

# Strategic Outline Climate-resilient Infrastructure



GREEN  
CLIMATE  
FUND

## Global Programming Conference – Strategy consultation

Katarzyna Dziemara-Rzucidlo, [krzucidlo@gcfund.org](mailto:krzucidlo@gcfund.org)

Julija Kuklyte, [jkuklyte@gcfund.org](mailto:jkuklyte@gcfund.org)

Alyssa Holganza, [aholganza@gcfund.org](mailto:aholganza@gcfund.org)

*Division of Mitigation and Adaptation, GCF*

# CLIMATE RESILIENT INFRASTRUCTURE GCF PORTFOLIO

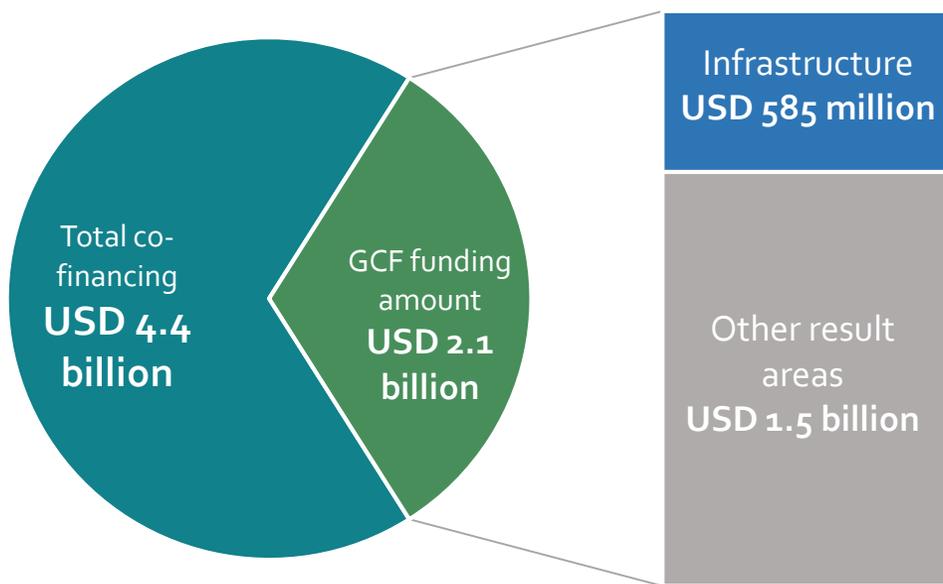


Approved projects

**36**

Number of beneficiaries

**145,278,993**



## PORTFOLIO INSIGHTS

- Only 2 projects looking into strategies, policies, regulations and standards
- Lack of consistent approach to engineering feasibility studies (embracing together build-in and nature-based solutions)
- Only 1 infrastructure projects structured as critical infrastructure priority
- No integrated infrastructure projects
- Multi-hazard approach often missing
- Consistent assessment of technologies selection and transfer in not present

# CLIMATE-RESILIENT INFRASTRUCTURE SECTOR IMPACT AND POTENTIAL



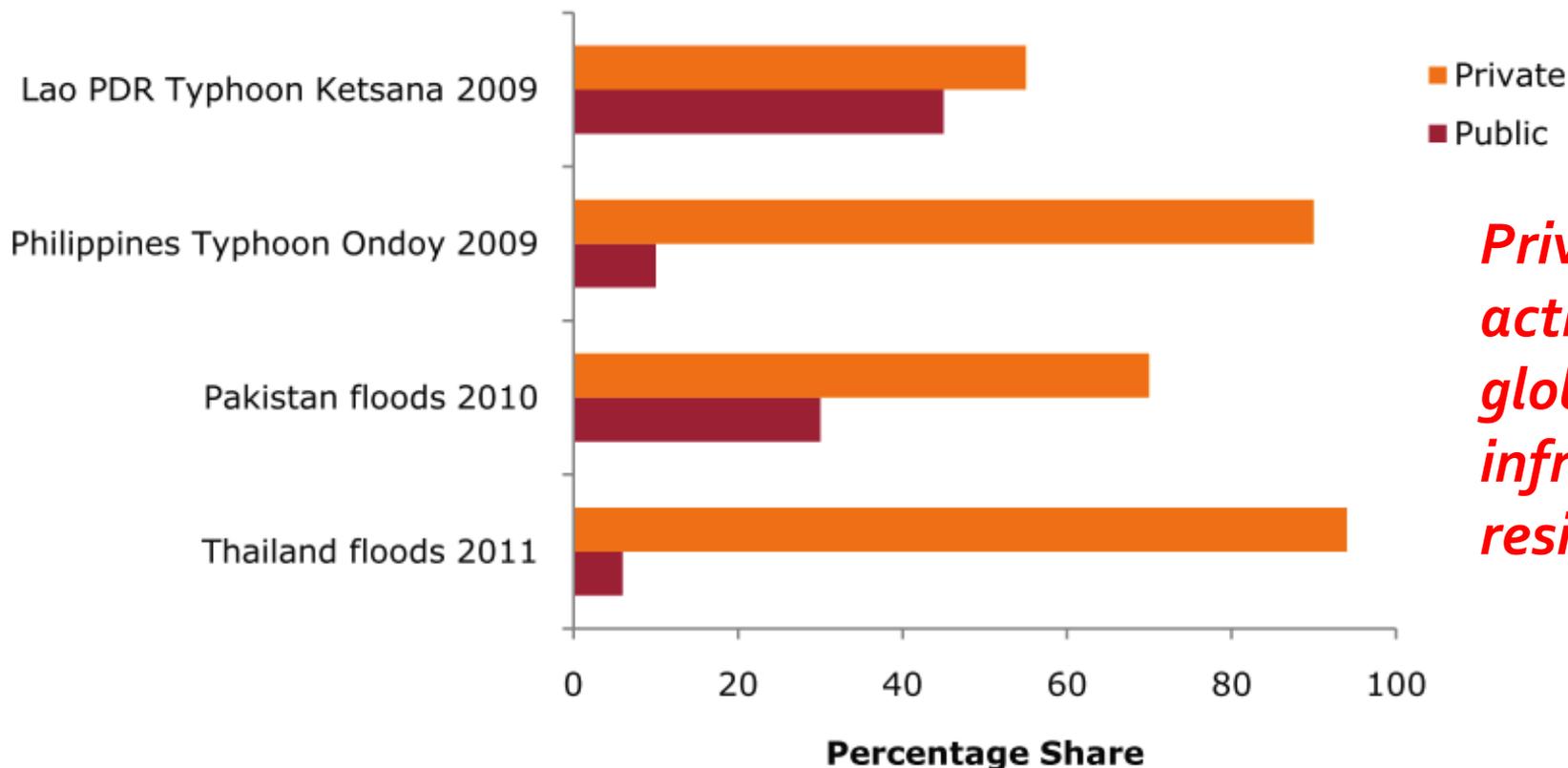
## BUSINESS AS USUAL

- USD 90 trillion in 15 years needed
- Developing countries need USD 4 trillion per year
- Current major investors:
  - UTILITIES
  - BANKS INCLUDING MDBS
  - CORPORATIONS
  - INSTITUTIONAL INVESTORS-PENSION FUNDS

## CLIMATE CHANGE SCENARIO

- In 2017, economic losses from hurricanes, severe storms, wildfires, floods reached **USD 330 billion** globally (only around 50% insured)
- **70%** of all economic losses in the period 2005–2017 were attributed to extreme weather events
- **8,470** casualties in 2017 relate to natural catastrophes

# CLIMATE RESILIENT INFRASTRUCTURE PRIVATE SECTOR PAYS FOR MOST LOSSES

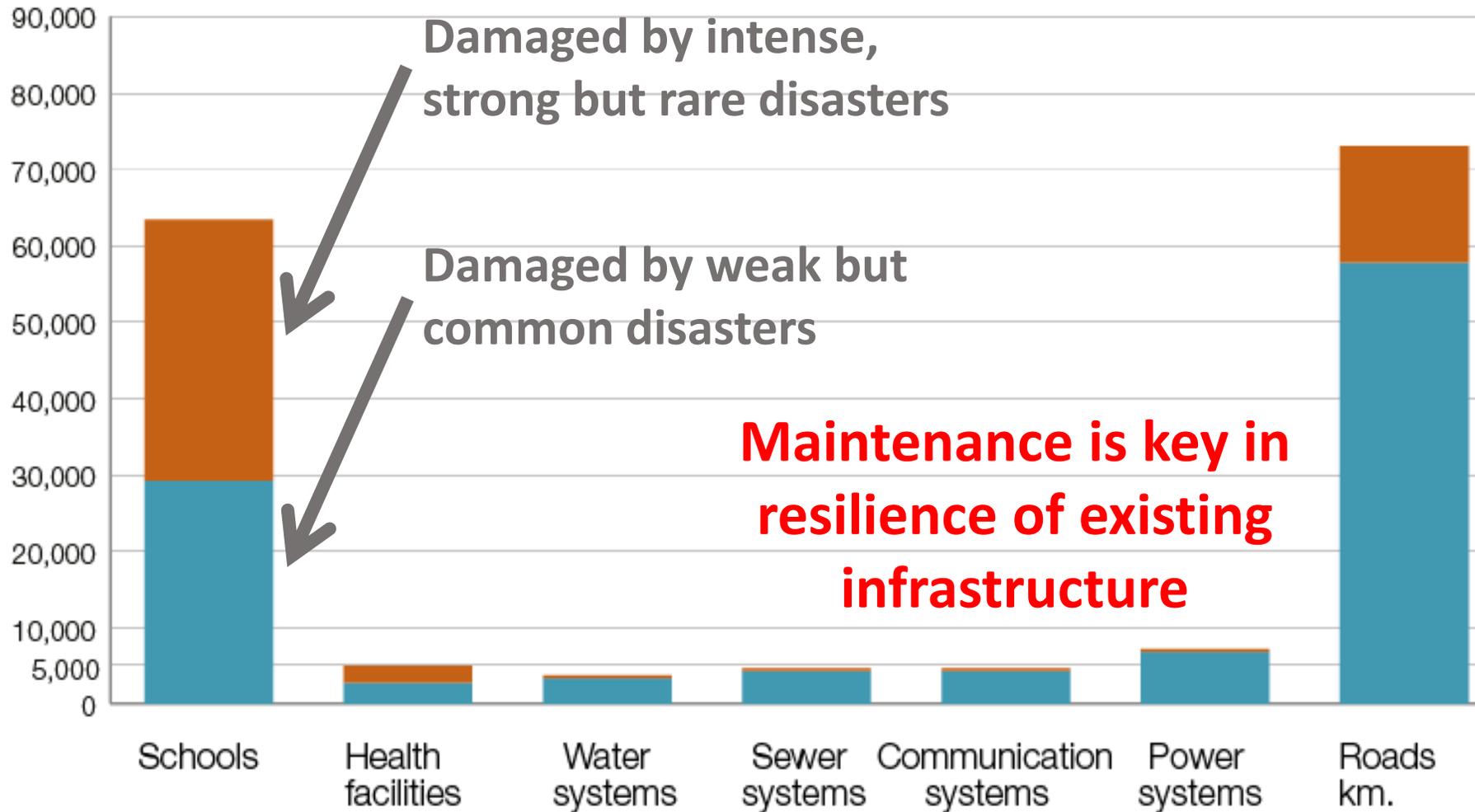


*Private sector  
action is key for  
global  
infrastructure  
resilience*

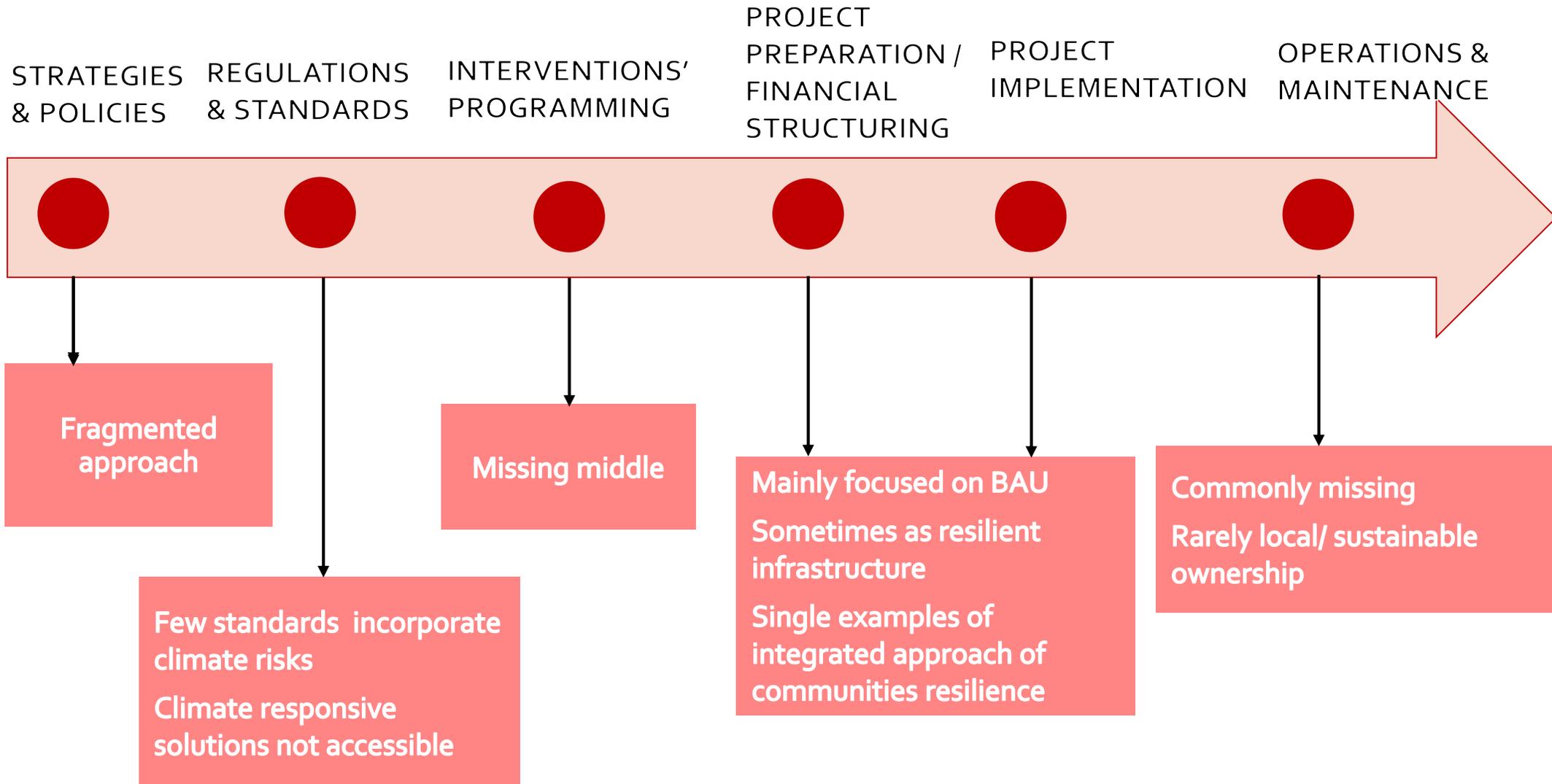
**Up to 80% of all present and future infrastructure investments and more than 70% of present and future losses are by the private sector**

# CLIMATE RESILIENT INFRASTRUCTURE

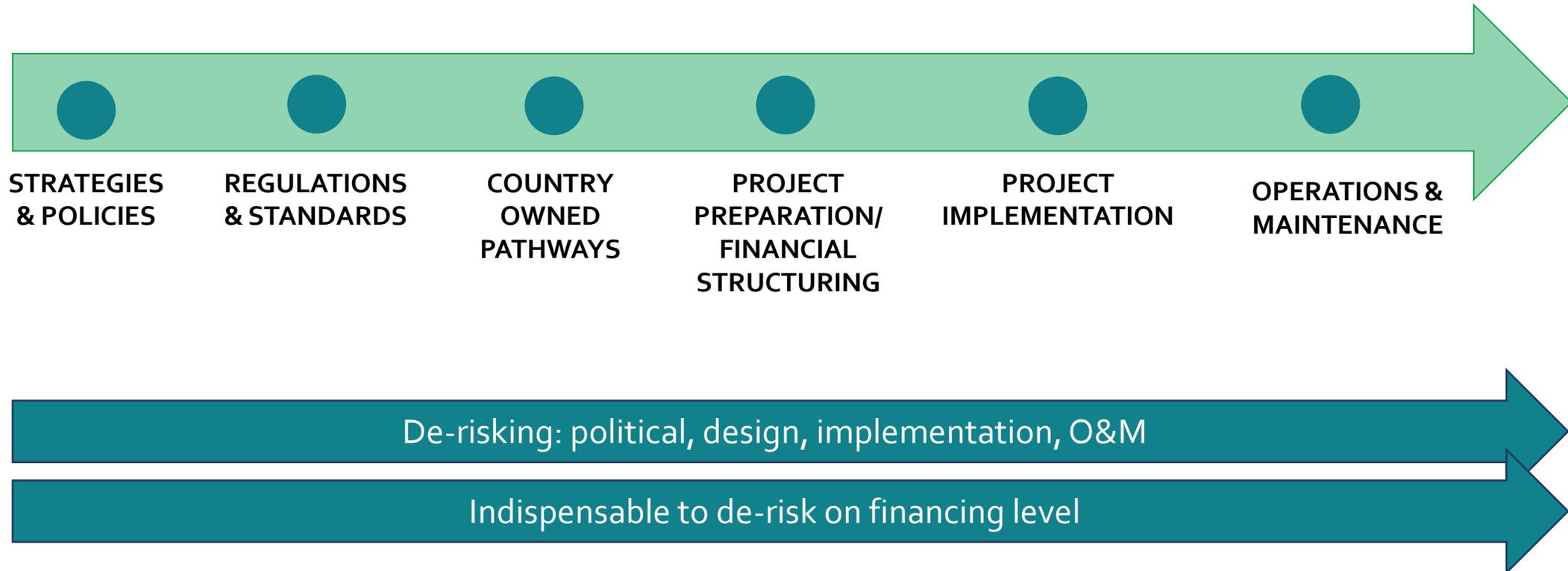
## MAINTAIN EXISTING INFRASTRUCTURE



# CLIMATE RESILIENT INFRASTRUCTURE KEY CHALLENGES



# CLIMATE RESILIENT INFRASTRUCTURE DE-RISKING AND LEVERAGING VALUE CHAIN



# CLIMATE RESILIENT INFRASTRUCTURE PROPOSED PRINCIPLES OF GCF'S APPROACH



- Resilient infrastructure by definition: build-in and nature-based
- Community resilience as objective of infrastructure resilience
- Focus on a integrated, critical infrastructure
- Promote resilient infrastructure value chains to enable smooth implementation and maintenance
- Improve investment tools to promote resilience



# CLIMATE RESILIENT INFRASTRUCTURE PROPOSED APPROACH FOR SECTOR STRATEGY



Driving **paradigm shift** by moving from single projects to integrated, climate-proof and sequenced packages of investments and de-risking vital elements of infrastructure value chain

## Transformational planning and programming

Action 1: Incorporating Climate-resilient Infrastructure integrated approach to strategies and planning  
Action 2: Raising awareness about risk assessment factors

## Catalyzing climate innovation

Action 1: Creation of integrated, climate-proof and sequenced packages of investments  
Action 2: Reflecting climate hazard strength in construction standards, identification of technologies and technology transfer, systematic incorporation of O&M, re-shaping of CBA, incorporation of risk assessment protocols

## Mobilization of investments at scale

Action 1: Creation of dedicated PPF in co-operation with other Stakeholders  
Action 2: Creation of RfPs and financial vehicles for Climate-resilient Infrastructure projects

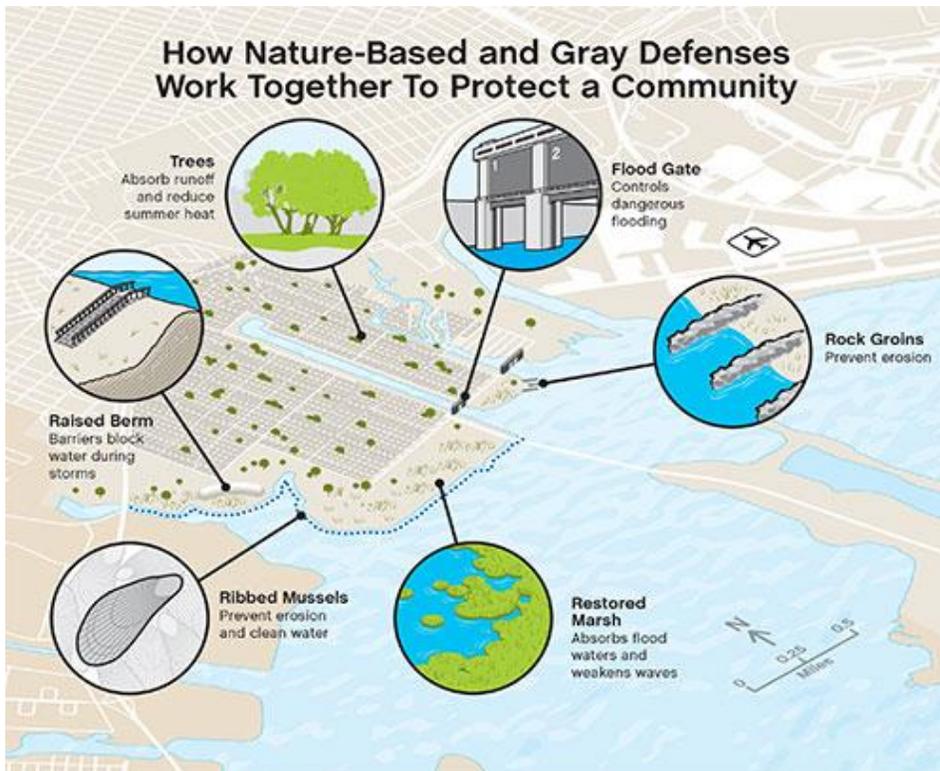
## Replication of knowledge to shift financial flows

Action 1: Training materials and toolkits  
Action 2: Train the Trainer

# CLIMATE RESILIENT INFRASTRUCTURE FLAGSHIPS

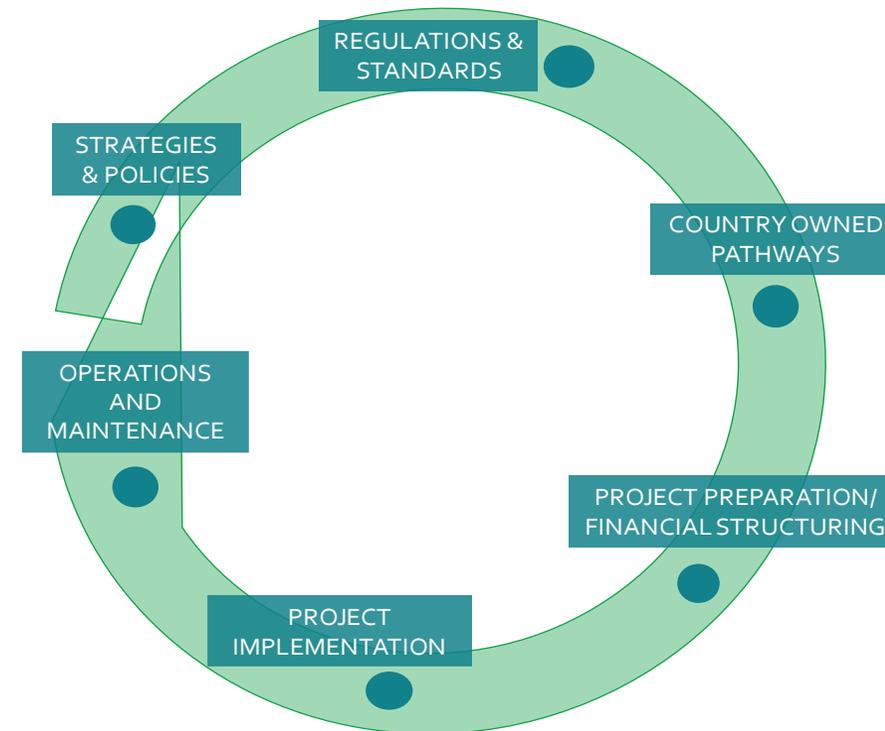


## Flagship 1: *Shifting Infrastructure Investments from Isolated Projects to Climate-resilient Pathways*



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## Flagship 2: *De-risking Climate-resilient Infrastructure throughout the infrastructure value chain*



# CLIMATE RESILIENT INFRASTRUCTURE PARTNERS



- NDAs and AEs
- Multilateral Development Banks
- Engineers Associations (like American Society of Civil Engineers, ASCE)
- Standardization Organizations (like Global Infrastructure Basel)
- Coalitions of public and private partners (like Coalition for the Mainstreaming of Climate Risks in Investment Decision Making)
- Other related initiatives (like Resilience Shift, ARUP)



# GREEN CLIMATE FUND