



# EIB ADAPTATION DAYS



Networking lunch break

*Agenda*





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Breakout sessions focussing on barriers to access finance and solutions

Water related sectors

Go to Room EKI 4118

Networks, grids, roads,  
railways...

Go to Room EKI 4205

Value chains  
(bioeconomy focus)

Go to Room EKI 4128

Cities and public  
authorities

Stay in room EKI 4226



## Water

Aimilia Pistrika



## Networks

Elisabet Vila



## Value Chains

Franck Jesus



## Cities

Giulia Macagno

# Main feedback from break out sessions



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**Alexandrina Boyanova**

Head of Climate Office Division in  
EIB Operations



**Magdalena Bos-Lewandoska**

European Commission DG CLIMA  
Climate Adaptation and Resilience Unit

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**Financing climate adaptation**



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**Alexandrina Boyanova**

Head of Climate Office Division in EIB Operations

**EIB Financing of climate adaptation**



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# The EIB Group – who we are



- The world's **largest multilateral lender**
- Long term lender
- Raising finance on debt capital markets



- **Governed by the EU Member States**
- **Driven by EU policies**
- Implementing EC mandates (incl. InvestEU)



- Provider of **climate finance** - EU Climate Bank
- **Global operations** - EIB Global
- Provider of **risk finance to SMEs** - EIF



- Headquartered in Luxembourg
- More than 4,000 staff in 59 offices worldwide

**Nearly €88 billion of  
new financing for high-impact projects**

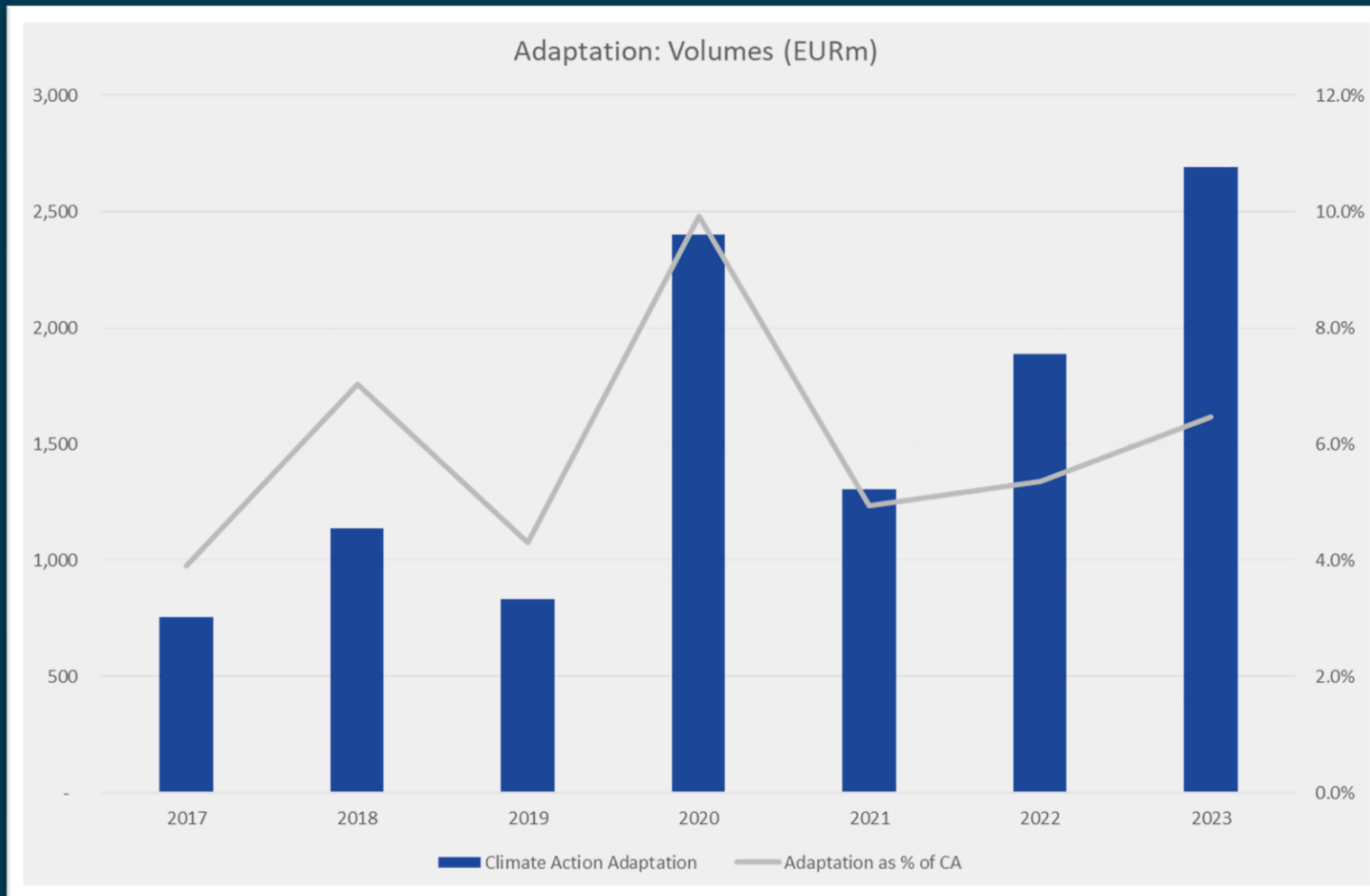


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# Adaptation financing trend: 2017-2023



**2023 Adaptation volume was 6.5% of total 2023 CA volumes** (which compares to the target of 15% by 2025).

However, this masks a **strong underlying annual increase in Adaptation volumes** – i.e. they increased by 43% to EUR 2.7bn in 2023.

Adaptation is a continuing priority area with ongoing roll-out of the Adaptation Plan.



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# Main barriers to adaptation financing

## Lack of standardized definitions and appraisal methods

Adaptation identification is difficult, which affects public and private sector in screening their investments



## Process based identification of eligible assets

The need for adapting to climate change does not necessarily translate into a robust pipeline of adaptation projects.

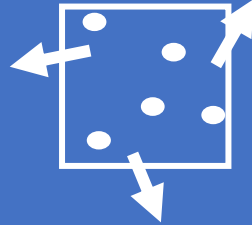


## Access to concessional funds for structural and non-structural interventions

Cost and public good nature of most adaptation interventions often require public funding and access to grants as incentives for action



**Main obstacles identified based on project appraisals, intermediaries and market research**



## Scattered, context specific, investments

May require aggregation to be cost-covering

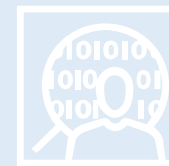


## Low bankability, absence or reduced clearly identifiable revenue streams

Monetizing climate risks and benefits is challenging, impacting private sector appeal and increasing capital requirements.

## Lack of regulations and limited access to information

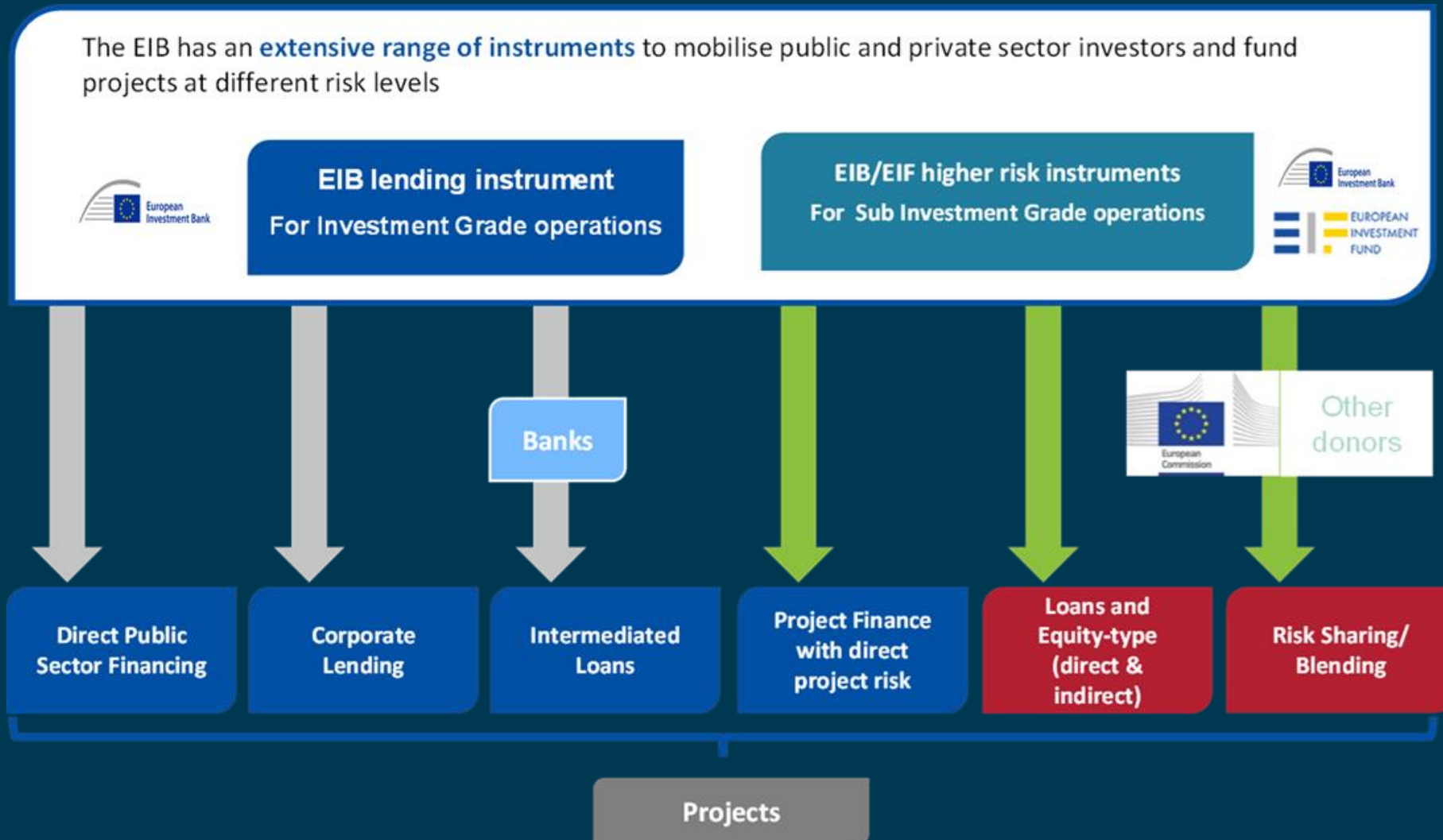
Gathering climate risk data is tough. Scarce regulations addressing risks







# The EIB traditional toolkit of products





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The EIB is developing new instruments to enhancing its product offering in order to generate increasing volumes of green funding.

**New Climate Product Development**

**Green Bond**

**Green Loan**

**KPI-linked loan**

**Green intermediated  
lending**

**Green Advisory**

**Projects**



# Lisbon Climate Adaptation Drainage System

- **Client:** Camara Municipal De Lisboa (Portugal)
- **Financial product:** direct investment loan to public sector
- **Approach to assess physical climate risk:** promoter's analysis of climate vulnerabilities
- **Key climate vulnerabilities:** flooding after extreme rainfall
- **Adaptation activities:** enhanced urban drainage systems to cope with increasing extreme precipitation events
- **Adaptation finance:** 65 m ( 40% of total project investment cost of EUR 163 m)



# KWS SAAT RDI

- **Client:** KWS (Germany)
- **Financial product:** corporate loan
- **Approach to assess physical climate risk:** promoter's analysis of changing agro-climatic conditions.
- **Key climate vulnerabilities:** more frequent and harmful biotic (insects, viruses, bacteria, mycotoxins or fungi, weeds) and abiotic stress (drought, cold, heat flooding, and salinity).
- **Adaptation activities:** New seed varieties are typically created to better adapt and retain agricultural productivity in changing agroclimatic conditions.
- **Adaptation finance:** 100% of project investment cost (EUR 275m)



# Netherlands Flood Defence PPP

- **Client:** Project SPV (LEVVEL BV)
- **Financial product:** project finance structured investment loan.
- **Approach to assess physical climate risk:** Project was part of major infrastructure investments planned by the national authorities.
- **Key climate vulnerabilities:** flood protection infrastructure dating back to more than a century facing increased sea level.
- **Adaptation activities:** Upgrade of the 32km long flood protection “Afsluitdijk”.
- **Adaptation finance:** 80% of project investment cost (EUR 325m).



# Flood protection in the Netherlands

- **Client:** NWB Bank (Netherlands)
- **Financial product:** intermediated loan for on-lending to Water Boards
- **Approach to assess physical climate risk:** promoter's analysis of climate vulnerabilities
- **Key climate vulnerabilities:** sea level rise, storm surge, extreme rainfall events and flooding
- **Adaptation activities:** small and medium-sized flood control and water resources management projects promoted
- **Adaptation finance:** 75% of project investment cost (EUR 200m)





# Fire engines for disaster prevention in Greece

- **Client:** Hellenic Republic (Greece)
- **Financial product:** framework loan
- **Approach to assess physical climate risk:** Project was part of major COVID 2019 Disaster Prevention and Climate Adaptation framework
- **Key climate vulnerabilities:** Increased frequency of heat waves, forest fires and droughts in Southern Europe.
- **Adaptation activities:** Identified needs to reshape and multiply the operational and administrative capabilities of the Civil Protection services.
- **Adaptation finance:** 79% of project investment cost (EUR 595m).



# X Ocean

- **Client:** X Ocean
- **Financial product:** Venture debt under the THEMATIC GREEN TRANSITION (INVESTEU Venture Debt)
- **Key climate vulnerabilities:** Gap in climate systems data. This project will collect ocean data.
- **Adaptation activities:** financing of a fleet of Uncrewed Surface Vessels (USVs) for collecting ocean data, mainly to the benefit of the off-shore wind energy sector and marine science, as well as RDI of additional technological solutions for ocean monitoring and surveying.
- **Adaptation finance:** 50 % of project investment cost (EUR 20 m)





# Athens Resilient City

- **Client:** Municipality of Athens
- **Financial product:** framework loan co-funded by EU Structural Funds
- **Approach to assess physical climate risk:** EIB advisory services to assess climate risks and identify adaptation activities
- **Key climate vulnerabilities:** Heat waves, heat island effect, flash floods, heat related illnesses and deaths.
- **Adaptation activities:** Green and Blue infrastructure in urban planning, cool pavements, materials with low embodied energy, and bioclimatic design. Public information and awareness campaign.
- **Adaptation finance:** 31 % of project investment cost (EUR 185m)





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Thank you!

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**Magdalena Bos-Lewandowska**

European Commission, DG Climate Action

**Adaptation and Finance**

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# Adaptation and Finance

*Magdalena Bos-Lewandowska  
European Commission, DG Climate Action*

# Climate change – financial exposure

## **2023** *(estimates by SwissRe Institute)*

- Natural catastrophes losses – more than USD 100 billion.
- Main contributor – severe thunderstorms.
- Losses from severe thunderstorms increase by 7% annually over past 30 years.
- Italy: losses of more than USD 3.3 billion.



# Climate Resilience Dialogue

## Tasks:

- exchange views on how to address the losses incurred from climate-related disasters;
- identify actions that increase the penetration of climate risk insurance for industry and all of society;
- discuss how to make the conditions right for more investment in good adaptation solutions.

## Participants:

17 organisations that represent the full range of different stakeholders, i.e. insurers, reinsurers, risk managers, public authorities and regions, and representatives of consumers and the real economy.



## Adaptation = Climate Resilience

Resilient to climate change:

able to effectively **prepare for** and **recover** from the effects of climate change, and **continue to thrive**

# Prepare – climate resilience building

- Economic rationale: investment in resilience is better than spending on recovery
- Preparedness at all levels:
  - aware of climate change effects for your business (short and long term)
  - assess the risk = estimate financial exposure
  - reduce the risk = lower the exposure



# Reflection Group on mobilising Climate Resilience Financing

## Main tasks:

- to explore on how to facilitate climate resilience finance;
- map best practices and identify obstacles and enabling conditions for the financing of climate resilience

It will bring together key industrial players and representatives of public and private financial institutions, that will look into how to coordinate their actions and look for possible gaps and/or synergies.

# Thank you



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**Fotios Kalantzis**

Senior Climate Expert – EIB Economics Department

**What drives firms' investment in adaptation?**

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# **Climate readiness: key takeaways from the EIBIS and Municipalities survey**

**Fotios Kalantzis**

**EIB Economics  
Department**





**EIBIS:** 13,000 firms surveyed across EU27, plus the US and the UK (until 2021)

Firms of 5+ employees in Manufacturing, Services, Construction & Infrastructure sectors

Representative of the economy (firms weighted by value-added)

**Municipalities survey:** 744 across EU27, representative by cohesion region type

## General information on:

- Characteristics and performance
- Past investment activities and future focus
- Investment finance, needs and constraints

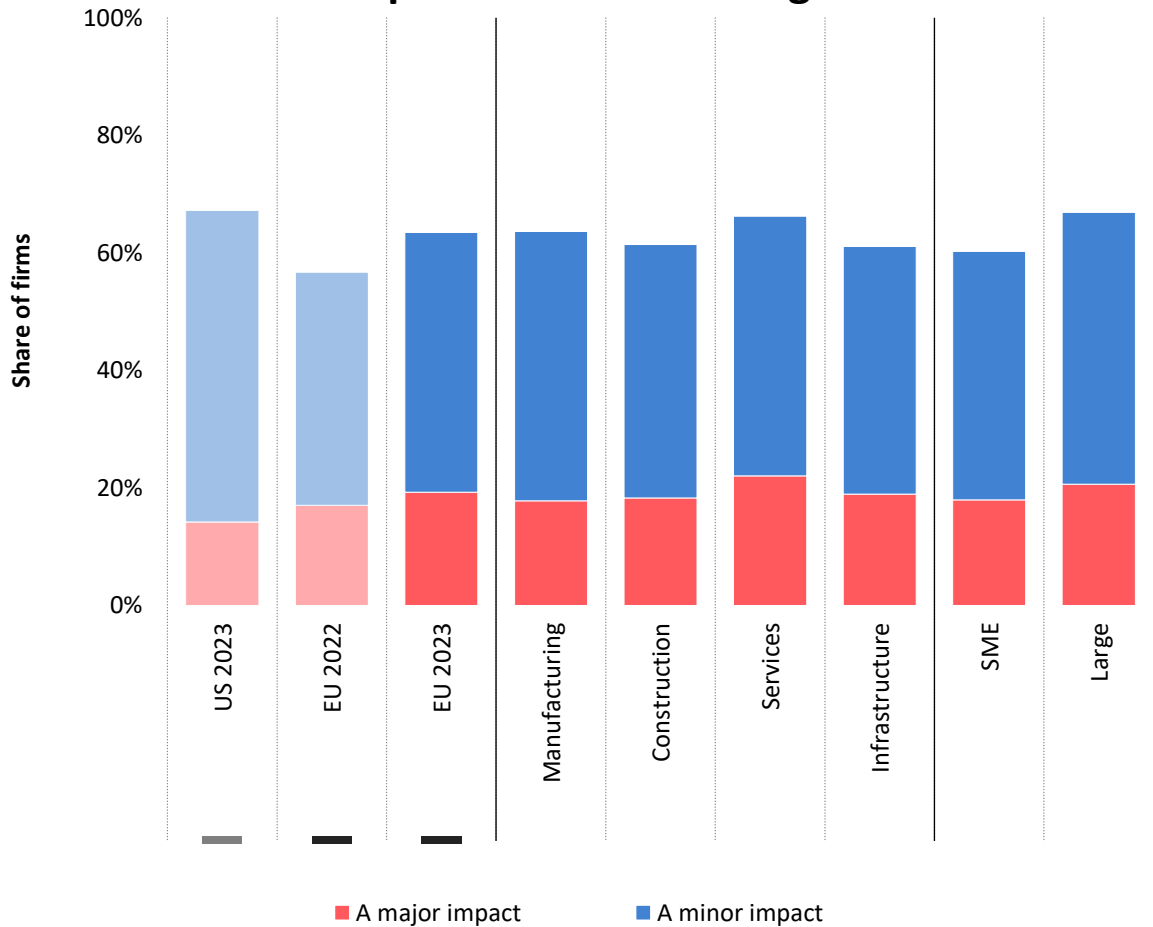
## Focus on Adaptation:

- Impacts of climate change
- Investment in adaptation measures

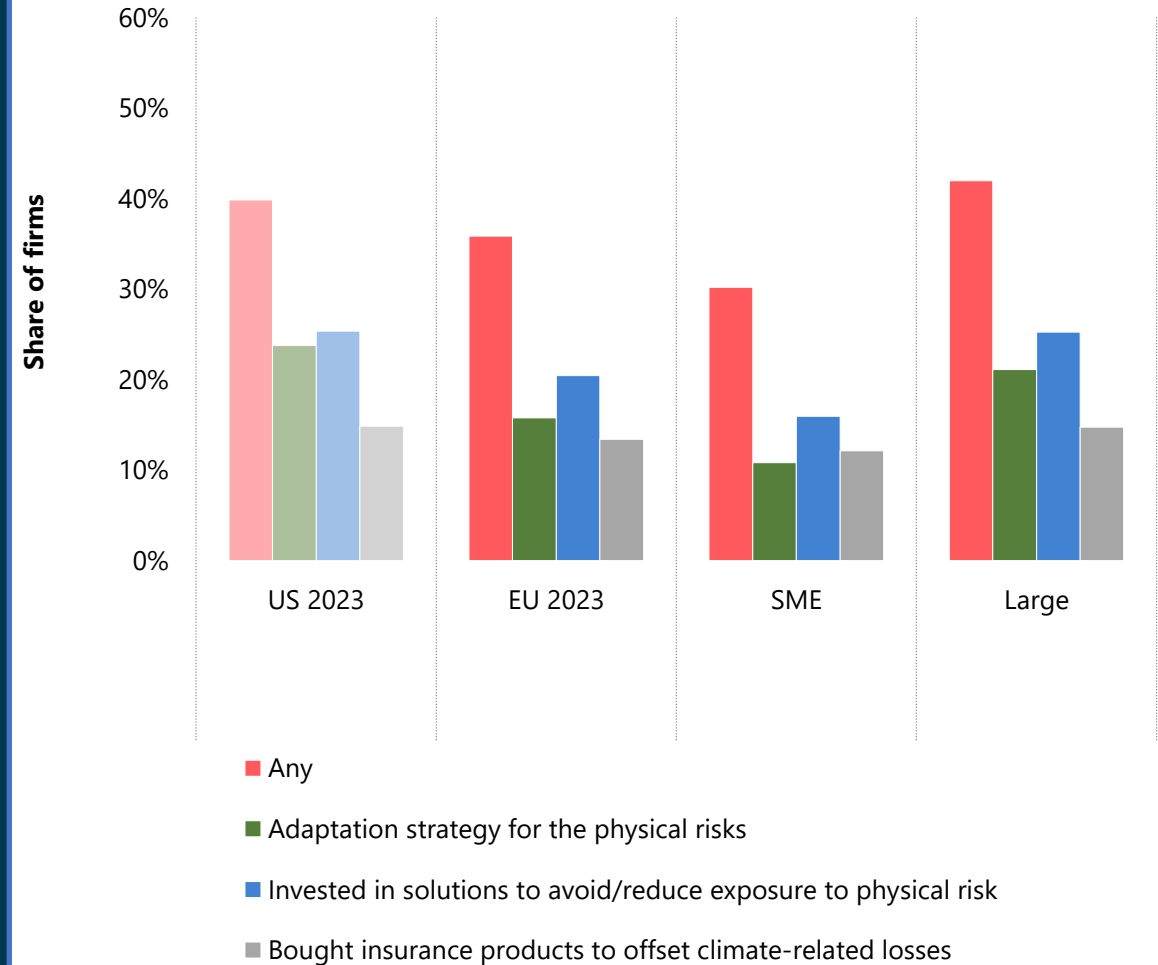


# Many firms face physical risks, yet few invest in resilience

### Impact of climate change



### Building resilience to physical risk





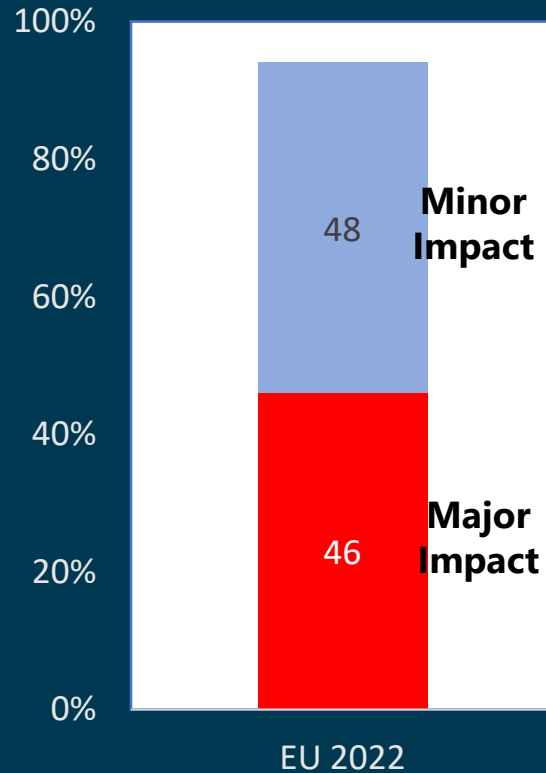
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# Municipalities momentum: from heat to action!

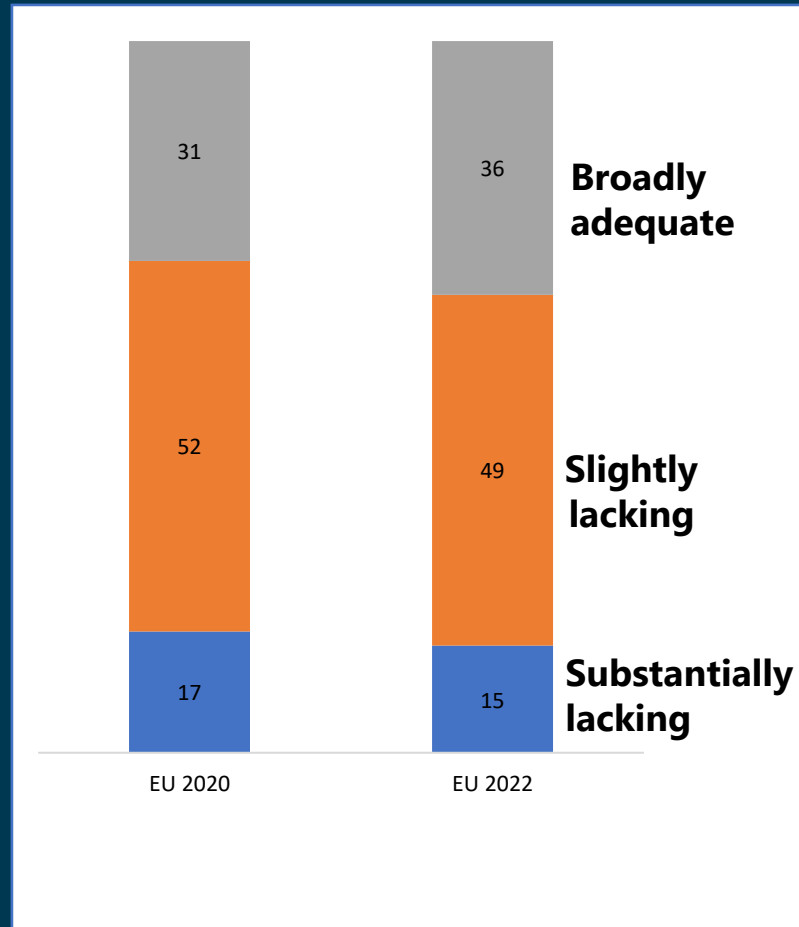


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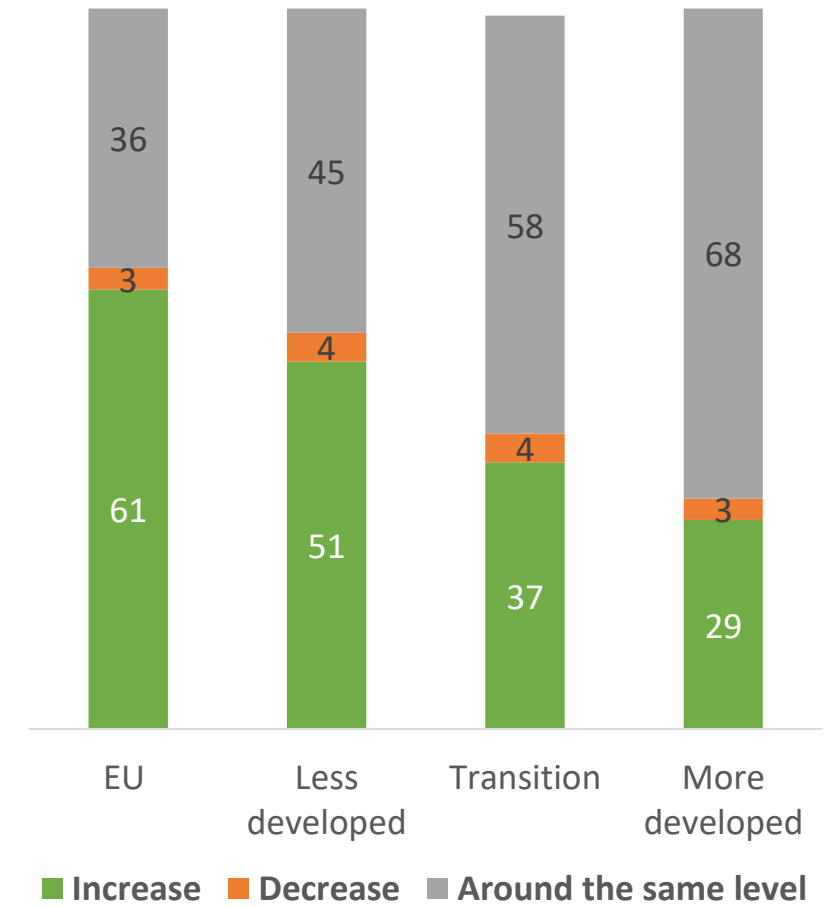
Impact of climate change



Investment adequacy in adaptation



Investment planning: 2022-26 vs. 2019-21





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# Would you like to learn more?



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**2023**

INVESTMENT REPORT  
2023/2024

Transforming for  
competitiveness

European  
Investment Bank

**2024**

European Union  
Overview

European  
Investment Bank

EIB INVESTMENT SURVEY  
**2023**

The state of local infrastructure  
investment in Europe  
EIB Municipalities Survey  
2022-2023

European  
Investment Bank





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**Oliver Walker**

Senior Expert and Associate  
Partner, McKinsey.



**Chris Perceval**

S&P Global Sustainable



**Alexandrina Boyanova**

Head of Climate Office Division  
in EIB Operations

**Looking ahead on innovative adaptation finance**



# EIB ADAPTATION DAYS



Networking drinks (Foyer Bananiers)

Project Clinics

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