

# Green bonds for adaptation

Ecomondo

5 November 2024

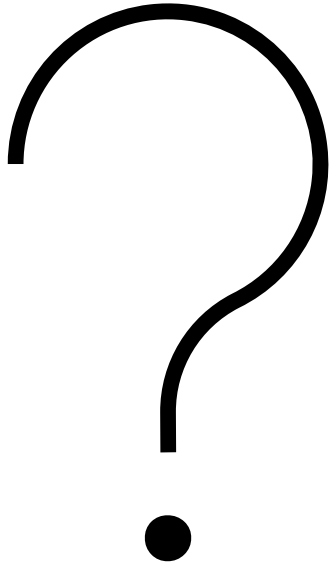






## Lavori per allungare la spiaggia con diecimila metri cubi di sabbia

Partono gli interventi da 200mila euro: in seguito mezzo milione per realizzare nuove scogliere Le ruspe nelle ore notturne per recuperare l'arenile perso durante l'ultima ondata di maltempo



01

Is beach replenishment (ripascimento) qualifying as a climate adaptation measure?

02

Is this a good investment? ROI?  
200k per year for 2 rows of umbrellas?

03

Can a green bond finance this?



Fabrizio Palmucci

- Two decades of experience (PIMCO, Jupiter AM, Moody's)
- Advisor for Corporates & Investors on climate transition financing and frameworks

MOODY'S  
ANALYTICS



Climate Bonds  
INITIATIVE

## Impactivise Works With

### Corporates

Reduce the cost of capital, improve their reputation and enlarge their pool of investors.

### Investors

Implement decarbonization commitments in portfolios, find attractive climate investments and create impact.

# Agenda

01

The GB market  
and available  
principles

02

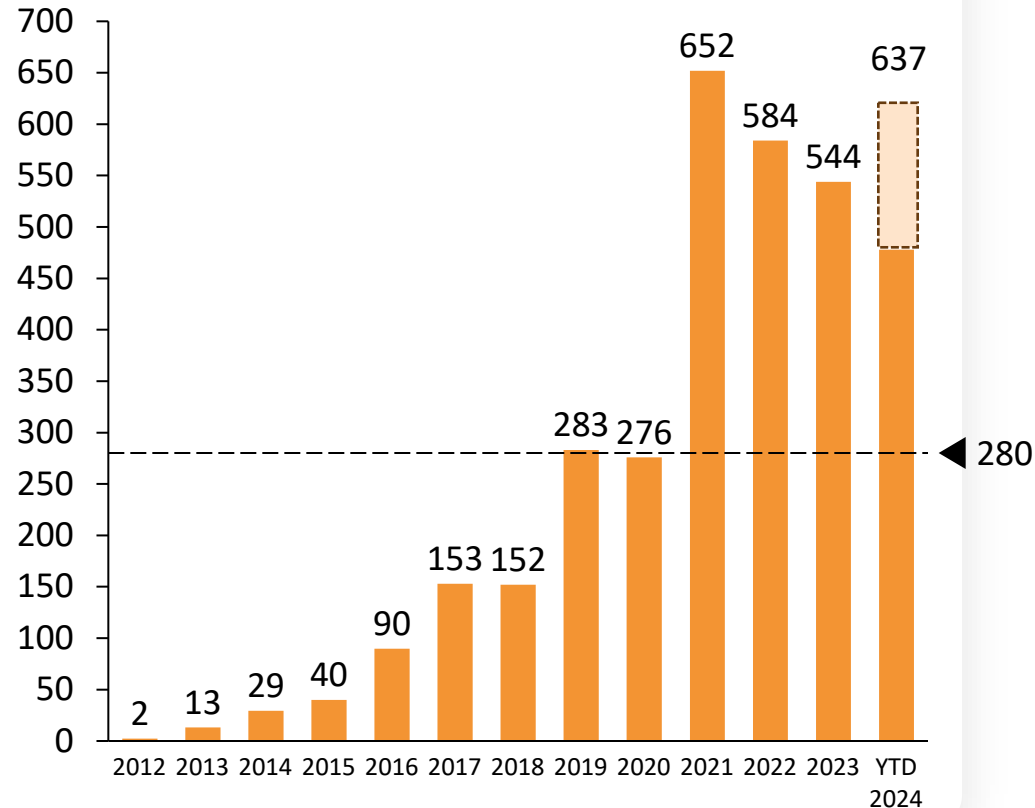
The challenges  
for adaptation

03

The CBI  
taxonomy

# Green bonds have capacity to fund adaptation

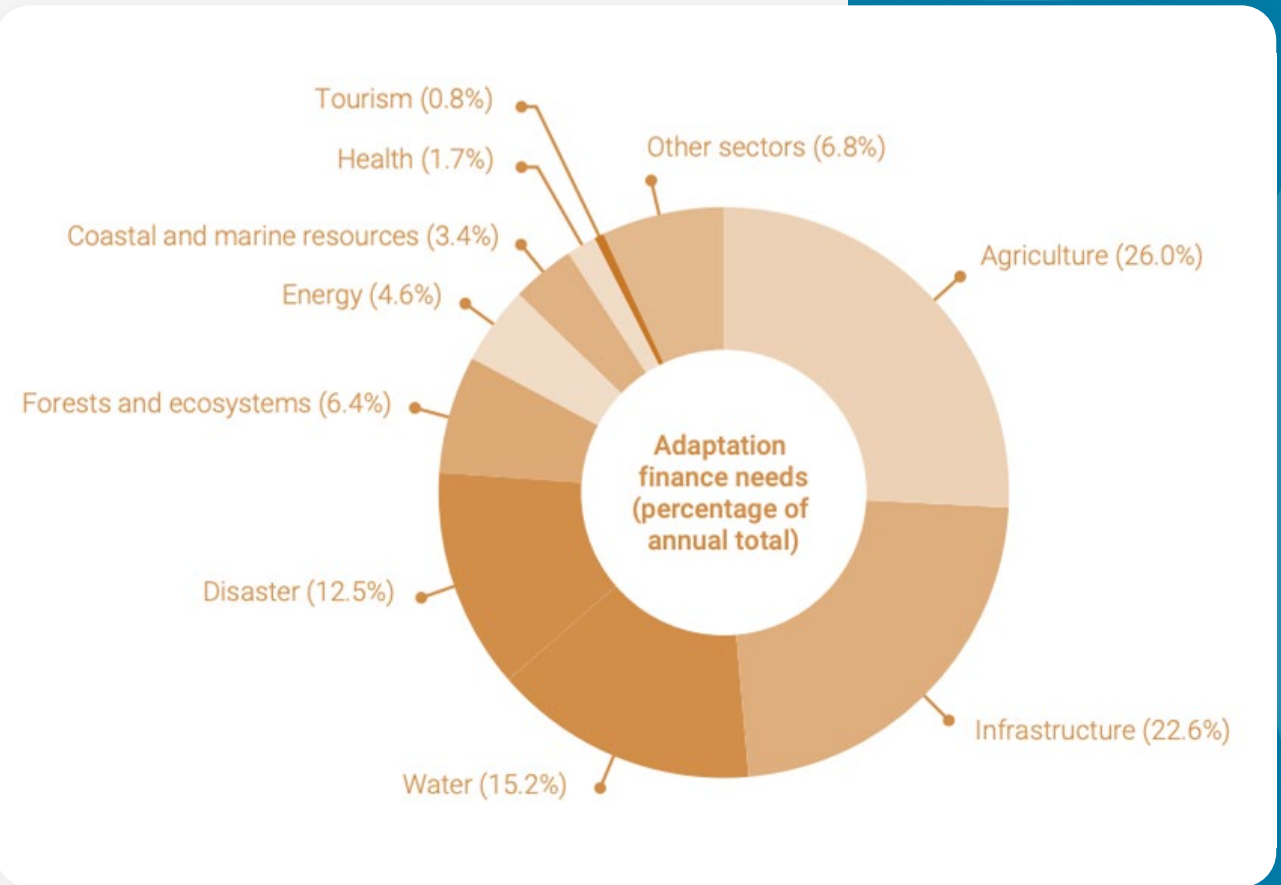
Annual green bond issuance (\$ Bn)



Adaptation finance gap  
c. \$280BN

# Adaptation funding needs

- 90%+ in low & Middle-income countries.
- Adaptation investment is required across sectors.
- **Agriculture, infrastructure, and water** are expected to be the sectors with the highest financing needs.



Source: UN Adaptation Gap Report 2021



# ICMA 4 principles

## Use of proceeds

### Define eligible categories

Climate change adaptation (including efforts to make infrastructure more resilient to impacts of climate change, as well as information support systems, such as climate observation and early warning systems)

1

## Evaluation / Selection

Define environmental objectives & selection process

2

## Process Management

Tracking of the proceeds

3

## Reporting

Use-of-proceeds reporting  
impact reporting

4

# EU Taxonomy: Based on principles



Climate risk and vulnerability assessment incl. materiality on the economic activity & assessment of adaptation solutions.

01

Not adversely affect the adaptation efforts or the level of resilience to physical climate risks of other people, of nature, of cultural heritage, of assets and of other economic activities;

02

Favour nature-based solutions or rely on blue or green infrastructure to the extent possible;

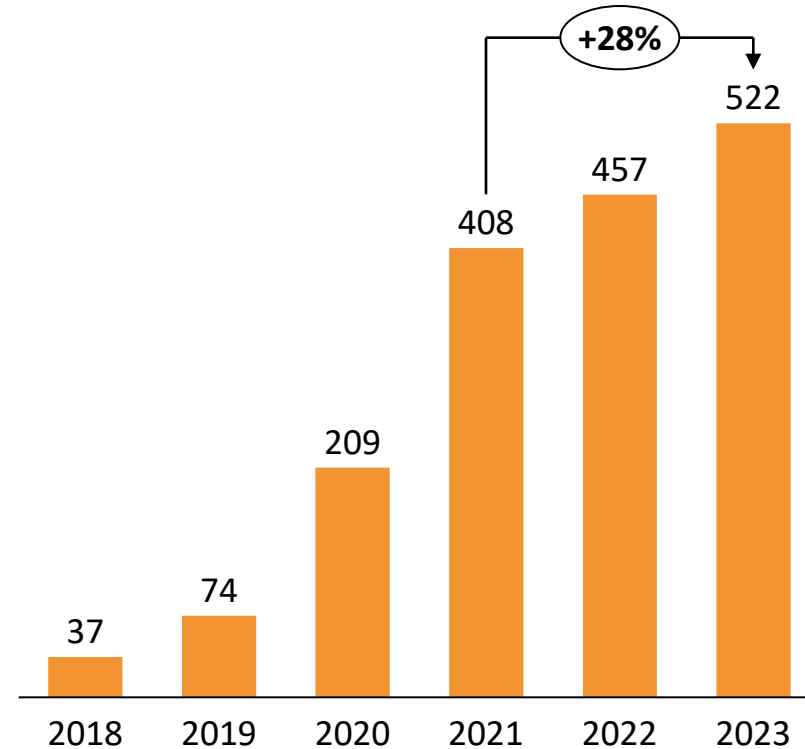
03

Be consistent with local, sectoral, regional or national adaptation plans and strategies;

+ DNSH + Social safeguards

# Investors in climate-focused funds increasing

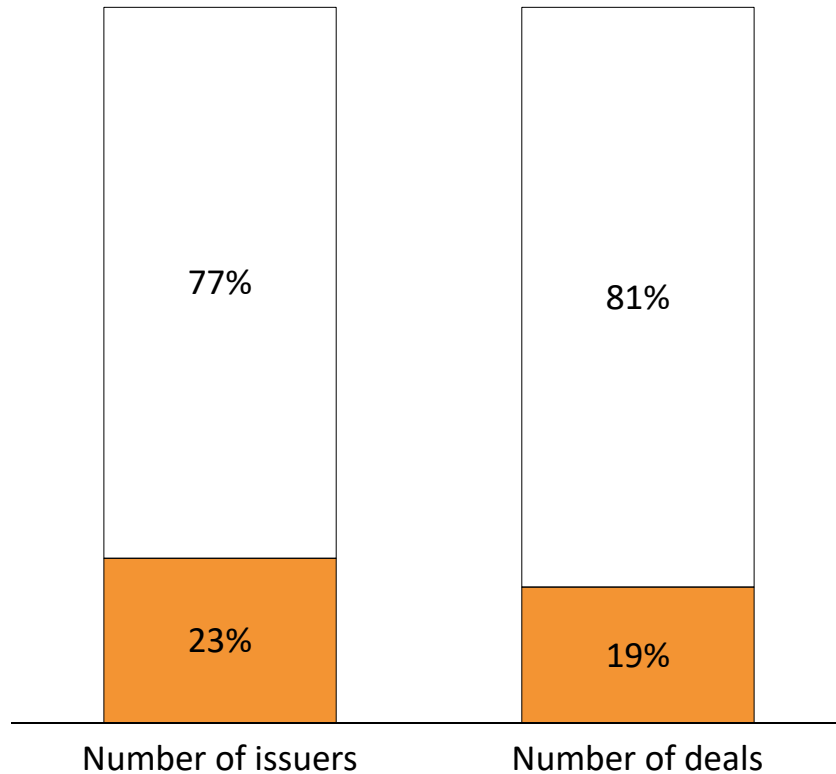
Climate-focused funds AuM (\$Bn)



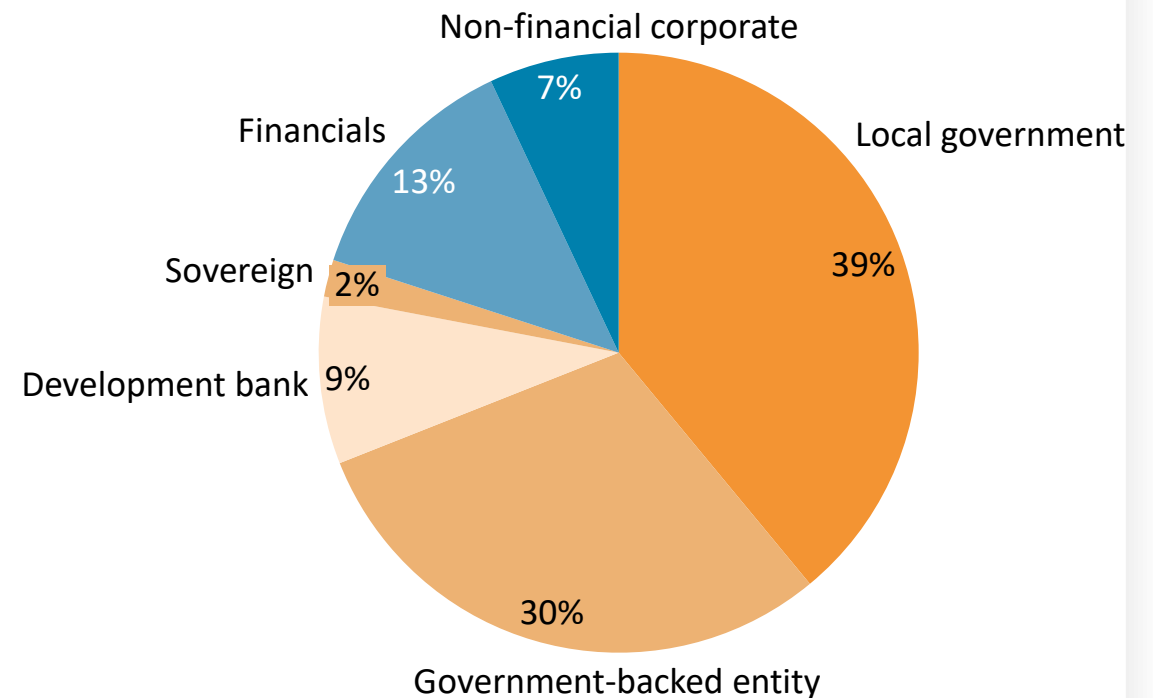
Source: Morningstar as of end of 2023

# Low take-up for adaptation

Low % of GB with adaptation investments



80% public related issuers



01

Economic benefits for society Vs  
financial benefit for the organisation

02

Difficulty to quantify benefits:

☺ Some are easy (revenues)

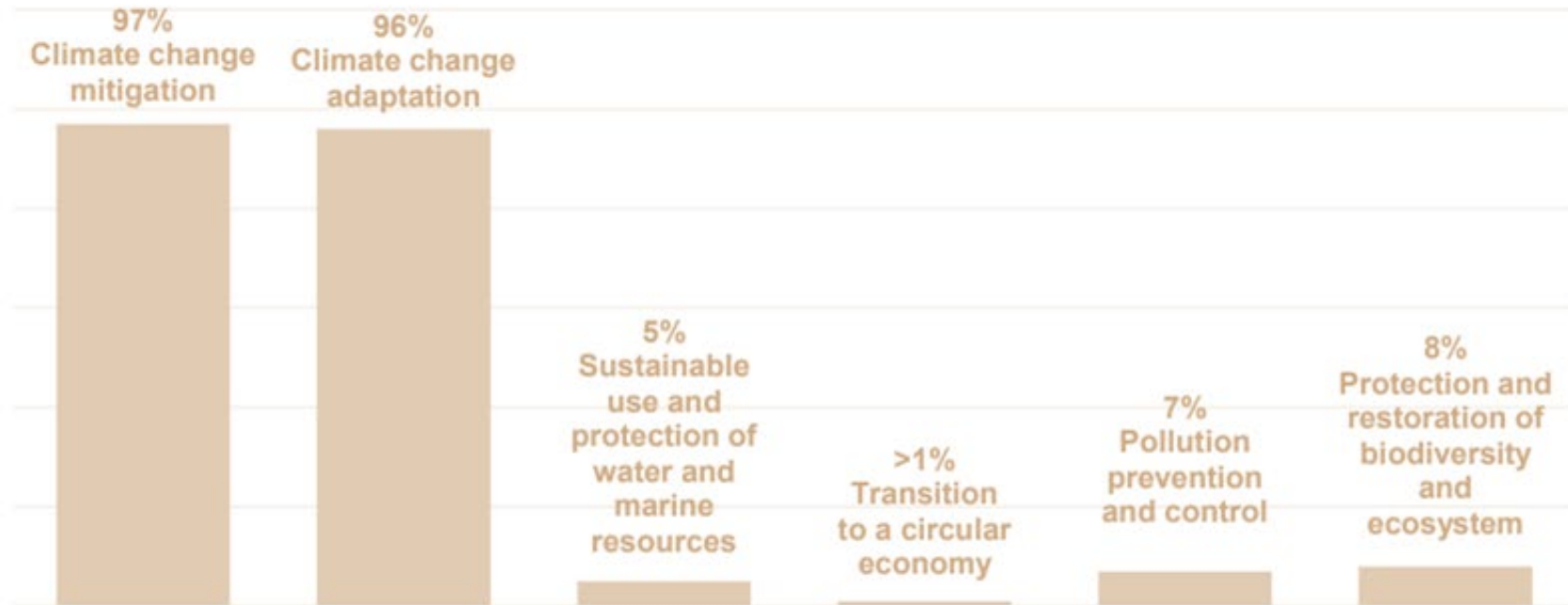
☹ Some are contingent (less losses)

03

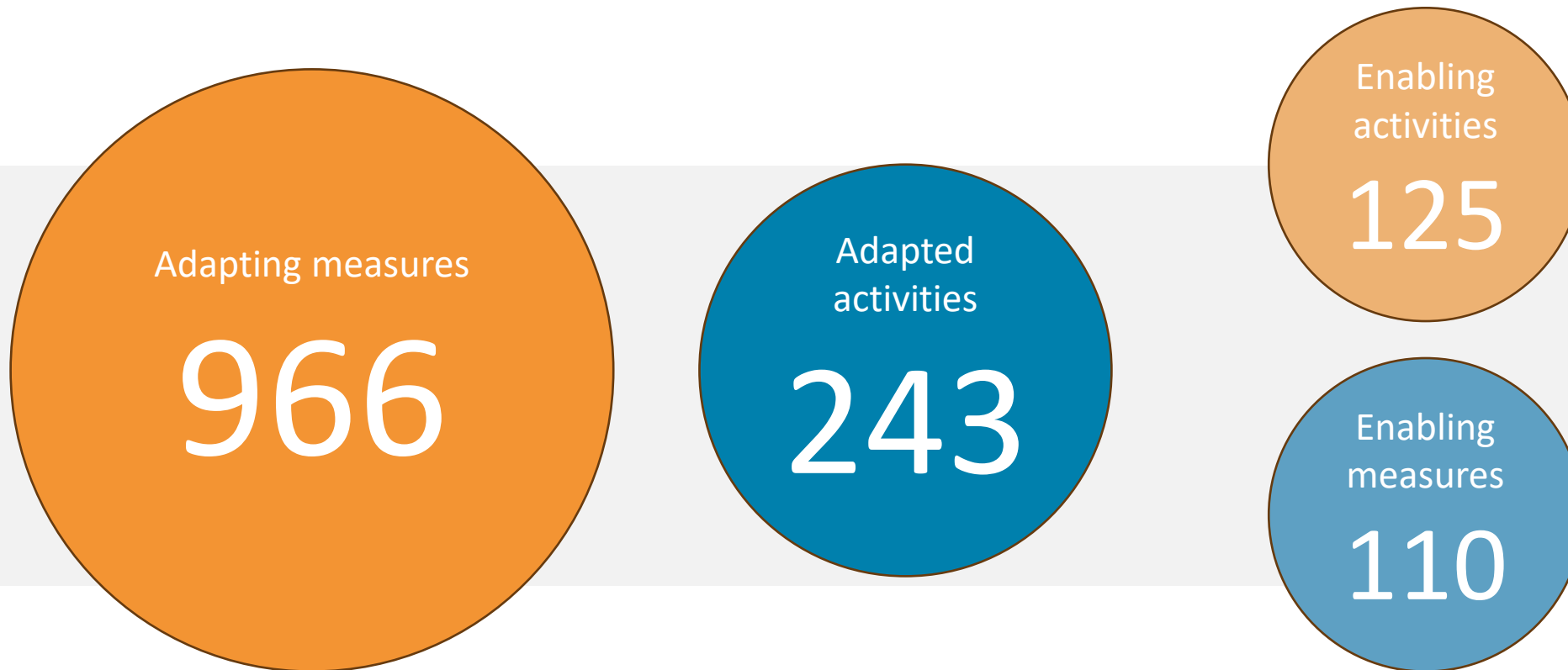
Difficulty to monetise with  
cash, even if easy to quantify

# ROI not always clear

# Need for clearer definitions



# CBI Adaptation taxonomy: 1,444 climate investments



# 7 categories

## 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 food 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

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, livelihoods and economic potential of inhabitants is not adversely affected.*



## 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 health systems

Systems, facilities, services and capacities for protecting and improving human health and respond 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, ecosystem services and cultural significance are maintained and/or enhanced.*




### Resilient industry and 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.*



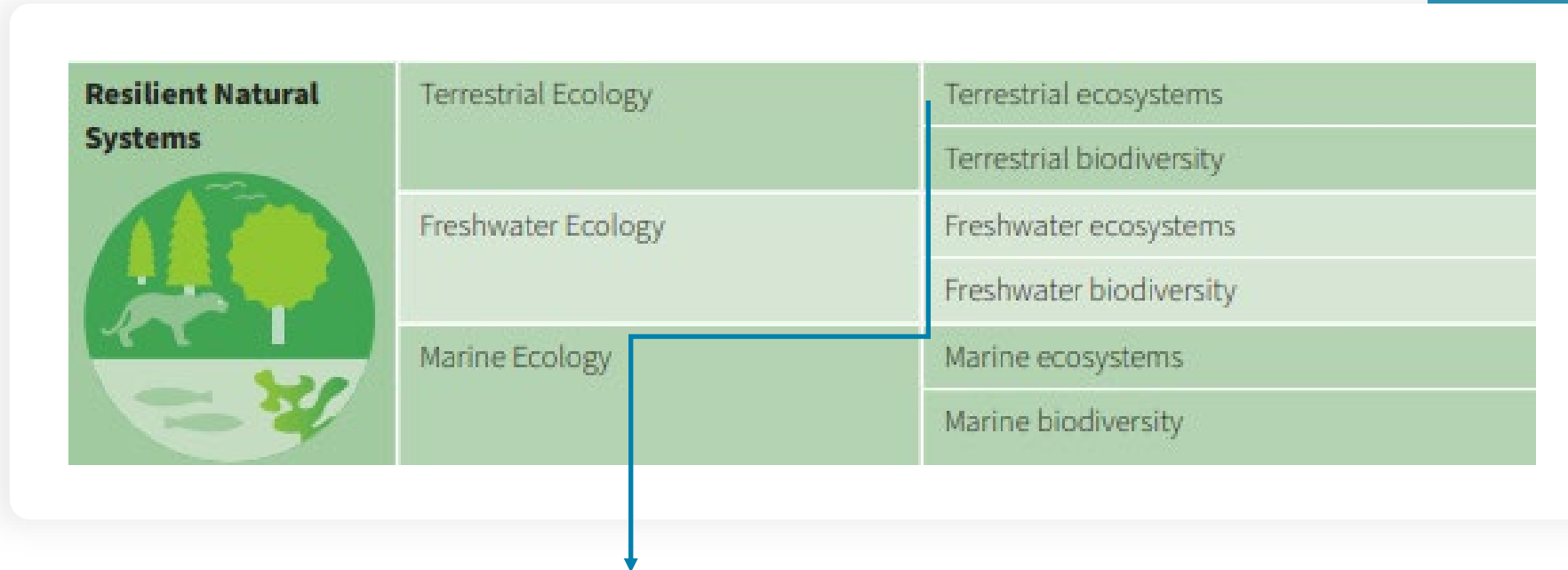
# Example: Agriculture

THEMES	SECTORS	SUBSECTORS
<b>Resilient Agri-Food Systems</b> 	Agricultural production	Animal production
		Agro-forestry
	Aquacultural production	Fishing
		Other aquacultural production
	Agri-food logistics, processing & retail	Wholesale of agricultural produce
		Manufacture of food & beverage products
		Retail of food products

## Crop production against flood

- Construction of flood-reinforced controlled environment agriculture
- Substantial Contribution: Reduced physical vulnerability due to the protection of crops from flood-borne contaminants & pathogens
- Screening criteria: Reduction of floodwater inundation likelihood by [x] m3 against BAU

# Example: Natural ecosystems



## Implementation of nature-positive land management strategies against flood

- Reduced physical vulnerability due to creation of natural flood defenses through ecosystem restoration

# The answers?

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# In conclusion...

01

Green bonds a natural place

02

Need to solve for bankability

03

Definitions are fundamental to grow the market



# Thank you

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