G20 PRINCIPLES FOR QUALITY INFRASTRUCTURE INVESTMENT

Preamble

- *Infrastructure is a driver of economic prosperity and provides a solid basis for strong, sustainable, balanced and inclusive growth and sustainable development, which are the key goals of the G20 and critical for promoting global, national and local development priorities. Nonetheless, the world still faces a massive gap in financing for investment in new and existing infrastructure, which could generate a serious bottleneck to economic growth and development or provision of secure and reliable public services. In this vein, the G20 has stressed the need to scale up infrastructure investment. Efforts have been made to find concrete ways to mobilize more private capital, such as the* Roadmap to Infrastructure as an Asset Class *(*"Roadmap"*) endorsed by Leaders in 2018.*
- *The G20 has also highlighted the importance of the quality of infrastructure investment, including in the Leaders' Communiqué at the 2016 Hangzhou Summit, and in the Roadmap. In infrastructure, quantity and quality can be complementary. A renewed emphasis on quality infrastructure investment will build on the past G20 presidencies' efforts to mobilize financing from various sources, particularly the private sector and institutional sources including multilateral development banks, thereby contribute to closing the infrastructure gap, develop infrastructure as an asset class, and maximizing the positive impacts of infrastructure investment according to country conditions.*

Principles for Promoting Quality Infrastructure Investment

- This document sets out a set of voluntary, non-binding principles that reflect our common strategic direction and aspiration for quality infrastructure investment.

Principle 1: Maximizing the positive impact of infrastructure to achieve sustainable growth and development

1.1 Setting off a virtuous circle of economic activities

- The aim of pursuing quality infrastructure investment is to maximize the positive economic, environmental, social, and development impact of infrastructure and create a virtuous circle of economic activities, while ensuring sound public finances. This virtuous circle can take various forms. New jobs are created during construction, operation and maintenance of infrastructure, while positive spillover effects of infrastructure stimulate the economy and

lead to more demand for jobs. Advanced technology and know-how may be transferred voluntarily and on mutually agreed-upon terms. This can result in better allocation of resources, enhanced capacities, skills upgrade and improvement of productivity for local economies. This impetus would improve the potential for economic growth, leading to widening of the investor base, crowding-in more private investment, and resulting in further improvement in economic fundamentals. This would facilitate trade, investment, and economic development. All these expected outcomes of the investment should be considered in the project design and planning.

1.2 Promoting sustainable development and connectivity

- Infrastructure investment should take into account economic, environmental and social, and governance aspects, and be guided by a sense of shared, long-term responsibility for the planet consistent with the 2030 Agenda for Sustainable Development, national and local development strategies, and relevant international commitments, and in the spirit of extensive consultation, joint efforts and shared benefits. The facilities and services of infrastructure should have sustainable development at their core and need to be broadly available, accessible, inclusive and beneficial to all. A virtuous circle of economic activities would be further secured through enhancing accessibility to, and national, regional, and global connectivity of, infrastructure, based on consensus among countries. Domestic resource mobilization is critical to addressing the infrastructure financing gap. Assistance for capacity building, including for project preparation, should be provided to developing countries with the participation of international organizations. Quality infrastructure investment also needs to be tailored to individual country conditions and consistent with local laws and regulations.

Principle 2: Raising Economic Efficiency in View of Life-Cycle Cost

Quality infrastructure investment should attain value for money and remain affordable with respect to life-cycle costs, by taking into account the total cost over its life-cycle (planning, design, finance, construction, operation and maintenance (O&M), and possible disposal), compared to the value of the asset as well as its economic, environmental and social benefits. Using this approach helps choose between repairing or upgrading an existing infrastructure or launching a new project. Project preparation, as set out in the *G20 Principles for the Infrastructure Project Preparation Phase* is crucial in this regard.

2.1 The life-cycle costs and benefits of infrastructure investments should be taken into consideration in ensuring efficiency. Construction, O&M and possible disposal costs should

be estimated from the onset of the project preparation stage. The identification of mechanisms to address cost overruns and cover ongoing O&M costs is critical to ensure financial sustainability at project level. Cost-benefit analysis should be used over the life-cycle of infrastructure projects.

2.2 Infrastructure projects should include strategies to mitigate the risks of delays and cost overrun, and those in post-delivery phases. Necessary elements to achieve this objective can include: (i) broad stakeholder engagement throughout the project; (ii) expertise in planning, operations, and risk allocation/mitigation; and (iii) application of appropriate safeguards and instruments.

2.3 Innovative technologies should be leveraged through the life-cycle of infrastructure projects, where appropriate, to raise economic efficiency for existing and new infrastructure. Advanced technologies are an important component for new and existing assets and can help to improve data availability to monitor infrastructure use, performance, and safety.

Principle 3: Integrating Environmental Considerations in Infrastructure Investments

Both positive and negative impacts of infrastructure projects on ecosystems, biodiversity, climate, weather and the use of resources should be internalized by incorporating these environmental considerations over the entire process of infrastructure investment, including by improving disclosure of these environment related information, and thereby enabling the use of green finance instruments. Infrastructure projects should align with national strategies and nationally determined contributions for those countries determined to implement them, and with transitioning to long-term low emissions strategies, while being mindful of country circumstances.

3.1 These environmental considerations should be entrenched in the entire life-cycle of infrastructure projects. The impact on the environment of the development, operation and maintenance, and possible disposal of the infrastructure project should be continuously assessed. Ecosystem-based adaptation should be considered.

3.2 The environmental impact of infrastructure investment should be made transparent to all stakeholders. This will enhance the appreciation of sustainable infrastructure projects and increase awareness of related risks.

Principle 4: Building Resilience against Natural Disasters and Other Risks

Given the increasing number and heightened magnitude of natural disasters and slow onset of environmental changes, we face the urgent need to ensure long-term adaptability and build resilience of infrastructure against these risks. Infrastructure should also be resilient against human-made risks.

4.1 Sound disaster risk management should be factored in when designing infrastructure. A comprehensive disaster risk management plan should influence the design of infrastructure, the ongoing maintenance and consider the re-establishment of essential services.

4.2 Well-designed disaster risk finance and insurance mechanisms may also help incentivize resilient infrastructure through the financing of preventive measures.

Principle 5: Integrating Social Considerations in Infrastructure Investment

Infrastructure should be inclusive, enabling the economic participation and social inclusion of all. Economic and social impacts should be considered as an important component when assessing the quality of infrastructure investment, and should be managed systematically throughout the project life-cycle.

5.1 Open access to infrastructure services should be secured in a non-discriminatory manner for society. This is best achieved though meaningful consultation and inclusive decision-making with affected communities throughout the project life cycle, with a view to securing non-discriminatory access to users.

5.2 Practices of inclusiveness should be mainstreamed throughout the project life cycle. Design, delivery, and management of infrastructure should respect human rights and the needs of all people, especially those who may experience particular vulnerabilities, including women, children, displaced communities or individuals, those with disabilities, indigenous groups, and poor and marginalized populations.

5.3. **All workers should have equal opportunity to access jobs created by infrastructure investments, develop skills, be able to work in safe and healthy conditions, be compensated and treated fairly, with dignity and without discrimination**. Particular consideration should be given to how infrastructure facilitates women's economic empowerment through equal access to jobs, including well-paying jobs, and opportunities created by infrastructure investments. Women's rights should be respected in labor market participation and workplace requirements, including skills training and occupational safety and health policies.

5.4 Safe and healthy occupational conditions should be put in place, both at the infrastructure site and in the surrounding communities. Maintaining occupational safety and health conditions would also present a huge economic advantage worldwide.

Principle 6: Strengthening Infrastructure Governance

Sound infrastructure governance over the life cycle of the project is a key factor to ensure long-term cost-effectiveness, accountability, transparency, and integrity of infrastructure investment. Countries should put in place clear rules, robust institutions, and good governance in the public and the private sector, reflecting countries' relevant international commitments, which will mitigate various risks related to investment decision-making, thus encouraging private-sector participation. Coordination across different levels of governments is needed. Capacity building is also key in ensuring informed decision-making and effectiveness of anti-corruption efforts. In addition, improved governance can be supported by good private sector practices, including responsible business conduct practices.

6.1 Openness and transparency of procurement should be secured to ensure that infrastructure projects are value for money, safe and effective and so that investment is not diverted from its intended use. Transparent, fair, informed and inclusive decision-making, bidding and execution processes are the cornerstone of good infrastructure governance. Greater transparency, including on terms of financing and official support will help ensure equal footing in the procurement process. A wide range of stakeholders such as users, local population, civil society organizations and private sector, should be involved.

6.2 Well-designed and well-functioning governance institutions should be in place to assess financial sustainability of individual projects and prioritize among potential infrastructure projects subject to available overall financing. In addition to project-level financial sustainability, the impact of publicly funded infrastructure projects, and of possible contingent liabilities[1], on macro-level debt sustainability, needs to be considered and transparent, given that infrastructure investment can have significant impact on public finance. This will contribute to attaining value for money that considers life-cycle cost, promoting fiscal sustainability, saving fiscal space for future potential projects, and crowding in more private investments. A functionally integrated and transparent decision-making framework for infrastructure investments that considers both O&M and new investments to ensure efficient resource allocation.

[1] Contingent liabilities, as defined by the IMF 2019 revised Fiscal Transparency Code, are payment obligations whose timing and amount are contingent on the occurrence of a particular discrete/uncertain future event or series of future events.

6.3 Anti-corruption efforts combined with enhanced transparency should continue to safeguard the integrity of infrastructure investments, which are potentially large-scale, complex, long-term, and with a wide range of stakeholders. Infrastructure projects should have measures in place to mitigate corruption risks at all project stages.

6.4 Access to adequate information and data is an enabling factor to support investment decision-making, project management and evaluation. Access to information and data needs to be available in-country to help undertake cost and benefit analyses, supports government decision-making and policy monitoring, and facilitates project preparation processes and management.