Climate Bonds Resilience Taxonomy

Climate Bonds Initiative

climatebonds.net

What is the Climate Bonds Resilience Taxonomy?

The Climate Bonds Resilience Taxonomy (CBRT) is a framework (in the form of a spreadsheet/database) for identifying, classifying, and qualifying investments that contribute to climate adaptation and resilience. It features investments that directly deal with the impacts of climate change and strengthen resilience to physical climate risks.

The CBRT aims to accelerate the allocation and mobilisation of urgently needed finance towards climate resilience investments, through the use of debt instruments such as bonds and loans, by improving the identification and assessment of climate resilience investments. It may also be used to support capital allocation decision making for climate resilience by financial institutions, real economy firms, and public bodies, in addition to informing the development of national or regional sustainable taxonomies that consider climate resilience or adaptation.

Identification and classification of climate resilience investments

Classification of climate resilience investment themes and sectors under CBRT

The CBRT covers seven climate resilience themes with investments classified into different sectors and subsectors. Secondary sectors are also identified to reflect the cross-cutting nature of resilience investments and potential relevance of an investment to multiple sectors. This structure enables it to be mapped onto widely recognised sector classification systems, such as ISIC (International Standard Industrial Classification of All Economic Activities), to ensure inter-operability with the broadest possible range of regional and national taxonomies. This broad and comprehensive classification aligns with the need for climate resilience finance across a diverse range of economic, social, and environmental priorities.

Resilient Social Systems

Systems and services for ensuring social well-being, safety, and the creation/protection of social capital across populations.

Building the climate awareness and climate resilience of social systems and services so that populations, communities, households, and individuals are better prepared for and able to cope with climate change impacts.

Resilient Agrifood Systems

Systems for the production and provision of food and other related products.

Building the climate resilience of agrifood systems and supply chains so that the provision, availability and affordability of nutritious food and related products, as well as food security, are not adversely affected.

Resilient Cities & Settlements

Human settlements whether large (e.g., cities) or small (e.g., villages), urban or rural.

Building the climate resilience of cities and settlements so that the well-being, safety, security, livelihood, and economic potential of inhabitants are not adversely affected.

Resilient Infrastructure

Infrastructure that provides essential services on which populations and wider economic activity depend.

Building the climate resilience of essential infrastructure services so that the reliability, safety, access, and affordability of these services are not adversely affected.

Resilient Health Systems

Systems, facilities, services, and capacities for protecting and improving human health and responding to new health challenges and emergencies.

Building the climate resilience of healthcare services and facilities so that they can respond to climate-driven health priorities and minimise adverse effects of climate on human health.

Resilient Natural Systems

Terrestrial, freshwater, coastal and marine ecosystems, the biodiversity they support, and the natural capital and ecosystem services that they provide.

Building the climate resilience of natural ecosystems (e.g., forests, grasslands, aquatic, etc.) so that their intrinsic biodiversity, natural capital, ecosystems services, and cultural significance are maintained and/or enhanced.

Resilient Industry & Commerce

Industrial and commercial operations encompassing extractive industries, manufacturing, and service-based industries.

Building the climate resilience of industrial and commercial operations and supply chains so that their economic output, operational safety, affordability of products and services, and the provision of employment are not adversely affected.

Within each Climate Resilience Theme, the CBRT organises investments by recognisable sectors and subsectors, to enable the easy location and identification of investments. For example, within the Resilient Infrastructure theme, investments are organised within four sectors: energy infrastructure, transport infrastructure, ICT infrastructure and water infrastructure.

- Within the transport infrastructure sector, investments are further categorised under four subsectors: aviation, ports, railways, and roads.
- The CBRT also identifies secondary sectors for some investments, which may be categorised under more than one sector or subsector.

CBRT rationale for subsector and secondary sector classification

Secondary sector classification allows CBRT users to identify all investments relevant to a given theme, sector or subsector. For example, an investment that makes water supplies more resilient to water stress will likely be implemented by a water utility

(primary theme: Resilient Infrastructure) while providing benefits to the communities served

(secondary theme: Resilient Social Systems) and/or contributing towards improved health outcomes

(secondary theme: Resilient Health Systems).

Addressing physical climate risks in the CBRT classification structure

The classification and identification of climate resilience investments in the CBRT goes beyond simply locating investments within a theme, sector, and subsector structure. It also takes account of the specific physical climate risks to which those investments are building resilience. This means that for an investment to be included in the CBRT it must also respond to the consequences of at least one physical climate hazard, such as:

- Heat stress
- Cold stress
- Water stress
- Flood damage
- Storm damage
- Mass movement damage
- Wildfire damage
- Changes to marine conditions
- Multi-hazard (to cover investments that address the consequence of more than one physical climate hazard)

Classification of investments under the CBRT

1

CBRT classifies investments based on the investment type.

Additionally, the CBRT also differentiates between investments in activities and investments in measures.

- **Activities** refer to economic activities that deliver goods or services, such as the construction of residential buildings.
- **Measures** refer to specific interventions within an asset, activity or entity, such as the installation of water-efficient fixtures and fittings in residential buildings.

2

CBRT classifies investments based on how they contribute towards climate resilience.

In line with other leading taxonomies, such as the EU Sustainable Finance taxonomy, the CBRT classification structure differentiates between investments that are adapted or enabling.

- **Adapted (or adapting) investments** are themselves climate resilient, incorporating features that reduce material physical climate risks to the investment itself.
- **Enabling investments** enable the climate resilience of other assets, activities or entities.

Based on these classification structures, the CBRT identifies four investment types based on how they contribute to climate resilience.

1. Adapted activities are activities that have been made resilient to all material climate risks, such as the operation or maintenance of a water supply system that is resilient to water stress.
2. Enabling activities are activities that make other activities more climate resilient, such as the manufacture of leak detection systems.
3. Adapting measures are measures that are implemented within an activity to make that activity more climate resilient, such as the installation of leak detection equipment within a water supply system.
4. Enabling measures are measures that are implemented within an activity to make other activities more climate resilient, for example, the expansion of water supply systems into water-stressed locations.

In this way, the CBRT classifies and identifies climate resilience investments on a granular and specific basis, taking account of:

- the theme, sector, and subsector within which they are located;
- the specific physical climate hazard consequences to which they respond; and,
- the specific investment type and how it contributes towards climate resilience.

Who can use the CBRT?

<table>
<tr><th></th><th colspan="2">APPLICATIONS</th></tr>
<tr><th></th><th>BROAD APPLICATIONS</th><th>DEBT ISSUANCES (BONDS & LOANS)</th></tr>
<tr><td rowspan="3">Government

Regulators,
Ministries, Treasuries,
State-owned Enterprises,
Bi-lateral and
Multi-lateral aid agencies.</td><td>Guide budget planning and tagging (sectoral and macro) to identify A&R pipelines</td><td rowspan="7">Support issuance of sovereign and sub-sovereign corporate or FI debt that credibly build resilience

Guide investors and underwriters to assess the credentials of resilience debt issuances</td></tr>
<tr><td>Provide targeted financial incentives for credible resilience initiatives</td></tr>
<tr><td>Support the development of national and regional taxonomies and standards on A&R</td></tr>
<tr><td rowspan="3">Financial Institutions

Banks, Investors,
Asset Managers, DFIs, etc</td><td>Guide investors on how to assess the credibility of resilience investment opportunities</td></tr>
<tr><td>Underpin the design of financial services and products that are taxonomy aligned (e.g. investment funds, loan facilities)</td></tr>
<tr><td>Support DFIs in identifying resilience investments for concessional finance and derisking</td></tr>
<tr><td>Real Economy Sectors

Corporates,
non-financial businesses</td><td>Inform corporate strategic decision-making, reporting and disclosures</td></tr>
<tr><td>Market observers

SPO Providers, Credit Rating Agencies,
Standard Setters, etc.</td><td>Inform assessment, screening & assurance of the credentials of resilience investments and/or action</td><td>Guide market observers on how to support the development and verifiction of green/sustainable bond frameworks that include A&R Use of Proceeds</td></tr>
</table>

How to use the CBRT

There are two potential entry points for using the CBRT

1

Step 1: Identify the investment

Entry point 1: Identifying potential resilience investments

- Filter the spreadsheet according to the relevant ‘ climate hazard consequence(s)’, ‘resilience theme(s)’/ ‘ primary sector(s)’/ ‘ primary subsector(s)’

Entry point 2: Locating a specific investment

- Locate the specified investment in the CBRT spreadsheet by searching the ‘investment” column

2

Step 2: Identify the Qualification/Certification criteria for a specified resilience investment

- After locating the investment, check whether the investment meet the following three (3) requirements:
  - It must make a substantial contribution to climate resilience, i.e. delivering a measurable reduction in vulnerability (or exposure) to physical climate impacts in the investment context.
  - Any potential maladaptation risks must be managed, i.e. the risk of an unintended measurable increase in vulnerability (or exposure) in the investment context and/or in the wider system within which the investment is situated.
  - It must do no significant harm (DNSH) to climate change mitigation objectives, i.e. avoid undermining climate mitigation objectives by causing a significant increase in GHG emissions.

3

Step 3: Determine which type of assessment the investment requires

- For each identified investment, the CBRT provides investment-specific guidance and screening criteria where needed, defining how to check that an investment makes a substantial contribution to climate resilience and indicating where a check is required for maladaptation and DNSH

Does the adaption measure present maladaption risks?

No

Is the adapting measure able to deliver substantial contribution across a broad range of contexts?

Yes

Investment is automatically eligible

- investments require *no assessments and are* ***automatically eligible*** on the grounds that they are expected to make a substantial contribution to climate resilience across a broad range of contexts and do not entail significant maladaptation risks.
- Such investments can ONLY be *adapting measures.*

No

Simplified assessment required

- A simplified assessment is a technical specification check. The technical specification check criteria ensure an investment makes substantial contribution to climate resilience.

Yes

Process-based assesment required

- Process-based assessment involves checking an investment's contribution to climate resilience based on the steps taken to identify, address and manage material physical climate risks.
- The assessment can align with globally recognised best practices, industry standards, or regulations, or Customise to specific local contexts and considerations.

4

Step 4: Check investment eligible costs

5

Step 5 (Optional) : Seek Certification under the CBI (see pg 12)

Qualification of climate resilience investments

Requirements for qualifying an investment under the CBRT

In addition to being located within the CBRT classification structure, an investment must meet the following requirements to be aligned with the CBRT:

- It must make a *substantial contribution to climate resilience*, i.e., delivering a measurable reduction in vulnerability (or exposure) to physical climate impacts in the investment context.
- Any potential *maladaptation risks* must be managed, i.e., the risk of an unintended measurable increase in vulnerability (or exposure) in the investment context and/or in the wider system within which the investment is situated.
- It must *do no significant harm* (DNSH) to climate change mitigation objectives, i.e., avoid undermining climate mitigation objectives by causing a significant increase in GHG emissions.

For each identified investment, the CBRT provides investment-specific guidance and screening criteria where needed, defining how to check that an investment makes a substantial contribution to climate resilience and indicating where a check is required for maladaptation and DNSH.

Investments that require no assessment for substantial contribution to climate resilience and maladaptation

Some investments require *no assessment* and are *automatically eligible* on the grounds that they are expected to make a substantial contribution to climate resilience across a broad range of contexts and do not entail significant maladaptation risks. Such investments can only be *adapting measures.*

Investments that require simplified assessment for substantial contribution to climate resilience and maladaptation

Some investments require simplified assessment by the CBRT user. Such investments can only be *adapting measures.*

Defining simplified assessment

What: A simplified assessment is a technical specification check. The technical specification check criteria ensure an investment makes substantial contribution to climate resilience.

When: It is used for investments that do not explicitly entail significant maladaptation risks but require further checks to ensure a significant contribution to climate resilience.

Investments that require process-based assessment for substantial contribution to climate resilience and maladaptation

All investments that are not covered in the above sections i.e., all other *adapting measures, adapted activities, enabling measures,* and *enabling activities* require process-based assessment by the CBRT user. This involves assessing an investment's contribution to climate resilience based on the steps taken to identify, address, and manage material physical climate risks.

These may be carried out as stand-alone assessments by the CBRT user, or through the application of an investment-specific proxy, for investments defined by the CBRT.

Process-based assessment needed to verify that an investment makes a substantial contribution to climate resilience and avoids maladaptation

Adapting measures (checked against a global threshold)

Some *adapting measures* require an investment-level assessment by the CBRT user against a global threshold, in line with the process-based guidance set out in Annex 1 of the CBRT Methodology document and using the global threshold defined in the CBRT.[1]

Adapting measures (checked against a local threshold)

Other *adapting measures* require an investment-level assessment by the user against a local threshold, in line with the process-based guidance set out in Annex 2 of the CBRT Methodology document and using the local threshold units defined in the CBRT (still interim pending CBRT validation by TWGs). [2]

Adapted activities

All *adapted activities* require process-based assessment by the user in line with the process-based guidance set out in Annex 3 of the CBRT Methodology document.

This entails framing the scope of the assessment, assessing the materiality of the target climate impacts that the activity is addressing, and identifying and integrating adapting measures that build resilience to those identified material climate impacts.

Enabling measures

All *enabling measures* require a process-based assessment by the user in line with the process-based guidance set out in Annex 4 of the CBRT Methodology document.

This entails framing the scope of the assessment, assessing all climate impacts that are material to the investment, identifying and integrating adapting measures that build resilience to those identified material climate impacts, and checking that the investment makes a measurable improvement in the climate resilience of activities beyond the activity in which it is implemented.

Enabling activities

All *enabling activities* require process-based assessment by the user in line with the process-based guidance set out in Annex 5 of the CBRT Methodology document.

This entails framing the scope of the assessment, assessing all material climate impacts, identifying and implementing adapting measures that build resilience to those climate impacts, and checking for an enabling contribution to activities beyond the investment through the provision of a technology, product, service, information, or practice that the CBRT defines as a climate resilience solution.

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1 However, as these thresholds are still pending CBRT validation by technical working groups (TWGs), the Climate Bonds Criteria for Certification against the Climate Bonds Resilience Taxonomy should be used for this purpose in the interim.

2 However, as these thresholds are still pending CBRT validation by TWGs, the Climate Bonds Criteria for Certification against the Climate Bonds Resilience Taxonomy should be used for this purpose in the interim.

Defining proxies

As the CBRT is further developed and validated by TWGs, it will identify investment-specific proxies that may be used to streamline the process of assessing an investment's substantial contribution to climate resilience. These will be subject to review and validation by TWGs.

These proxies are externally-recognised, robust certification and labelling schemes, frameworks or standards, which are often focused in specific sectors, activities or asset types. CBRT users may apply these proxies, where available and appropriate, to confirm that an investment makes a substantial contribution to climate resilience while managing any maladaptation and DNSH risks.

DNSH to mitigation assessment

In addition to being assessed for their substantial contribution to climate resilience and management of any maladaptation risks, investments also require a DNSH check against the mitigation objective in order to be aligned with the CBRT. This is to ensure that investments that contribute towards climate resilience do not undermine other climate-related objectives, specifically the need to reduce greenhouse gas (GHG) emissions.

Where investments are flagged as having the potential for significant harm to climate mitigation objectives, CBRT users should check that the investment:

- meets any relevant, existing sector-specific DNSH to mitigation criteria from credible and authoritative sources, such as the EU Taxonomy or other sustainable finance taxonomies; or
- is not included in any fossil fuel power/electricity generation activity or any activity dedicated to the exploration, refinement, supply or transportation of fossil fuels; or
- is not expected to result in a material increase GHG emissions intensity over the investment lifespan.

DNSH to environmental objectives

Sustainable use and protection of water and marine resources: does the investment entail the potential for large-scale water abstraction (quantity) or discharge into water bodies (quality)? (Y/N)

Transition to a circular economy: does the investment entail the potential for generating large amounts or waste, and/or for failing to re-use or recycle that waste? (Y/N)

Protection and restoration of biodiversity and ecosystems: Does the investment entail the potential for damage to or loss of natural habitats? (Y/N)

Pollution prevention and control: Does the investment entail the potential for release of harmful substances into the environment? (Y/N)

Investment cost eligible under CBRT

Once an investment has passed all the above checks, the sum of the investment costs that are eligible under the CBRT can be defined, which depends upon the investment type:

- Adapting measures: only the costs of the specific intervention are eligible.
- Adapted activities: only the cost of adaptation measures implemented within the activity are eligible.
- Enabling measures: only the cost of the enabling measure itself is eligible.
- Enabling activities: the entire cost of the activity is eligible (both capital and operating expenditure).

Certification against CBRT

Projects aligned with the CBRT can now be certified using the Climate Bonds Standard Resilience Criteria, which enable issuers to demonstrate that their investments are consistent with the requirements of the CBRT. Such CBRT investments and associated Criteria are relevant to Use of Proceeds (UoP) Certification and Asset Certification only.

For the avoidance of doubt, investments that are not listed verbatim in the CBRT, but closely match an investment listed in the CBRT, are also eligible for Certification and included in the definition of CBRT investments. An investment is deemed to closely match one listed in the CBRT where it satisfies the following:

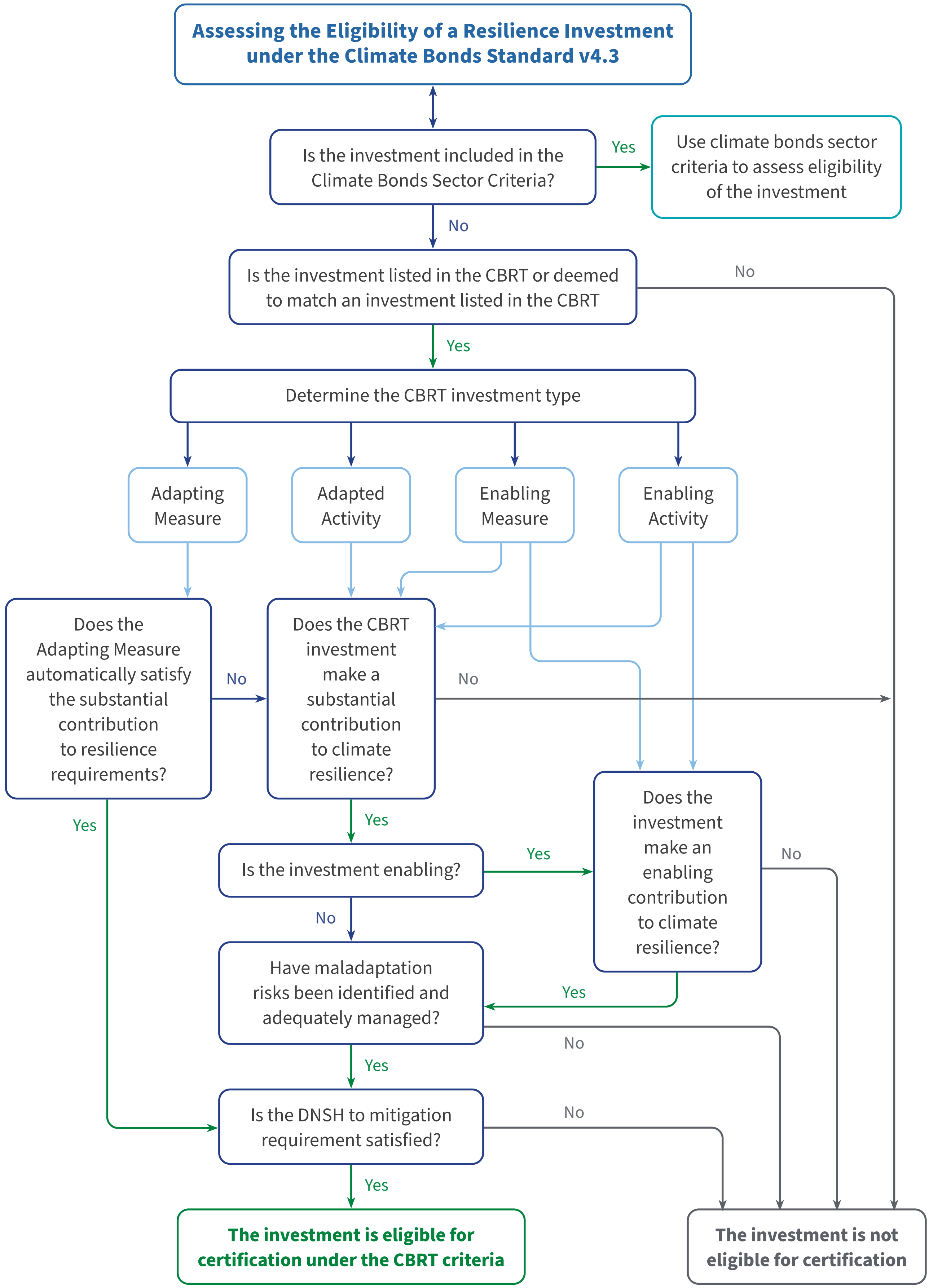
- ✓ Belongs to the same theme/sector/subsector with the matched CBRT investment.
- ✓ Addresses the same climate hazard consequence.
- ✓ Matches the investment type (adapted activity, enabling activity, adapting measure and enabling measure).
- ✓ Matches the equivalent output-level substantial contribution to resilience.
- ✓ Satisfies the three CBRT Criteria outlined in step 2

Issuers/applicants are required to document how the above steps have been followed so that proposed investments can be identified as CBRT investments. If this is not possible, the investment may be submitted to Climate Bonds for review and consideration as an addition to the CBRT.

CBRT investments are Certifiable if they satisfy all the following requirements:

1. **The investment makes a substantial contribution to climate resilience.**
2. **Any associated maladaptation risks have been identified and managed.**
3. **The investment does not cause significant harm to climate mitigation objectives.**

Resilience Investment Certification pathway



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