Global Economy and Development at BROOKINGS

Scaling-up Sustainable Investments for Better Development and Better Climate

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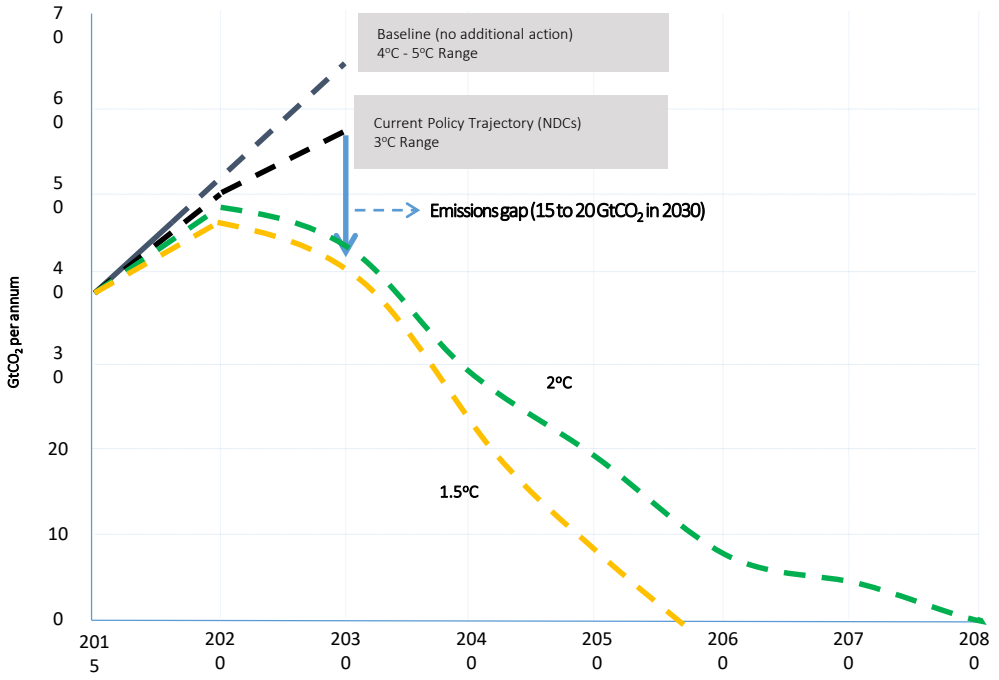
A New Era of Economic Growth

- Tremendous change in our understanding since the Stern Review made the case 12 years ago that the costs of inaction were greater than that of action.
- As the 2018 Report of the Global Commission on the Economy and the Climate argues, **the world has an unprecedented opportunity to shift to a better growth trajectory**, one that is driven by: 1) innovation, 2) high quality and sustainable investments, 3) greater resource productivity and 4) the vitality and potential of the private sector.
- This opportunity has become available because of the enormous advances over the past decade and a changing understanding of the processes of growth.
- **This new growth path will deliver higher productivity, more resilient economies and greater social inclusion. It can thus lay the foundations of "strong, sustainable, balanced and inclusive growth", deliver on the sustainable development goals and reduce the intense pressures on the global commons including the grave threats posed by climate change.**

The Present Path will leave us far short of the Paris climate targets

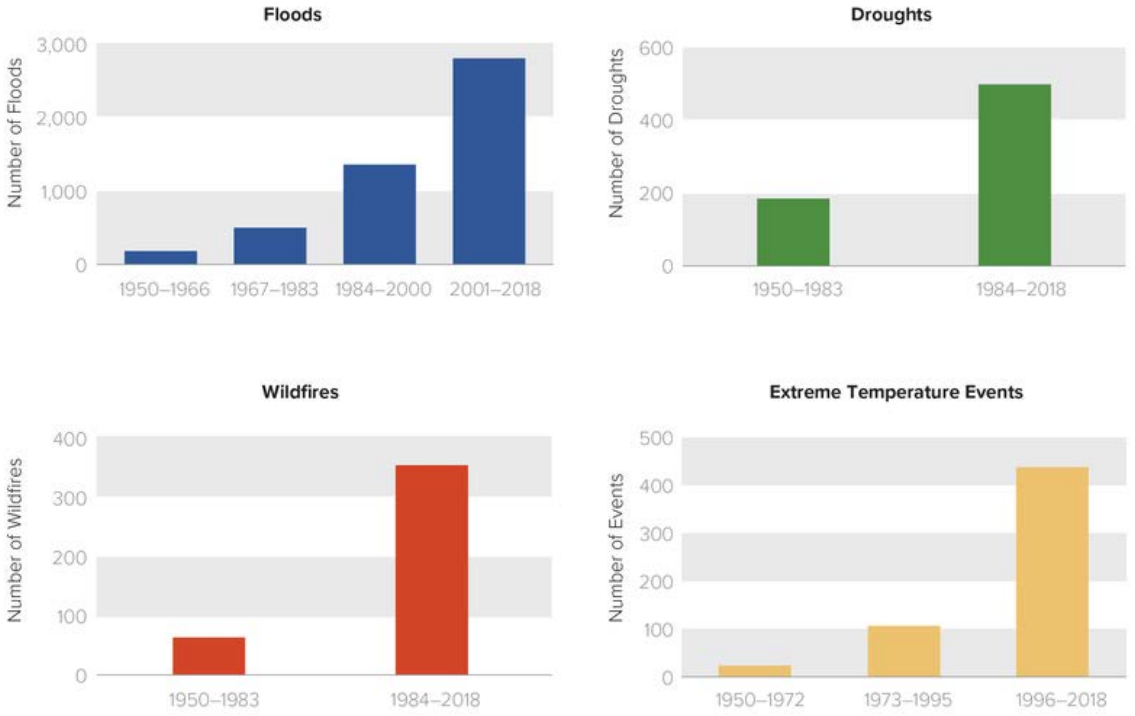


The challenge is now to implement and accelerate to 2020 to close the gap

Growing Risks from Inaction

While the opportunities are greater than they appeared a few years ago, the risks and costs of inaction are mounting faster and are greater than previously recognized.

More Frequent and Intense Extreme Weather Events are Becoming the 'New Normal'

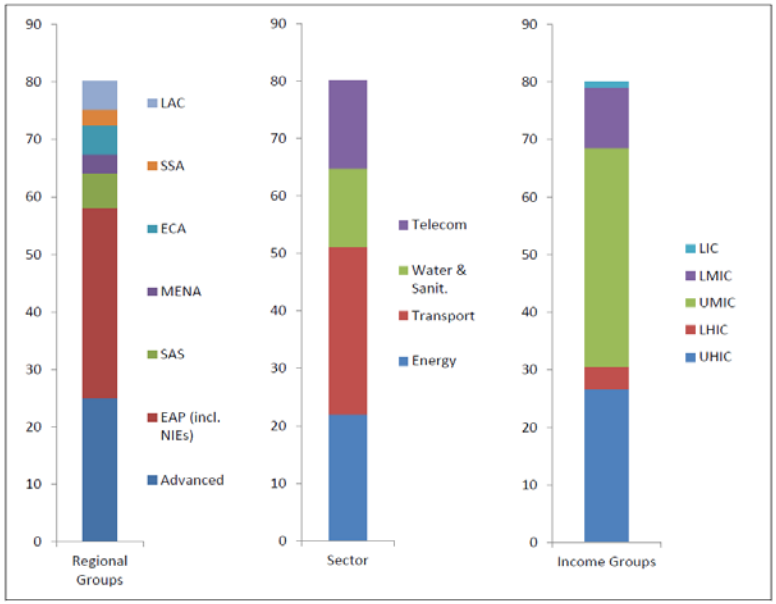


Sustainable infrastructure is at the center of this story

Around 70 percent of the projected infrastructure investment needs will be required in EMDCs

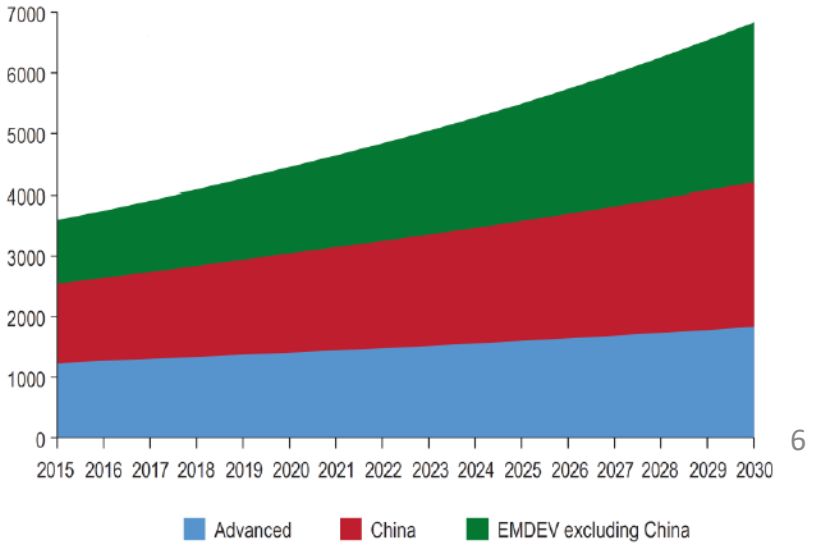
Projected cumulative infrastructure demand, 2015-2030

By regional groups, sector and income groups



Source: Bhattacharya et al. (2016)

Projected Annual Infrastructure Investment Trends, US$ Billions (2014 US$)



The Urgency

The next two decades are crucial:

- **Crucial period for development, sustainable and inclusive growth, and climate.**
- **2030 development agenda offers a historic opportunity for a breakthrough on poverty reduction and development, but if missed we will leave behind many permanently especially in Africa.**
- **The opportunities and benefits of the new growth path are increasingly evident; and the risks of the old are mounting faster than we had anticipated.**
- Over the next 15 years, the stock of infrastructure is expected to double; the world economy will likely double over the next over the next 20 years and urban population will nearly double over the next 30 years.
- With the scale of the investment that will have to be made, we cannot afford to lock-in polluting technologies and inefficient capital.
- We have a small window of opportunity to make the shift to this new growth path because of a shrinking carbon budget and because remedial measures will become progressively costlier.
- The next 2-3 years are a critical window when many of the policy and investment decisions that will shape the next 10-15 years will be taken.

Impediments to sustainable infrastructure

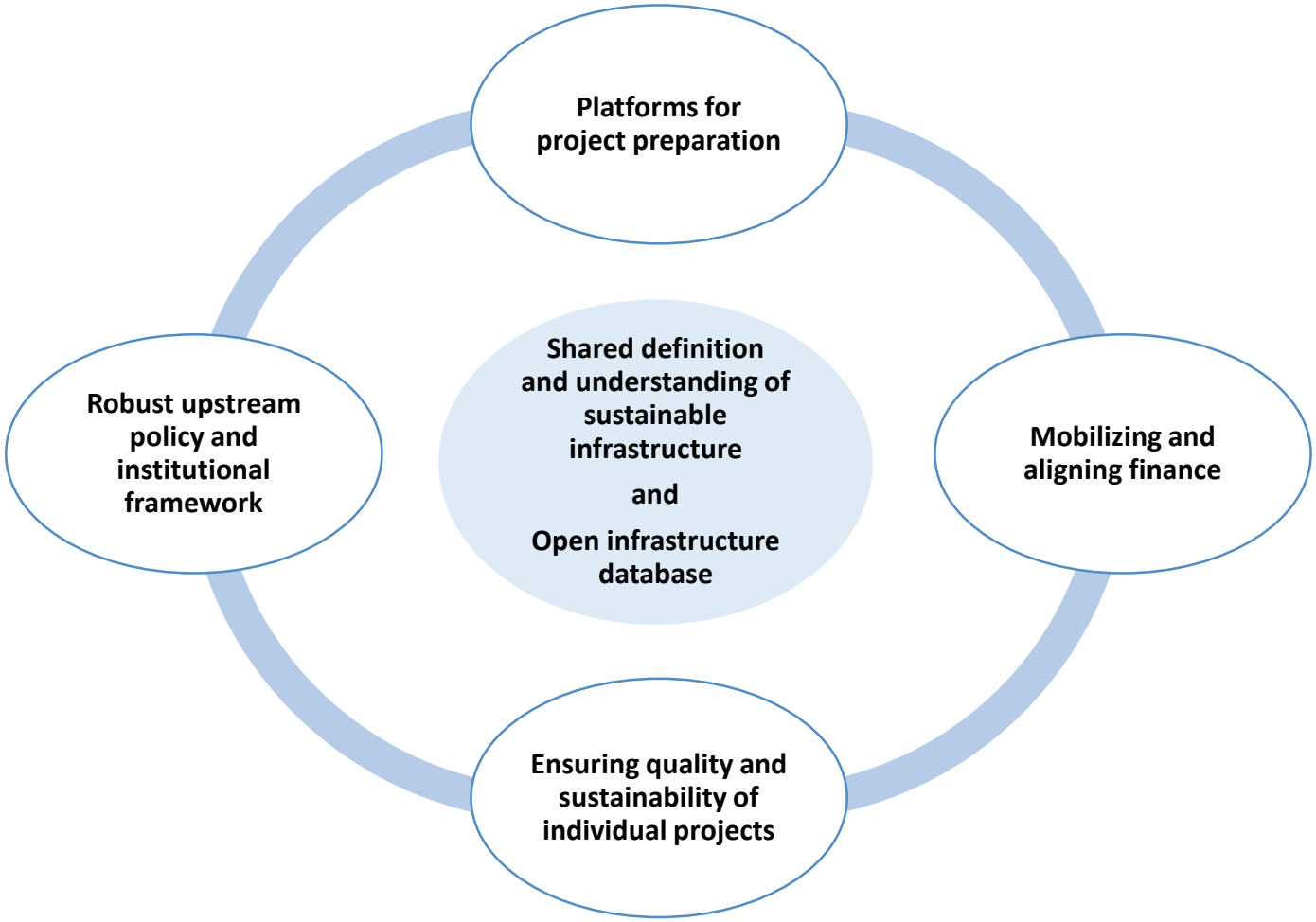
- Despite its central importance, **unable to deliver on the quantity and quality of investment needed**.

- The failure to deliver on the scale and sustainability of infrastructure investments reflects two fundamental and persistent gaps.

- Most countries are unable to translate the tremendous needs and opportunities for sustainable infrastructure investment into realized demand, and a significant proportion of investment is not as sustainable as it should be. This is largely due to the inherent complexities of infrastructure investment (long-term nature, interconnectedness, social impacts, and externalities positive and negative) and policy and institutional impediments.

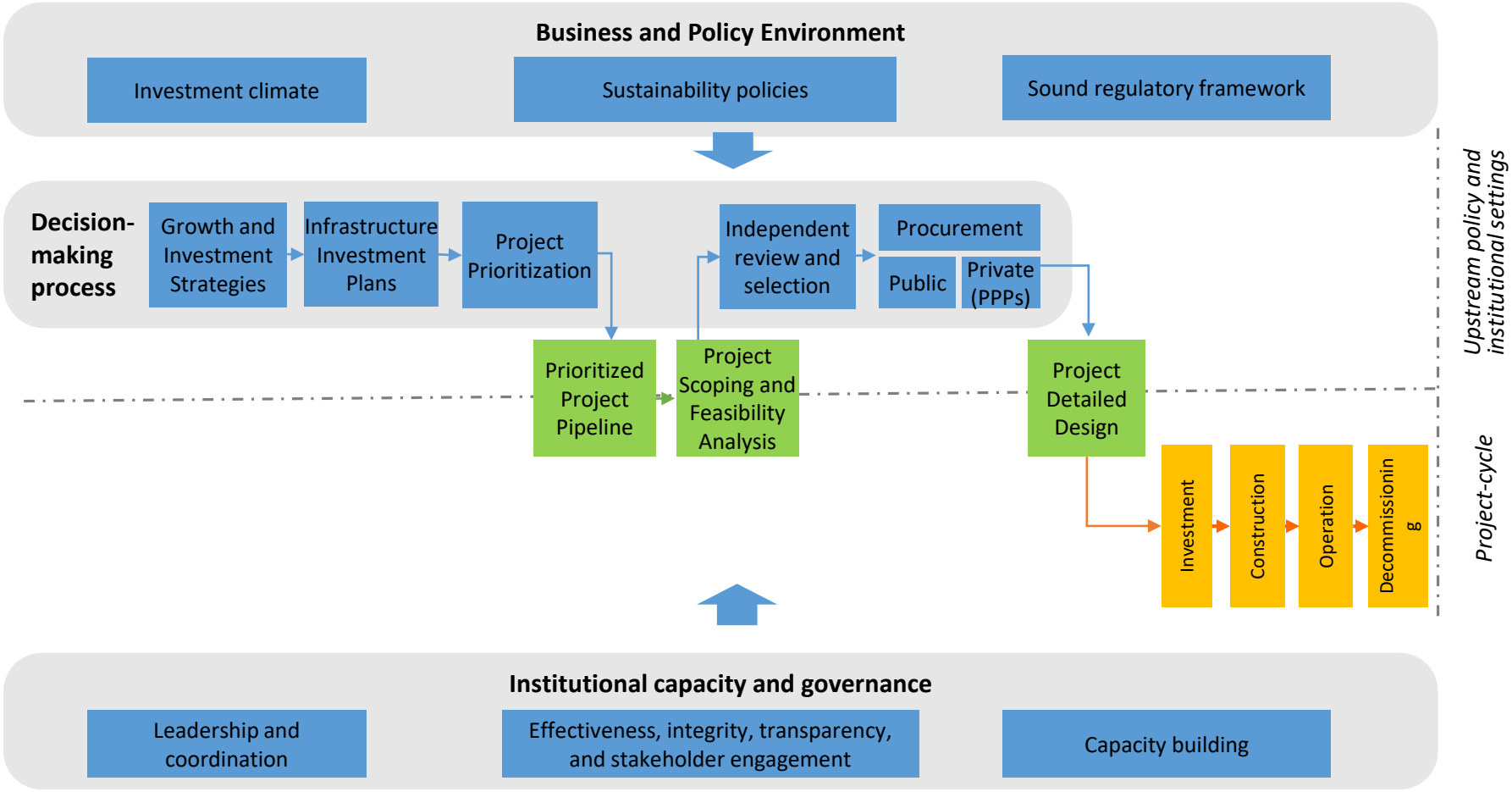
- Second, despite the large pools of available savings, mobilizing long-term finance at reasonable cost to match the risks of the infrastructure project cycle and ensuring that finance is well-aligned with sustainability criteria remains a widespread challenge.

Pillars for delivering on sustainable infrastructure



Source: Bhattacharya, Contreras, and Jeong (forthcoming)

Upstream policy and institutional framework

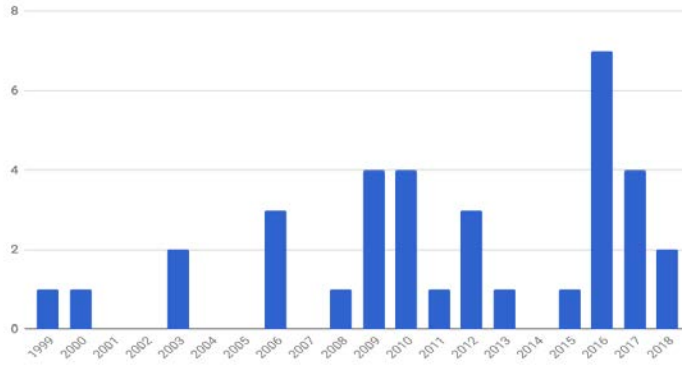


Source: Bhattacharya, Contreras, and Jeong (forthcoming)

Ensuring quality and sustainability of individual projects

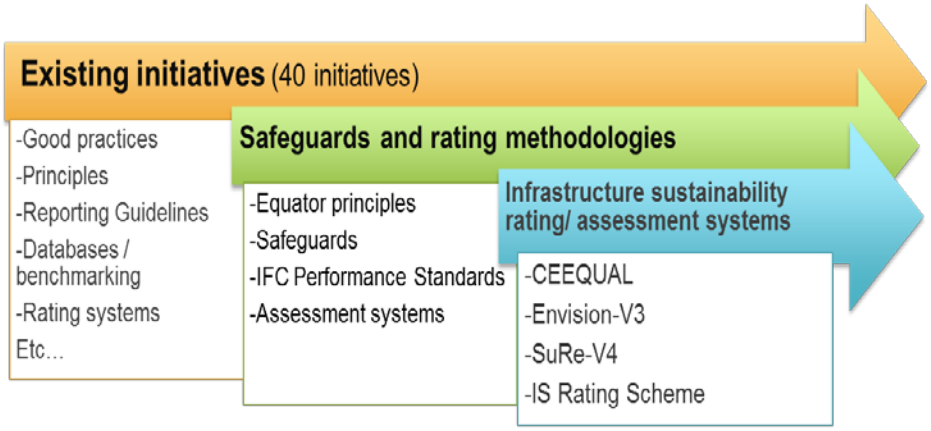
- Several standards and tools on sustainable infrastructure have been developed and refined in recent years.
- Standards and tools need to fully incorporate sustainability criteria to ensure sustainability of individual projects.

Number of SI tools developed by year



Who developed the tools?

1. **Public agencies**
2. **Development banks**
3. **Engineering associations**
4. **Research institutions**
5. **Private companies**



Source: Bhattacharya, Contreras, and Jeong (forthcoming)

Platforms for project preparation

SOURCE: A joint Global Initiative for Advanced Project Development

- **SOURCE is the multilateral project development platform led and funded by Multilateral Development Banks. It brings about systemic change in the way governments define, develop and manage their infrastructure projects. It provides a powerful tool to engage all stakeholders including the private sector. SOURCE is implemented by the Sustainable Infrastructure Foundation (SIF).**
- SOURCE provides a comprehensive map to develop quality and sustainable infrastructure, covering governance, technical, economic, legal, financial, environmental and social issues. It uses sector-specific sets of questions covering all the stages of the project cycle, spanning from project definition to operation and maintenance.

Project Preparation Facilities (PPFs)

- Numerous project preparation facilities (PPFs) created to address the lack of well-prepared projects.
- Provide a wide range of support covering all the stages of project preparation.
- MDB Infrastructure Cooperation Platform released the Guidance for Project Preparation for MDBs and their PPFs to streamline support for project preparation.

Funding vs. Financing

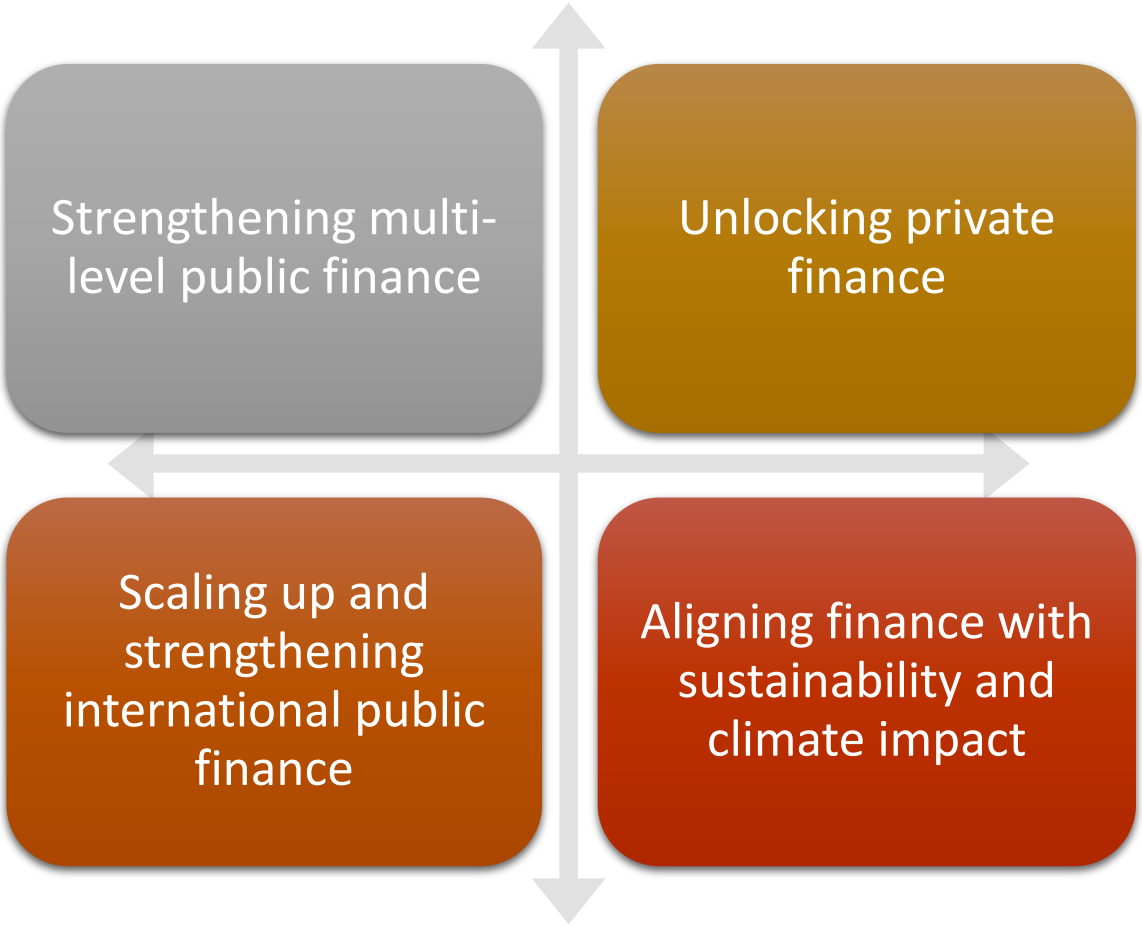
Infrastructure Funding

- **Revenue sources**, often collected over a span of many years, which are used to pay the costs of providing infrastructure services
- Most common sources of funding are:
  - ✓ General purpose tax revenues
  - ✓ Revenues from user charges
  - ✓ Other charges or fees dedicated to infrastructure

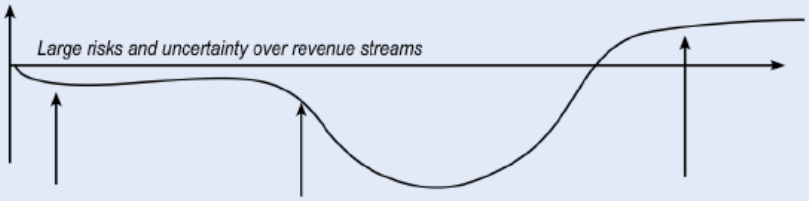
Infrastructure Financing

- **Turns the infrastructure funding into capital** that can be used today to build or make improvements in infrastructure
- Only if a project can demonstrate reasonable predictability in funding sources for both capital expenditures and for operations and maintenance (O&M), financing can be feasible

Mobilizing and aligning finance



Financing sustainable infrastructure faces additional challenge due to the inherent nature of infrastructure projects

	Preparation	Construction	Operation
Description	Developer/government organizes feasibility studies; models cash flows, finances; organizes contracts with utilities, operators and construction firms	Construction first build the project to specifications	Separate operating company takes over operation and maintenance of the project
Main risks	Macroeconomic & political risks Technical risks to project viability Environmental and planing risks	Macroeconomic & political risks Construction risks (e.g., of overrun, delay)	Macroeconomic & political risks Demand/traffic risks Operating risks Policy risks (e.g., tariff changes)
Cash flows (stylized)			
Financing moments	During project preparation and feasibility studies the developer seeks patient capital or, often, public funds	Once project is 'bankable' the developer will seek equity investors and debt providers to finance the project	Once construction is compete and started to operate project can be refinanced to reflect the changing risk profile

Source: Bhattacharya, Romani and Stern (2012)

- The characteristics of infrastructure pose various risks in each phase of the life-cycle of a project
- The biggest risks and constraints to financing arise at the early stages of project

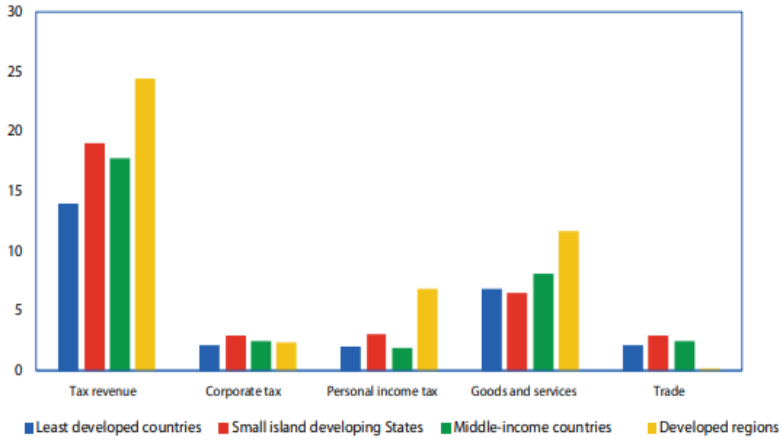
Mobilizing capital for sustainable investment

- **Given the scale of investment requirements, a significant scaling up of financing is needed from all sources**—domestic, international, public and private—and the links between them made stronger.
- **Robust public finance is an essential foundation** given the public good nature of infrastructure investments and the need to meet viability gaps for private investments**.**
- **The biggest opportunity and challenge is to mobilise the large pools of private capital** especially those held by institutional investors. This requires both better mechanisms to tackle early stage risks and to crowd in long-term finance once revenue streams and underlying cost structures are clearer.
- **There is significant scope to further develop innovative sources of finance including green and sustainable finance**. The development finance landscape has changed significantly and there are new sources of domestic and international public finance that can complement and help attract private resources.
- **There is a need for a common understanding of the effective deployment of blended finance instruments**. It is also important to engage and enable new and underdeveloped sources of capital for sustainable investment, for instance by expanding the engagement of philanthropic capital in blended finance.
- ***Multilateral development banks and other DFIs have a central role to play in supporting the new growth agenda.*** Their mandate, expertise, instruments and shareholding structure enable them to play a role that other financial institutions cannot.

The importance of robust public finance foundations

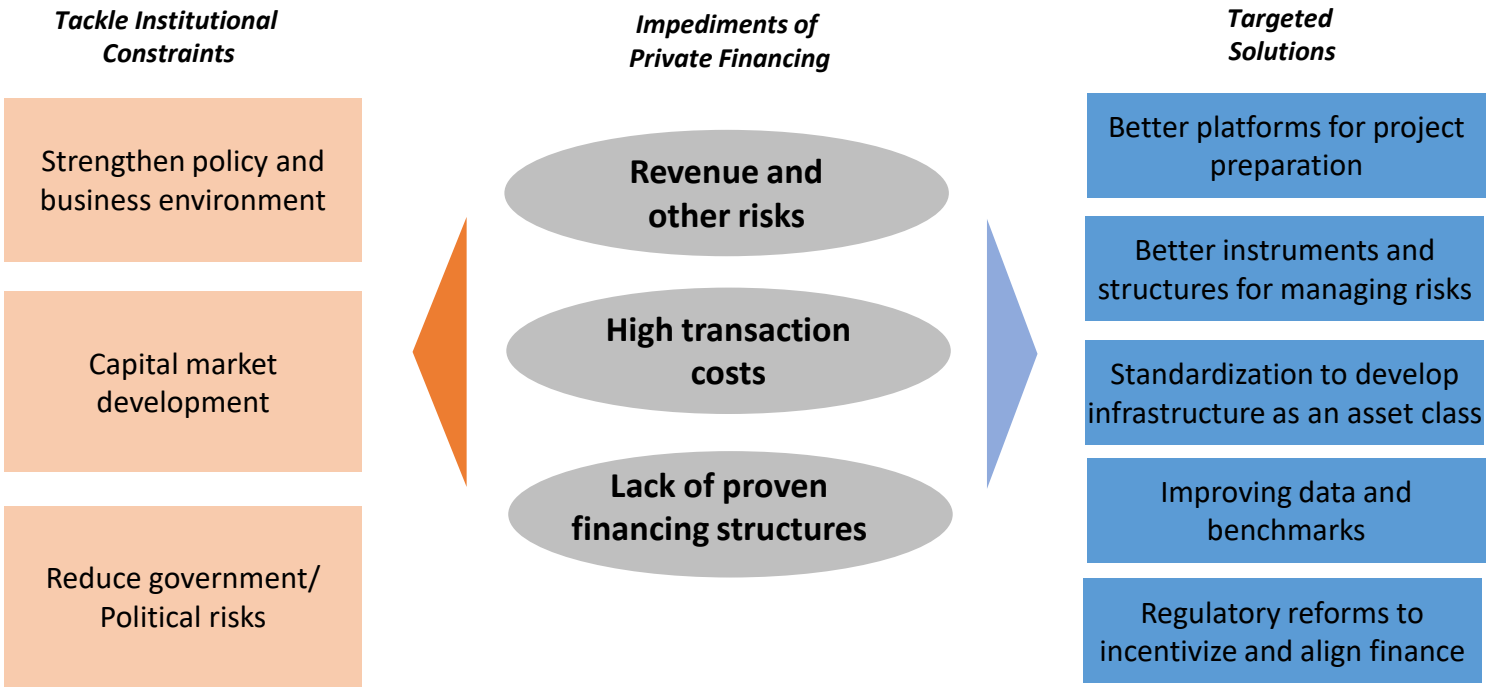
- Removing excessive and regressive tax exemptions, taxing negative externalities, and making fuller use of property taxes are all options to expand fiscal space for infrastructure investments
- Carbon taxation and elimination of fossil fuel subsidies can raise substantial revenues to fund infrastructure as well as shift investments towards sustainable infrastructure
- Structural reform of national tax policy frameworks is important to generate financing for sustainable infrastructure and to create incentives for investments
- The national tax agenda should be complemented by strengthening local tax and expenditure capacities since an increasing proportion of infrastructure needs are local and municipal.

Median tax revenue by type of tax
(2015, % of GDP)



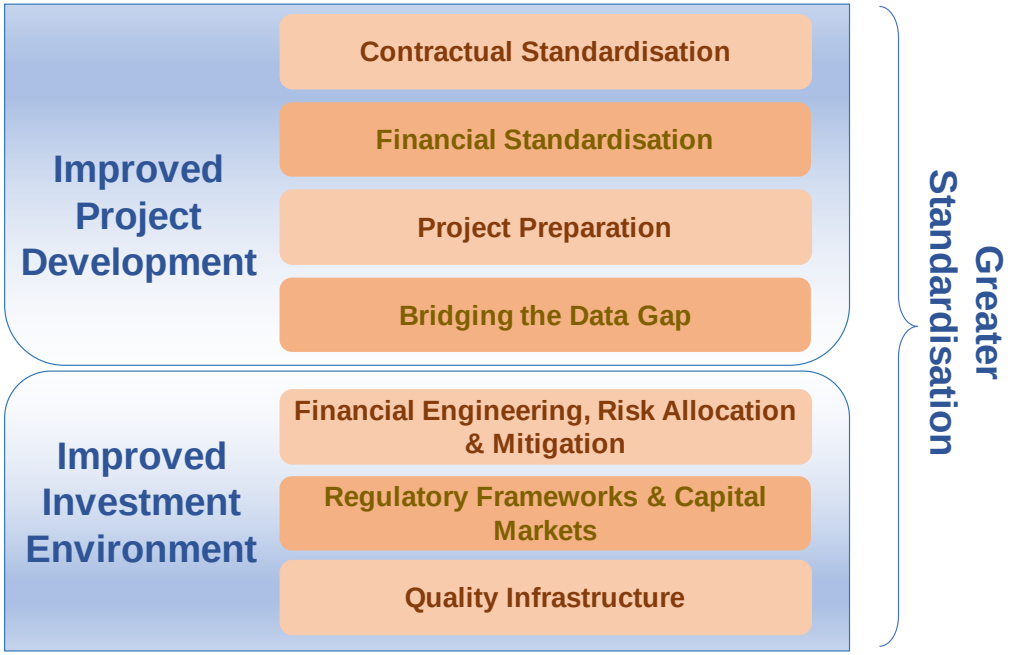
Source: Inter-agency Task Force on Financing for Development (2018); IMF

Mobilizing private financing



Source: Bhattacharya and Jeong (forthcoming)

G20 roadmap to infrastructure as an asset class: Pillars and work streams



Scaling up of blended finance is crucial to unlock private capital

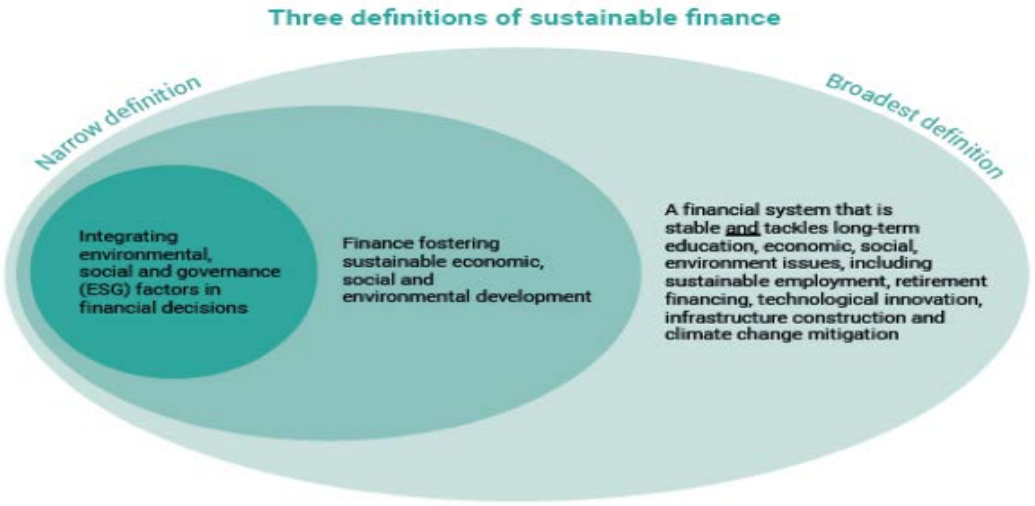
Shared value for ensuring effective blended finance

Guidance based on shared values

1. **Practice**: Translate a common narrative into good practices
2. **Mobilisation**: Where possible, accelerate mobilization of private commercial finance by optimizing incentives, financial instruments and standardisasion efforts
3. **Transparency**: Build on efforts to facilitate transparency in the use of blended finance, in particular blended concessional finance
4. **Build inclusive markets**: Addressing specificities in the local and international invest climate
5. **Impact**: Promote measurement and monitoring of the impact of blended investments towards the SDGs

Source: Tri Hita Karana Roadmap for Blended Finance

Finance needs to be aligned with sustainability



Source: EU High-Level Expert Group on Sustainable Finance

Innovative solutions to finance resilience

- Nature-based solutions for climate action and sustainable development offer cost-effective benefits for the transition to a low-emissions economy, including climate change mitigation, adaptation and resilience, while conserving, restoring and sustaining biodiversity and ecosystem services.
- Finance is needed for investments to improve watershed management and to upgrade urban infrastructure, to improve data collection and updating of land zoning to reflect flood and fire risks, as well as in early warning and emergency planning. Complementary policies are also needed to target financial inclusion and social safety nets for the most vulnerable communities, as well as insurance and contingency funds to increase resilience.
- Implemented globally, a comprehensive policy package for disaster risk reduction and resilience could avoid losses of around US$100 billion per year when the outsized impacts of disasters on the poor are accounted for (WB, 2017).
- Investing in natural infrastructure, such as watershed and coastal zone protection, can cost-effectively build resilience to disasters and limit the need for built infrastructure.
- Green bonds, aiming to preserve natural capital, can also be a tool to free up financing for natural infrastructure.
- Importance of adequate concessional financing to tackle the needs of the poorest and most vulnerable countries, including those caught in vicious debt cycles.

Country Platforms for scaling up investments

- Involvement of all relevant stakeholders: public and private; domestic and external.
- Well articulated investment strategy and medium-term investment plan for sector or sub-sector.
- Assessment of policy and other impediments and game plan to address them. Robust mechanisms and processes to ensure integrity and good governance.
- Project preparation platforms and templates; standardization of documentation; data and benchmarks.
- Financing models that bring together both intermediaries and long-term investors.
- Risk mitigation and sharing that can be replicated and taken to scale.
- International public finance including consortium of development banks.

Specific institutional structures and features will depend very much on country and sector circumstances.

Role of MDBs

Because of their mandate, instruments and shareholding structure MDBs are able to play a development role that other financial structures cannot.

- Policy and institutional support to unlock and raise quality of investments and strengthening domestic capital markets through knowledge sharing and capacity building
- Support in preparation and implementation of high quality projects, especially more complex and difficult projects
- Central role in country, regional and global platforms for scaling up
- Reducing and mitigating risk especially in the difficult early stages, reducing cost of capital and crowding in private sector finance based on their unique strengths in mobilizing international public finance

These multipliers are not as strong as they could be and overall scale and impact far short of what is needed for systemic transformation

Country platforms with strong and well-coordinated MDB engagement provides the most concrete means to deliver on the "billions to trillions" agenda