

Fiscal Considerations on Climate Change: Perspectives on the Way Forward

Eighth Tokyo Fiscal Forum
6–7 June 2023

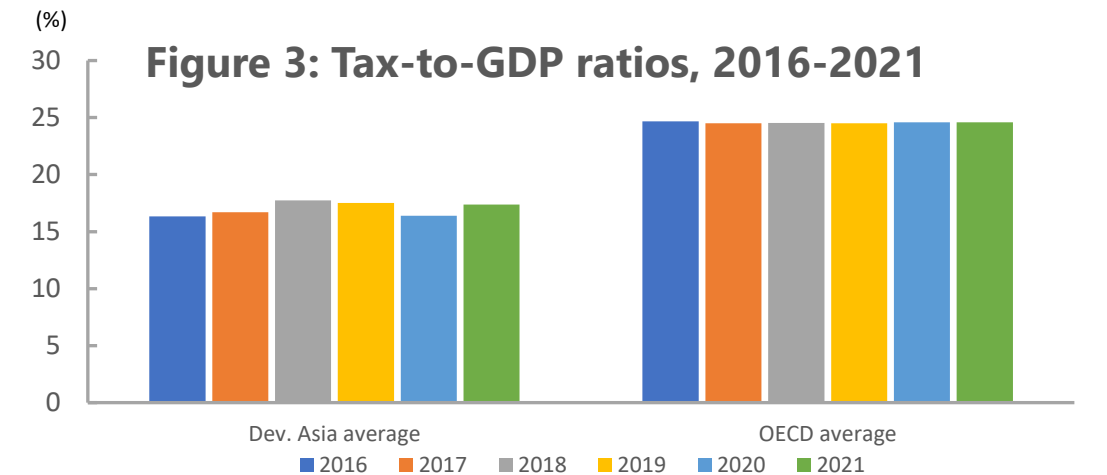
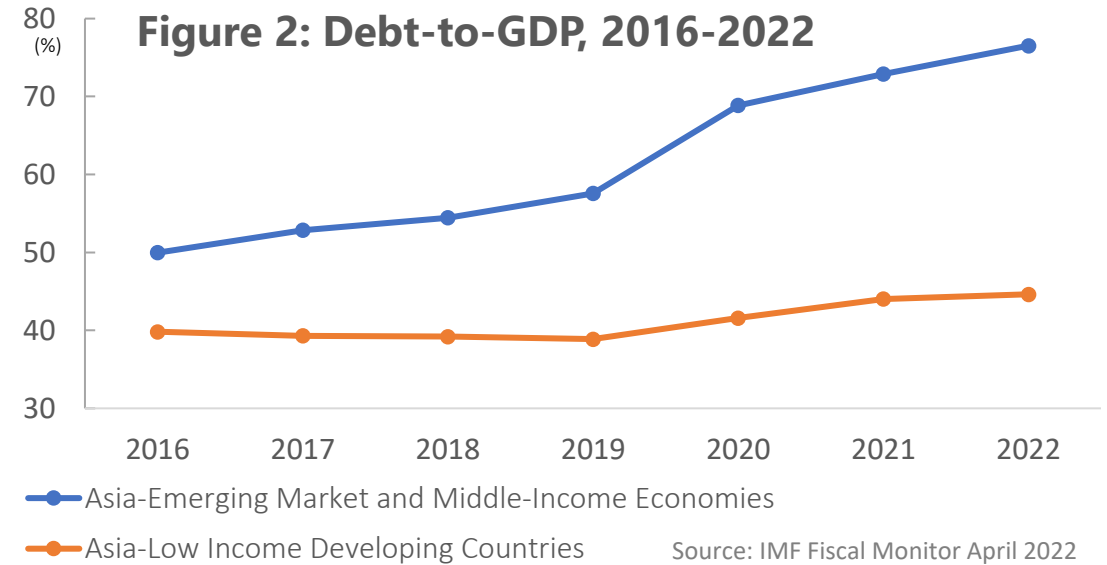
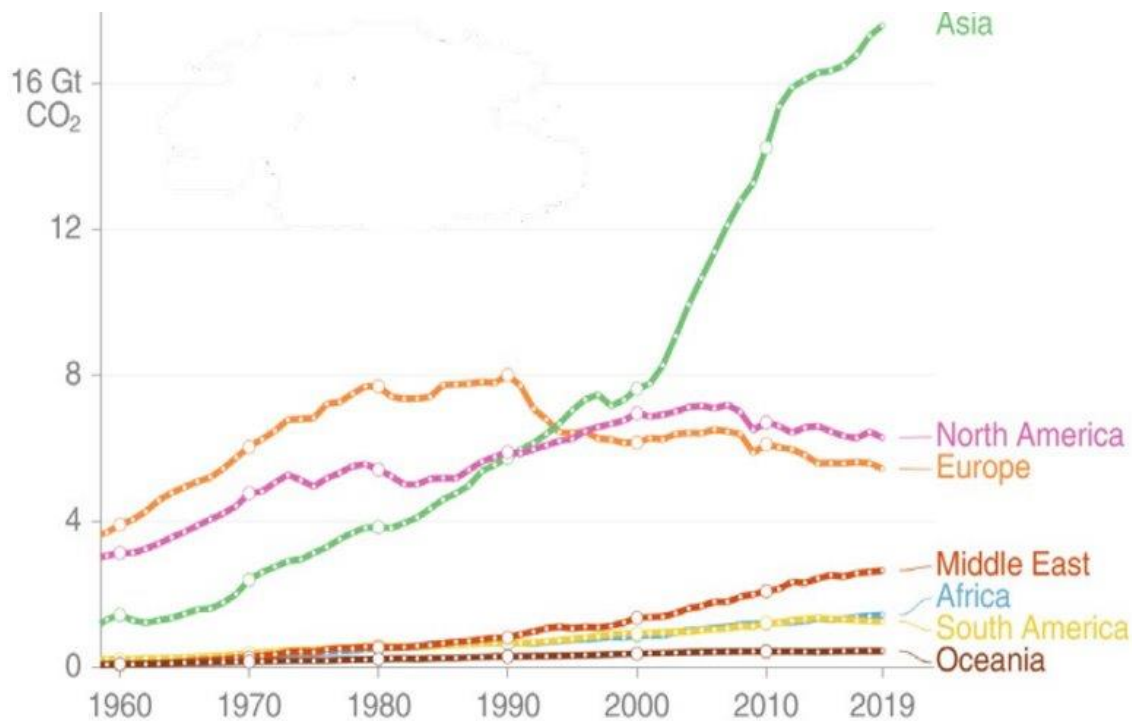
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Climate Change and the Public Finance Challenge



Figure 1 - Annual Fossil CO2 Emission by Continent

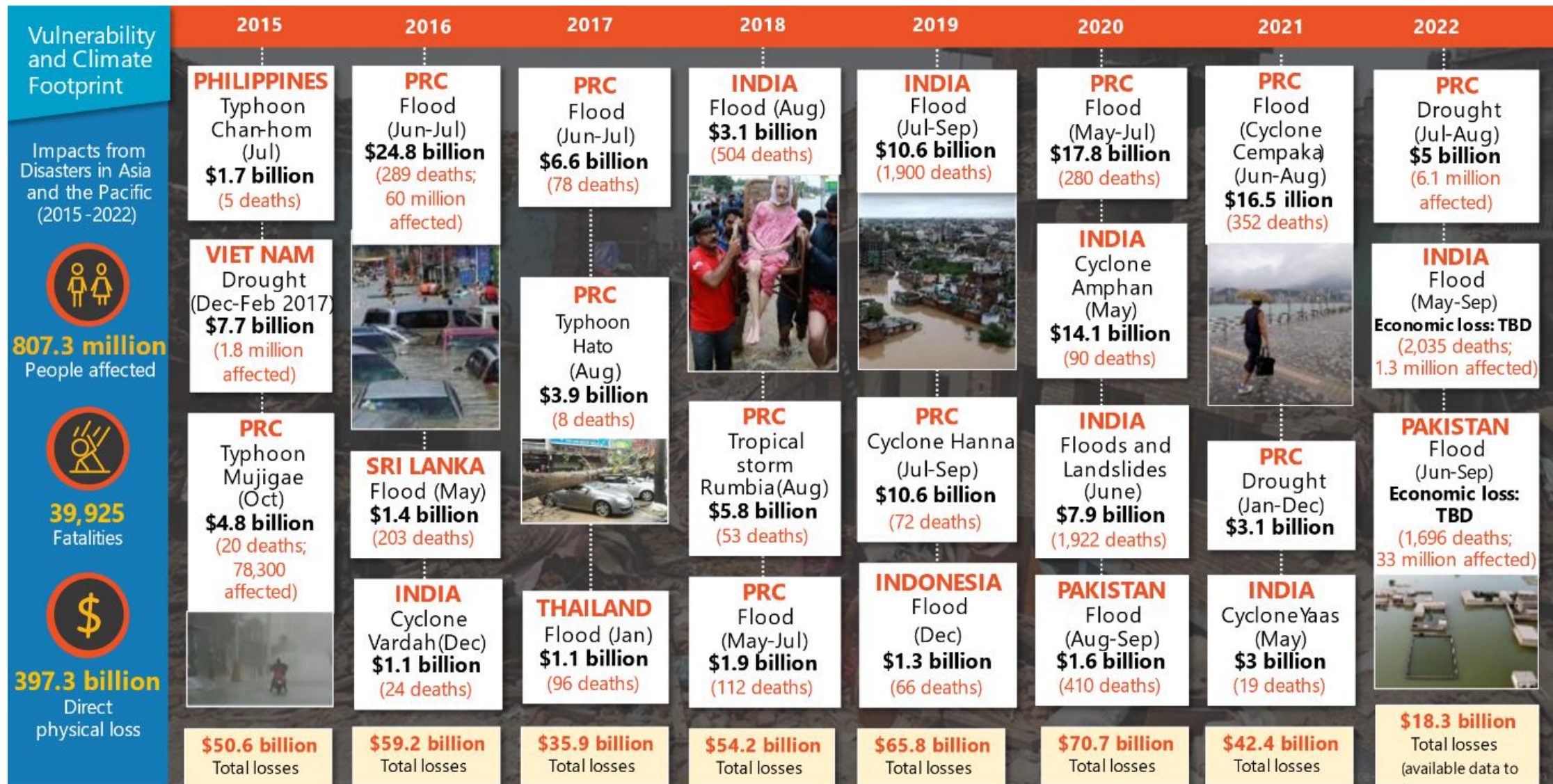


Note: In terms of OECD average, FY 2020 data is used for FY 2021 due to the data unavailability. Data do not include Social Security Contribution.

Source: ADB staff estimates based on ADB Key Indicators Database, OECD Revenue Statistics 2022, IMF Government Finance Statistics, Government Statistics, and World Bank Open Data.



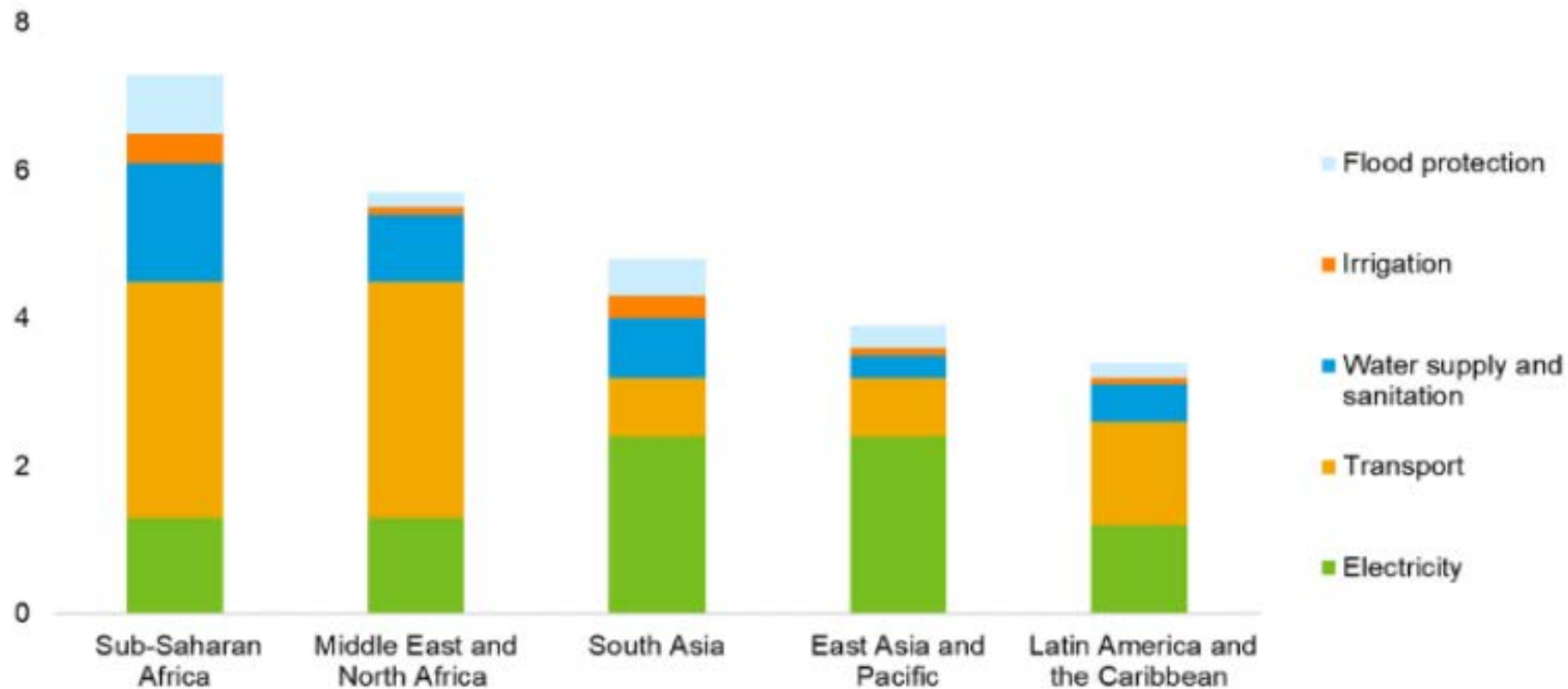
Climate Change and Disasters in Asia and the Pacific





Capital Investment Requirements by 2030

Figure 4 - Scenario for SDG and Paris Agreement Compatible Annual Investment Spending
(Annual Average in Percent of Regional GDP)

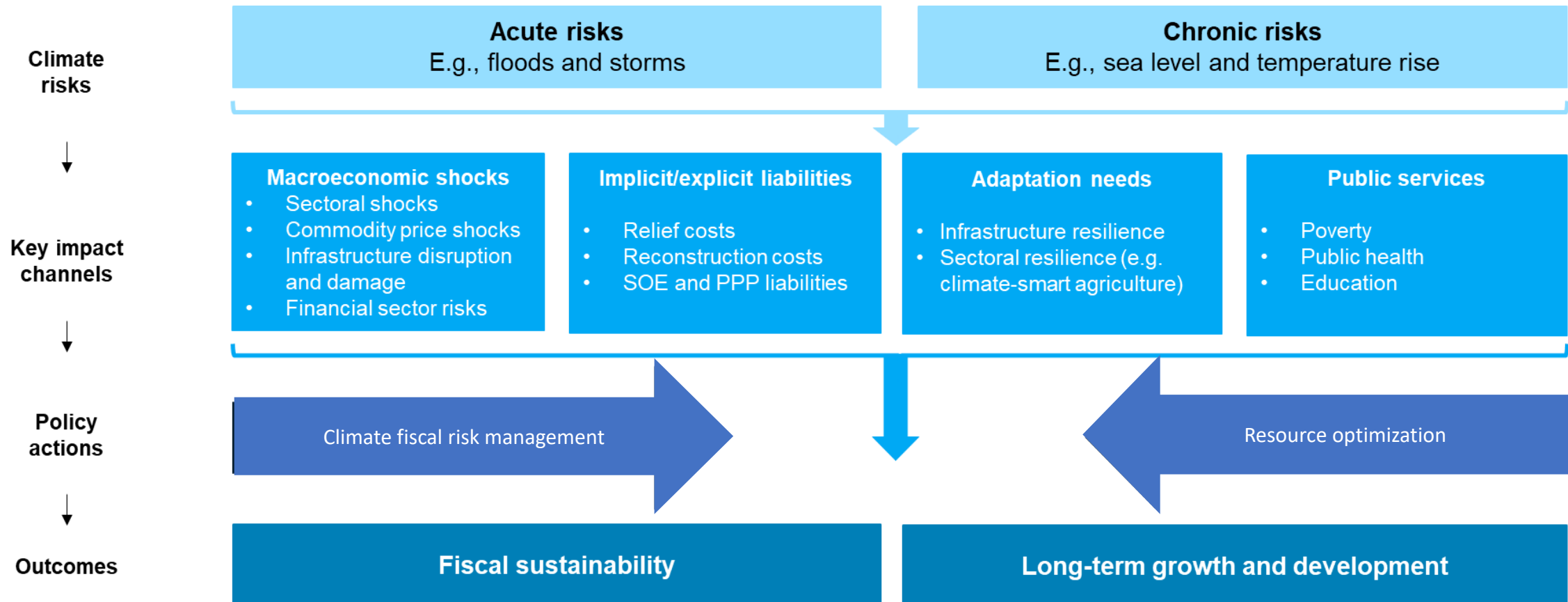


Source: IMF (2021), based on Rosenberg and Fay (2019)

Climate-related risks pose a frequent, sizeable, and increasing risk to fiscal sustainability

Climate risks, both acute risks (e.g., floods and droughts) and chronic risks (e.g., sea level and temperature rise), can affect the fiscal position of nations both directly and indirectly through four key impact channels.

Climate responsive fiscal management enables central finance agencies to *allocate* and *manage* fiscal risks, and *mobilize* financial resources to finance investment in a climate-constrained world.



Asia stands to gain from ambitious climate action

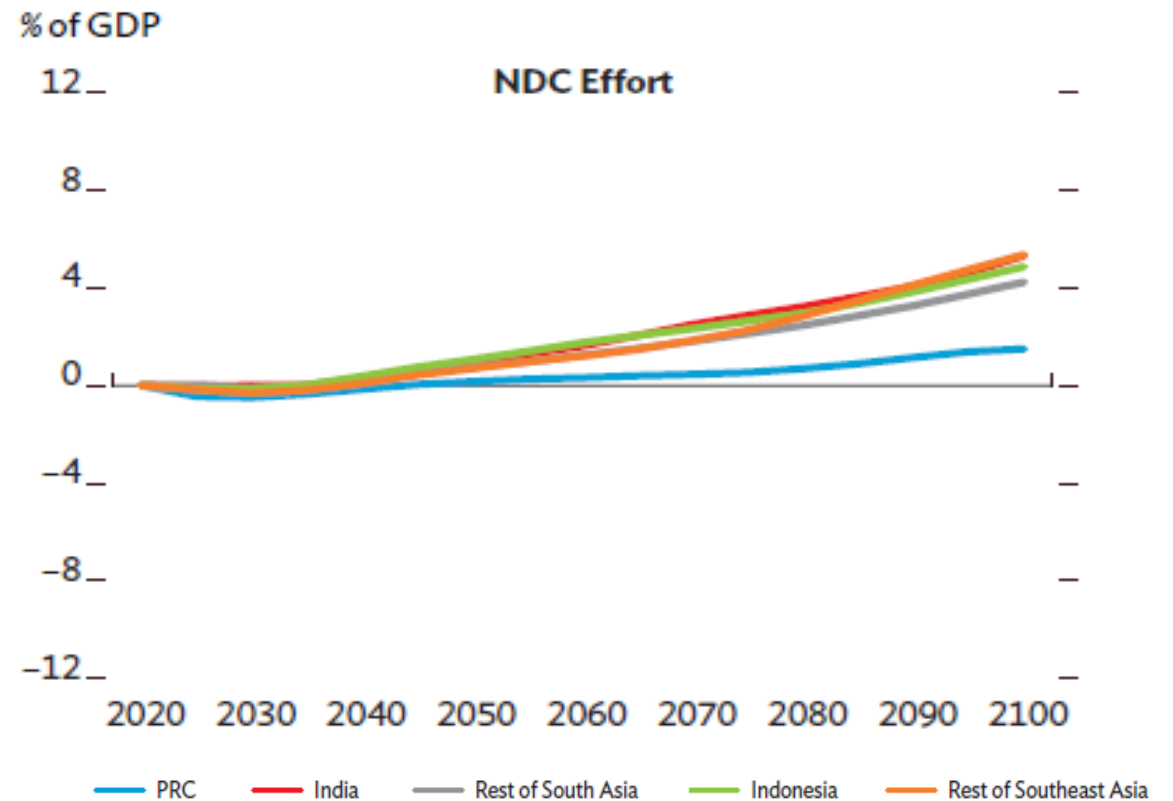
Meeting Paris Agreement goals requires

- *over the short term* – drastic transformations of energy and land use; and
- *over the long term* – decarbonization of energy.

Climate benefits would be 260% of mitigation costs for developing Asia.

Co-benefits are initially much larger than climate benefits including saved lives and food production from reduced air pollution.

Figure 5 – Annual Net Policy Costs and Climate Benefits from Ambitious Decarbonization



Note: Benefits from reduced climate change are generated using damage functions from van der Wijst, K. et al. 2023

Modelling uses the World Induced Technical Change Hybrid (WITCH) model.

It can find optimal mitigation pathways and actions for a particular climate goal.

Source: ADO Thematic Chapter 2023.



1 Reforming Prices

- Putting a price on carbon emissions
- Removing subsidies that promote emissions

2 Facilitating Low-Carbon Responses

- Implementing regulations and incentives for decarbonization
- Leveraging finance for low-carbon activities

Source: ADO Thematic Chapter 2023

3 Ensuring Fairness

- Working toward fair international mitigation burden sharing
- Compensating and protecting vulnerable groups
- Helping the affected to adjust



Carbon Pricing in the Broader Climate Policy Architecture

Carbon pricing can be an effective green fiscal policy instrument to facilitate green growth

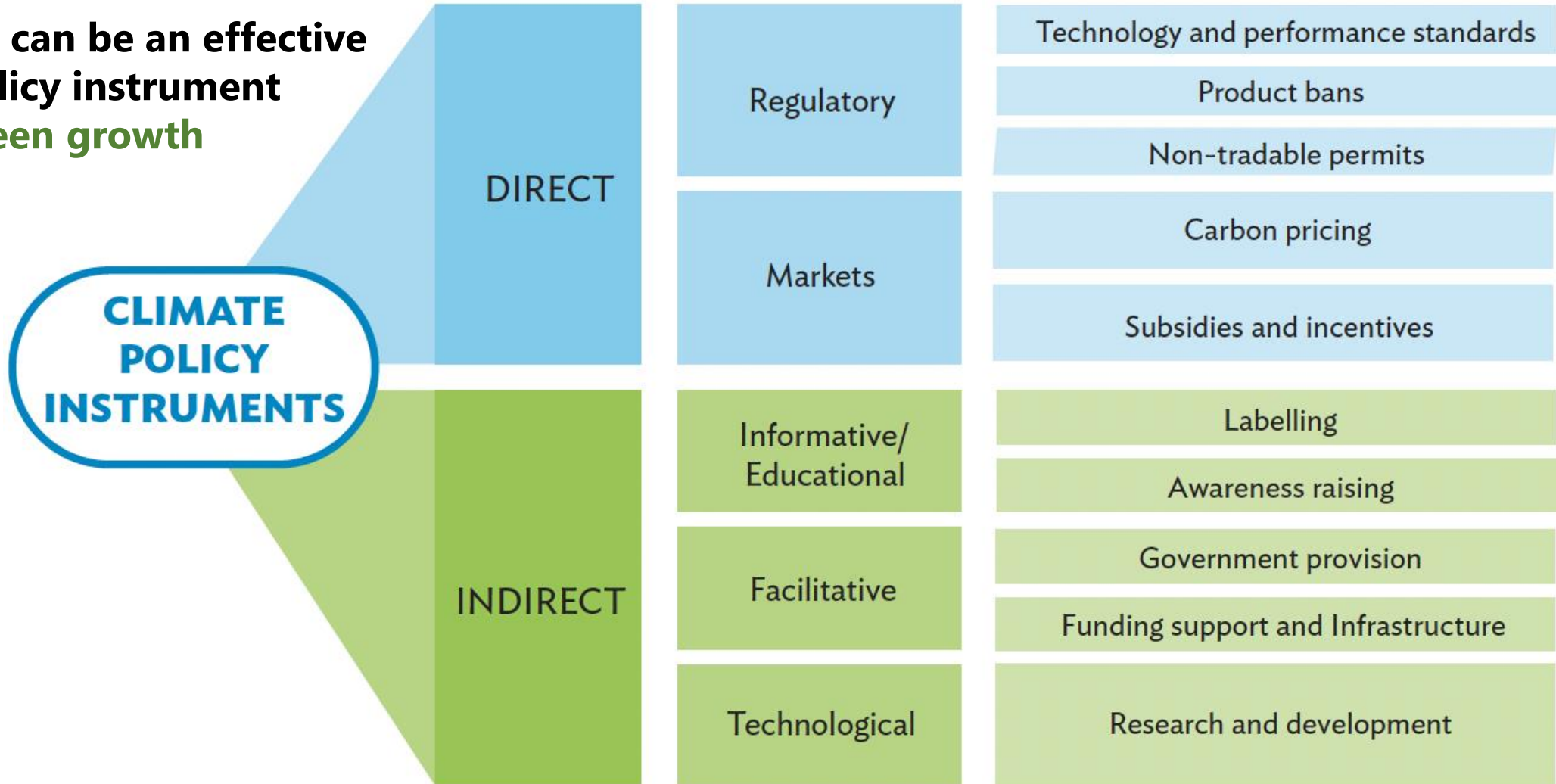


Figure: Carbon Pricing in the Broader Climate Policy Architecture (Source: Asian Development Bank)



Prevalence of regulated power markets hindering ETS efficacy

Policy Options: Coverage of indirect emissions; Climate oriented or green dispatch; Carbon Investment Board; Pricing Committee; Consumption charge

Potential distributional impacts to consumers and businesses

Policy Options: Address competitiveness for domestic industry; Introduce tax discounts or exemptions to vulnerable sectors; Provide tax rebates to low-income households

Potential distributional impacts to consumers and businesses

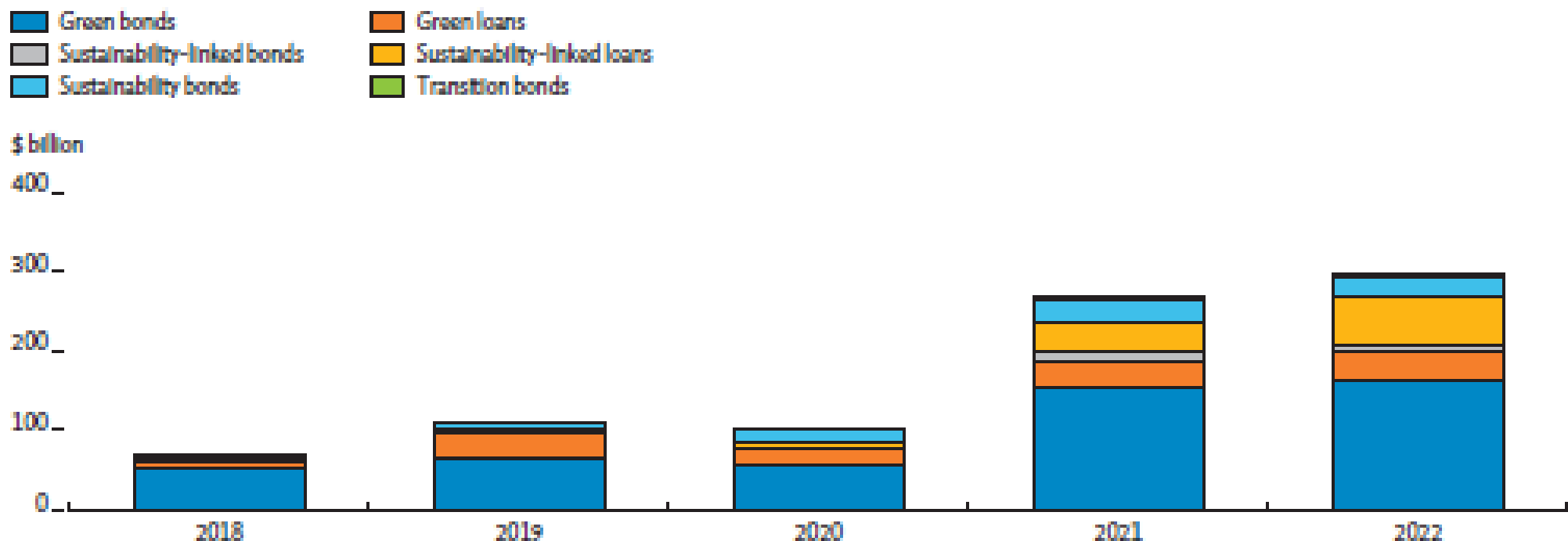
Policy Options: Coordinate with development partners; Knowledge transfer and sharing between countries; Establish inter-ministerial committees; Build on existing infrastructure and systems

- Cutting carbon subsidies can offset much of the cost of deep decarbonization.
- Developing Asia spent \$116 billion in 2021 on subsidizing fossil fuels, and these subsidies are much higher than subsidies for renewables.



Green and transition finance has expanded rapidly in developing Asia.

Issuance of Green and Transition Debt Finance in Developing Asia, 2018–2022



Sources: Asian Development Bank. [AsianBondsOnline](#) (accessed 15 March 2023).

Enhancing Public Financial Management for Green Investments

Some Stylized Facts

- Data from 16,000 major investment projects in twenty different fields in 136 countries show that 91.5% of projects go over budget, not completed on time, and fail to achieve their full benefits.
- Adaptation strategies are typically not integrated with sector development plans or investment priorities.
- Climate costs and benefits and other climate data are typically not integrated into strategic planning and the fiscal framework nor in the budget preparation process.

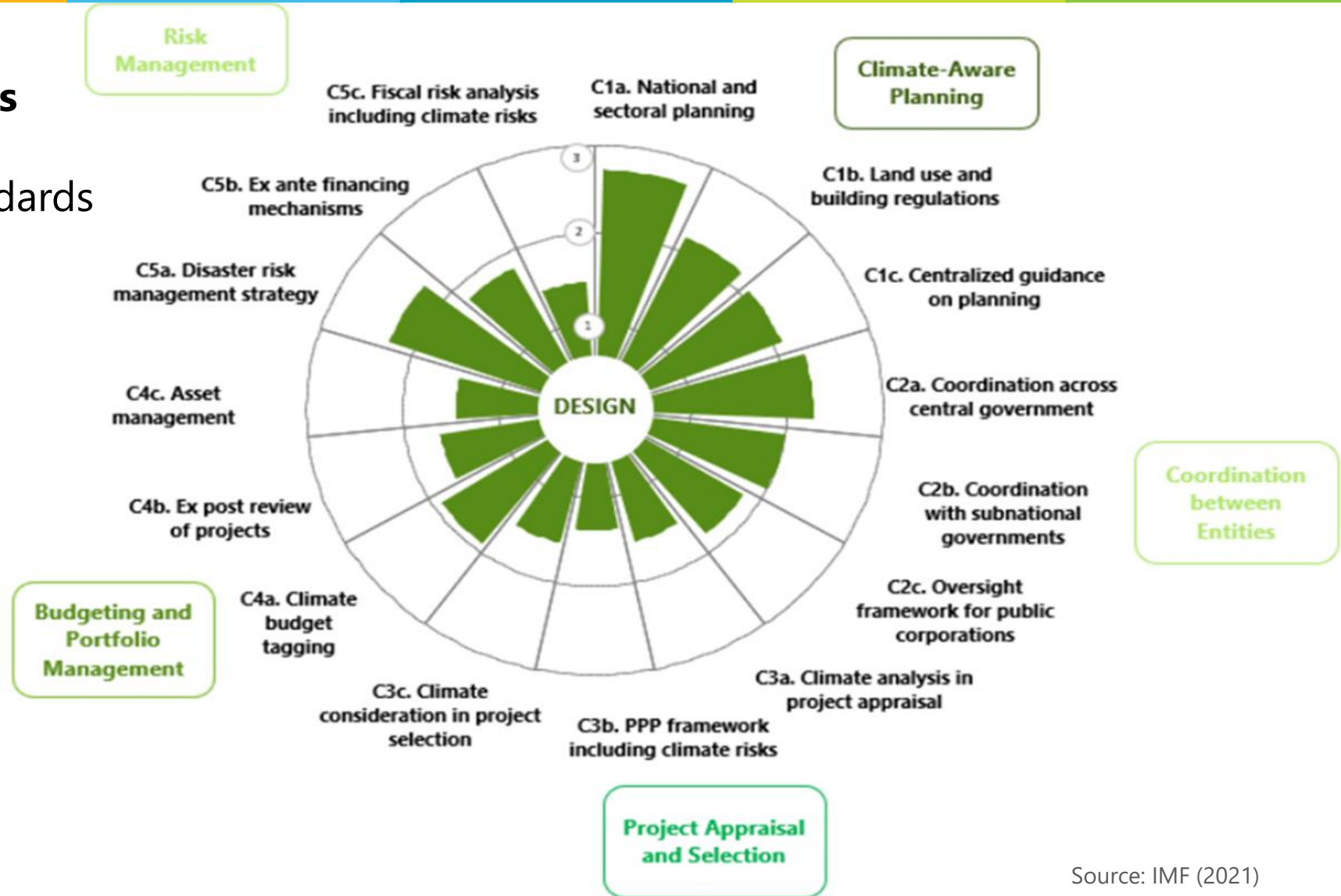
Some Important Goals

By aligning public finances and sustainability goals with well-defined PFM processes for managing revenue, expenditure, debt, and public investment, and integrating climate data into fiscal policies and decision making, governments can mobilize green investments, strengthen resilience and adaptation, promote accountability.



Going beyond assessments

- Help set Green PIM standards and reform priorities
- Advancing project by project



Source: IMF (2021)

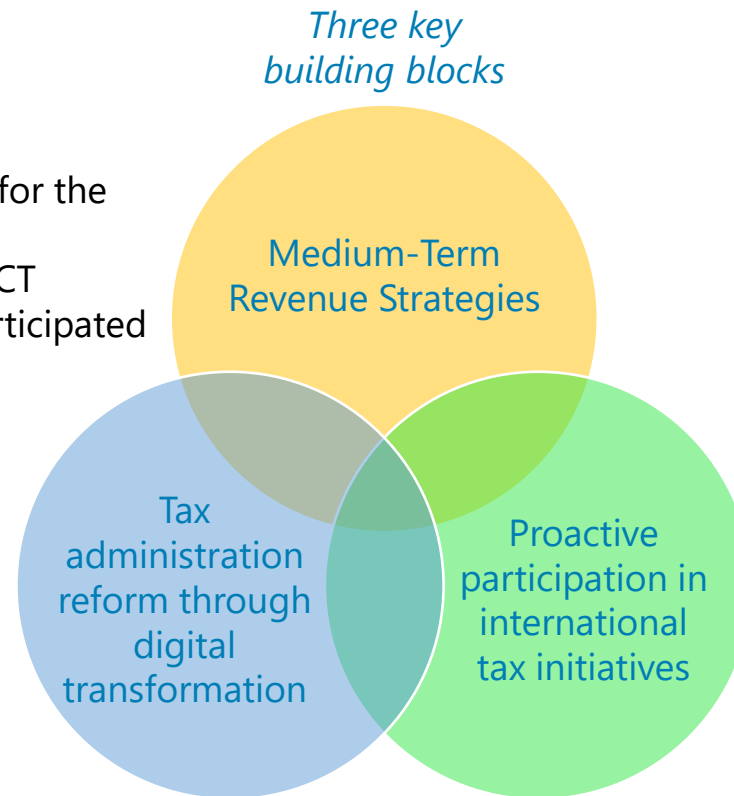
Asia Pacific Tax Hub



- ✓ A collaborative approach with IMF for the MTRS formulation is ongoing
- ✓ MTRS workshops organized with PCT
- ✓ Several TADAT assessments led/participated



- ✓ Virtual workshops organized with WBG and OECD
- ✓ Technical support for developing a roadmap for digitalization is ongoing
- ✓ Publication released



- ✓ Co-hosted BEPS regional consultations and other regional meetings
- ✓ Became a partner to the Asia Initiative
- ✓ BEPS 2.0 Helpdesk to be launched with OECD
- ✓ Technical assistance on BEPS& EOI is ongoing



ADB can leverage its financial instruments, such as policy-based and project lending/grant for our DMCs



Seizing the economic opportunities of low carbon transition

- Climate action presents the most significant economic opportunity arising from the unprecedented global demand for low and zero carbon technologies and solutions over the next 30 years.
- Developing Asia is well positioned to play an important role in global value and supply chains - if it acts now.
 - By more effectively engaging the private sector in climate action, by identifying clear business opportunities and creating the enabling conditions to unlock private sector investment at scale.
 - By fostering greater regional cooperation and seizing the opportunity in areas where greater policy harmonization or integration can maximize the economic benefits to DMCs.



Fiscal Policies for Climate Action and Sustainable Development

- Fiscal instruments can lay the foundation for building low-carbon growth pathways in developing countries.
 - Fiscal reforms (esp. through environmental taxes and targeted subsidies) to increase green activities, promote green innovations, reduce emissions and generate welfare gains.
 - Environment taxes/spending cuts for early climate action with preventive investment to avoid delays or remedial actions later which cause higher economic costs.
- Governments need to quantify and incorporate climate change risks in the budget preparation and fiscal risk assessment.
- Governments need to explore better ways to transfer and diversify fiscal risks against shocks coming from climate-related natural disasters and extreme weather events.