

Opportunities for steering private sector investment towards resilience

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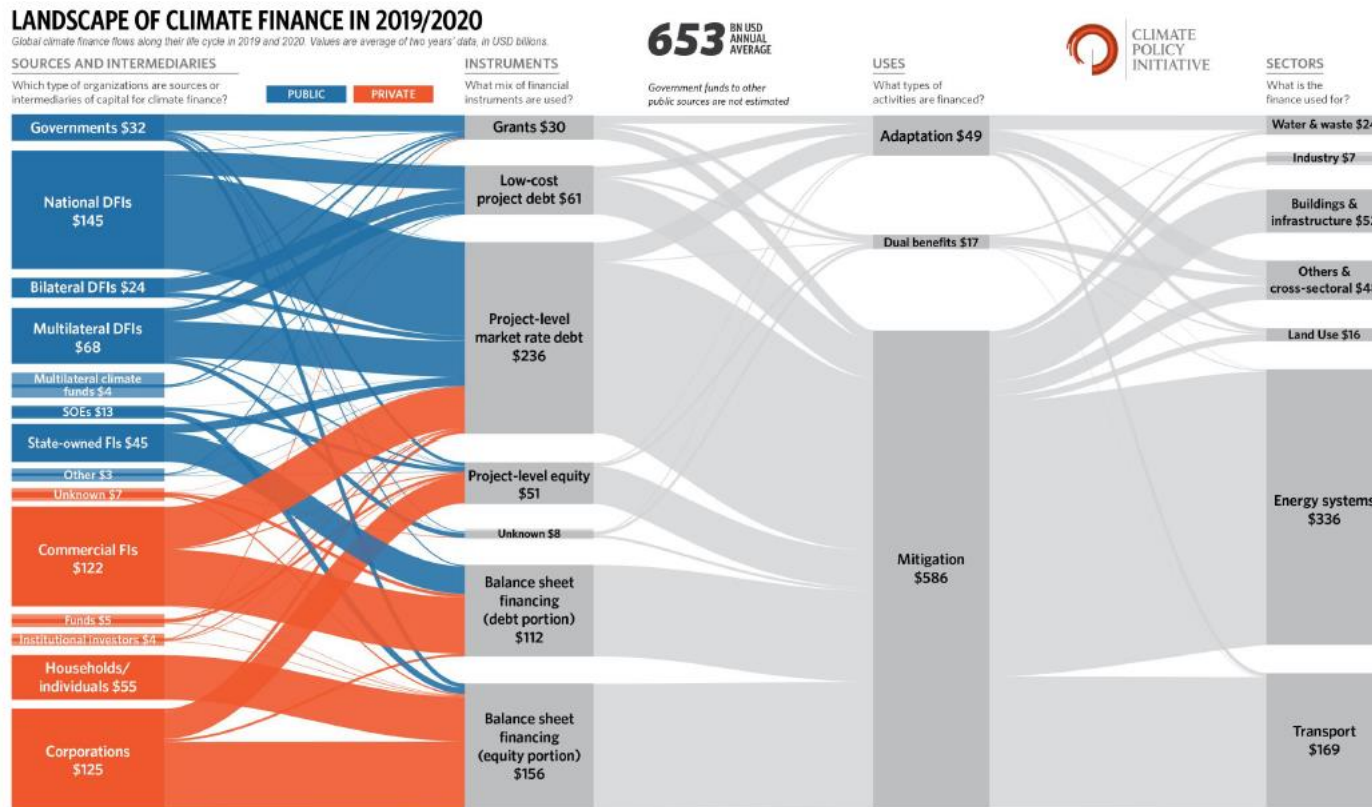
23 June 2023

Regional Workshop on Climate and Disaster Risk-Informed Investments at Bangkok, Thailand

Agenda

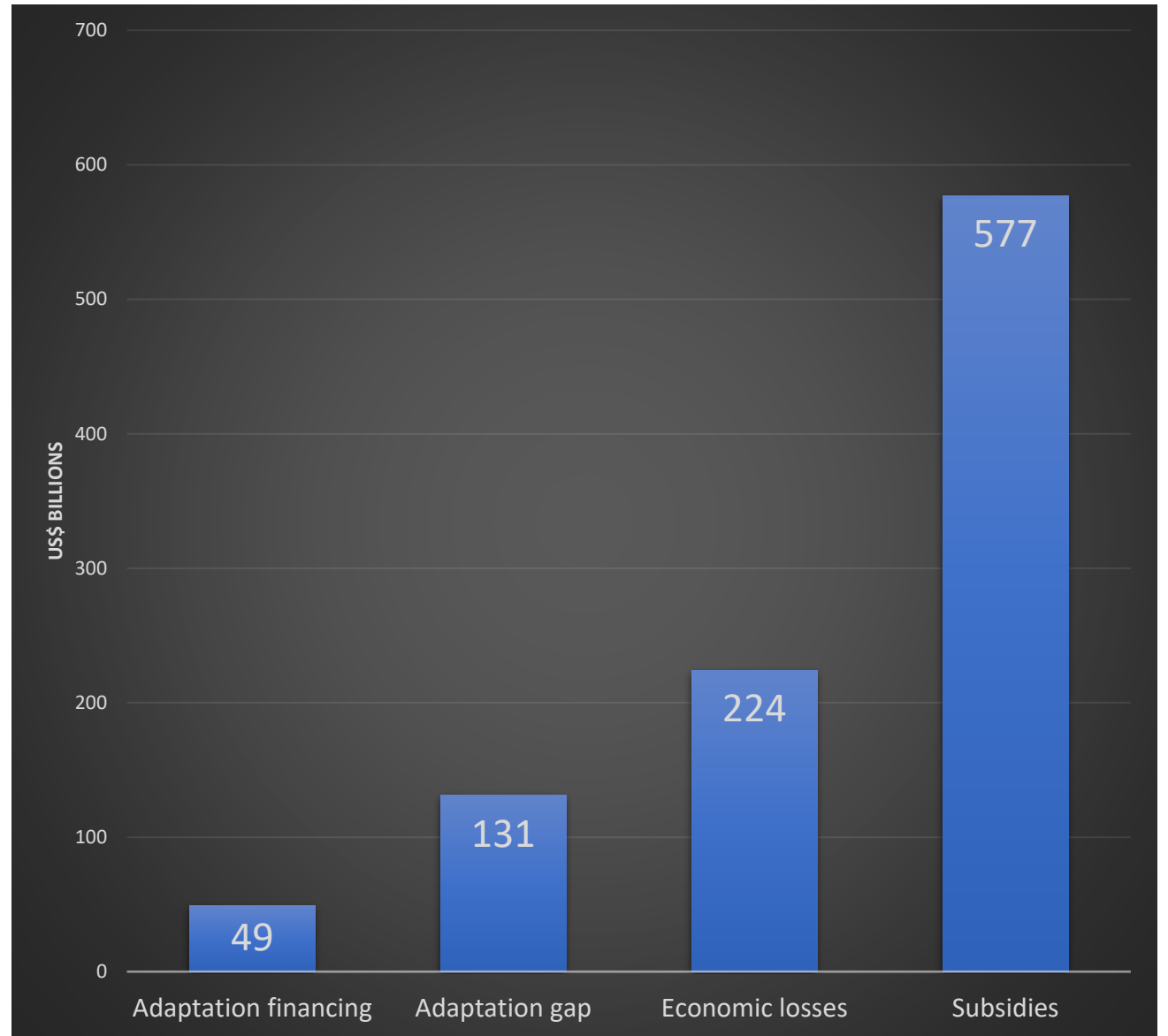
- **Adaptation: Filling the Gap**
- **Entry points for the private sector**
- **Pre-disaster preparedness**
- **Integrating CRR and DRM in PPP Process cycle**
- **Ensuring resilience in the private sector**

Adaptation and why it is important?



- The “adaptation gap” is estimated to be **\$131 billion per year**, expanding up to \$240 billion by 2030 - *The UN Environmental Program’s “Too Little, Too Late” 2022 report*
- In 2022, the Emergency Event Database EM-DAT recorded 387 natural hazards and disasters worldwide, resulting in the loss of 30,704 lives and affecting 185 million individuals. Economic losses totaled around **US\$223.8 billion**. - *EMDAT*
- Only 10% (**\$49 billion**) of climate finance is dedicated to adaptation in 2019-20- *Climate Policy Institute*.

Inefficiencies of public funding



Author's adaptation based on CPI, UNEP, EM-DAT, World Bank reports

Private climate finance is led by green energy and renewables...

- Most markets **do not have the requisite demand** to mobilize capital at larger scale of sectoral/country level
- Many governments **lack access to and/or track record** of- commercial borrowing, without DFI involvement
- DFIs are mostly focused on **hard infrastructure** given the connectivity needs
- Climate funds are expanding green transport portfolio; but they **don't act as lead arrangers**

Sources of Climate Finance for Low-Carbon Transport in developing countries - US\$ billion*

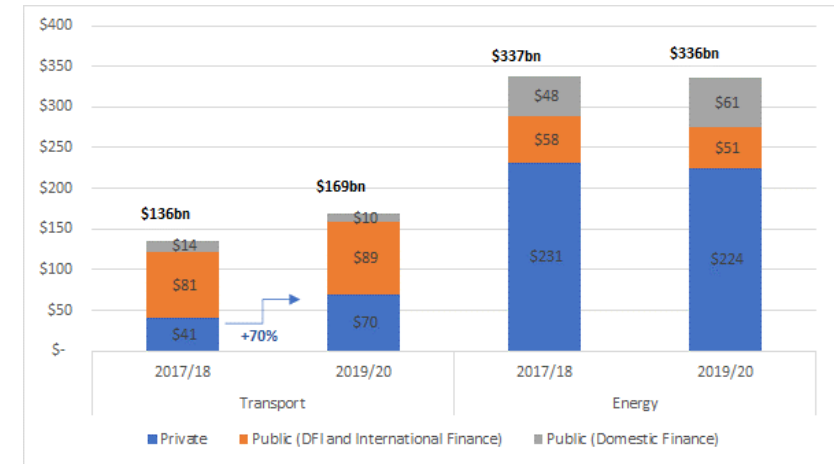
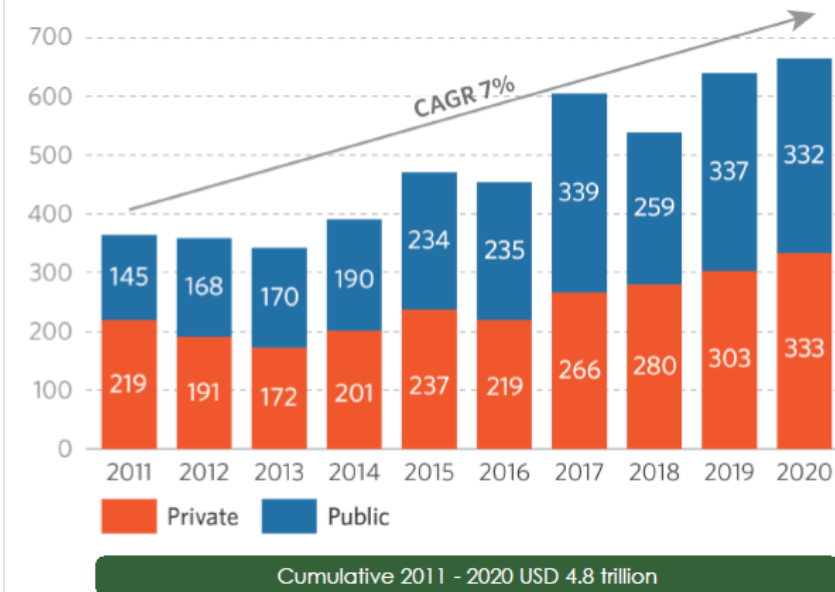
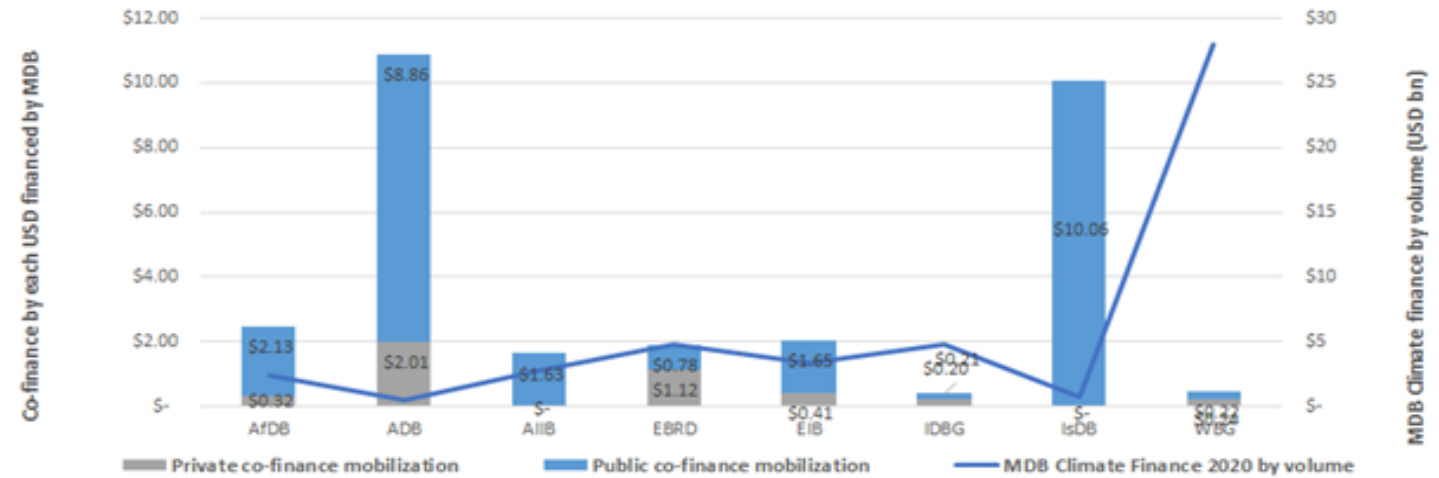


Figure 3: Climate Finance by public and private sources in 2011-2020 (USD bn)*

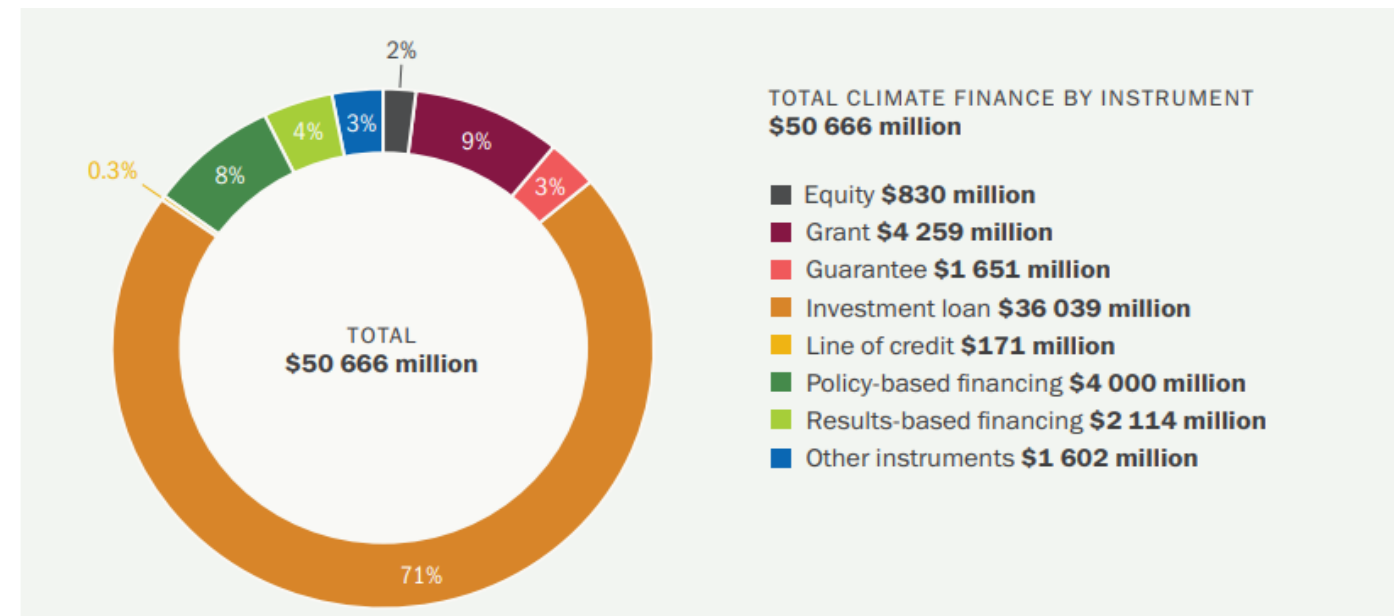


...MDBs continue to lend, instead of leveraging...

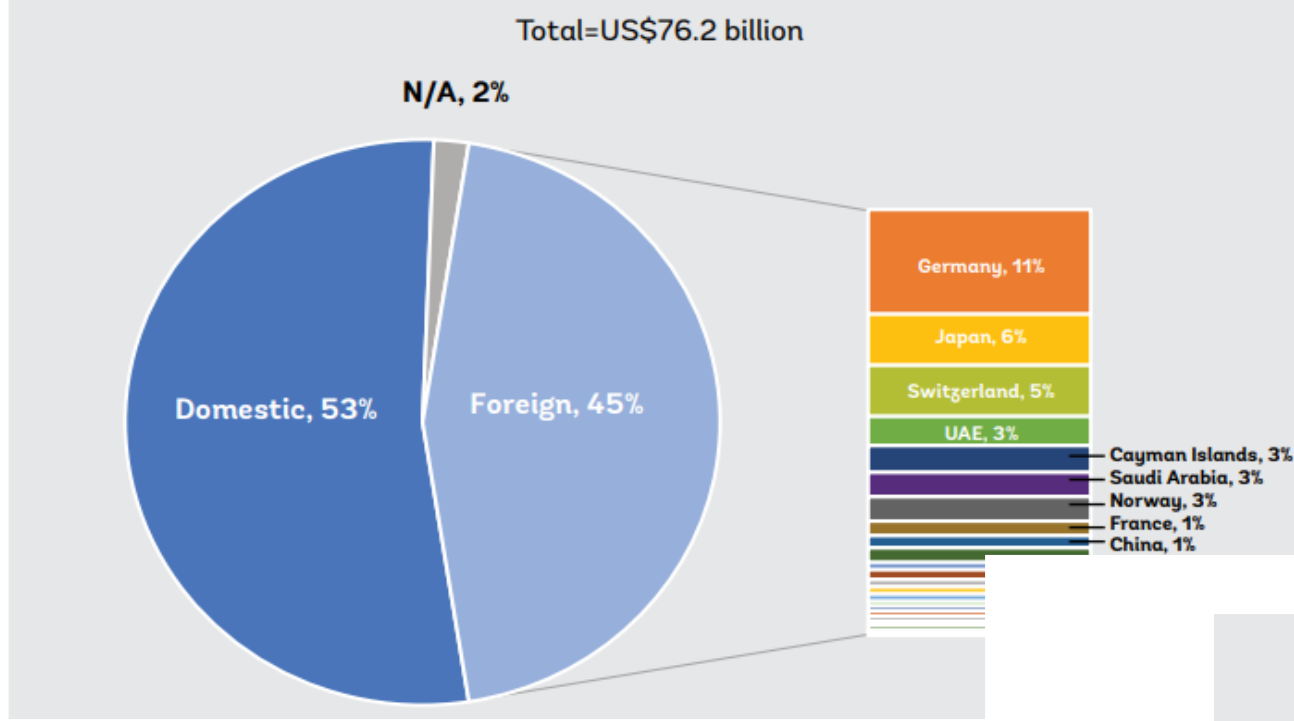
Cofinancing mobilized for each dollar of MDB climate finance to LMIC (2021)



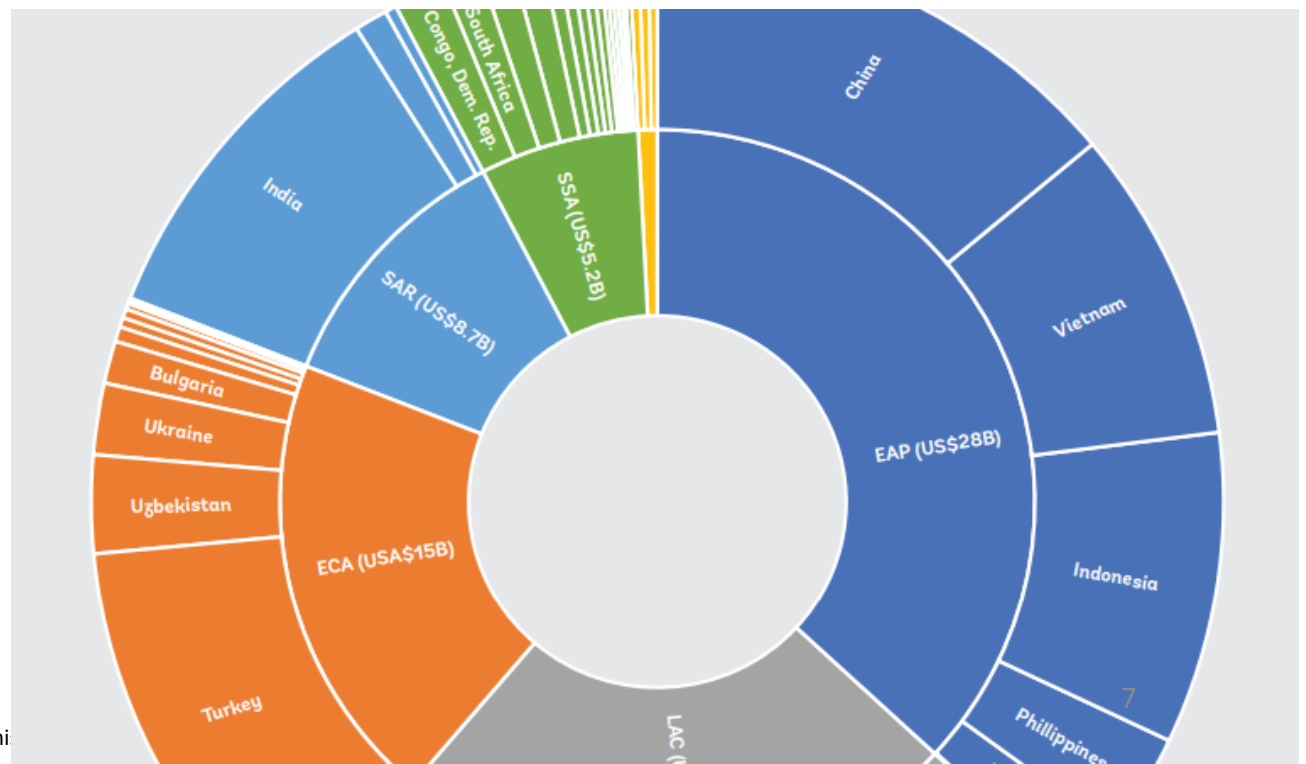
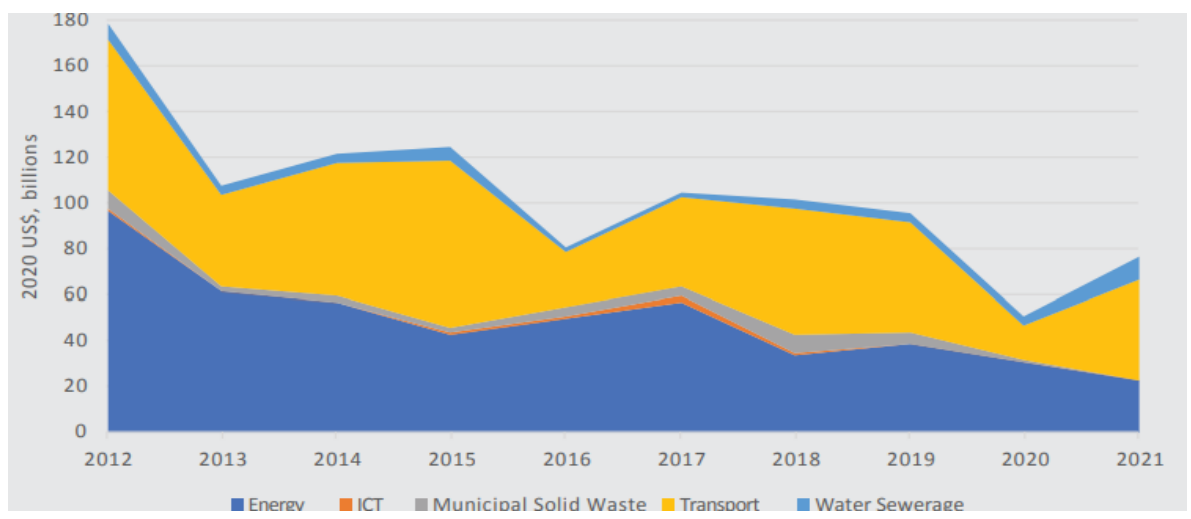
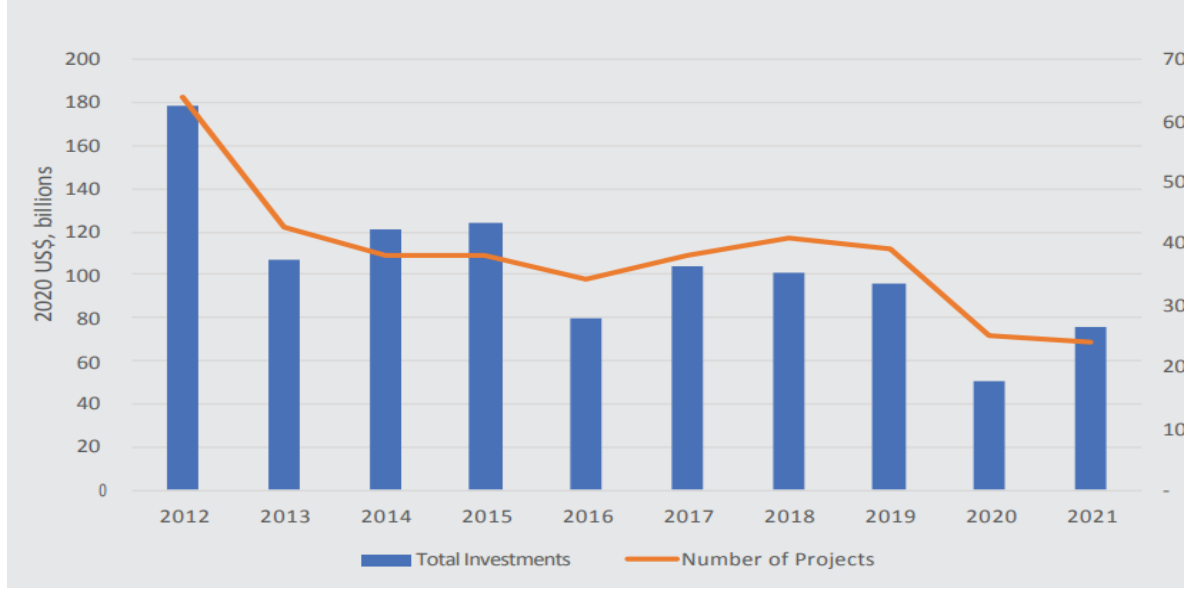
MDB Climate finance by type of Instruments in LMIC (2021)



Proportion of Foreign to Local Sponsors in Low- and Middle-Income Countries with Private Inv Commitments, 2021



Investment Commitments in Infrastructure Projects with Private Participation in Low- and Middle-Income Countries, 2012-2021

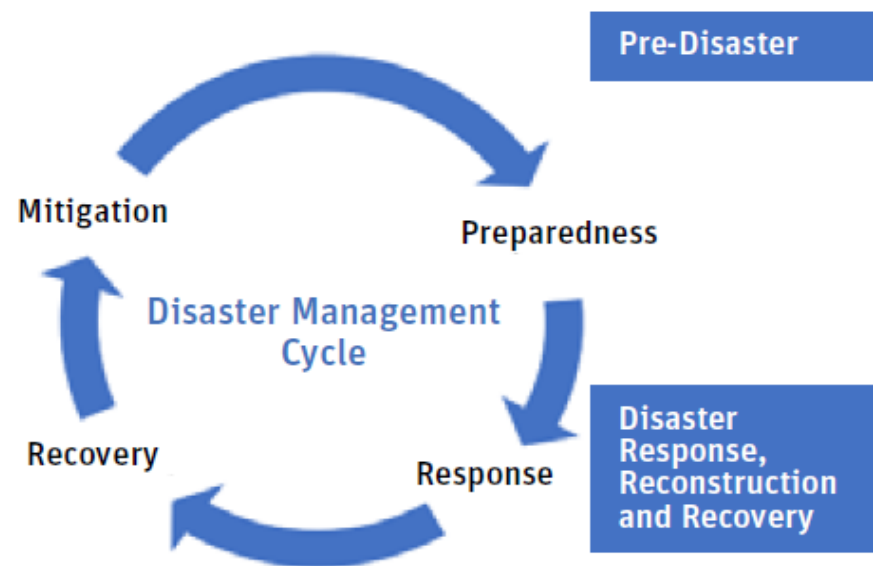


Private participation in infrastructure in low- and middle-income countries, PPI Database, World Bank

Can private sector fill the
gap?

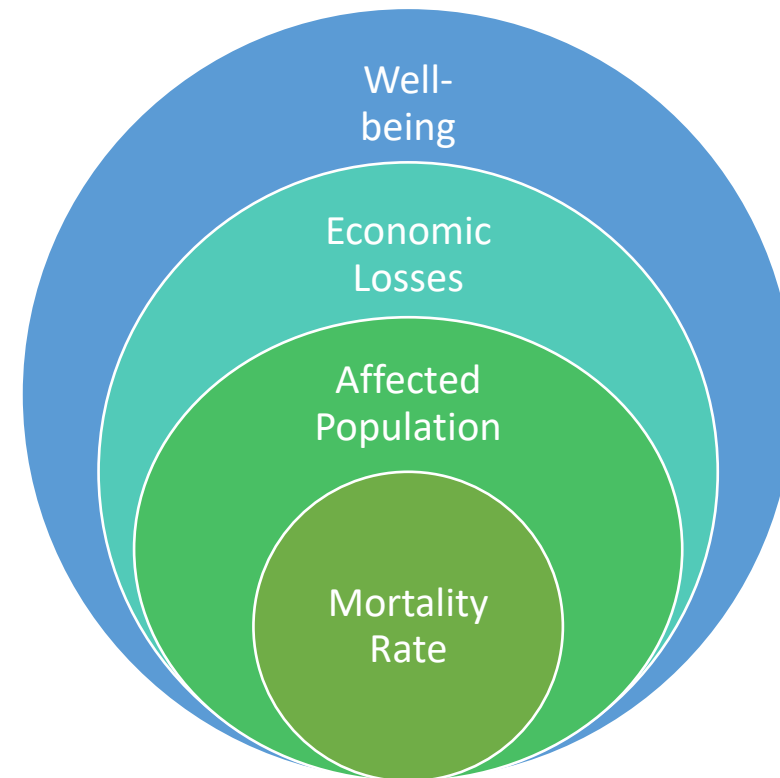
Private sector can play a role in many phases and scope....

Disaster Management Cycle



Source: Adapted from FEMA (n.d.) and Thomas (2017).

Reduction and management of ...



Entry points for Private Sector

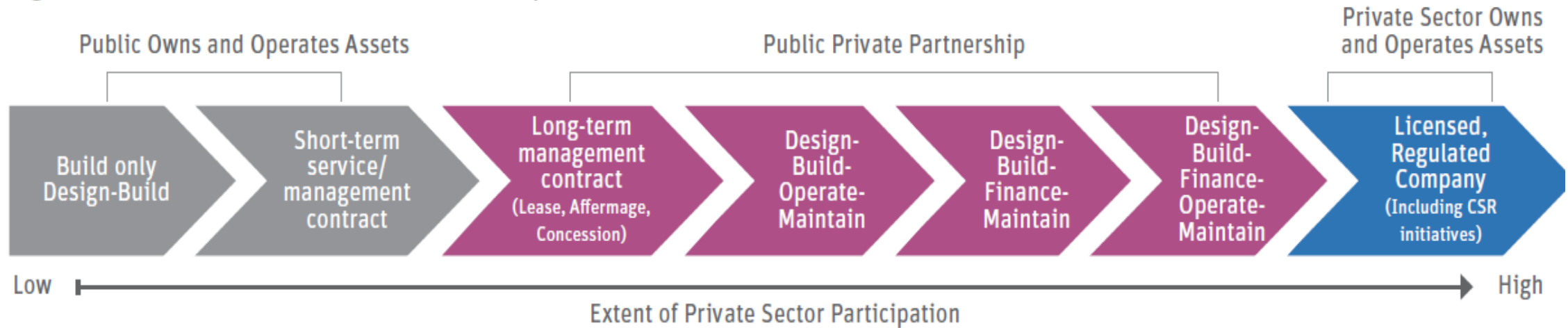
Planning for resilient future: At policy & planning levels, Public Investment Management (PIM) and PPP screening/preparation process

Recovery for immediate needs: At national disaster recovery framework level and with retrofitting contractual innovations to manage uncertainty

Emergency Response: With integrated coordination and active engagement efforts

Resilient businesses: Becoming compliant with country's regulations on ESG and conforming to international standards

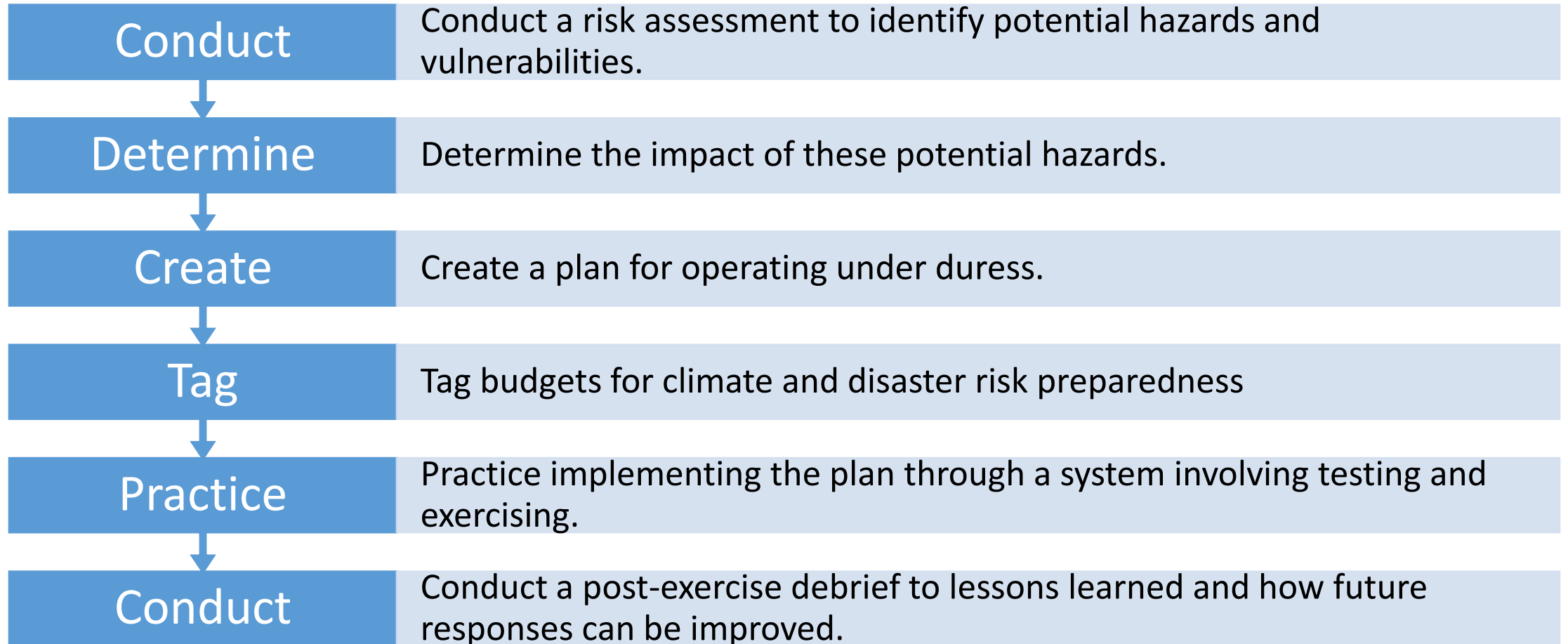
Extent of private sector participation



Sources: Adapted from World Bank (2016, 2017).

Note: CSR= corporate social responsibility.

Start with pre-disaster preparedness planning



Pre-disaster preparedness: Case Study of Kokusai Kogyo in Japan

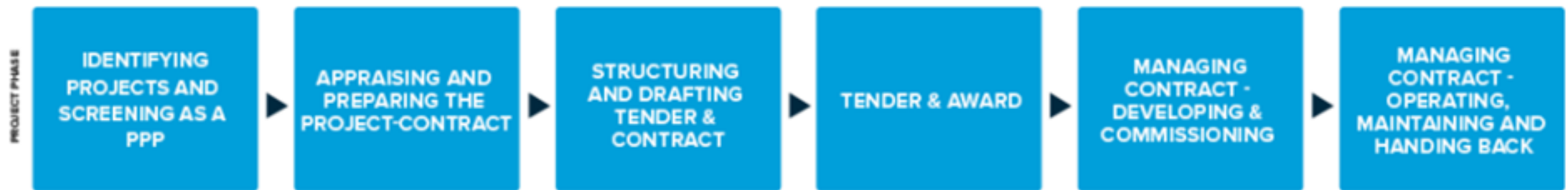
Kokusai Kogyo has a government contract entitled *saigai kyotei*, activated by the government in the event of a disaster.

The company collects and sells geo-spatial information including aerial imagery of Japan's terrain.

March 2011 earthquake, Kokusai Kogyo surveyors undertook aerial imaging, which was then combined with property tax records, to determine the extent of damage to residential homes in the tsunami-affected areas.

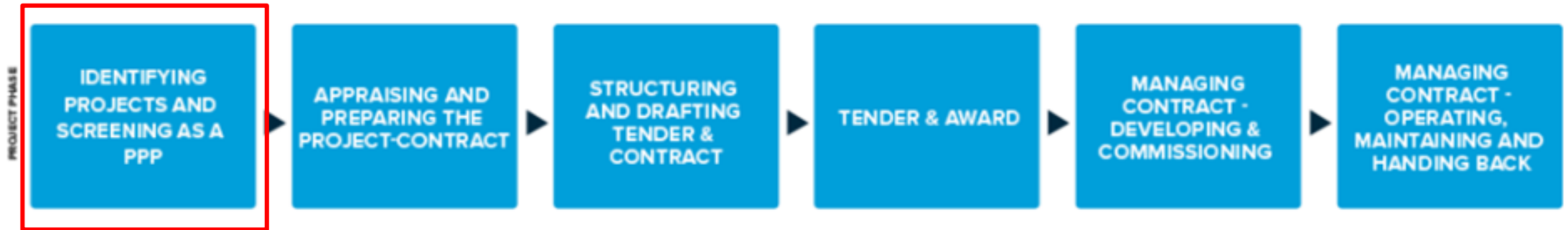
The company also helped issue disaster loss certificates.

Integrating climate and disaster risks management in the PPP process cycle to ensure resilient investments



Source: ADB, EBRD, IDB, IsDB, & WBG in the APMG PPP Certification Program Guide, 2016

At inception...



Contracting authorities should consider the alignment of infrastructure projects with a country's long-term climate needs by making good use of:

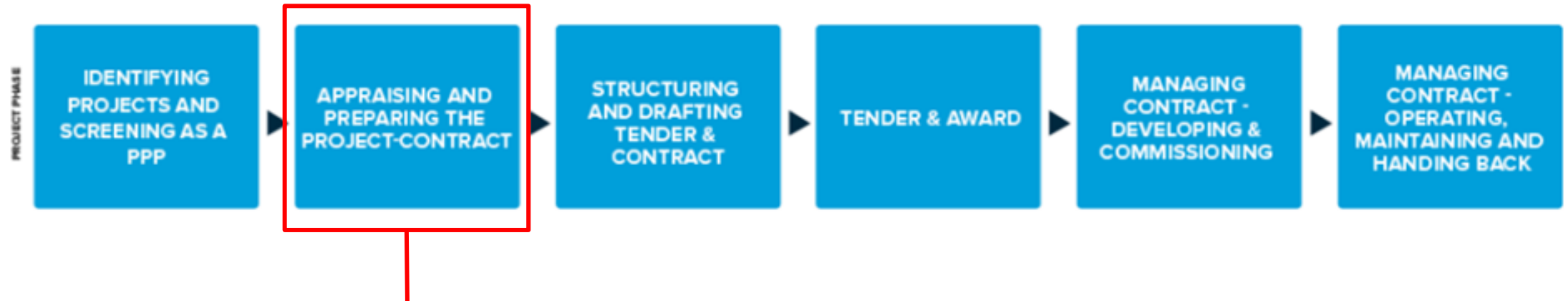
- i. **Nationally Determined Contributions (NDCs)**, which are at the heart of the Paris Agreement
- ii. **National Adaptation Plans (NAPs)** are key to understanding a country's adaptation strategies: as of March 2021, **22 developing countries had completed their NAPs and 126 are in the process of formulating and implementing their NAPs** (UNFCCC, 2021)
- iii. **Public Investment Management**, which screens all projects from whole-of-government should include climate and disaster risk scenarios and vulnerability upfront



The Building Standards Committee in Fiji

- Private firms in Fiji oversee the preparation of the National Building Code, which establishes the minimum standards to reduce disaster-related losses and set hurricane insurance premiums.
- Homes that are upgraded are inspected by an engineer and issued a certificate.
- This certificate is necessary for obtaining cyclone insurance and undertaking mortgages.

At appraisal...



PPP contracting authorities should ensure that the projects' **life-cycle cost analysis (LCCA)** considers the **long-term cost implications of CRR and DRM**:

- It is likely that increasing climate hazards would raise the long-term cost of infrastructure projects
- **Feasibility studies** must include climate and disaster risks and vulnerability assessments, in addition to the environment and social impact assessments
- **Technical and engineering studies** must include resilient technologies and solutions to withstand the risks
- For instance, **in Ontario, Canada**, the cumulative O&M costs of public buildings are projected to **increase by \$0.8 billion per annum over the rest of the 21st century under the medium-emissions scenario** (Financial Accountability Office of Ontario, 2021). However, this figure would **rise substantially to \$1.5 billion under the high-emissions scenario**

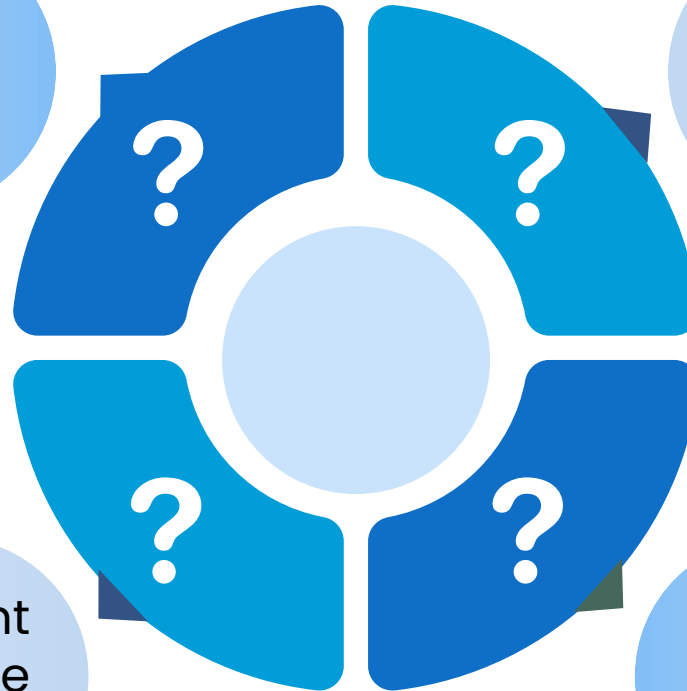
Resilience as an investment and not a cost

What are the projected damages?

What are the difference in cost between damages and the cost of improvements?

How can investing in more resilient infrastructure and facilities reduce these damages?

How can we quantify the economic impact?



Using disasters as a catalyst for changes in disaster mitigation efforts: Australia

- Following the 2009 Victorian 'Black Saturday' bushfires in Australia, the Victorian Government introduced updated Building Standards AS3959-2009 for bushfire-prone areas to facilitate the rebuilding process.
- The Standards increased the construction requirements for residential buildings to ensure better fire protection.
- The new Australian Standard now applies to the whole State.

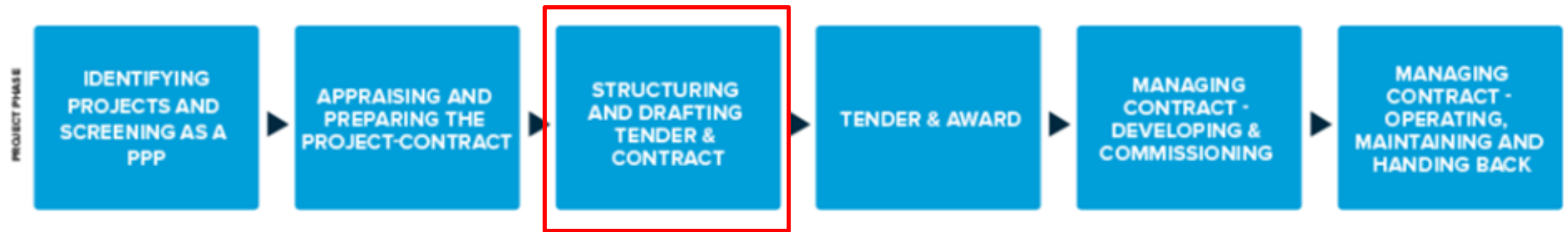
IKEA's Solar-powered Better Shelter

Developed by the not-for-profit Ikea Foundation with the United Nations High Commissioner for Refugees (UNHCR), IKEA's solar-powered Better Shelter lasts six times longer than a typical emergency tent.

- Easy to assemble quickly
- Sleeps five people comfortably and is twice the size of a regulation refugee tent.
- Solar-powered roofing.
- 2015 Nepal earthquake.
- 2018 Senegal severe coastal erosion.



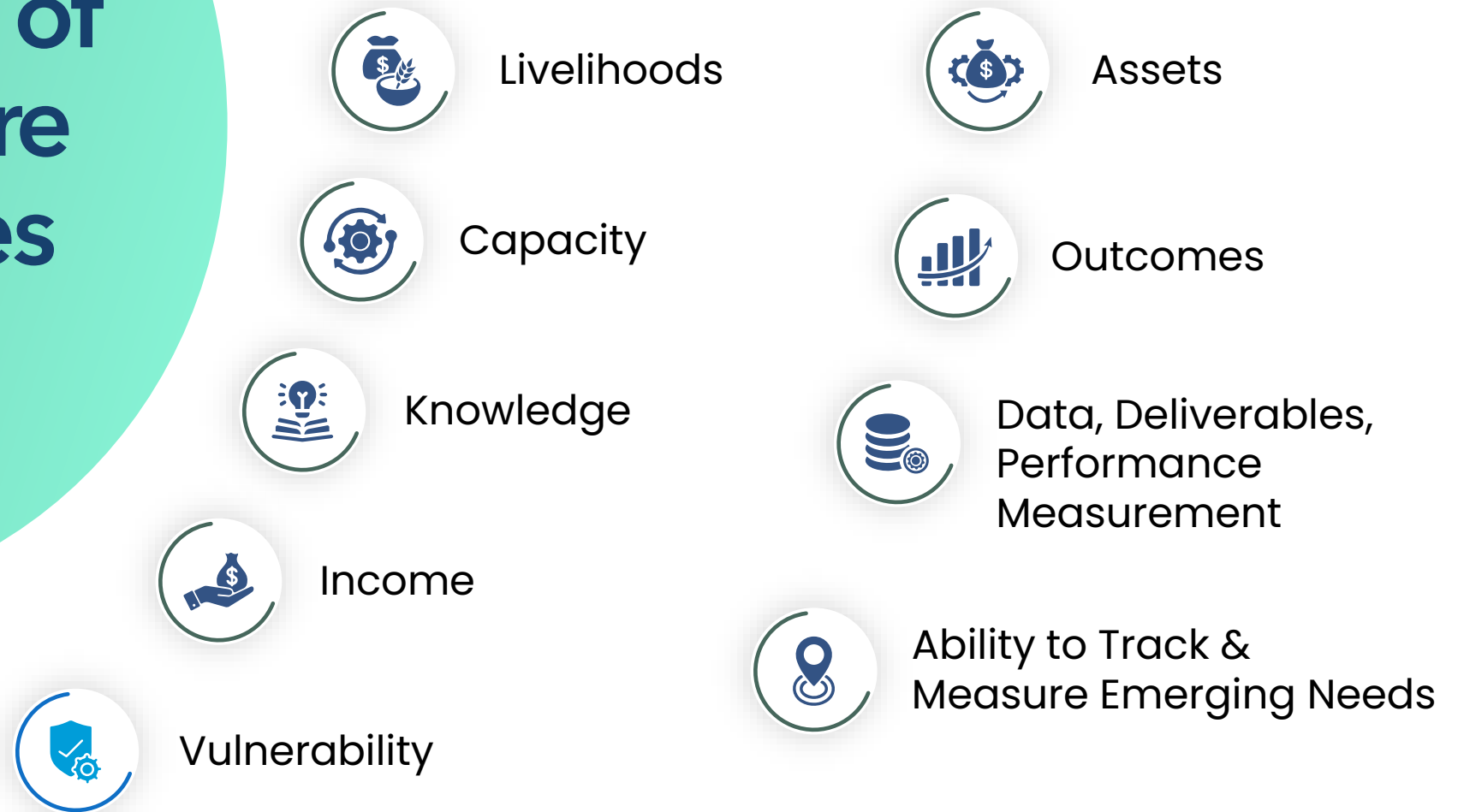
At procurement...



PPP contracting authorities should determine whether any CRR & DRM should be reflected in the contractual terms. Among others:

- **Contracts** are built for long-term and so does the KPIs, which should factor in adaptation of hard and soft infrastructure
- **Force Majeure Events are especially pertinent to the management of CRR & DRM** as traditionally climate and natural disaster risks fall under this bracket.
- For instance, in Japan, some PPP agreements **determine Force Majeure Events related to earthquakes based on seismic intensity**; as some low-intensity earthquakes are excluded, the private developers shoulder responsibilities to address such risks which are relatively manageable and expected.

Factors in Adaptation of Infrastructure and Facilities



Private companies should internalize the externalities of their business operations

- Incorporate ESG considerations in making decisions



Environment

- Water and pollution
- Resource depletion
- Greenhouse gas emission
- Deforestation
- Climate change



Social

- Employee relations and diversity
- Working conditions, including child labour and slavery
- Local communities; seek explicitly to fund projects or institutions that will serve poor and underserved communities globally
- Health and safety
- Conflict



Governance

- Tax strategy
- Executive remuneration
- Donations and political lobbying
- Corruption and bribery
- Board diversity and structure

Government can support the transition in making private sector resilient

- **Regulatory Incentives:** Supporting sustainability reporting, disclosure and transition through TCFD and NGFS
- **International standards:** Compliance with Task Force on Climate-related Financial Disclosures (TCFD), UN Principles of Responsible Investment (PRI), Sustainable Banking Network (SBN), Sustainable Infrastructure Label FISl and many others

Unprecedented
climate
emergency
demands new
solution to be fit
for purpose for
future...

Policy makers in developing countries

- Address the **fundamental bankability** issues in projects, which are reinforced even more in green transport projects.
- Establish green & resilient **taxonomy and standards**.
- Identify and screen for green & resilient **pipeline of projects**.
- **Carbon pricing** can be a tool to augment the transition to new adaptive solutions

Financiers and companies

- Harness **new financiers** who are focused on resilience, sustainability (ESG & impact investors) and access capital markets.
- DFIs need to **scale up their financing** to climate mitigation and adaptation.
- DFIs can play a larger role in **providing derisking instruments** to mobilize private capital.
- **Scaling-up small projects** will bring private sector investment and innovation.

Recommended reading

- https://wappp.org/wp-content/uploads/2022/08/ClimateRelatedRisk-in-infra_as-is_5Aug2022.pdf

Integrating climate risk management in infrastructure PPPs in developing countries: Key concepts, best practices, and broader considerations

Jyoti Bisbey¹, Chang-Boong Lee², Patrick Ryan³

Abstract

Climate change is one of the largest threats to global economic growth and financial stability. While international cooperation to address climate change has increased in recent years, progress has been limited in transition to more climate-proof infrastructure management. Stakeholders involved in infrastructure development must urgently understand and integrate climate-related risks (CRR) from all three physical, transition, and liability aspects. As public-private partnerships (PPPs) are a key modality in delivering infrastructure projects, PPP process cycle provides many venues to proactively manage CRR that could arise throughout the whole infrastructure life cycle. To such an end, this paper identifies the specificities of CRR for infrastructure PPPs, providing illustrations on the relevant types of climate-related risks, conceptual analyses of the systemic implications, broader ecosystem-wide considerations facing the key stakeholders as well as granular practical recommendations to adapt the PPP process cycle. Finally, the broader considerations for key stakeholders, particularly the public sector, policymakers, and private sector are discussed. In doing so, this paper aims to contribute towards the development of good practices among PPP practitioners and stakeholders for managing climate-related risks.

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Thank you!

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