than 10% of all climate finance is allocated for adaptation, ¹⁰ despite its equal importance in Article 2.1 of the Paris Agreement and being reflected in the Global Goal on Adaptation. ¹¹ Estimates suggest that the annual climate adaptation financing gap in developing countries is between USD 194-366 billion, approximately 10-18 times more than current financing flows. ¹² This gap is expected to increase to USD 315-565 billion by 2050. ¹³ Further, development financing for disaster risk reduction as a whole has barely increased over the past 30 years. ¹⁴

Table 2. Definition of Adaptation and Resilience

Adaptation and resilience are similar concepts – but not exact substitutes for each other - that when taken together aim to manage and minimize risk, reduce vulnerability and enhance the capacity of systems (whether social, economic or environmental) to deal with the impacts of natural hazards and climate change.

This Guide uses the Sendai Framework for Disaster Risk Reduction ("Sendai") definitions of the two concepts as follows:¹⁵

Adaptation: the process of adjusting practices, systems and structures to moderate potential damage and cope with the consequences of natural and climate-related hazards. This includes adjusting socio-economic and environmental practices to limit damage.

Resilience: the ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management.



- The IPCC AR6 report defines Adaptive Capacity as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences," and Vulnerability as "the propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt."
- Standard Chartered Bank (2022), Adaptation Economy, https://www.sc.com/en/campaigns/adaptation-economy/; Note: Even if the world succeeds against the odds in limiting temperature rises to the Paris agreement goals, the 10 markets identified in SCB's Adaptation Economy report could be facing an estimated cost of USD377 billion in damages and lost economic growth by 2030. This rises to USD 1.4 trillion between now and 2050.
- $^{10} \quad \text{Climate Policy Initiative (2023), Global Landscape of Climate Finance, https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-landscape-of-climate-finance-2023/publication/global-global-global-global-global-global-global-global-global-global-global-global-global-global-global-global-global-global-global-global-global-global-global-g$
- UNFCCC (2015), Paris Agreement, https://unfccc.int/sites/default/files/english_paris_agreement.pdf; Note: Established a qualitative goal on adaptation: "enhancing adaptive capacity, strengthening resilience, and reducing vulnerability to climate change."
- ¹² UNEP (2023), Adaptation Gap Report, https://www.unep.org/resources/adaptation-gap-report-2023
- UNEP (2022), Adaptation Gap Report, https://www.unep.org/resources/adaptation-gap-report-2022
- ¹⁴ UNDRR (2023), The Report of the Midterm Review of the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030, https://sendaiframework-mtr.undrr.org/publication/report-midterm-review-implementation-sendai-framework-disaster-risk-reduction-2015-2030
- UNDRR (2015), Sendai Framework for Disaster Risk Reduction 2015-2030, https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030

Investment in natural hazard adaptation and resilience extends beyond avoiding loss and damage. Standard Chartered Bank's Adaptation Economy Report highlights a significant economic opportunity in investing for adaptation and resilience to climate-change related impacts. For every \$1 spent on adaptation this decade, an economic benefit of \$12 could be generated.¹⁶

The Glasgow Sharm-El-Sheikh Adaptation Agenda and the Mid-Term Review of the Sendai Framework on Disaster Risk Reduction both emphasize the urgency of addressing the finance gap. Funding flows for natural hazard and climate adaptation come from public, private, and alternative capital providers, often through combined investments.¹⁷ The societal benefits (public return) of investing in adaptation and resilience are clear, with public finance representing most of the capital allocation.

Private capital providers – including banks, institutional investors, and private equity – conversely contribute just 2% of the tracked finance for climate adaptation. A range of barriers have historically limited private finance flows and reduced the perceived attractiveness of investing in these areas (as detailed in Table 3). To close the finance gap and meet the needs of natural hazard adaptation and resilience, an increase in private investment is essential. Financial institutions and investors, especially those operating in emerging markets and developing economies (EMDEs), are increasingly recognizing their role in directing capital towards the markets that are particularly vulnerable to the impacts of natural hazards.

Table 3. Real and perceived barriers to private finance for natural hazard adaptation and resilience

Perceived barriers

- Limited revenue streams for many adaptation and resilience investments¹⁹ (mainly generating avoided losses).
- Long investment horizon and size of adaptation and resilience projects.

Real barriers

- Short-term perspectives and market inefficiencies that affect the accurate pricing and adequate consideration of natural hazard and climate-related risks
- A lack of country-specific data and asset-level data on natural hazard and climate risk and vulnerability which impedes informed investment decisions.
- The private sector's challenge in understanding the environmental and social benefits of investing in adaptation and resilience.²⁰
- Information disparities and gaps in knowledge, including understanding the extent of potential environmental and social benefits, which influence the assessment of public-private investment returns and decision-making processes.
- Inaction by financial regulators and policy makers to incorporate natural hazard and climate-related risks into their activities and policies.
- The absence of common market language, standard definitions and classification frameworks for adaptation and resilience-building investments and transactions.

¹⁶ Standard Chartered Bank (2022), Adaptation Economy, https://www.sc.com/en/campaigns/adaptation-economy/

¹⁷ Climate Policy Initiative (2023) State and Trends in Climate Adaptation Finance 2023, State and Trends in Climate Adaptation Finance 2023 (climatepolicyinitiative.org); UNFCC (2023) Synthesis report on existing funding arrangements and innovative sources

https://www.wri.org/insights/private-sector-climate-adaptation-finance, referring to tracked adaptation finance in 2019 and 2020, compared to 98% from public sources, and only refers to investments in adaptation projects with public benefits

 $^{^{19} \}quad \text{https://www.smithschool.ox.ac.uk/sites/default/files/2023-06/Mission-Climate-Ready-Unleashing-finance-and-investment-REPORT.pdf}$

²⁰ GCA (2019), Adapt Now: A Global Call for Leadership on Climate Resilience, https://gca.org/reports/adapt-now-a-global-call-for-leadership-on-climate-resilience/

To boost private investment in natural hazard adaptation and resilience, the following measures can be considered: Integration of natural hazard risk measurement and management into the mandates and decisions of central banks and other financial and regulatory authorities. This integration will incentivize investments in risk reduction and resilience.

- Development of enhanced frameworks for hazard and disaster information, including data, disclosures, metrics, and alignment strategies. This should involve an adaptation and resilience finance taxonomy/ classification system that provides a consistent and common language for the economic activities considered by thematic finance pools in greater detail than those already available. These frameworks are necessary to promote market transparency, integrity, and scalability.
- Clear presentation of the business case for financial institutions and investors to align their ambitions, policies, and capital allocation with natural hazard adaptation and resilience needs and opportunities.
- Utilization of a diverse range of financial tools, such as blended finance, to mobilize finance for natural hazard adaptation and resilience on a large scale.
 This approach should include collaboration with multilateral development banks (MDBs) and governments.
- Financial products innovation such as disaster, adaptation and resilience bonds, catastrophe bonds, and parametric insurance products.

Objectives:

The Guide aims to assist commercial banks, financial institutions, and investors in engaging their clients in financing and investment opportunities (i.e. private lending and investment arrangements and public market capital raising) related to natural hazard adaptation and resilience.

Climate change adaptation is recognized as an eligible project category by various voluntary process guidelines (e.g. Green Bond Principles and Green Loan Principles) and within regulated reporting standards (e.g. EU Sustainable Finance Taxonomy; Singapore-Asia Taxonomy for Sustainable Finance). However, these guidelines and standards address adaptation at a high-level; there is a pressing need for more detailed guidance to specify eligible activities within these categories and to define potential co-benefits for people and the planet.

The Guide provides an indicative list of financeable adaptation and resilience themes and activities, forming a classification framework. The Guide aims to:

- Identify the eligible use of proceeds for financing and investment opportunities in adaptation and resilience in emerging markets and developing economies;
- Map the co-benefits of these investments beyond climate adaptation;
- Screen investment opportunities for substantial contribution, and highlight references for international standards on social and environmental safeguards;
- Consider how the impact of these investments could be measured and reported on.

By creating a common reference for adaptation and resilience investments, this Guide aims to accelerate the development and structuring of financial products focused on adaptation and resilience, such as loans, bonds, private placements, structured notes, letters of credit, and deposits.

The Guide is intended to be dynamic and will continue to evolve over time in response to market developments.

Investment Criteria



Investment Criteria

To categorize and screen natural hazard adaptation and resilience investments, this Guide builds on accepted market frameworks, such as the EU Sustainable Finance Taxonomy and the UNDRR-Climate Bonds Initiative Designing a Climate Resilience Classification Framework whitepaper, and the MDB Group Joint Methodology for tracking climate change adaptation finance.²¹²²

A full list of frameworks is presented in Annex A.

Types of Adaptation / Resilience investments

This Guide categorizes natural hazard adaptation and resilience investments as follows:²³

Adapted Investments: These are investments that integrate measures to minimize the impact of natural hazard and physical climate risks to the asset, activity, or entity being invested in (e.g., upgrading an irrigation system to improve water efficiency and reduce water losses).

Enabling Investments: These investments facilitate the resilience of other assets, activities, or entities (e.g., constructing of coastal defenses to protect communities, businesses, and infrastructure from increasing flood risk).

Screening Principles for Adaptation and Resilience Finance

1. Substantial contribution to adaptation and resilience

This Guide's definition of a substantial contribution to adaptation and resilience aligns with the definition advanced by the UNDRR/Climate Bonds Initiative Classification Framework:

- Directly responding to the climate change impacts (direct or indirect) (e.g., coastal defenses)
- Reducing pressures that exacerbate and/or are exacerbated by climate change impacts (direct or indirect) (e.g. reducing water consumption in response to increasing water stress)
- · Enabling either of the above two types.

This Guide adopts this definition and expands it to also cover non-climate driven hazards as outlined in Table 1 (i.e., geological, geophysical and environmental).

Establishing whether an investment substantially contributes to adaptation and/or resilience requires defining the conditions under which the investment qualifies (i.e. Yes/No threshold test; standard yardstick). Existing regulations and standards such as the EU Sustainable Finance Taxonomy do not define what the assessment criteria are, thus leaving room for interpretation.²⁴

However, given the highly complex, localized and context-specific nature of natural hazard risks, impacts and adaptation responses, it is very difficult or nearly impossible to define a single, universally accepted measure of adaptation benefits/outcomes by investment category or type.

MDB Group (2021), Joint methodology for tracking climate change adaptation finance, https://thedocs.worldbank.org/en/doc/20cd787e947dbf44598741469538a4ab-0020012022/original/20220242-mdbs-joint-methodology-climate-change-adaptation-finance-en.pdf With reference to the MDB Joint Methodology, as defined by this Guide, Adapted Investments correspond to Type 1 adaptation activities, while Enabling Investments correspond to Type 3 adaptation activities with reference to the WBG Resilience Rating Guide, Adapted Investments correspond to "resilience to" investments, and Enabling Investments correspond to "resilience to" investments.

²² These definitions are aligned with those included in UNDRR and Climate Bonds Initiative (2023), Designing a Climate Resilience Classification Framework, https://www.undrr.org/publication/designing-climate-resilience-classification-framework-facilitate-investment-climate

These definitions are aligned with those included in UNDRR and Climate Bonds Initiative (2023), Designing a Climate Resilience Classification Framework, https://www.undrr.org/publication/designing-climate-resilience-classification-framework-facilitate-investment-climate. Please see this document for examples of each of these investment types

²⁴ For information, the EU Sustainable Finance Taxonomy Regulation defines a substantial contribution to climate adaptation as either (i) a significant reduction in the risk of adverse current or future climate impacts, or (ii) a substantial decrease in those adverse impacts, both without increasing the risk to people, nature, or assets.EU Technical Expert Group on Sustainable Finance (2020), Taxonomy Report: Technical Annex, https://finance.ec.europa.eu/system/files/2020-03/200309-sustainable-finance-teg-final-report-taxonomy-annexes_en.pdf

Investors will need to define, on a specific investment basis, simple, easily-measured threshold indicators that are sensitive to and reflective of characteristics such as the investment's specific hazard risk materiality (e.g. vulnerability to, or impacts of one or more risks), as well as the anticipated timing of realization of adaptation benefits (e.g. at investment outset or in the longer-term) and the sustainability of benefits. Indicators may be both quantitative (numeric) or qualitative (non-numeric), and may describe how the investment significantly contributes to reducing vulnerability, building capacity, and achieving adaptation outcomes.

Substantial Contribution

Examples of indicators to assess Substantial Contribution of a specific investment:

- Quantitative e.g. Anticipated percentage reduction in the value of assets at risk from pluvial flooding due to an investment in flood protection infrastructure; or, increase in crop yields (kg/ha) due to an investment in agricultural crop irrigation technologies.
- Qualitative Perceived degree of effectiveness (e.g. High, Medium, Low) of the investment at reducing the expected impact of hazards. This could include reduced impact of flooding events due to rapid emergency response enabled by investment in early warning systems.
- Process-based Adaptive measures which change how a process works in response to climate change (e.g. changes to industrial processes to account for increased heat during particular parts of the day / year).

2. Avoidance of Maladaptation and Significant Harm to Sustainability Objectives

In addition to ensuring substantial contribution, investments must also be assessed to avoid risk of potential for maladaptation and significant harm to other sustainability objectives, as aligned with the concept of 'do no significant harm' adopted in other regional taxonomies²⁵

Defining maladaptation

 Maladaptation is defined by the IPCC in their latest Synthesis Report as "actions that may lead to increased risk of adverse climate-related outcomes, including via increased greenhouse gas emissions, increased or shifted vulnerability to climate change, more inequitable outcomes, or diminished welfare, now or in the future. Most often, maladaptation is an unintended consequence."²⁶ Maladaptation and significant harm to other sustainability objectives for any party as a result of the potentially eligible investment are important considerations to ensure that improved adaptation and resilience outcomes for one party do not result in costs of increased vulnerability for others.

Key questions to consider in ensuring that maladaptation risk is adequately mitigated:

- Are environmental, social, and governance safeguards, such as those referenced in the IFC Performance Standards,²⁷ applied?
- Does the activity introduce risks that could hinder progress on other social or environmental priorities as stated in the Sustainable Development Goals, including the risk of maladaptation or significant harm related to the adaptive activity to any stakeholder group or other sustainability objective?
- Does the activity redistribute or introduce new sources of vulnerability?
- Does the activity marginalise any stakeholder groups?
- Are future risks considered and incorporated into planning (including long term impacts, externalities and systemwide impacts)?

Alignment of the investment with the issuer / borrower's climate transition plan is also an important consideration. When there is inconsistency between the transition plan and the investment, further assessment of the implications of the investment for the broader sustainability objectives of the issuer / borrower should be made and considered in the context of maladaptation and do no significant harm.

As captured in the UNDRR Climate Resilience Classification Framework, defining eligible investments may require balancing the potential for a substantial contribution against the risks of maladaptation or significant harm to other sustainability objectives. This concept of balancing gains against potential risks at a system level can be understood as "net resilience gain", which assesses the overall resilience improvement at the system level, even if there may be increased risks for specific entities.²⁸

 $^{^{\}rm 25}$ E.g., The EU Sustainable Finance Taxonomy and the Singapore Asia Taxonomy for Sustainable Finance

²⁶ C (2023), Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, pp. 35-115, doi: 10.59327/IPCC/AR6-9789291691647

³⁷ IFC (2021), Performance Standards on Environmental and Social Sustainability, https://www.ifc.org/content/dam/ifc/doc/2010/2012-ifc-performance-standards-en.pdf

²⁸ UNDRR and Climate Bonds Initiative (2023), Designing a Climate Resilience Classification Framework, https://www.undrr.org/publication/designing-climate-resilience-classification-framework-facilitate-investment-climate

Example: Assessing maladaptation risks and substantial contribution associated with protecting critical power generation infrastructure

Protecting critical power generation infrastructure against natural hazard and climate-related risks is crucial to minimize economic losses. However, many emerging markets rely heavily on fossil fuel-fired power plants including generating over 50% of their electricity from coal. These high-emitting activities significantly harm climate mitigation objectives and increase the climate vulnerability of other parties. Therefore, adaptive measures aimed at protecting fossil fuel-based power generation infrastructure, including coal-fired power plants, requires careful assessment for maladaptation and significant harm to other sustainability objectives.

In cases where adaptation applies to existing infrastructure without extending its useful economic life or altering planned retirement, adaptive measures that protect the social and economic value of these assets can be recognized. However, if adaptive measures involve retrofitting, upgrading, or renovating an asset, thereby extending its useful life or delaying planned retirement (i.e. measures or activities that create carbon lock-in), this may cause additional significant harm. In such cases, the investment should not be considered for adaptation and resilience finance.

3. Consistent with nationally defined adaptation and resilience strategies, and Sharm-El-Sheik Adaptation Agenda and Sendai Framework for Disaster Risk Reduction targets, where appropriate.²⁹

Adaptation and resilience investments should be consistent with national and local priorities and plans, such as those formally codified in Adaptation Communications, Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs), or National Disaster Risk Reduction Strategies. For many countries such plans may either not exist, or do exist but do not have sufficient detail about priorities and needs that would allow an issuer or borrower to determine consistency. In such instances – ideally- engagement should take place between the financing entities and local bodies that have a good understanding of adaptation priorities and needs of the local areas and communities.



²⁹ See Appendix 1 for the detailed targets set out by the Sharm-El-Sheik Adaptation Agenda

4. Enhance adaptation and resilience in key vulnerability areas

This Guide aligns with the seven resilience themes outlined in the UNDRR and Climate Bonds Initiative Climate Resilience Classification Framework in order to promote interoperability with future guidance from the Climate Bonds Initiative. As such, the investment should contribute to adaptation and resilience outcomes in one or more of the following themes:³⁰

- **Resilient Agrifood Systems** Systems for the production and provision of food and other related products, encompassing primary production, processing, logistics, storage, wholesaling and retail, including the capacities and knowledge of policymakers, service providers (public and private) and populations
- Resilient Cities Human settlements whether large (e.g. cities) or small (e.g. villages), urban or rural, encompassing buildings (residential, commercial & public), planning, development & management of urban areas and settlements, and cultural heritage
- **Resilient Health** Systems, facilities, services and capacities for protecting and improving human health and for pre-empting and responding to new health challenges and health-related emergencies, including the capacities and knowledge of policymakers, service providers (public and private) and populations
- **Resilient Industry & Commerce** Infrastructure that provides essential services on which populations and wider economic activity depend, e.g. water & wastewater, transportation, information & communication technology (ICT) and electricity
- **Resilient Infrastructure** Industrial and commercial operations encompassing extractive industries, manufacturing and service-based industries (e.g. professional services, financial services, tourism, leisure, etc.)
- **Resilient Nature & Biodiversity -** Terrestrial, freshwater, coastal or marine ecosystems and the biodiversity they support and the natural capital and ecosystem services (e.g. freshwater provision, flood management, oxygen replenishment, etc.) that they provide
- **Resilient Societies** Systems and services for ensuring social well-being, safety and the creation/protection of social capital across populations, covering social protection, education, financial inclusion, digital inclusion, disaster risk (DRR and emergency services), and including the capacities and knowledge of policymakers, service providers (public and private) and populations.



UNDRR and Climate Bonds Initiative (2023), Designing a Climate Resilience Classification Framework, https://www.undrr.org/publication/designing-climate-resilience-classification-framework-facilitate-investment-climate

Guidance for Adaptation and Resilience Financing - Key Stages to Assess and Manage Eligible Investments

i Identify and categorise use of proceeds:

i) In line with identified needs / needs assessment, and Table of Eligible Activities, identify proposed adaptation or resilience investment at following levels,:

ii) Assess potential environmental or social co-benefits using the Table of Eligible Activities

Project assessment and selection

i) For projects that have been identified as eligible based on standard investment assessment criteria, and additional consideration of co-benefits identified in Stage 1, assess eligibility as A&R investment through the following questions, wherein successful projects should be able to clearly describe:



Type 1: Investments that are adapted

Type 2: Investments that enable adaptation

- An investment should meet the definition adopted by this Guide for substantial contribution, and the conditions under which the investment qualifies should be documented
- Indicators of substantial contribution should be captured as well as the expected timing for benefits to materialise
- Environmental and Social risks should be assessed using international frameworks such as the IFC Performance Standards by individuals with appropriate expertise
- ESG safeguards should be set out
- DNSH thresholds should be clearly defined, with monitoring and measurement on an ongoing basis
- There should be clear accountability for management and escalation of E&S risks at investment level
- Engagement should take place between financing entities and local bodies that have a good understanding of the adaptation priorities of the local areas and community
- Note: Majority of countries don't have NAPs, and most of them are too high level to be able to answer alignment of investment with strategy, so further assessment may be required
- The investment should align to one of the indicative eligible activities set out in this Guide or otherwise be clearly stated as part of a national or local adaptation strategy/ plan

iii Management of Proceeds

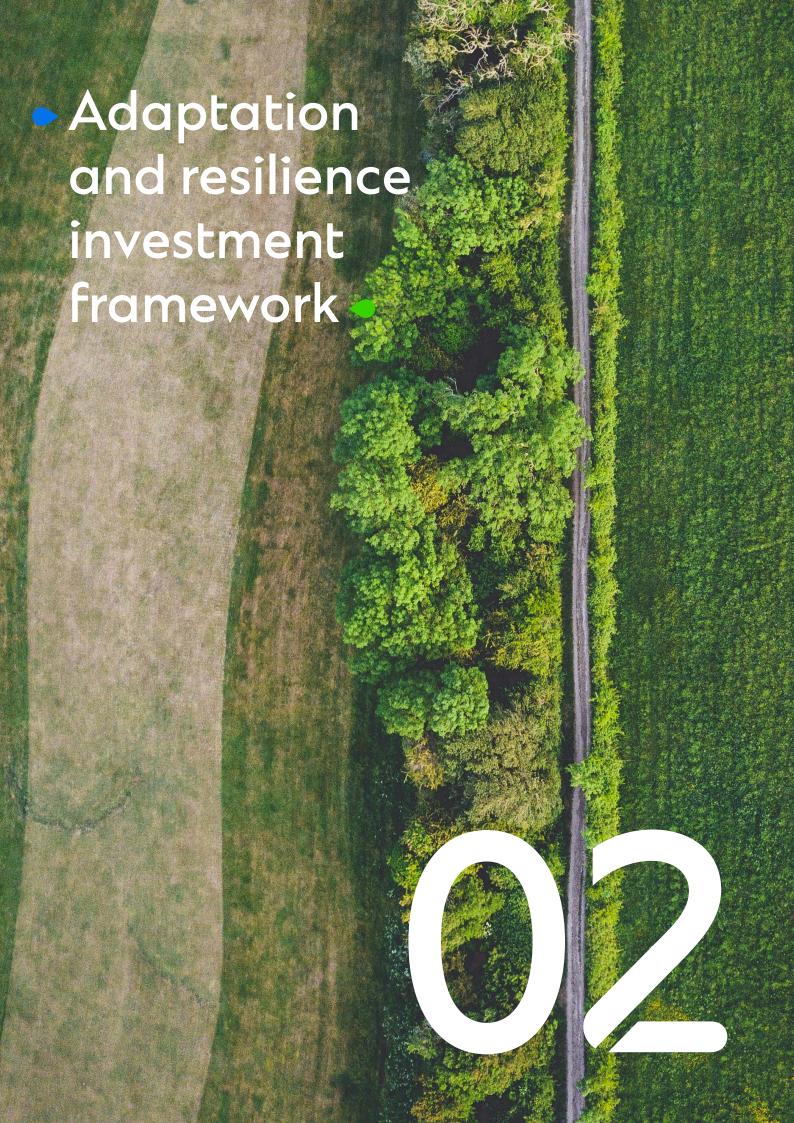
 i) If the above criteria has been met and can be demonstrated, financing can proceed; set clear metrics, aligned to established principles and guidance for adaptation finance measurement and reporting

 ii) Issuer or borrower should have the ability to segregate proceeds from adaptation and resilience finance; if there are multiple components, only those eligible should be counted

iv Impact Reporting

i) Establish consistent results framework for monitoring, evaluating, tracking and reportin A&R performance of investment

ii) Metrics & indicators should be included in annual impact reporting, including best practice recommendation for third-party review



Adapation and resilience investment framework

To align with current market practices, borrowers and issuers of adaptation and resilience financial products, including bonds, loans and structured financing, should develop a framework detailing the use of proceeds for adaptation and resilience activities. This framework should include the following elements:

- Use of Proceeds: Investments contributing to adaptation and resilience objectives and objectives, aligned with the eligible project categories of the Green/Social Bond Principles, Green/Social Loan Principles and the UNDRR/ Climate Bonds Initiative classification framework, drawing on the activities set out in this Guide.
- Project Evaluation and Selection: The process for assessing and selecting eligible investments, including assessment of substantial contribution, avoidance of maladaptation and significant harm to sustainability objectives.
- Management of Proceeds: The approach to managing the financing proceeds in accordance with the framework's requirements.
- Reporting: The methods for measuring, monitoring, evaluating and reporting the outcomes and impact of the adaptation and resilience financing, including the indicators used.

Obtaining an independent review and verification of the framework is considered best practice.

Use of Proceeds

This Guide offers an indicative list of A&R investments relevant for financial institutions and investors (Table 1) – issuers or borrowers should apply this list to help determine eligible uses of proceeds that contribute to enhanced adaptation and resilience outcomes.

Adaptation and resilience investments included are those which belong to two categories (adapted and enabling) as aligned with the UNDRR.

They are presented as aligned with the Climate Resilience themes set out above and have been mapped to the Green Bond / Loan Principles' Environmental Objectives and the Social Bond / Loan Principles' Social Outcomes to ensure consistency with broader market practice on aligning sustainable debt capital raising with the ICMA / LMA principles and guidance. The Guide also includes adaptation (non-climate related) and resilience cobenefits which are not already explicitly covered by the Environmental Objectives and Social Outcomes of the ICMA / LMA principles.

This list of indicative activities has purposefully not captured all of the detailed requirements as set out above to enable simplicity and ease of use for the reader. Each investment should still be assessed for substantial contribution, maladaptation and significant harm to other sustainability objectives, and alignment to nationally defined adaptation and resilience strategies.



These definitions are aligned with those included in UNDRR and Climate Bonds Initiative (2023), Designing a Climate Resilience Classification Framework, https://www.undrr.org/publication/designing-climate-resilience-classification-framework-facilitate-investment-climate

Table 1: Indicative Eligible Investments (Use of Proceeds)

The following list of activities is not intended to be exhaustive and is focused primarily on investments that can be considered priority needs within emerging markets and developing economies.

				otation ilience pe	ce Principles' Environmental Objectives							Soc		d / Soci locial O			oles'
Climate Resilience Themes	Sub-Theme	Examples of Eligible Investments	Type 1: Activities that are adapted	Type 2: Activities that enable adaptation	Adaptation (Climate Change related)	Mitigation	Biodiversity	Pollution Prevention and Contro	Natural Resource Conservation	Adaptation (non-climate related)	Resilience (natural hazards)	Affordable basic infrastructure	Access to essential services	Affordable housing	Employment generation	Food security and sustainable food systems	Socioeconomic advancement and empowerment
Resilient Agrifood Systems	Primary production	Climate resilient crops (e.g., drought resistant seeds, new varieties including R&D expenditures)		×	×		×			×						×	
		Drip irrigation / more efficient irrigation for agricultural production systems (e.g. pressurized irrigation technologies)		×	×				×	×						×	
		Drainage and stormwater diversion and storage		×	×			×	×	×	×					×	
		Climate resilient livestock infrastructure (e.g. temperature regulation technologies - cooling sheds, emergency shelters etc.)		×	×					×						×	
		Climate-smart agriculture infrastructure and / or technology															
		Climate-smart sustainable fisheries management e.g. biodiverse agroeconomic systems, aquatic food systems etc.		×	×		×	×		×	×						
		Infrastructure to prevent runoff of agrochemicals and sediment into rivers or coastal basins during flooding / heavy rainfall e.g. high precision laser land levelling		×	×		×	×		×	×						
	Processing, logistics, storage	Construction / retrofit / expansion / operation / upgrade to enhance resilience against natural hazards (storm damage, flooding, extreme heat etc.)	×		×					×	×					×	
	Wholesaling and retail	Resilient retail centres	×		×							×				×	
	Financing and insurance	Parametric insurance schemes for agriculture		×	×					×	×					×	×

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Climate Resilience Themes	Sub-Theme	Examples of Eligible Investments	Type 1: Activities that are adapted	Type 2: Activities that enable adaptation	Adaptation (Climate Change related)	Mitigation	Biodiversity	Pollution Prevention and Contro	Natural Resource Conservation	Adaptation (non-climate related)	Resilience (natural hazards)	Affordable basic infrastructure	Access to essential services	Affordable housing	Employment generation	Food security and sustainable food systems	Socioeconomic advancement and empowerment
Resilient Cities	Residential, commercial and public buildings	Green spaces including roofs, walls and gardens	×		×	×	×	×		×							
		Water retention gardens and systems	×		×	×	×	×		×							
		Measures to reduce localised air temperatures including painting buildings white, adding trees to streets.															
		Construction / expansion / operation / upgrade / retrofit to enhance resilience against natural hazards (storm damage, flooding, extreme heat, wildfires, etc.)	×		×					×	×			×			
	Planning, development and	Construction of sea walls (concrete)		×	×					×	×						
	management of urban areas and settlements			×	×	×	×	×		×	×						
		Stormwater management		×	×			×	×	×	×	×					
		Flood management systems		×	×			×	×	×	×	×					
		Flood management system (nature based)		×	×	×	×	×	×	×	×	×					
		Relocation of settlements including building of new settlements		×	×					×	×	×	×	×			
		Desalination plants in areas of water stress due to climate change		×	×				×				×				
		Desalination plants in areas of water stress due to other factors		×					×	×			×				
		Water reclamation plants in areas of water stress		×	×		×	×	×	×			×				
		Nature based solutions in areas of heat stress (e.g. trees, vegetation, green infrastructure (walls, roofs)		×	×	×	×			×							

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Climate Resilience Themes	Sub-Theme	Examples of Eligible Investments	Type 1: Activities that are adapted	Type 2: Activities that enable adaptation	Adaptation (Climate Change related)	Mitigation	Biodiversity	Pollution Prevention and Contro	Natural Resource Conservation	Adaptation (non-climate related)	Resilience (natural hazards)	Affordable basic infrastructure	Access to essential services	Affordable housing	Employment generation	Food security and sustainable food systems	Socioeconomic advancement and empowerment
		Porous pavements	×								×		×				×
	Cultural heritage	Protection of cultural heritage sites against natural hazards	×		×			×		×		×					
Resilient Health	Systems and facilities for protection and improvement of health	Resilient public hospital infrastructure	×								×		×				×
	Pre-empting and responding to health challenges and emergencies	Health surveillance technologies to identify and pre-empt natural hazard driven disease patterns		×	×					×			×				×
		Health information management systems (incl. inventory mgmt.) specifically for disaster response situations		×	×					×			×				×
		R&D for medicines targeting emerging diseases		×	×					×			×				×
	Healthcare services	Financing to equip, operate and add capacity and efficiency to essential healthcare facilities such as hospitals, clinics, healthcare care, emergency care, diagnostics, laboratory facilities, nursing home and rehabilitation facilities who are facing increase demand due to natural hazard driven diseases		×	×					×			×				×
		Manufacturing, logistics and distribution of medical products and supplies essential to medical response in disaster situations, disease control services and vaccinations which cover climatesensitive diseases		×	×					×			×				×
		Financing to equip, operate and add capacity to facilities that house healthcare professionals in disaster response or hazard-driven outbreak situations		×	×					×			×				×

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Climate Resilience Themes	Sub-Theme	Examples of Eligible Investments	Type 1: Activities that are adapted	Type 2: Activities that enable adaptation	Adaptation (Climate Change related)	Mitigation	Biodiversity	Pollution Prevention and Contro	Natural Resource Conservation	Adaptation (non-climate related)	Resilience (natural hazards)	Affordable basic infrastructure	Access to essential services	Affordable housing	Employment generation	Food security and sustainable food systems	Socioeconomic advancement and empowerment
	Healthcare supplies and equipment	The conversion of facilities or equipment to produce supplies or equipment needed for the prevention or treatment of diseases or health emergencies due to climate or natural hazards		×	×					×			×				×
	Pharmaceuticals	Financing the subsidisation of provision of provision of pharmaceuticals needed in the treatment of diseases or health emergencies due to climate or natural hazards		×	×					×			×				×
		Financing the production and distribution of pharmaceuticals needed in the treatment of diseases or health emergencies due to climate or natural hazards		×	×					×			×				×
Resilient Industry & Commerce	Cross-cutting	Strengthening of buildings, infrastructure and process plant															
		Emergency onsite backup power (e.g. generator, battery storage, CHP with fuel storage)															
		Fire security measures															
		Alternative sources of cooling															
		Siting cabling and electrical equipment above likely flood levels															
		Improving site drainage and roof drainage															
		Civil engineering measures to combat landslide, subsidence, heave or wind damage															
	Materials	Air conditioning for stocks of materials / products that deteriorate during hot weather															

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Climate Resilience Themes	Sub-Theme	Examples of Eligible Investments	Type 1: Activities that are adapted	Type 2: Activities that enable adaptation	Adaptation (Climate Change related)	Mitigation	Biodiversity	Pollution Prevention and Contro	Natural Resource Conservation	Adaptation (non-climate related)	Resilience (natural hazards)	Affordable basic infrastructure	Access to essential services	Affordable housing	Employment generation	Food security and sustainable food systems	Socioeconomic advancement and empowerment
	Industrials	Emergency heating source input to effluent system						-									
	Consumer staples	Consumer staples															
Resilient Infrastructure	Cross-cutting	Construction / expansion / operation / upgrade to enhance resilience against natural hazards (storm damage, flooding, extreme heat, gradual heat etc.)	×		×	(x)				×	×	×					
		Mechanical or structural strengthening of infrastructure to enhance resilience against natural hazards (storm damage, flooding, extreme heat etc.)	×		×					×	×	×					
		Land-use buffers and vegetation management around infrastructure (including vegetated drainage basins)	×		×	×	×			×	×						
		Flood defences (strengthening, elevating structures; geosynthetics - geotextiles and geomembranes)	×		×			×		×	×	×	×				
		District cooling		×	×					×	×		×				
		Air conditioning in areas prone to high heat stress	×	×	×					×	×	×					
		Relocation of infrastructure or key equipment	×		×					×	×		×				
		Off-grid energy use (renewables, batteries etc.)		×	×	×				×	×		×				
		Off-grid use where renewables is not a viable alternative and where there is significant risk of energy shortage during disaster recovery (generators, nonrenewable)		×	×					×	×		×				

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		Backup storage for critical systems		×	×	(x)				×	×		×				
		Localised power sources		×	×	(X)				×	×		×				
	ICT infrastructure	Underground telecommunication lines	×		×					×	×		×				
		Wireless connectivity for locations vulnerable to weather-induced disruption	×		×					×	×		×				
		Redundancy and back up connectivity infrastructure	×		×					×	×		×				
	Transport infrastructure	Height adjustment (e.g. raising road or train tracks above flooding lines)	×		×					×	×	×					
		Breakwaters		×	×					×	×						
		Drainage		×	×			×		×	×						
		Flood pathways and mitigation measures that prevent plastic, solid waste, or pollutants runoff	×		×			×		×							
		Emergency response capabilities		×	×					×	×		×				×
	Water and wastewater infrastructure	Overflow reservoirs and drainage systems		×	×			×	×	×	×	×					
		Water storage: Rainwater harvesting, groundwater storage		×	×				×	×	×		×				
		Water conservation and efficiency measures leading to 20% minimum saving, such as water metering, water resource monitoring equipment, leak detwection equipment and automated water and pressure control systems		×	×				×	×	×		×				
		Wastewater treatment and recycling		×	×			×	×	×	×		×				

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Climate Resilience Themes	Sub-Theme	Examples of Eligible Investments	Type 1: Activities that are adapted	Type 2: Activities that enable adaptation	Adaptation (Climate Change related)	Mitigation	Biodiversity	Pollution Prevention and Contro	Natural Resource Conservation	Adaptation (non-climate related)	Resilience (natural hazards)	Affordable basic infrastructure	Access to essential services	Affordable housing	Employment generation	Food security and sustainable food systems	Socioeconomic advancement and empowerment
	Coastal and riverine infrastructure	Coastal & riverine flood protection: Levees, floodgates, sand dams, surge barriers, pumps		×	×		×	×	×	×	×	×					
		Coastal pumping stations in areas of water stress		×	×		×				×		×				
	Energy generation, transmission and distribution infrastructure	Hydropower: Adjusted reservoir / spillway / turbine capacity for fluctuating water levels		×	×					×			×				
		Wind: Shorter blade design	×		×						×		×				
		Thermal power: Resized cooling units, dry cooling systems	×		×						×		×				
		Mini-/microgrids		×	×	×				×	×	×	×				
		Energy storage		×	×	×				×	×	×	×				
Resilient Nature & Biodiversity	Nature-based solutions	Afforestation and reforestation, incl. restoring drylands		×	×	×	×				×						
		Mangrove conservation and replanting		×	×	×	×				×						
		Seagrasses and kelp conservation and (re-)planting		×	×	×	×				×						
		Restoration of salt marshes or peatlands		×	×	×	×				×						
		Conservation or rehabilitation of coral reefs to reduce storm surges and flooding		×	×	×	×				×						

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Climate Resilience Themes	Sub-Theme	Examples of Eligible Investments	Type 1: Activities that are adapted	Type 2: Activities that enable adaptation	Adaptation (Climate Change related)	Mitigation	Biodiversity	Pollution Prevention and Contro	Natural Resource Conservation	Adaptation (non-climate related)	Resilience (natural hazards)	Affordable basic infrastructure	Access to essential services	Affordable housing	Employment generation	Food security and sustainable food systems	Socioeconomic advancement and empowerment
Resilient Societies	Social protection and education	Data driven climate monitoring solutions, such as climate observation		×	×					×	×						×
		Early warning systems		×	×				×	×							×
		Monitoring, forecasting and modelling solutions of changes to the natural environment, and early warning systems for extreme weather events		×	×				×	×							
		Air quality forecasting system, monitoring of fire propagation and smoke transport systems		×	×			×		×	×		×				×
		Wildfire safety infrastructure and equipment such as hd cameras, and weather stations		×	×			×		×	×		×				×
	Financial and digital inclusion	Climate change adaptation insurance in line with the EU Taxonomy		×	×					×	×						×
		Parametric insurance schemes for green/blue infrastructure such as coral reefs, fisheries, and coastal protection		×	×		×			×	×						×

^{*}Where brackets are used to indicate a co-benefit, this co-benefit may only arise in certain instances of that eligible investment (e.g. when deployed using renewable energy).

Project Selection

The issuer or borrower should apply the Guide to help identify and classify eligible investments. Eligible investments should clearly describe the significance of their contribution to adaptation, co-benefits, prevention of maladaptation, and avoidance of significant harm to other sustainability objectives.

Investments should have sufficient information to objectively describe the use of proceeds and enable impact reporting. These activities and components must also align with existing local adaptation regulations, National Adaptation and DRR targets where applicable, and adhere to stringent environmental and social standards.

Management of Proceeds

The issuer or borrower should have the ability to segregate the proceeds from adaptation and resilience finance and allocate them solely to eligible measures and activities, as defined in their Use of Proceeds framework.

If an investment has multiple components, only those eligible should be counted as adaptation and resilience finance. Components not eligible under this framework must not contribute to avoidable negative impacts on adaptation or environmental or social outcomes.

Impact Reporting

The issuer or borrower should develop a consistent results framework for monitoring, evaluating, tracking and reporting the adaptation and resilience performance of the investment. There should be a clear and logical connection between indicators used to assess Substantial Contribution (i.e. expected impact) and indicators used to assess adaptation and resilience realized impact.

Indicators used may:

- be qualitative and quantitative,
- measure the instrumental or intrinsic value of the investment, and
- measure capacity or contributions to resilience, intermediate outcomes or ultimate impacts..

Collaboration with other financial institutions, adaptation experts, and affected stakeholders and rightsholders may be necessary to define suitable impacindicators including those that measure short-term effects (e.g., within the investment duration) and those that may not bemeasurable within but have benefits that extend beyond the investment duration. As example, the benefits of an investment to reduce chronic (i.e. annual/bi-annual) flood damage may be amenable to short-term measurement, whereas the benefits of an investment to address 1-in-50 or 1-in-100 flood event risk or slow-onset stresses such as gradual rise in sea level ad associated salt water intrusion may be more difficult to measure within the investment time frame (i.e. over decades).

Measuring Adaptation & Resilience Impact

Examples of indicators to assess Adaptation & Resilience impact of a specific investment:

- Reduced damage and costs of rehabilitation
- Reduced disruption to business services and economic production
- · Reduced cost of repairs from damages
- Reduced losses in labour productivity
- Reduced reliance on grid energy and/or fuelwood use
- Reduced loss of economic activity from damage to critical public infrastructure
- Increased profitability through improved baseline conditions (e.g. soil moisture retention reducing impacts of rainfall and flood; improved ability of livestock to thrive on more variable pasture quality)
- Improved effectiveness of A&R policies and programs included enhanced preparedness for response
- Improved resilience through risk diversification (e.g. new crops/services and markets; income diversification)
- Adapted from UNDRR (2020). Budget Tagging for Disaster Risk Reduction and Climate Change Adaptation, p.32-40.

Selected adaptation and resilience indicators should align to established principles and guidance for adaptation finance measurement and reporting (e.g., transparent, coherent, feasible, sensitive to local context).³² The analysis of performance and benefits could be conducted on an ex-ante (pre-investment) and/or ex-post (after-investment) basis.

To support assessment of entity-level adaptation and resilience investments, individual measures or activity-level metrics/indicators should be amenable to aggregation to determine the entities' overall alignment with positive adaptation and resilience outcomes.

Metrics/indicators should be included in annual impact reporting, including, where possible, independent third-party review to assess alignment with the Use of Proceeds Framework and to assess the attainment of investment objectives and A&R benefits.

Examples include:
IDFC (2023), Common Principles for Climate Adaptation Finance Tracking, https://www.idfc.org/wp-content/uploads/2023/11/idfc-2023-common-principles-adaptation.pdf
IPAM (2021), Adaptation Metrics Mapping Evaluation Framework, https://adaptationmetrics.org/sites/AMME-Framework.pdf
ICMA (2023), Handbook - Harmonized Framework for Impact Reporting, https://www.icmagroup.org/assets/documents/Sustainable-finance/2023-updates/Handbook-Harmonised-framework-for-impact-reporting-June-2023-220623.pdf

Annex 1. Sharm-El-Sheikh Adaptation Agenda

In 2022, the COP27 Presidency set out the Sharm-El-Sheikh Adaptation Agenda, which is a set of 30 global adaptation targets to be reached by 2030, in line with the Race to Resilience goal of building resilience across five impact systems: Food and agriculture; water and nature; coastal and oceans; human settlements; and infrastructure; including enabling solutions for planning and finance.³³ We recognize that work is also on-going to develop a Global Goal on Adaptation.

mpact System	Sharm-El-Sheikh Adaptation Agenda with Global 2030 Adaptation Outcome Targets ³⁵
. Food Security and Agriculture Systems	Climate resilient, sustainable agriculture increases yields by 17% and reduces farm level greenhouse gas (GHG) emissions by 21%, without expansion of the agricultural frontier.
	Halve the share of food production lost, and per capita food waste (relative to 2019).
	Healthy alternative proteins capture 15% of the global meat and seafood market.
	The global consumption of fruits, vegetables, seeds, nuts and legumes increases 1.5 times.
2. Water and Nature Systems	Protection of 45 million hectares (lands and inland waters), 2 billion hectares sustainable management and 350 million hectares restoration of land securing legal indigenous and local communities with use of nature-based solutions to improve water security and livelihoods.
	By 2025: financial institutions contribute to halting land conversion by eliminating commodity-driven deforestation from portfolios and tap into nature-based solutions investment opportunities of USD 354 billion/year needed by 2030.
	Water systems are smart, efficient and robust with a reduction in water loss through leakage.
	Wastewater systems maximise recycling and reuse alongside natural wetland filtration with zero environmental spillage.
	Sustainable irrigation systems are implemented across 20% of global croplands to preserve water availability whilst supporting yield growth
3. Human Settlements Systems	1 billion people have better design, construction and access to finance to live in decent, safe homes.
	Smart and early warning systems reach 3 billion people
	USD 1 trillion invested in nature-based solutions for communities in urban areas.
	Harden social infrastructure to ensure access to basic and essential community services.
	Increased use of waste as a secondary resource boosts the livelihoods of informal workers and reduces open waste burning by 60%, lowering pollution levels and improving the health of local communities.
. Ocean and Coastal Systems	Invest USD 4 billion to secure the future of 15 million hectares of mangroves globally through collective action on halting mangrove loss, restoring half of recent losses, doubling protection of mangroves globally and ensuring sustainable long-term finance for all existing mangroves.
	Halt loss, protect and restore coral reefs to support people in tropical communities.
	Halt loss, protect and restore seagrass, marshes, and kelp forests to support people in temperate communities.
	Urban coastline is protected by grey and hybrid solutions.

³³ https://climatechampions.unfccc.int/system/sharm-el-sheikh-adaptation-agenda/

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Note: Adaptation Agenda for Africa also exists, see UN Climate Champions (2022), Sharm-El-Sheikh Adaptation Agenda: The global transformations towards adaptive and resilient development, https://climatechampions.unfccc.int/wp-content/uploads/2022/11/SeS-Adaptation-Agenda_Complete-Report-COP27_FINAL-1.pdf

United Nations Framework Convention on Climate Change (2022), Sharm El-Sheikh Adaptation Agenda, https://climatechampions.unfccc.int/wp-content/uploads/2022/11/SeS-Adaptation-Agenda_Complete-Report-COP27_FINAL-1.pdf

5. Infrastructure Systems	A diverse set of energy generation sources enable affordable access to electricity for 679 million unconnected people and higher quality access for 1 billion underserved people through climate resilient energy systems.
	2.4 billion people with access to clean cooking through at least USD 10 billion/year in innovative finance for clean cooking action worldwide.
	585 GW of battery storage capacity and extension of transmission and distribution networks enable decentralised generation and consumption.
	2.2 billion people access low-cost, clean vehicles and mobility solutions through the expansion of affordable public and private transport services.
Cross subtings Dispusing	Transport infrastructure is resilient to climate hazards through adoption of new technology, design and materials.
. Cross-cutting: Planning	10,000 cities and 100 regional governments have evidence-based, actionable adaptation plans.
	2,000 of the world's largest companies developed actionable adaptation plans.
	Universal access to the tools and information required to integrate climate risks into decision making from local to global levels.
	Operationalisation of National Adaptation Plans and Locally-Led Principles, enabling adaptation in a country-driven localised and consultative manner.
7. Crosscutting: Finance	Private sector integrates physical climate risks into investment decisions and continues to innovate mechanisms for financing adaptation and resilience so as to enable the mobilisation of the USD 140 to USD 300 billion that will be needed across both public and private sources.
	Public finance actors increase provision of climate finance and allocate 50% of climate funds to adaptation and resilience.
	Global property and casualty insurance sector has an industry capabilities framework, actively supports project implementation, and institutionalises a longer-term industry approach to climate adaptation.

 $^{^{35}\ \} https://climatechampions.unfccc.int/system/sharm-el-sheikh-adaptation-agenda/$

Note: Adaptation Agenda for Africa also exists, see UN Climate Champions (2022), Sharm-El-Sheikh Adaptation Agenda: The global transformations towards adaptive and resilient development, https://climatechampions.unfccc.int/wp-content/uploads/2022/11/SeS-Adaptation-Agenda_Complete-Report-COP27_FINAL-1.pdf

³⁷ United Nations Framework Convention on Climate Change (2022), Sharm El-Sheikh Adaptation Agenda, https://climatechampions.unfccc.int/wp-content/uploads/2022/11/SeS-Adaptation-Agenda_Complete-Report-COP27_FINAL-1.pdf

Annex 2. Reference literature

Taxonomy / classification frameworks

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Annex 3

Approach:

The Guide builds from the Climate Resilience Classification Framework that was advanced in the White Paper:

Designing a Climate Resilience Classification Framework produced by the Climate Bonds Initiative and supported and published by the United Nations Office for Disaster Risk Reduction (UNDRR). By aligning to the classification structure and definitions as presented in the White Paper, this Guide promotes consistency and common understanding across market participants in what constitutes Adaptation Finance. Although this Guide is grounded in the Classification Framework, it also incorporates insights from a comprehensive range of market, regulatory, and voluntary guidance, standards, frameworks, and tools, including:

- ACT Adaptation Methodology (ACT)
- Adaptation Performance Measurement Framework (Green Climate Fund)
- Adaptation Solutions Taxonomy (IADB and GARI)
- Climate Adaptation and Resilience Principles (Climate Bonds Initiative)

- Common Principles for Climate Change Adaptation Finance Tracking (IDFC)
- DAC Rio Markers for Climate: Handbook (OECD)
- DRR and Climate Change Adaptation Taxonomy for Public Budget Tagging (UNDRR)
- EU Taxonomy for Sustainable Activities (Adaptation)
- FAST-Infra Sustainable Infrastructure Label
- Framework and Principles for Climate Resilience Metrics in Financing Operations (IADB)
- Green / Social Bond Principles and associated resources e.g., the Green / Social Bond Principles Handbook (ICMA)
- Green / Social Loan Principles (LMA and APLMA)
- Joint Methodology for Tracking Climate Change Adaptation Finance (MDBs)
- Resilience Rating System (World Bank)
- Sustainable Development Goals Finance Taxonomy
 (UN)
- UK Green Taxonomy (UK GTAG)

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