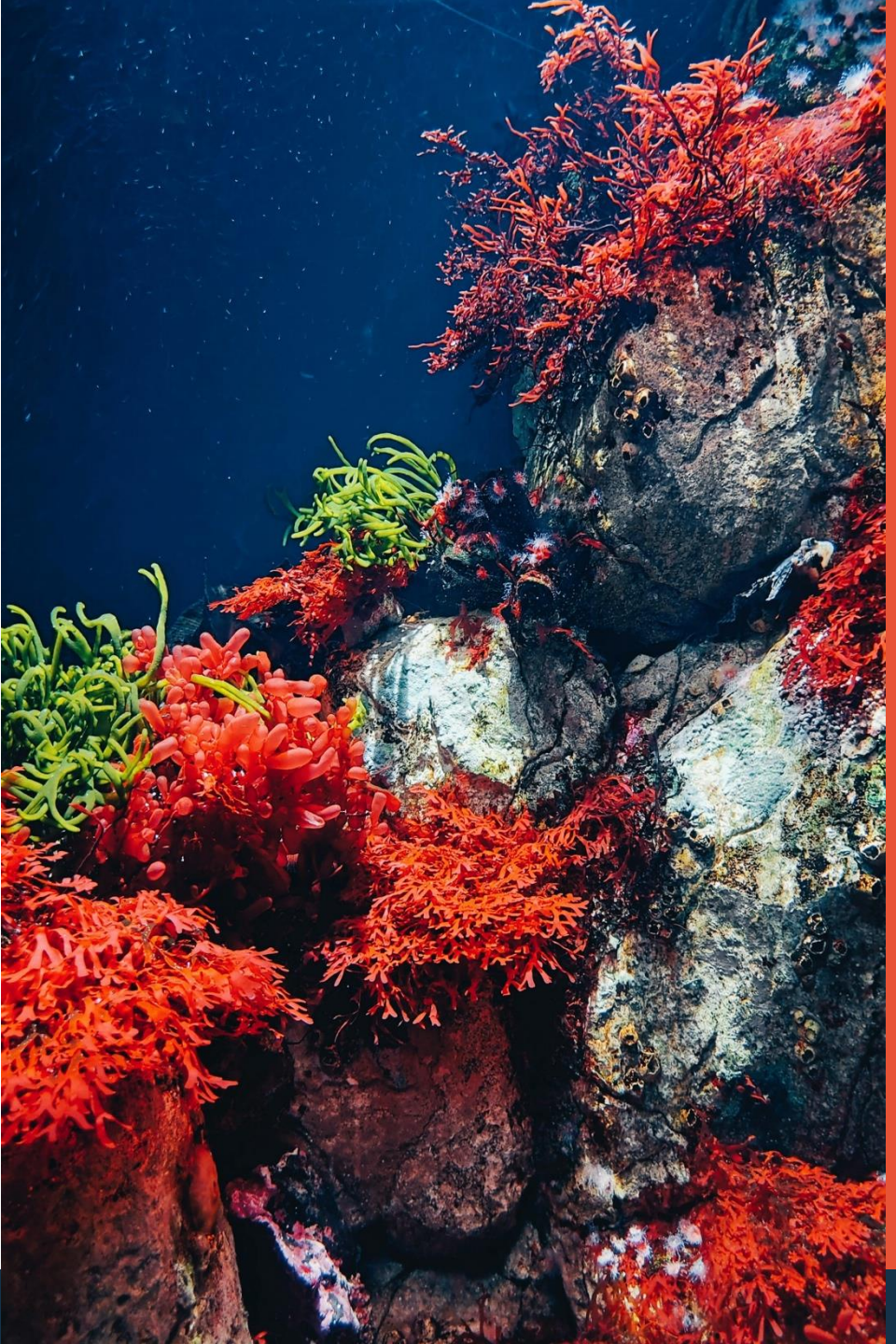


14 May 2026

UNEP FI Climate Adaptation & Resilience Team

Strengthening Private Sector's Business Resilience

About UNEP FI

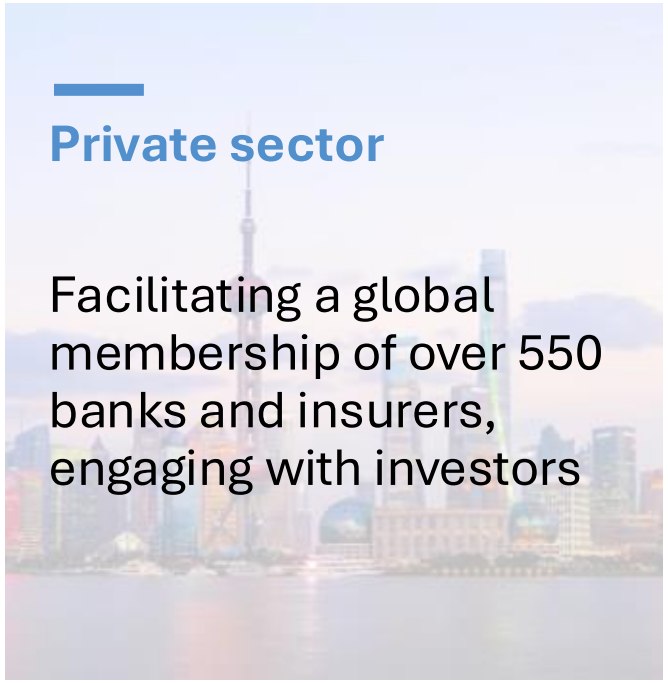
A project in partnership with:

unepfi.org

Our work and role

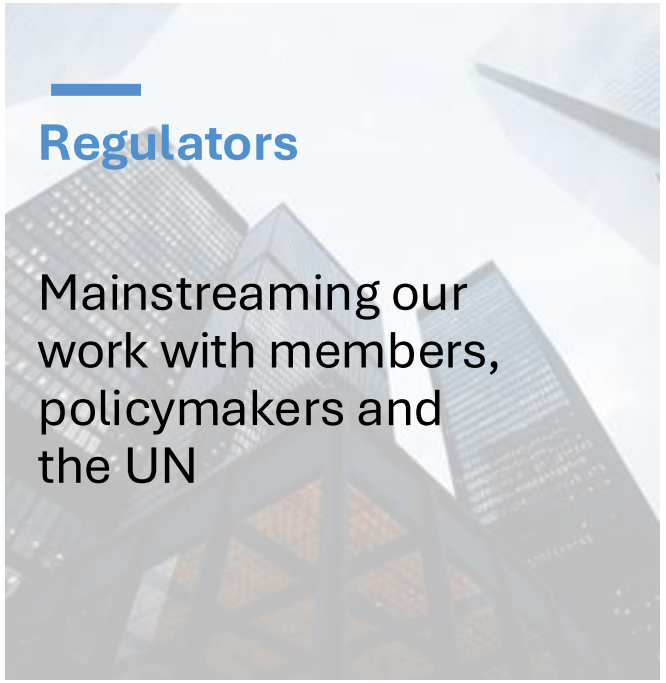
United Nations

Amplifying the voice of the finance sector in UN work



Private sector

Facilitating a global membership of over 550 banks and insurers, engaging with investors



Regulators

Mainstreaming our work with members, policymakers and the UN

About the Adaptation & Resilience team

A&R core team

Paul Smith
A&R Lead

Gary Power
Snr. Consultant

Diana Diaz
Consultant

A core team focused on A&R across UNEP FI and wider partners

UNEP FI thematic areas

- **Climate**
- **Human rights**
- **Nature**
- **Healthy and inclusive economies**

Partner frameworks & programs (non-exhaustive)

UN environment programme | finance initiative — Principles for Responsible Banking

PRI Principles for Responsible Investment

VULNERABLE TWENTY GROUP

Adaptation & Resilience Investors Collaborative

UN environment programme | finance initiative — Principles for Sustainable Insurance

Risk Centre
Helping UNEP FI's members take an integrated approach to sustainability risks

ADB · AIIB Asian Infrastructure Investment Bank · CEB · European Bank for Reconstruction and Development · European Investment Bank · IDB · IDB Invest · IsDB Islamic Development Bank · New Development Bank · World Bank Group

Joint MDB working group members

UNEP FI Adaptation and Resilience strategic engagements

ARIC
Adaptation & Resilience Investors Collaborative

Introduction
A partnership of development finance institutions working to accelerate and scale private sector investment in climate adaptation and resilience.

Membership/Engagement scope

DFIs
British International Investment · cdp · FMO Entrepreneurial Development Bank · FinDev Canada · KFW · AFD Agence Française de Développement · PROPARCO Groupe AFD

MDBs
Joint MDB Adaptation WG co-chairs

Development Agencies
Foreign, Commonwealth & Development Office

Other Global Institutions
Global Center on Adaptation · Global Innovation Fund

UNEP FI role
Secretariat and technical lead across workstreams.

CAIL
Climate Adaptation Information & Learning Project

Introduction
Facilitating Adaptation and Resilience-related information exchange across finance actors through regional Communities of Practice (CoP).

Membership/Engagement scope
Representative regional CoPs across LAC, SSA and SEA encompassing actors across;
- Financial Institutions
- Finance sector institutions
- Real economy actors

UNEP FI role
Identifying and leading CoP design and delivery across 2024/2025.

PRB
Principles for Responsible Banking Adaptation WG

Introduction
A network of global banks working to mainstream adaptation financing and increase portfolio resilience.

Membership/Engagement scope
Bank of Jiangsu · Nationwide · MCB · Crédit Agricole · Standard Chartered · First Abu Dhabi Bank · Rabobank · Standard Bank · Produbanco Grupo Promerica · ING

UNEP FI role
Program lead, developing implementation methodology and guidance materials.

RFM
Resilience Finance Mobilisation Project in Kenya

Introduction
Mobilising finance for priority A&R needs in Kenya across circular economy, water and Agricultural resilience thematics.

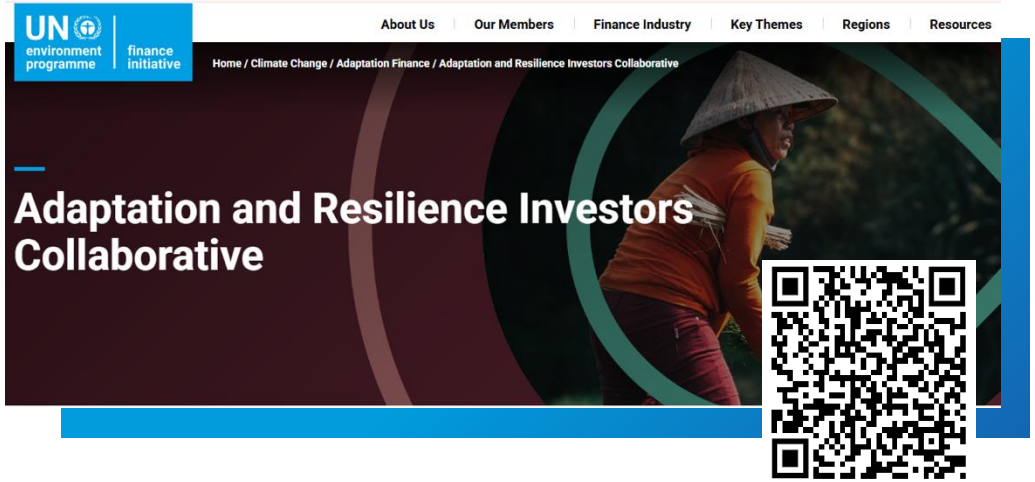
Membership/Engagement scope
- Scaled seaweed production
- Water services & utility financing
- Agricultural resilience

UNEP FI role
Program lead, developing financial pathways and connecting stakeholders in support of finance mobilisation.

Publications and work supporting A&R action

The '*Investors Resilience Challenge*'

The '*Adaptation & Resilience Investors Collaborative*'



The '*A&R Impact Measurement Toolkit: A practical framework for financial institutions*'

Understanding resilience

A project in partnership with:

unepfi.org

Understanding the dimensions of resilience

Shareholder value creation

Value preservation

"Resilience of" / risk

- Optimised CAPEX and OPEX
- Reduced/ maintained cost of capital
- Revenue generation capacity maintained
- Regulatory compliance and reduced liabilities

Value generation

"Resilience through" / opportunity

- Improved access to capital
- Product/service market share
- New market opportunities opened
- Asset optimisation
- Increased asset valuation

Focus of today

Stakeholder value creation

People

- Improved ability to adapt and withstand adverse climate conditions
- Community relations

Planet

- Optimised natural asset, and associated services, utilisation (reduced in efficiency/waste)

Economy

- Improved availability of climate resilient solutions
- Climate resilient services for end users
- Reduced negative socio-economic impacts

Physical climate risk introduction

Physical climate risk refers to the financial risks (and losses) that can arise from the adverse effects of current or future climate conditions.

Illustrative hazards driving physical climate risk

- Temperature variability
- Sea-level rise
- Precipitation variability
- Water stress
- Flood
- Extreme rainfall
- Wildfire
- Extreme heat
- Drought
- Cyclones (hurricanes and typhoons)

Note: The physical climate risk drivers outlined are illustrative examples that may be material to an investment depending on context - additional resources are available in the Annex of this document to support investors in more comprehensively understanding and engaging on physical climate risk drivers

Illustrative climate-driven impacts across sectors

Agriculture

- Decline in yields quality and/or quantity
- Crop loss
- Increased pest and disease occurrence
- Post-harvest loss increases
- Decreased livestock productivity

Real Estate

- Devaluation of assets
- Increased operating costs due to higher energy demand for cooling
- Increased property damage/loss
- Higher temperatures reducing worker and machine productivity

Manufacturing

- Inadequate water availability\
- Increased energy costs for cooling
- Flood-induced damages
- Infrastructure damages
- Supply chain disruption

Non-exhaustive impa

Assessing risk, its materiality and managing that risk

The high-level approach to physical climate risk assessment and management

1. Screening for physical climate risks

Determining if the counterparty's assets, operations and workforce are exposed and sensitive to physical climate risk drivers that may affect its performance

2. Determining physical climate risk materiality

Determining the materiality* of physical climate risk to the counterparty's performance through a climate risk and vulnerability assessment

3. Identifying adaptation and resilience (A&R) solutions

Identifying A&R solutions to mitigate or avoid the identified material physical climate risks, and engaging with the counterparty to develop an Adaptation Action Plan

4. Managing physical climate risks

Monitoring performance in the implementation of A&R solutions agreed in the Adaptation Action Plan

*Materiality is defined as any climate hazard that may impact counterparty operations and service provision

Physical climate risk drivers

Understanding how physical climate risk drivers can impact a counterparty enables investors to evaluate and manage the potential financial implications

Impact channels & pathways

Direct	**Counterparty's assets/ operations/ workers**	The financial risks and associated impacts vary depending on *frequency* and *severity* of climate hazards and the climate resilience of a counterparty's assets, operations, workforce and business model.
Indirect	**Supply chains**	Financial risk can manifest through a corporate's supply chain, depending on factors such as the diversity and location of suppliers, and the natural resource intensity and shock resilience of its supplies.
	Markets of sale	Financial risks and impacts vary depending on climate-related events and climate-driven price shocks, and the company's capacity to shift customer base or pass through costs as appropriate/needed to customers.

Risk to counterparty

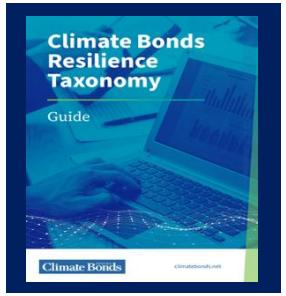
- Revenue loss
- Cost increase
- Decreased asset and company valuation
- Increased cost of capital

Risk to investor

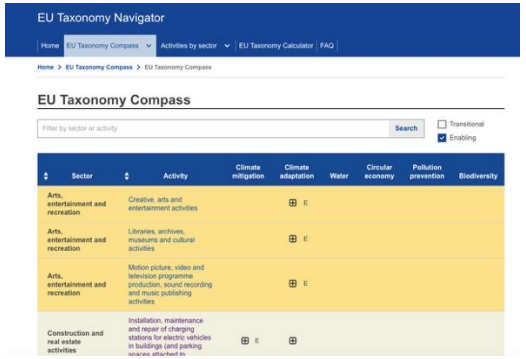
- Financial risk
- Impact risk
- Strategic risk
- Reputational risk

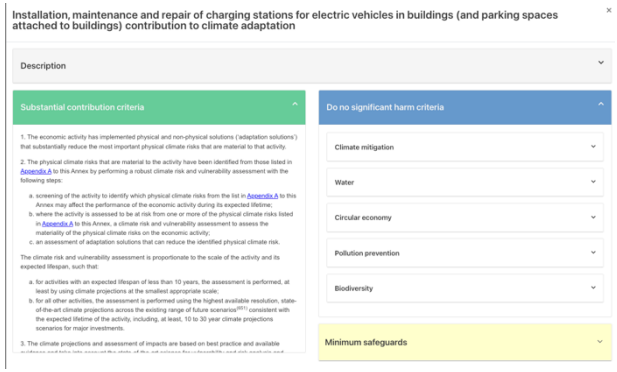
Adaptation & Resilience solutions – representative taxonomies

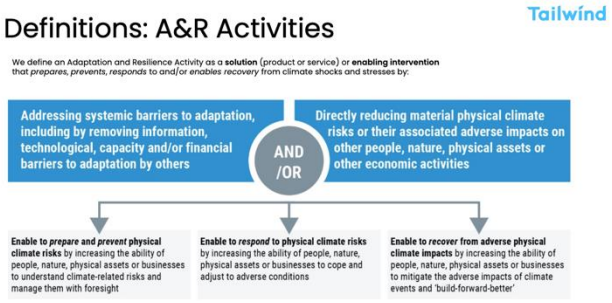
Illustrative taxonomies utilised by organisations to identify and quality A&R solutions

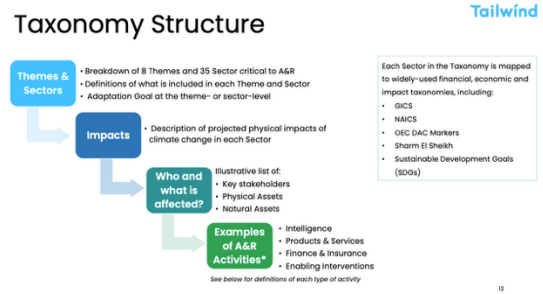


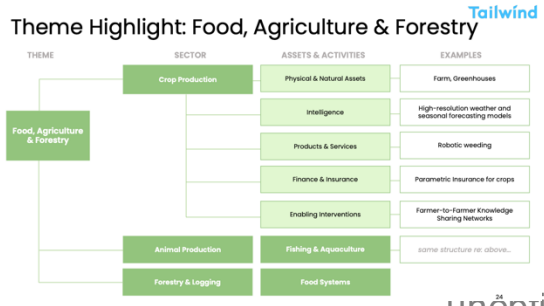
PRIMARY Climate Resilience Theme	PRIMARY Sector	PRIMARY Sub-sector	SECONDARY Sector	Investment	Climate Resilience Solution (Y, N)	Output level Substantial Contribution	Climate Hazard Consequence	Environmental/Social/Economic Impact
Resilient Cities & Settlements	Buildings	Commercial buildings	Urban systems; Commercial trade; Hospitality; Financial services; Other services	Installation of Electrical protection	N	Reduced physical vulnerability due to minimized risk of electrical fire ignition	Wildfire Damage	Asset value loss due to wildfire damage
Resilient Cities & Settlements	Buildings	Commercial buildings	Urban systems; Commercial trade; Hospitality; Financial services; Other services	Installation of Emergency escape and access	N	Improved adaptive capacity due to facilitated evacuation and firefighter access	Wildfire Damage	Asset value loss due to wildfire damage
Resilient Cities & Settlements	Buildings	Commercial buildings	Urban systems; Commercial trade; Hospitality; Financial services; Other services	Installation of Emergency water supply	N	Reduced physical vulnerability due to on-site water availability for fire suppression	Wildfire Damage	Asset value loss due to wildfire damage
Resilient Cities & Settlements	Buildings	Commercial buildings	Urban systems; Commercial trade; Hospitality; Financial services; Other services	Installation of Fire resistant building materials, fixtures and equipment	N	Reduced physical vulnerability due to use of fire-resistant construction materials	Wildfire Damage	Asset value loss due to wildfire damage











Illustrative private sector A&R case

A project in partnership with:

unepfi.org

Private sector A&R Case: Ethiopian Agribusiness

Investor overview	The investor is an agriculture focused fund manager, with experience in coffee investment in Kenya. The investor is looking to expand to wider East African markets to diversify its portfolio and is planning an equity investment in a target company.
Investment target	The investment target is an agribusiness producing coffee in Ethiopia. The business has a wide variety of offtakers for the washed coffee beans it produces, but has a key dependency on its inputs with a single supplier agreement in place across its input requirements (fertiliser etc.).
Investment geography	The agribusiness owns and operates its coffee farm in Jimma-Limu, Ethiopia

Integrating A&R action into due diligence

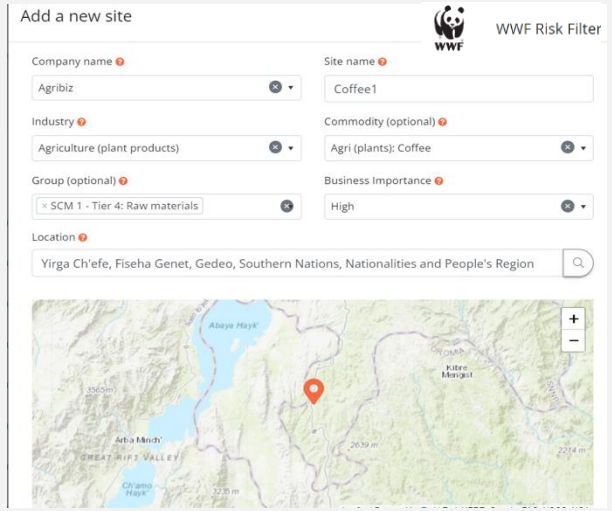
Investment stage	**Screening due diligence**
Objective	Identifying physical drivers that may materially affect the counterparty's performance

Activity

The investor screens the agribusiness company's farm for its exposure and sensitivity to physical climate risk drivers using the Water Risk Filter tool (further/wider tool availability is included in the Annex of this playbook)

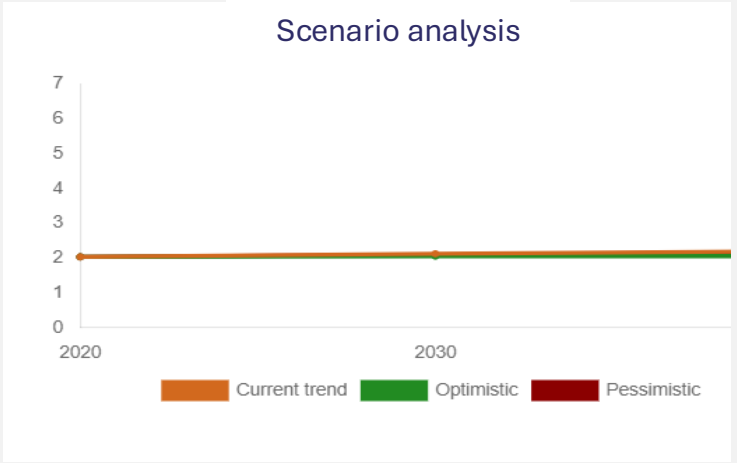
The initial assessment highlights that **flood** and **drought** may materially affect the company's operations. Droughts can stress coffee plants and make them more susceptible to diseases, while floods can damage crops and wash away soil nutrients.

Based on these findings the investor elects to undertake a physical climate risk and vulnerability assessment during the next stage of due diligence.



Hazard	Risk tier
Drought	Med-High
Flood	High

Risk tiers trigger a physical climate risk and vulnerability and adaptive capacity assessment



https://riskfilter.org/water/explore/

Output

Inherent physical climate risk rating **High**

Integrating A&R action into due diligence

Investment stage	**In-depth due diligence**
Objective	Conducting physical climate risk and vulnerability assessment

Activity

The investor performs a climate risk and vulnerability assessment at two levels to determine risk materiality and identify the required A&R solutions to formalise in the adaptation plan which forms part of the ESAP.

Company's assets, operations and workforce vulnerability

Dimension	Guiding questions	Response
Addressing flooding risk	Which measures are in place to avoid or reduce the adverse effects of flooding and droughts on the coffee plantations, if any?	Drainage
Addressing drought		Solar irrigation

Company's capacity, commitment and track record to manage physical climate risk

Dimension	Guiding questions	Risk rating
Governance	Has the company allocated roles and responsibilities for the identification, assessment and management of physical climate risks?	Adequate
Strategy	Is the company's business model concentrated or diversified in terms of suppliers or customer base? Has the company developed an Adaptation Plan?	Inadequate
Risk Management	Is the identification, assessment and management of physical climate risks integrated in the company's risk management system? Does the company have any track record in identifying, assessing and managing physical climate risks? Has the company contracted an insurance policy to cover for the adverse consequences of climate-related events?	Inadequate
Metrics and targets	Does the company have metrics in place to measure its operational and financial performance in relation to physical climate risk and resilience and, where set, progress towards any climate-related targets?	Inadequate

Risk rating determined by the investor. The investor may also incorporate financial materiality assessment based residual climate risk rating

Output	**Residual physical climate risk rating** — **Med-High**

Integrating A&R action into legal agreements

Investment stage	**Investment legal agreement**
Objective	Formalising the Adaptation Action Plan

Activity

Risk dimension		Adaptation solution	Implementation timeframe	Budget	Responsibility
Company assets, operations and workforce	Addressing flooding risk	Installation of of an effective nature-based drainage facility	6 months from capital receipt	$5,000 USD	CEO
	Addressing drought	Installation of a solar irrigation capability	1 year from capital receipt	$35,000 USD	CEO
Company capacity	Governance	Maintenance of existing governance structures and processes – quarterly Exco review	Immediate upon capital receipt	N/A	COO
	Strategy	Refresh of risk management procedures to reflect physical climate risk management	Immediate upon capital receipt	N/A	COO
	Risk Management	Climate resilient training for employees on procedures and processes around climate-related events/shocks	6 months from capital receipt	$300 USD	HR Lead
	Metrics and targets	Integration of physical climate risk metrics into performance monitoring and reporting e.g. management KPIs	6 months from capital receipt	$N/A	COO

Output	**Adaptation Action Plan formalised and in place**

Integrating A&R action into monitoring and reporting

Investment stage	**Monitoring and Reporting**
Objective	Evaluate performance in the implementation of the Adaptation Action Plan

Activity

Risk dimension	Adaptation solution	Implementation timeframe	Indicator for completion	Budget	Responsibility
Addressing flooding risk	Nature-based drainage facility	6 months from capital receipt	# trees planted	$5,000 USD	CEO
Addressing drought	Solar irrigation capability	1 year from capital receipt	Off-grid kW capacity	$35,000 USD	CEO
Governance	Quarterly Exco review	Immediate upon capital receipt	# Exco reviews held	N/A	COO
Strategy	Risk management procedure refresh	Immediate upon capital receipt	% procedures reviewed	N/A	COO
Risk Management	Climate resilient training	6 months from capital receipt	% employees trained	$300 USD	HR Lead
Metrics and targets	Physical climate risk metrics integration	6 months from capital receipt	# metrics reported	$N/A	COO

Output	**Residual physical climate risk rating**	**Low**

Investors should also consider counterparty reporting on climate hazard–related disruptions and impacts to support effective monitoring, reporting, and identification of additional adaptation and resilience needs.

Integrating A&R action into value add

Investment stage	Exit with value add
Objective	Value demonstration

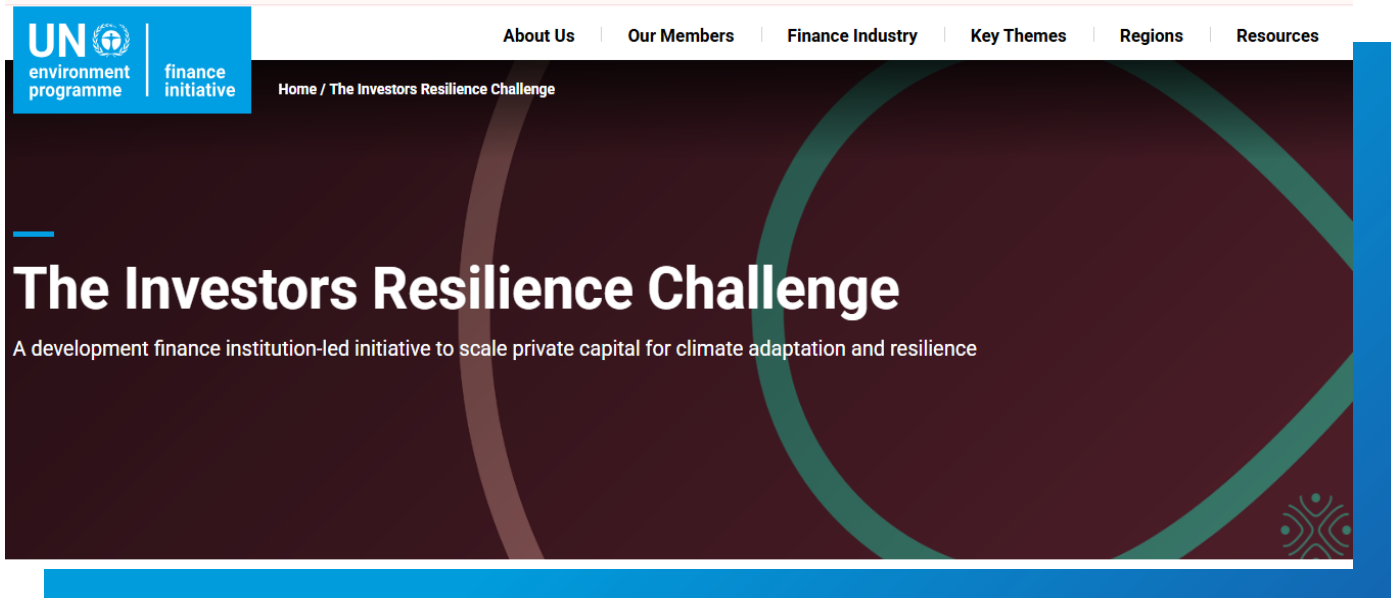
Activity

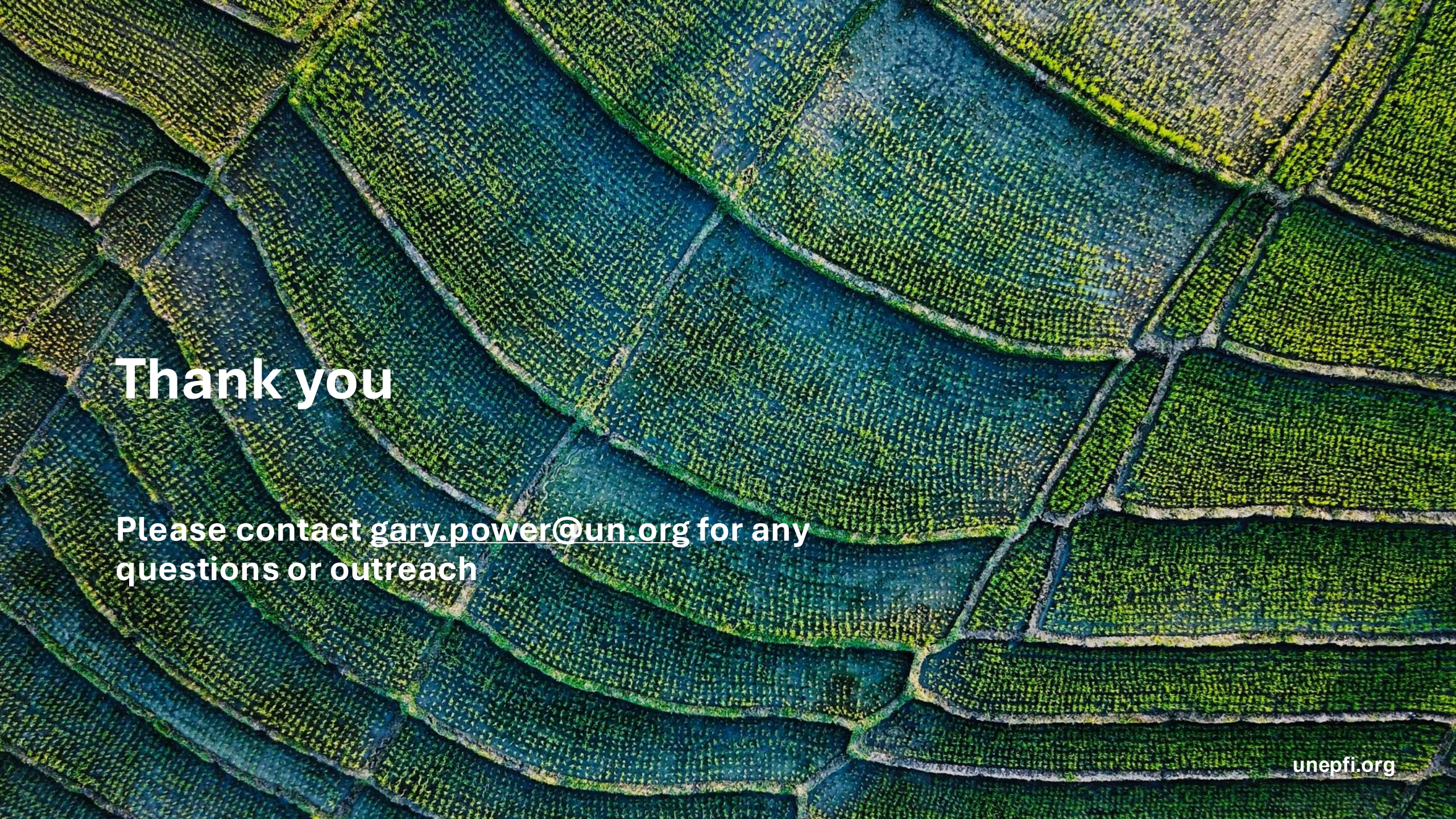
Initiative	Shareholder value creation		Stakeholder value creation		
	Value preservation	*Value creation*	*People*	*Planet*	*Economy*
Reduced farm's vulnerability	✓	✓		✓	
Reduced/maintained cost of capital	✓	✓			
Increased sales volume due to enhanced brand reputation		✓	✓		✓
Asset valuation increase		✓			
Improved management of natural assets for adaptation and resilience			✓	✓	✓

Output	**Successful demonstration of financial, and wider, value creation within the investment, and long-term benefit realisation due to the implementation of A&R solutions**

UNEP FI and private sector resilience engagement

The ‘Investors Resilience Challenge’





Thank you

Please contact gary.power@un.org for any questions or outreach

unepfi.org