Against the backdrop of a global pandemic, the world demand for infrastructure remains unfazed and even increased. A rising population, economic development, as well as higher living standards and the need for new ecological and climate resilient infrastructure are boosting the demand for new infrastructure and for the update of existing ones, especially in advanced countries. Many governments are progressively setting targets to reach carbon neutrality in their countries and infrastructure plays a key role in obtaining these goals. Digitalization and new ways to design, build, operate and maintain infrastructure are key to tackle the climate crisis, reduce carbon emissions and have a positive impact on the environment. Furthermore, the pandemic has changed citizens’ habits, which will probably trigger a different demand for infrastructure, reshaping - for example - the connections between metropolitan nodes and smaller towns.

The need to achieve the Sustainable Development Goals and be in line with the climate targets of the Paris Agreement is greater than ever, further strengthening the governments’ and private investors’ focus on planning, designing, building, operating and maintaining sustainable infrastructure as part of a more comprehensive strategy to ensure a transition to a more sustainable economy and more efficient energy consumption. In advanced economies especially, this entails that maintenance investments in ageing infrastructure can no longer be deferred. In particular, modernization of aged infrastructure and wider implementation of preventive maintenance (PM) and predictive maintenance (PdM) approaches could lead to future reduction of maintenance costs, also by enhancing energy efficiency and the use of ecology friendly technologies. In emerging markets, instead, it means fulfilling the pronounced and wide-ranging need for infrastructure development. Of the current infrastructure financing gap of approximately USD 2.5 trillion annually, around 75% is made up of infrastructure investments in developing markets.

Investments in infrastructure are essential also because of their direct and indirect impact on Gross Domestic Product (GDP), producing a high multiplier effect on the economy. In the short term, infrastructure have a positive effect on employment and GDP growth while in the longer term they contribute to enhance competitiveness and overall economic efficiency.

However, research by the Global Infrastructure Hub has shown a decade-long decline in private investment in new infrastructure, from about USD 156 billion in 2010 to about USD 100 billion in

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1 UNCTAD, World Investment Report 2020
Increasing private investment in infrastructure in the current context is challenging, but essential to meeting the gap between infrastructure needs and infrastructure investments. In the aftermath of the Covid-19 crisis, private investments will be even more crucial to support public spending, constrained by rising public debt in the years to come. It is thus essential to foster private sector investment in sustainable infrastructure. One way to achieve this can be through the establishment of competitive governance framework and enhanced public-private cooperation, such as revisited public-private partnership (PPP) models, as well as enhancing the role of long-term Financial Institutions.

Higher private investments can be achieved by closing the gap in risk perception between investor and project sponsor at the level of legal and regulatory frameworks, starting with a common international approach to quality infrastructure to be agreed amongst the private sector, Long-Term Financial Institutions and governments which should then lead to common international quality standards for infrastructure design and delivery. This process would benefit from a streamlined approach, to reduce bureaucracy and red tape, making infrastructure investments more attractive for the private sector. In the medium-long term, the establishment of a clear and durable common international framework to define sustainable infrastructure to rely on, through agreed quantitative and qualitative criteria, would be needed to plan long-term investments. A cooperative approach is thus crucial among G20 members to establish a stable and friendly investment environment, reduce market fragmentation and promote a level playing field in the infrastructure financial markets.

Proposal for a G20 Infrastructure Investors Dialogue

Acknowledging a number of important initiatives on infrastructure, some of which already being implemented on behalf of the G20, such as the Global Infrastructure Hub and the G20/OECD Task Force on Long-term Investment, there is still a need for cooperation among different stakeholders to mobilise private investments and reduce risk in infrastructure investments. A constant dialogue with asset managers, institutional investors, general contractors and National Development Banks (NDBs) represents a formidable tool for governments to identify the main shortcomings that hinder a greater involvement of private investors in sustainable infrastructure.

Building on the recommendations of the G20/OECD Report on the Collaboration with Institutional Investors and Asset Managers on Infrastructure, and in light of the successful outcome of the 2021 G20 Infrastructure Investors Dialogue: Financing Sustainable Infrastructure For The Recovery co-organized by the G20 Presidency with the D20-LTIC and OECD, the D20-LTIC proposes to the G20 Presidency to promote on a regular basis the G20 Infrastructure Investors Dialogue. The initiative with key stakeholders from Governments, Long Term Investors and the private sector would discuss the main measures that can foster private investments in infrastructure, providing a platform to build trust and commitment between public and private actors.

Building on the precondition of a common international approach to quality infrastructure now, and a more stable and enticing regulatory framework in the long run, including common international quality standards, infrastructure would develop as an asset class. Governments taking steps to create credible and predictable project pipelines and improve bankability issues to bridge gaps between national planning priorities and private investors’ needs would also clearly establish a role for PPPs in meeting infrastructure needs. A number of barriers to delivering successful PPPs need to be tackled.

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2 Global Infrastructure Hub (GIH), Infrastructure Monitor 2020
in order to foster long-term, sustainable investments, particularly in new and emerging sectors and technologies.

**Address barriers to successful PPPs to foster private and Long-Term investors’ participation**

PPP have often proved to be challenging to prepare, procure and deliver. They involve complex contractual arrangements, place high demands on public authorities’ technical capacity, expertise and governance, and transaction costs are high when compared with other forms of public procurement. An asymmetry of expertise, experience and information between the public and private parties often exists, which can lead to unrealistic or unreasonable expectations, for example, in relation to risk allocation. PPPs are often criticised for a lack of flexibility when it comes to accommodating changes and for creating an “affordability illusion” which emerges when the long-term commitments to pay for the PPP are ignored. These challenges can deter investors from bidding for PPPs, ultimately compromising the public authority’s bargaining power and the success of the underlying project. However, there are ways in which a number of these challenges can be addressed in order to create an enabling environment for PPP investments.

The G20 should promote reviews (and, where appropriate, updates) in the appropriate setting bodies and fora of existing PPP frameworks from the perspective of addressing the common challenges of PPPs and facilitating co-investments by Long Term Investors in quality infrastructure.

G20 governments should encourage all the public actors involved (i.e. Ministries of Finance, procuring authorities, and regulators) to consider an appropriate risk allocation on PPPs that is reflective of value for money, affordability and bankability considerations. Investments in new and emerging sectors and technologies, in particular, may merit fresh approaches to risk allocation and the mechanisms used to achieve optimal risk allocation (e.g. government guarantee schemes). The PPP market, with the support of public guarantee schemes, would be large and liquid – with the participation of several more private investors ensuring distributed risk – facilitating the smooth conclusion of PPP contracts.

G20 governments, multilateral financial institutions and standard setting bodies should support standardisation or elaborating common approaches initiatives that seek to address contractual complexity, ambiguity and high transaction costs associated with PPPs. Whilst diversity of languages, legal systems, political and institutional frameworks precludes a “one-size fits all” PPP contract, standardisation of PPP contracts at a national level, within specific PPP programmes/sectors, offers significant benefits. More broadly applicable guidance on certain PPP contract principles has also proved to be valuable and should continue to be encouraged.

Project’s economic viability, financial soundness and high quality are the main requirements to make infrastructure investments appealing to the private sector.

For the purpose of financial attractiveness, de-risking mechanisms through the blending of public and private resources or the use of financial guarantees and junior loans are important to allow for the multiplication of resources dedicated to an asset class that is still underrepresented in investors’ portfolios. Public resources are fundamental to attract and leverage private investments, multiplying resources and number of projects dedicated to sustainable infrastructure development, possibly reducing at the same time the perceived risks for private investors. Accordingly, national and multilateral development financial institutions (DFIs) can play a crucial role in this regard in order to mitigate the risk for the private sector. They must continue to be at the forefront to stimulate private
sector investments in infrastructure, especially in developing countries, facilitate project preparation and quality and sustainability data transparency.

**Promote cooperation initiatives such as Guarantee Facilities and Frameworks to foster co-investments**

High risks and in some cases low return rates are major obstacles for private sector involvement in infrastructure investments. De-risking mechanisms such as the blending of public and private resources are thus crucial to allow for the multiplication of financial resources and reduce the perceived risk for private investors.

G20 members should work with multilateral, regional and national development banks to create global sustainable infrastructure project preparation and guarantee facilities that could be managed at the country level, anchored by multilateral, regional and national development banks. The regional and multilateral development finance institutions (DFIs) would provide technical assistance to enable countries to conduct cross-sectoral and large-scale infrastructure planning. DFIs could also help favouring the aggregation of infrastructure demand and, hence, funds blending. Large-scale infrastructure investments offer the advantages of economies of scale for funds and investment expertise and more stable long-term real returns for private investors. Common cooperation initiatives would be used to help national development banks to promote a project pipeline by identifying new sustainable projects, scale up existing ones and monitor the development and impact of projects, minimizing the risks involved in sustainable investments.

Drawing from the experience of regional and multilateral investment facilities, cooperation initiatives shared by the willing development banks of G20 countries could be implemented, blending public and private resources to de-risk investments by virtue of the possible attraction of private flows and boosting quality infrastructure investments in member or third countries. This kind of shared initiatives can be functional in achieving some of the priorities G20 members have, in particular in the areas of climate resilience and sustainable transition, infrastructure maintenance and renewal, energy security, digital development and social inclusion.

It is also important to ensure securitisation mechanisms, once the de-risking mechanisms have enticed the private sector to commitment, with the aim of making the market liquid so as to encourage the mobilisation of asset managers to invest in sustainable infrastructure.

**Foster private and Long-Term investor participation to sustainable social infrastructure investments through securitization mechanisms**

Social infrastructure is crucial to create the basis for long-term economic growth and the on-going pandemic will deeply reshape its quality and quantity. New consumer habits will shift the demand towards new types of social infrastructure, especially when considering population demographic and distribution trends. In advanced economies, ageing population will require new investment in third-age related services, such as hospitals and care centres. Emerging and developing economies, instead, are characterized by a young and fast-rising population with higher demand for social infrastructure, such as education facilities and water supply networks. In addition to these trends, technology is spurring rapid innovations, while climate change is shifting priorities with profound implications for social systems.
G20 members should foster a securitization framework that could give private investors access to portfolios of smaller size sustainable social infrastructure projects, simultaneously advancing infrastructure as an asset class. Securitization mechanisms developed by Long Term Investors should ensure both the flexibility of bank loans and the marketability of financial assets in providing finance to smaller sustainable and social infrastructure projects.

To developing countries in particular, G20 members and DFIs should offer technical assistance at national and local level to create an enabling normative and business-friendly environment, in order to scale up private investments in social infrastructure also by sharing the burden in riskiest investments.

Infrastructure has been a key focus of the last G20 Saudi Summit, which has recalled the importance to build quality and resilient infrastructure, pursuant to the G20 Principles for Quality Infrastructure Investment (QII) endorsed at the G20 Osaka Summit in 2019. Moreover, sustainable infrastructure is also recognized as a critical component of inclusive growth in achieving several of the United Nations’ Sustainable Development Goals (SDG) targets. Therefore, pursuing sustainable and quality infrastructure investments is recognised to maximise the positive economic, environmental, social and development impacts, and create a virtuous circle of economic activities. Quality infrastructure should then be affordable and well-priced, keeping in consideration total cost over its lifecycle, from inception to maintenance and to disposal. This approach requires a new way of thinking and designing greenfield infrastructure, and a different approach to maintenance of brownfield projects including wider implementation of Preventive Maintenance (PM) and Predictive Maintenance (PdM) approaches. From a social standpoint, quality infrastructure should also foster inclusiveness by creating equal opportunity and well-paying jobs, taking in consideration how to facilitate youth and women’s participation and economic empowerment too. The needs and empowerment of people with disability should also be considered when developing or maintaining infrastructure. Technology is also an important feature to new and existing infrastructure, helping to monitor its use, performance and safety. Innovative technologies are a crucial tool to raise efficiency and modernize existing infrastructure (brownfield projects) in order to increase its quality and sustainability.

**Definition of long-term infrastructure plans to increase public and private investments**

A long-term vision on infrastructure is a formidable catalyser to boost private investments and facilitate the involvement of Long-Term Investors in infrastructure financing. Long-term plans must enhance the economic, natural, social and human capital which underpins well-being, sustainable growth and competitiveness.

To reduce the investment gap in infrastructure and crowd in private and Long-Term Investors, G20 countries should explore possibilities to develop and publish long-term infrastructure plans, consistent with a sound fiscal framework and their national economic strategies. Infrastructure prioritization should be informed by a rigorous assessment of current and future infrastructure needs and must be monitored, flexible and regularly updated to promote and take into account the impact of evolving technologies and national contexts. Infrastructure demand aggregation could help mitigate investment risks and exploit economies of scale in both management and planning. Finally, national infrastructure plans should actively contribute to the achievement of sustainable and inclusive development in line with long-term policy objectives, including national and international commitments on environmental protection, climate resilience, low greenhouse gas emissions and social inclusion.
Forms of technical assistance and advisory from Long-term Financial Institutions to the public institutions in charge could then reap benefits in developing quality and sustainable infrastructure appealing also to private investors.

However, a convergent and shared understanding of sustainable infrastructure is still missing, as well as global common metrics to evaluate its impacts on environmental, social and governance (ESG) factors, with a particular focus on the social dimension (including: promotion of good working conditions; interventions that improve well-being and development of communities; protection of local communities rights; preservation of cultural functions of the landscape, habitat, and existing infrastructure). To have a shared understanding of sustainable infrastructure it is essential, then, to make explicit the connections between sustainable infrastructure and circular economy (both from the point of view of land consumption and of waste minimization during the project’s lifecycle), smart cities/urban regeneration (sustainable infrastructure as a central element of sustainable, resilient, and inclusive urban development policies), smarter and greener transportation (sustainable infrastructure as a central element of sustainable mobility systems) and positive governance principles (as community inclusion in infrastructure planning).

### Towards common ESG standards to assess infrastructure project sustainability

The individuation of shared, clear quantitative and qualitative elements to identify the sustainability of infrastructure investments is more and more crucial to establish a clear pipeline of bankable sustainable projects and for the development of infrastructure as an asset class. By ensuring a common ESG approach to infrastructure project assessment, private and public investors would have a sound long-term framework to invest in sustainable infrastructure.

The G20 should coordinate efforts to elaborate shared standards or promote the convergence among existing ones to both assess the sustainability of an investment and the transparency of ESG risks, considering their potential impact on the financial value of the investment. The establishment of a minimum level playing field and the harmonization of ESG standards, as many D20-LTIC members are pursuing, is essential to scale up the amount of sustainable infrastructure investments, in particular for Long-Term Investors.

Finally, priority from all involved actors should be given to the identification and structuring of projects according to ESG criteria, QII principles and appropriate risk-return-impact assessment metrics to identify priority investments and allocate available financial resources.

In the light of the aforementioned role of increasing importance played by the Long-term Financial Institutions and national development banks in fostering sustainable and quality infrastructure investments as a building block of a long-lasting international economic development, the D20-LTIC is committed to take on a proactive role and build upon the established dialogue and cooperation with the main national and international public institutions in this moment of great upheaval, in order to join efforts with the global recovery initiatives and ensure a steady and sustainable economic growth in the years to come.