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Policy Paper

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FOREWORD BY TASK FORCE CHAIR EDUARDO ELSZTAIN

We are living in a much more integrated world where modern technology allows people to share international events in real time. However, there are marked differences in the development patterns followed by different countries. These differences are leading to continuous divergences in life standards regarding wellbeing, and the distribution of income and wealth. One glaring difference is the diverse policies regarding investment in infrastructure.

People-oriented infrastructure should be a central category in countries' budgets, and new and creative mechanisms of financing such as the Public-Private Partnerships (PPP) should be encouraged and incorporated. In addition, our goal in these pages is to contribute to establish the proper analytical and policy frameworks in order to make infrastructure an asset class.

The significant importance of appropriate and modern infrastructure in the process of development has substantially increased in recent years because of the rising importance of technology as a source of growth.

Technology is an essential component of most of the new production functions and, being embodied in the new massive infrastructure projects, the transfer and diffusion of new technologies is facilitated and energized in countries where infrastructure development is a priority.

In the past, the responsibility to build and finance infrastructure was exclusively of the governments; but economic and population growth creates greater pressure on the public sector and thus transfers the necessity of an increase in the participation of the private sector.

This private participation should be further encouraged to complement public effort in bridging the infrastructure gap. For that reason, we need to promote a solid financial framework to strengthen infrastructure financing and long-term growth, with the adequate legal background, greater transparency and quality of information to guarantee predictability to the private investors that are attracted to these projects.

It is imperative to acknowledge that this is not just a concern for emerging economies and developing nations. It is essential for every country to take advantage of all the benefits that infrastructure investment offers, including the scope for focusing on inclusion and integration development.

It is also worthwhile to remark that recent financial crises show that the political fallout from these events hinges mainly on the negative impact that they have on the distribution of income. In this context, the assembly of social infrastructure and the development of affordable housing has positive externalities since it tends to equal the provision of social requirements, and improve life quality in an increasing world population.

Infrastructure is a lever for economic growth. In the short term, financing infrastructure stimulates demand and creates jobs. In the long term, investments drive productivity, deepen markets, and make economies more competitive.

As FGI B20 Argentina, we look forward to working together with G20 leaders to mobilize the G20 countries, the B20 companies and global policymakers. We have the responsibility and the challenge to take in additional financial resources to prop up growth and sustainable development through the provision and promotion of government support for the rapid growth and stable development of infrastructure.

Sincerely,

Eduardo Elsztain

Chair of the B20 Argentina Financing Growth & Infrastructure Task Force

Chairman of Grupo IRSA & Banco Hipotecario

EXECUTIVE SUMMARY

Estimates indicate that global infrastructure needs will reach almost USD 70 trillion by 2035, and the world could face a USD 5.5 trillion gap, compromising economic growth and population's wellbeing. Also, the lack of access to affordable housing will affect more than 1.6 billion people by 2025, mostly in major cities. This gap in infrastructure investment is uneven around the world, especially when considering the urgent needs that underserved regions face in terms of basic economic and social infrastructure. Moreover, financial markets are in constant evolution and require regulations to provide a stable environment for incentivizing growth and investment.

To close this investment gap, world leaders need to increase their efforts towards sustainable and resilient infrastructure investment, helping to also meet the Sustainable Development Goals (SDGs) while considering climate change adaptation and mitigation.

Closing the infrastructure gap will entail facilitating public and private investment in infrastructure through new and improved investment vehicles as well as strengthening the global financial sector. To this effect, the B20 encourages G20 leaders to pursue the following four actionable pillars:

1: Advancing the implementation of infrastructure as an asset class by improving project bankability, supporting the creation of financial vehicles for infrastructure, and enhancing the role of Multilateral Development Banks

We advise G20 leaders to adopt market-oriented pipelines in order to create bankable and investable infrastructure assets; and to keep improving the project pipeline to bridge the gap between national planning priorities and private investor's needs. Also, we prompt the G20 to standardize the risk/return profiles of infrastructure investments, support the creation of marketplaces, and incentivize the creation of financial vehicles that can support the development of infrastructure as an asset class. The G20 should enhance the role of Multilateral Development Banks (MDBs) to support riskier infrastructure investments, project preparation and data transparency.

2: Increasing the impact of Public-Private Partnerships by clearly establishing their role, implementing competitive procurement mechanisms and promoting executional excellence

We encourage G20 leaders to clearly establish the role of Public-Private Partnerships (PPPs), to develop a competitive governance framework for, PPPs and to promote PPPs executional excellence. Additionally, the G20 should adopt PPP models considering financial, practical and political outcomes and increase project delivery efficiency through adoption of best practices.

3: Narrowing the affordable housing gap by setting policy targets, increasing resource efficiency and expanding financial access for developers and buyers

We recommend G20 leaders to define affordability thresholds and promote a ladder approach for housing development. Moreover, G20 leaders should expand financing to reduce costs for home buyers and developers while supporting a healthy rental market. G20 leaders should also implement financing policies that expand the housing market by providing adequate instruments for developers and home buyers.

4: Ensuring consistency in financial regulation that fosters growth, stability and investment in infrastructure

We encourage G20 leaders to enhance cross-border financial regulation consistency and to promote regulatory consistency to reduce compliance arbitrage costs by ensuring a proper dialogue with stakeholders in the implementation phase. Also, G20 leaders should encourage sustainable development financing, since the development of quality infrastructure investment financing runs parallel to the development of a suitable financial system for sustainable development.

KEY POLICY RECOMMENDATION AND ACTION PLAN

TOPIC 1: DEVELOP INFRASTRUCTURE AS AN ASSSET CLASS

RECOMMENDATION 1: Advancing the implementation of infrastructure as an asset class by improving project bankability, supporting the creation of financial vehicles for infrastructure, and enhancing the role of Multilateral Development Banks.

Policy Action 1.1: Improve project pipeline to bridge the gap between national planning priorities and private investor's needs.

- Consolidate and centralize long term national project commitments
- Adopt fact-based project selection to improve resilience and investment feasibility
- Increase the amount of funds allocated to infrastructure investment by promoting hedging instruments and improving liquidity

Policy Action 1.2: Standardize risk/return profiles, support the creation of marketplaces, and create adequate financial vehicles.

- Standardize risk/return profiles of infrastructure as an asset class and develop a history of risk/return data for different investment instruments
- Enhance private sector partnerships between banks and insurers as well as securitization
- Create a global marketplace to increase liquidity and asset trade

Policy Action 1.3: Enhance the role of Multilateral Development Banks to support riskier infrastructure investments, project preparation and data transparency.

- Support riskier infrastructure investment in emerging and developing countries through project bonds, securitization of loans, and syndication arrangements
- Increase investment towards MDBs infrastructure data platforms and portals supporting project preparation tools and promoting knowledge sharing
- Grow the expertise required to increase implementation of infrastructure as an asset class
- Ensure support by MDBs is provided where actually needed and avoid private investment crowding out

TOPIC 2: INCREASE THE IMPACT OF PUBLIC PRIVATE PARTNERSHIPS (PPPs)

RECOMMENDATION 2: G20 leaders must clearly establish the role of PPPs, implement competitive procurement mechanisms, and promote executional excellence to successfully implement PPPs and increase their impact.

Policy Action 2.1: Clearly establish the role of PPPs and develop a competitive governance framework for PPPs.

- Clearly establish the role of PPP by creating a transparent and robust pipeline of PPP projects and implementing adequate legal and institutional frameworks
- Implement a competitive governance framework

Policy Action 2.2: Promote PPPs executional excellence

- Adopt PPP models considering the financial, practical and political outcomes, and design robust business plans
- Increase project delivery efficiency through the adoption of best practices

TOPIC 3: NARROW THE AFFORDABLE HOUSING GAP

RECOMMENDATION 3: G20 leaders must set policy targets, increase resource efficiency, and expand financial access for developers and buyers in order to narrow the affordable housing gap.

Policy Action 3.1: Define affordability thresholds and promote a ladder approach for housing development.

- Define aspirations and targets at all government levels to frame the affordable housing policy
- Increase resource efficient utilization

Policy Action 3.2: Implement financing policies that expand the housing market by providing adequate instruments for developers and home buyers.

- Reduce the cost of financial access for residents
- Support developer financing
- Generate appropriate rental or leasing options as an alternative for lower income households

RECOMMENDATION 4: G20 Leaders must ensure financial regulation that fosters growth, stability and investment in infrastructure.

Policy Action 4.1: Promote regulatory consistency to reduce compliance arbitrage costs by ensuring a proper dialogue with stakeholders in the implementation phase.

- Increase pre and post implementation analyses to understand the impact of financial regulations in stability, growth and infrastructure investment
- Promote collaboration among public and private stakeholders to reduce the negative impact of diverging financial regulations

Policy Action 4.2: Encourage sustainable development financing.

- Financial regulation should support long term investment contributing to a greener and cleaner economy
- Mobilize financial centres action on sustainable development

GENERAL CONTEXT: THE INFRASTRUCTURE GAP[1]

Infrastructure characteristics have always posed significant challenges to governments and other public entities. First, infrastructure entails long asset life-time, is capital intensive and poses investment complexity. Thus, political interference with short election cycles and lack of technical expertise can regularly lead to bad planning. Second, infrastructure has important network effects and external spill-overs. In this context, scattered ownership and governance across regions and asset classes can lead to sub-optimum infrastructure systems. Finally, because of its mono/oligopolistic nature infrastructure can sometimes have a badly defined public vs. private sector interface, including market structure, regulatory and pricing framework. These infrastructure characteristics have certainly an impact on the present infrastructure gap, along with other important factors including climate and development challenges [2]. The goal of the B20 Argentina is to advance recommendations that G20 leaders can embrace to enabling financing infrastructure and growth.

The world invests some USD 2.5 trillion a year in economic infrastructure: transportation, power, water, and telecom systems. Other USD 7 trillion[3] are invested each year in social infrastructure (hospitals, schools, urban development), utility networks and housing. Yet this amount continues to fall short of the world's ever-expanding needs, which results in lower economic growth and deprives citizens of essential services. By 2035, estimates indicate that global infrastructure needs will reach almost USD 70 trillion, or USD 3.7 trillion a year[4]. However, because of current trends in infrastructure investments among countries, the world could face a USD 5.5 trillion gap, compromising economic growth and population´s wellbeing. The largest investment demand will arise from power plants, roads, telecoms, water and rails.

There is also a significant infrastructure investment gap against climate and sustainability challenges. The Organization for Economic Cooperation and (OECD) estimates, in its contribution to the 2017 G20, that USD 6.3 trillion per year of infrastructure investment would be needed from 2016 to 2030 on average. To make infrastructure compatible with the 2-degree climate goal under the Paris Agreement, another USD 0.6 trillion per year would be needed.

Moreover, the lack of access to affordable housing will affect by 2025 more than 1.6 billion people, mostly in the main cities. Adopting national and city plans to revert the lack of access to affordable housing could unleash a USD 9 to 11 trillion global construction opportunity that would benefit public and private sectors and, specially, households and communities[5].

Within G20, countries face different realities, depending on their actual infrastructure spending. China, Saudi Arabia, Australia, Russia, Japan and France have positive gaps, meaning they are spending above their projected infrastructure needs to sustain predicted growth. The rest of the countries face investment gaps that range from 1.3 percent of their Gross Domestic Product (GDP), as in Mexico, to 0.3 percent of the GDP in Turkey.

[1] This section -to a significant degree- is based upon the conclusions of McKinsey Global Institute's (MGI) "Bridging Global Infrastructure Gaps", published in June 2016.

[2] OECD (2017), Investing in Climate, Investing in Growth, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264273528-en.n presidency)

[3] Bridging Global Infrastructure Gaps, Has the World Make Progress? McKinsey Global Institute, 2017.

[4] Bridging Global Infrastructure Gaps, Has the World Make Progress? McKinsey Global Institute, 2017

[5] A blueprint for addressing the global affordable housing challenge. McKinsey Global Institute. October 2014

Investing in infrastructure is a highly profitable endeavor for countries. The IMF estimates that a 1 percent increase in spending on infrastructure leads to an average of 1.5 percentage points in GDP growth over four years. The returns are higher in countries where infrastructure is well planned and well executed—2.6 percentage points over four years[6]. The positive gap for countries maximizing returns suggests that there is an opportunity for governments to streamline infrastructure investment in the most efficient and effective ways that lead to economic growth.

There are at least three additional powerful reasons why the world needs to address this gap. First, infrastructure is a critical enabler of long term development. Roads, ports, airports, rail, and telecom networks are the conduits of trade and mobility. Electricity fuels production, and clean water underpins public health while connectivity is the pillar for digitalization. Adequate investments in roads and rail, sanitation, and electricity can also be important tools to increase the supply of affordable housing. These investments become essential for social advancement, poverty alleviation and the reduction of inequality.

Second, infrastructure construction creates jobs, immediately. For example, in the shorter term, increasing infrastructure investment by 1 percentage point of GDP could generate an additional 3.4 million direct and indirect jobs in India, 1.5 million in the United States, 1.3 million in Brazil, and 0.7 million in Indonesia. Recent experiences have shown that quality of government plays a major role in the effectiveness of infrastructure investment in triggering economic spill-overs and promoting also long-term impacts on employment and development.

Finally, infrastructure is a multi-trillion-dollar market where there are tremendous untapped business opportunities. Institutional investors and banks have USD 120 trillion in assets that could partially support infrastructure projects. Some 87 percent of these funds originate from advanced economies, while the largest needs are in middle-income economic [7] . To match the needs of different stakeholders, policymakers need to address the main challenges that currently prevent investments.

Policymakers face many capability challenges. The G20 leaders must address the lack of financially viable and sustainable project pipelines meaning the low number of bankable/investable projects do not make up a significant-enough opportunity set to compel institutional investors to invest. Moreover, G20 leaders, with the help of MDBs, must address the challenge of balancing the investment risks and returns, amongst other barriers, as projects typically do not yield returns during the construction phase, and project structures may not always allocate risks to the parties best able to manage them[8]. In addition to that, leaders must revert information asymmetry that prevents communication channels between investors and infrastructure builders/managers.

There is a wide range of actions that governments can take, both through direct investment as well as through regulatory action to unleash private sector investment to bridge this gap. A particular consideration should be given to projects that can be mostly funded by users[9]. The G20 has consistently addressed this issue in the past;

[6] Heathcote, C.: Sending the right infrastructure message. How governments can encourage private-sector infrastructure investment. McKinsey & Company

[7] Bridging Global Infrastructure Gaps. McKinsey Global Institute. June 2016

[8] OECD (2018), Making Blended Finance Work for the Sustainable Development Goals, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264288768-en.

[9] ITF OECD Report June 21th 2018 Private investment in Transport Infrastructure. Dealing with uncertainty in contracts It refers to the importance of differentiation between Funding (who finally pays the project) and Financing

our objective as a task force is to strengthen the focus on the issue and provide specific policy recommendations that would not only increase the chance of their implementation but also, and more importantly, maximize their chances of success.

TOPIC 1: DEVELOP INFRASTRUCTURE AS AN ASSSET CLASS

This year, we want to elevate recommendations to the G20 is in a specific way of bridging the infrastructure gap: advancing infrastructure as an asset class, with the goal of significantly increasing the flow of private capital to infrastructure. The issue of describing and better defining infrastructure as an asset class has been addressed in past B20 and G20 Meetings. We chose to focus on this mainly because of two reasons: (a) as previous B20 meetings highlighted, we believe it is one of the key policy measures than can significantly unlock the potential for private investment in infrastructure and hence help bridge the infrastructure gap; (b) this topic has been selected by the Argentinean Presidency as the highest priority area in which to deliver progress in the field of financing and infrastructure.

Future work at the OECD, in conjunction with the G20 and other policy fora, should focus on developing a first set of integrated and multidisciplinary international G20/OECD guidelines for action promoting quality infrastructure. It is also worthwhile to recall the B20's previous policy paper on investing in resilient, future-oriented growth, which aligned with this policy paper can form a basis for mobilizing investment for quality infrastructure, while also advancing the description of infrastructure as an asset class.

Additionally, ongoing research at the OECD through the Project on Long-term Investment has found that investors such as pension funds and insurance companies prefer the investment profile of well-structured investments that are supported through strong funding models and public sector commitment to mitigate certain risks. This implies that an application of the concepts of quality infrastructure, which is of growing importance to the G20 can be instrumental in securing financing for infrastructure. In this way, quality infrastructure investment is a holistic concept ranging from infrastructure planning, design, construction, innovation, resiliency, impact assessment, and financing that seeks to maximize the long-term social and economic benefits of investment, while minimizing adverse environmental impact.

Previous B20 meetings

In this area, we are building on the work of previous energy related B20 Task Forces, which have consistently called for action on this issue. For example:

- Australia 2014 task force promoted the creation of the Global Infrastructure Hub that "collects and disseminates leading practices" and accelerates the development of Infrastructure as an asset class[10].
- Turkey 2015 task force first recommendation involved improving the infrastructure investment ecosystem to facilitate the development of infrastructure as an asset class. Market inefficiencies and legislative and regulatory disincentives constrain private capital that could fund infrastructure projects[11].
- China 2016 task force recommendation consisted on developing "conducive regulations, deploy asset-monetization strategies, and promote the creation of financial instruments necessary to unlock long-term investments in infrastructure"[12].

[10] B20 Infrastructure & Investment Task force Policy Summary, Australia 2014.
[11] B20 Infrastructure & Investment Task force Policy Paper, Turkey 2015.
[12] B20 Infrastructure & Investment Task force Policy Paper, China 2016.

- Germany 2017 task force recommended boosting infrastructure finance by "developing and promoting bankable/investable and investment-ready infrastructure project pipeline."[13]

Moreover, this year´s G20 Communiqué by the Ministers of Finance and Central Bank Presidents in Argentina endorsed the document a "Roadmap towards infrastructure as an asset class". The Roadmap is organized into three overarching pillars with the principal objectives of improving project development; improving the investment environment for infrastructure and promoting greater standardization[14].

Context

Developing infrastructure as an asset class is a vehicle for matching institutional investors in developed economies to global infrastructure needs in emerging countries. The following figures provide a present description of the main challenges:

- Economic infrastructure needs for the period 2017-2035 add USD 70 trillion, more than doubling historical infrastructure spending[15].
- Performance of infrastructure assets has new positive evidence from a recent Moody´s report, suggesting that in a 30-year period, infrastructure was less likely to incur in credit loses compared with corporate investments.
- Investment will continue to shift to emerging markets; nearly two-thirds of global infrastructure investment in the period to 2035 is required in emerging economies[16].
- A 36 percent of global institutional investors allocate funds to infrastructure asset class and most investors have an average target allocation of less than 10 percent to infrastructure. Additionally, based on an OECD survey of large pension funds, overall investment levels in unlisted infrastructure equity are 1.1 percent of the total assets under management[17]. However, investors plan to increase their allocation to infrastructure in the long term, because most investors felt their infrastructure fund investments have lined up to expectations[18].
- More competitive deal environment is pushing up prices for infrastructure assets and affecting deal flow; as a result, the largest proportions of surveyed infrastructure investors feel these are the key challenges for the market[19].
- Infrastructure governance has a main role on how governments plan, prioritize, deliver, regulate and evaluate infrastructure investments[20]. Infrastructure investment has greater impact when projects are well prepared and executed. As suggested by the IMF, a 1 percent increase in spending on infrastructure leads to an average of 1.5 percentage points in GDP growth over four years. In countries where infrastructure is well planned and well executed, the return is even greater—2.6 percentage points over four years.

[13] B20 Financing Growth & Infrastructure Policy Paper. Investing in Resilient, Future-oriented Growth Boosting Infrastructure Investment and Balancing Financial Regulation. Germany 2017.
[14] Overview of Argentina's G20 Presidency 2018.
[15] Bridging Global Infrastructure Gaps, Has the World Make Progress? McKinsey Global Institute, 2017.
[16] Bridging Global Infrastructure Gaps, Has the World Make Progress? McKinsey Global Institute, 2017.
[17] OECD (2018), Survey of Large Pension Funds and Public Pension Reserve Funds, 2016 www.oecd.org/finance/survey-large-pension-funds.htm
[18] Preqin Investor Outlook: Alternative Assets H1 2016 cited in "Infrastructure as an Investment Asset Class: Growing Investor Interest and Recent Performance". McKinsey & Company. March 2017
[19] Ibid.
[20] OECD (2017), Getting Infrastructure Right: A framework for better governance, OECD Publishing, Paris

RECOMMENDATION 1: G20 LEADERS MUST IMPROVE PROJECT BANKABILITY, SUPPORT THE CREATION OF FINANCIAL VEHICLES FOR INFRASTRUCTURE AND ENHANCE THE ROLE OF MDBS IN INFRASTRUCTURE INVESTMENT.

POLICY ACTIONS

1.1: Adopt market-oriented pipelines to create bankable and investable infrastructure assets. G20 members need to keep improving the project pipeline to bridge the gap between national planning priorities and private investor's needs.

1.2: Standardize the risk/return profiles, support the creation of marketplaces and create financial vehicles that can support the development of infrastructure as an asset class.

1.3: Enhance the role of MDBs to support riskier infrastructure investments, project preparation and data transparency.

Policy Action 1.1: Adopt market-oriented pipelines to create bankable and investable infrastructure assets. G20 members need to keep improving the project pipeline to bridge the gap between national planning priorities and private investor's needs.

A robust pipeline is crucial to assist in resource allocation, project prioritization, governance and more widely is about identifying investment opportunities, better progress tracking to objectives, and links between the public and private sectors.

- In terms of resource allocation, infrastructure investments can encounter a fragmented view. This translates to asset specific ministries/agencies with limited cross asset integration, conflicting objectives in adjacent regions and competing projects in same area
- Nations also need to tackle project prioritization. Conflicting views often impede selection based on the merits and economics of each project and limit the visibility of project interfaces. Moreover, infrastructure priority tends to be influenced by regional political interest and calendars. Strong political pressure exists to launch projects while those projects are not mature enough to be absorbed by the market.
- A persistent challenge for infrastructure development is related to the lack of coordination among multiple agencies, ministries and regional and local governments.
- Finally, leaders need to address the lack of incentives for private sector funding. The problem is related to the persistence of common pitfalls such as poorly defined projects and immature regulation.

The goal of the pipeline should be to reach a long-term political consensus regarding priority projects and asses which of them should be offered as financial products. Although progress has been made, there is persistent variability in the capacity of governments to offer infrastructure as a financial vehicle for investors through robust pipelines. This has to do with the difficulty of presenting fact-based analysis that could help stakeholders achieving consensus. Moreover, making project delivery efficient is key to make infrastructure as asset class thrive, since it lowers the risk and makes returns happen faster. In sum, further action is needed:

- **Increase the amount of funds allocated to infrastructure investments to close the infrastructure gap.**

G20 leaders should promote hedging instruments for infrastructure investments, help countries to enhance investors' right protection and mobilize local resources to increase the amount of funds allocated to infrastructure investments.

Policies that improve 'market infrastructure' are key to establish an efficient and liquid secondary market. The lack of availability of hedging instruments or liquidity of longer-duration assets are points we've identified as reasons for underdeveloped markets.

We find that enhancing the protection of investors' rights in long-term infrastructure investments is a necessary step to establish an asset class. Hence, promoting clear, sound and reliable frameworks for dispute resolution could go a long way on promoting infrastructure investments. International methods of settlement may be appropriate in certain cases, for example, where bilateral, regional or international investment treaties are relevant.

Foreign investment flow is an important source for infrastructure development in emerging countries. However, mobilizing domestic resources and deepening banking intermediation should also be prioritized. In the public-private partnership in infrastructure finance, the role of local banks to support an efficient allocation of investments and contribute to private sector development should not be ignored.

- **Consolidate and centralize long term national project commitments.**

G20 leaders must lead the infrastructure crusade by advancing holistic and intertemporal plans, among multiple infrastructure asset classes focusing on bottleneck resolution and social and economic impact. This long-term vision is of utmost importance within emerging economies and least developed countries.

Leaders must aim at infrastructure inter temporal plans through a coordinated approach and policies across federal, provincial and municipal governments that include regional plans[21]. A viable pathway to signal the importance of project centralization and consensus is through the coordination of a central Infrastructure Delivery Unit with clear and harmonized metrics and procedures. Infrastructure delivery units report to the highest level of government and are charged with overcoming technical and political bottlenecks. Also, the approval of different government instances such as legislative bodies can provide the basis for a long-term national strategy.

- **Adopt fact-based project selection to increase resilience and investment feasibility.**

G20 leaders must promote fact-based project prioritization and selection by using standardized methodologies. Investors need to see that projects in the priority pipeline have solid foundations in terms of expected revenues streams and in terms of sustainable development. Thus, leaders must implement system-wide portfolio prioritization that balances short and long-term benefits and nation building vs. economically self-sufficient projects. Fact-based and consistent project evaluation

[21] OECD (2013), Investing Together: Working Effectively Across Levels of Government OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264197022-en

such as cost/benefit analysis can eliminate upside biases in project selection and increase likelihood of private investment. The infrastructure prioritization framework by the World Bank is a new tool that uses a multicriteria approach synthetizing social, environmental, financial and economic factors. It serves prioritization because it uses a minimum amount of project level information with the main focus of resilience into decision-making. This tool is being piloted in Argentina, Chile, Panama, Sri Lanka and Vietnam.[22]

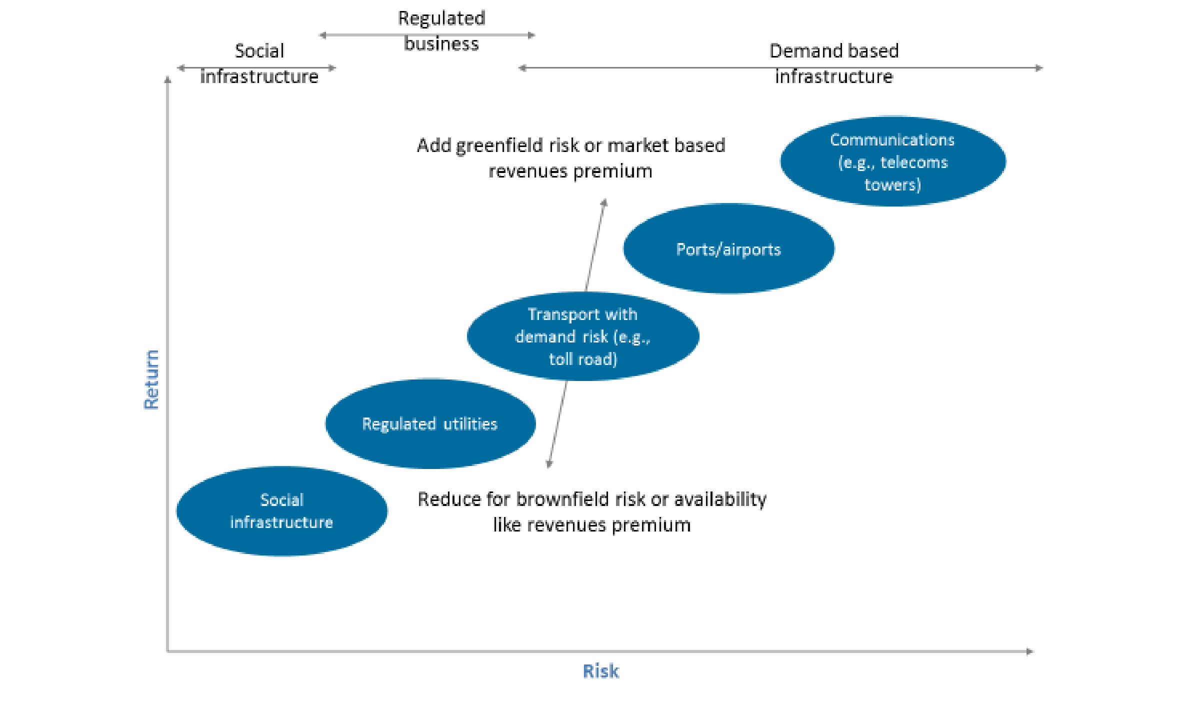
Policy Action 1.2: Standardize the risk/return profiles, support the creation of marketplaces and create financial vehicles that can support the development of infrastructure as an asset class. Even if projects are perfectly bankable/investable, the development of a marketplace is still a challenge for infrastructure as an asset class to thrive and address several challenges:

- Infrastructure assets have intrinsic risks that are specific to each project (technical, political etc.) notably in the construction phase which does not fit well with standardization expected by institutional investors. Such risks require specific expertise and introduction in the documentation of mitigation strategies on a case by case basis, making them more suitable for MDBs and banks with dedicated expertise. On the other hand, properly risk-managed and diversified infrastructure debts demonstrate a low risk profile at portfolio level which unfortunately is not recognized in financial regulations.
- As infrastructure as an asset class is not fully developed the intermediation of infrastructure transactions is highly fragmented.
- There is often the assumption that infrastructure sectors and sub-sectors have the same investment characteristics. However, research acknowledges the heterogeneity of infrastructure sectors and the need to advance research to analyze the impact and significance of this heterogeneity at portfolio level.[23] Although, infrastructure assets share common features such as lower risks compared to other kind of assets, greater protection and less correlation to economic cycles, there are important differences among assets that need further contractual adjustments.
  - Energy, information and communication technology (ICT) and some types of transportation facilities like ports are making progress in being perceived as Infrastructure asset classes that fit investor’s needs. Also, renewables are gaining asset class category with growing number of project bonds.
  - Social infrastructure such as schools, hospitals and prisons, and economic infrastructure with subsidized tariffs such as water, sewage and roads are far from private sector investment requirements.

[22] Promoting Infrastructure as an Asset Class. Standards, tools, guides and best practices. World Bank and development partners.

[23] Panayiotou, Athina. Infrastructure as a Financial Asset Class. Doctoral Thesis. University College London. August 2017.

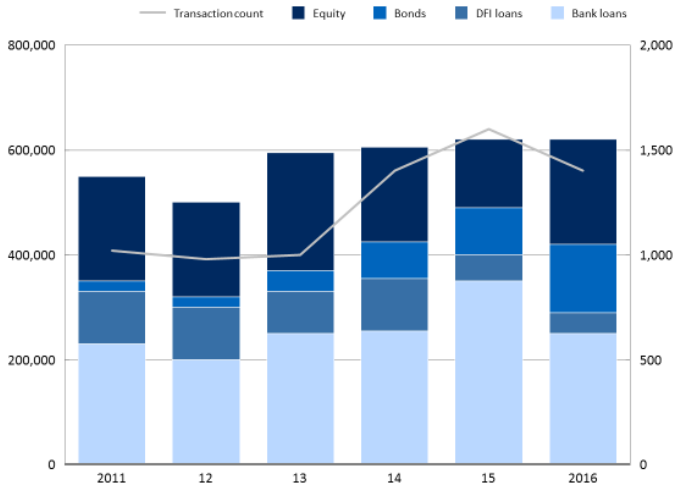
Exhibit 1 | Risks and return profiles by sector. Source: AMP Capital


Regulated business
Social infrastructure
Demand based infrastructure
Add greenfield risk or market based revenues premium
Communications (e.g., telecoms towers)
Ports/airports
Transport with demand risk (e.g., toll road)
Regulated utilities
Social infrastructure
Reduce for brownfield risk or availability like revenues premium
Return
Risk

- There is a need to develop infrastructure finance as an asset class while considering banks financing specificities. Banks are better placed to finance construction risk; insurers are the most natural holders of long term liabilities. However, there is a lack of solutions to transfer risks (from banks to institutional investors) at portfolio level.

Exhibit 2 | Current infrastructure private funding

The chart below[24] shows that in 2015 and 2016 private funding (including both greenfield and brownfield) was close to USD 0.65 trillion. Funding comes from market financing such as bonds (53%), bank loans (41%) and MDB loans (7%).



There is an urgent need to foster innovation in the ways infrastructure assets can be offered as financial vehicles. Moreover, there is a need to explore actual marketplaces where this kind of assets can be traded. The role of standardization of trading processes as it is the case with traditional asset classes must serve as an example. Development of infrastructure as asset class will depend upon further action:

- **Standardize risk/return profile of infrastructure as an asset class and develop a history of risk and return data for different investment instruments.**

G20 leaders must incentivize standardized tools and forms to facilitate due diligences, thus facilitating investments and market liquidity. Moreover, G20 leaders need to develop a history of risk and return data for different investment instruments/vehicles and promote standardization of documentation wherever possible.

Investment in infrastructure can take place via a range of different instruments or vehicles, each with its own risk/return profile (thus fitting within different asset classes). These range from equity (from outright ownership to participation in private equity funds) to project finance loans, traditionally originated by banks (but increasingly by non-banks with a growing focus on the greenfield phase of the project) to bonds (issued either by infrastructure companies or by special entities set up to manage a portfolio of infrastructure projects) to shares in mutual funds dedicated to infrastructure investment (i.e., listed equities). For achieving greater standardization among risk and returns, there must be a realistic acknowledgment for infrastructure as asset class that increases project termination. There is a need to build a risk return matrix that allows the creation of standardized contract models,

[24] IJGlobal

including asset class subsectors and geographies. Additionally, standardized documentation templates should be created to decrease due-diligence costs, facilitate infrastructure comparison and increase market liquidity.

Exhibit 3 | Main constraints to develop a fully standardized approach for the financing documentation in relation to long term infra financing

Main constraints to develop a fully standardized approach for the financing documentation in relation to long term infra financing (i.e. PPP financing) are:

1. Each country has its own specificities and government entities do not have the same creditworthiness.
2. Differences between applicable regulations.
3. Diversity of the sponsors ready to undertake the construction of the infra projects and diversity of the structure of the project documents (multi sourcing, EPC contractors, etc.).
4. Different level of complexity depending on the underlying project and the operations that are to be covered by the PPP (e.g. a hospital would always be more complex than toll roads).
5. Political vision of the authority varies, depending on what is to be outsourced to the contractors (for instance, expropriation could be dealt with by the sponsors in certain countries, whist this would be dealt with by the State or its governing bodies for others).
6. Different level of allocation of the risks between the private and the public part.

- **Enhance private sector partnerships to increase investments in infrastructure.**

G20 leaders must enhance private sector partnerships (e.g. between banks and insurers) to increase investments in infrastructure. An alternative to cope with the banks long term constraints is to build partnerships between banks and insurance companies/institutional investors according to which banks finance the project until completion, and investors replace the banks post completion (or could take part of the longer-term exposure post completion) when cash flows are generated by the operations of the infrastructure. A condition precedent to such arrangement being implemented would be that investors are committed from day one to participate to the financing after completion.

Securitization of banks (as well as MDBs) portfolios should be encouraged. It would allow them to free up their balance sheets to originate new loans while providing institutional investors with new investment opportunities and increasing portfolios' diversification.

Moreover, The G20 should encourage Export Credit Insurance Agencies (ECIAs) dedicated risk mitigation agencies to further expand their role as risk absorber and financing facilitator, through collaborating with investors or banks from both public and private sectors, providing accessible and affordable financing solution to infrastructure projects and developing the infrastructure as an asset class.

- **Create a global marketplace for infrastructure assets.**

G20 leaders should incentivize the creation of a global infrastructure marketplace to increase liquidity and asset trade. A marketplace could be important to increase awareness and knowledge sharing as well as to continue to develop standards for different types of infrastructure asset classes. Special focus areas include the promotion of standardized documentation (to the extent possible given many infrastructure projects are bespoke), robust investor rights, stable and internationally consistent dispute resolution mechanisms, and strong risk sharing frameworks, with predictable future cash flow projections for investments. Together with developing the right financial vehicles, creating a market for infrastructure could generate the needed synergies for increasing financing and trading.

Policy Action 1.3: Enhance the role of MDBs to support riskier infrastructure investments, project preparation and data transparency.

MDBs activities, especially among emerging and developing countries, can be key to crowd institutional investors to infrastructure investment and provide strategic advice to countries to implement public funded infrastructures. MDBs can increase their already crucial role in infrastructure investment because of their knowledge of countries´ needs, their strong reputation within capital markets and their flexible tools. At present, MDBs intervene in financing infrastructure mostly through bonds issued on international capital markets. However, there are additional opportunities for MDBs to innovate and offer new financing vehicles. This section echoes important data points and innovative approaches for policy action identified by a comprehensive and recent study by the Overseas Development Institute[25]:

- The public sector in emerging and developing countries is responsible for funding 70 percent of current investment spending, however, it is not enough to finance infrastructure gaps.
- Global private infrastructure financing does not show a rising trend in the last years and has decreased from 2014 to 2016.
- Among emerging and developing countries, private infrastructure investment continues to decline since 2012.
- The regulatory framework arising from Basel III anchored capitalization and liquidity requirements, limiting lending at a global scale. As a result, infrastructure lending which is the main vehicle of project finance has suffered because of increased costs, affecting long maturity transactions.
- Assistance from bilateral and multilateral sources account for 10 percent of infrastructure investment in emerging and developing countries.
- Experts find that although efforts to address information gaps and promote standardized data reporting, risk assessment frameworks and contractual arrangements related to infrastructure are on the way, however, the change is moving at a slow way.
- Political and foreign exchange risks continue to hinder investments in emerging and developing countries and thus, the role of MDBs is increasingly important.
- To deal with new and relatively more complex than other types of asset class, developing infrastructure as an asset class requires not only traditional financial knowledge but also public-sector expertise and economic development understanding that most long-term capital holders do not necessary count on.
- As stated by the Overseas Development Institute recent study, MDBs are supported by the world´s largest economies and count with the highest reputation AAA given by the rating agencies driven by their institutional capacity for providing quality control, transparency and financial probity. Thus, they are in a reliable position to confront risks that are typical of infrastructure projects, especially when they are conducted in emerging and developing countries. The priority risks that need policy intervention from MDBs are mainly construction and political risks.

[25] Humphrey, C. Channeling private investment to infrastructure. What can multilateral development banks realistically do? Overseas Development Institute. April 2018

The expertise and potential of MDBs for financing infrastructure can be further leveraged:

- **Support riskier infrastructure investments in emerging and developing countries.**

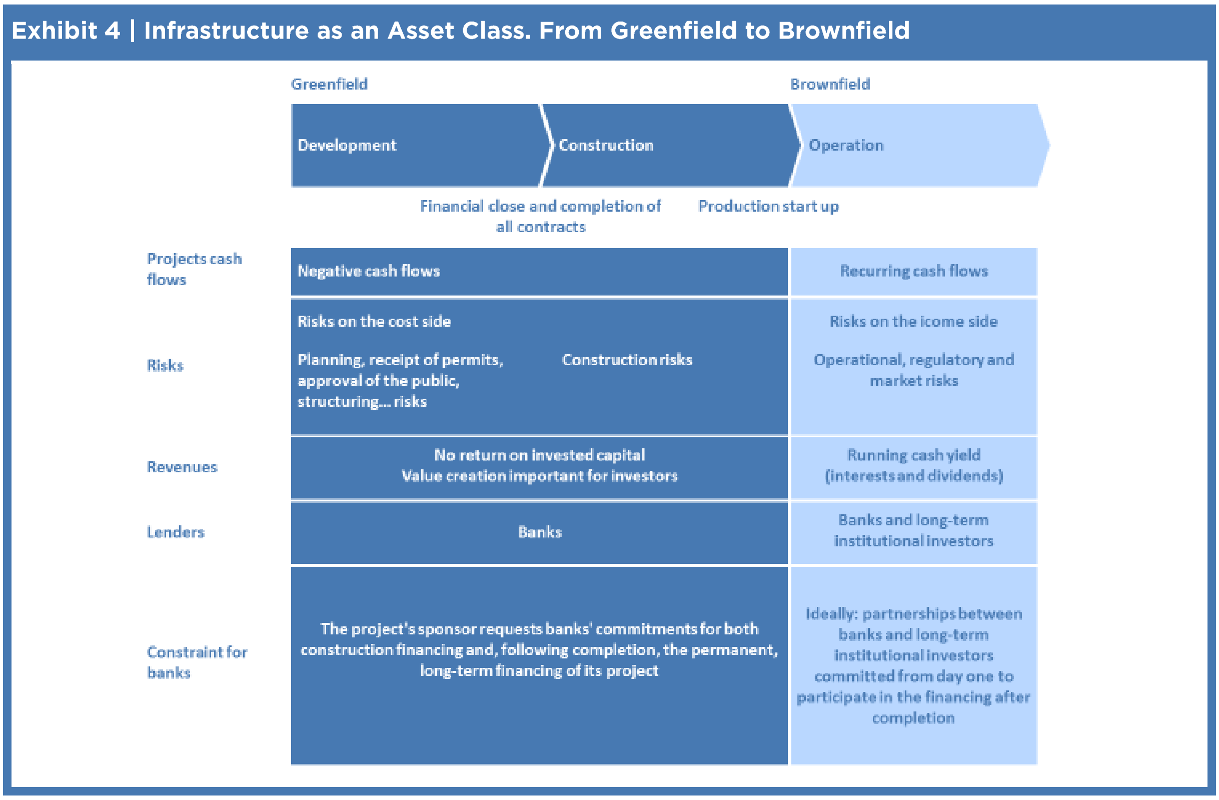
G20 leaders must support MDBs and other organizations to invest in riskier infrastructure developments through different instruments. There is an opportunity for MDBs to provide support to riskier infrastructure through project bonds, securitization of infrastructure loans and syndication arrangements, as proposed by the recent paper by the Overseas Development Institute. Projects bonds are a solution to raise financing for a specific project. MDBs can broaden the availability of guarantee instruments by promoting regulatory reforms and design standardized contract, this was successful in Malaysia (project bond) and Colombia (World Bank´s Deep Dive). It is crucial that MDBs increase collaboration with rating agencies to improve guarantee instruments and provide full guarantees when justified. MDBs should build on the experience of Multilateral Investment Guarantee Agency (MIGA) piloted in Hungary to increase the use of reinsurance that free risk capital for other operations. In addition, there is an opportunity to improve MIGA´s operations as a guarantee agency with other MDBs and broaden the availability of their products.

MDBs should also be incentivized to convert some donors' windows into guarantees or first loss. This would allow MDBs to take more risks without affecting their external rating and funding costs, while member countries development budgets would be leveraged rather than spent without any return. MDBs can also create instruments encouraging private investors (currency risk, underwriting risk and other hedging instruments). By doing so they would crowd in private funding.

It is crucial that MDBs increase collaboration with rating agencies to improve guarantee instruments and provide full guarantees when justified. MDBs should build on the experience of Multilateral Investment Guarantee Agency (MIGA) piloted in Hungary to increase the use of reinsurance that free risk capital for other operations. In addition, there is an opportunity to improve MIGA´s operations as a guarantee agency with other MDBs and broaden the availability of their products.

Finally, there should be an effort to create a securitization facility that brings together MDBs collective efforts. Synthetic securitization for private sector clients is feasible alternative and has the advantage of being attractive for investors.

Exhibit 4 | Infrastructure as an Asset Class. From Greenfield to Brownfield



	Greenfield	Brownfield
Projects cash flows	Negative cash flows	Recurring cash flows
Risks	Risks on the cost side Planning, receipt of permits, approval of the public, structuring… risks Construction risks	Risks on the icome side Operational, regulatory and market risks
Revenues	No return on invested capital Value creation important for investors	Running cash yield (interests and dividends)
Lenders	Banks	Banks and long-term institutional investors
Constraint for banks	The project's sponsor requests banks' commitments for both construction financing and, following completion, the permanent, long-term financing of its project	Ideally: partnerships between banks and long-term institutional investors committed from day one to participate in the financing after completion

- **Increase investment towards MDBs infrastructure data platforms and portals, support project preparation tools and promote knowledge sharing.**

G20 leaders need to increase funding to project preparation facilities, portals and platforms. In this perspective, the infrastructure project pipelines can be based on dedicated portals (local, regional or national) allowing access to project information, through the standardization of documentation. The launch of the Global Infrastructure Hub (GIH) under Australia's G20 Presidency in 2014 to grow the global pipeline of investment-ready infrastructure projects, was a first step. This approach was similar when the European Commission launched the European Investment Project Portal (EIPP) in 2016, offering a convenient way for private and public project promoters to boost the visibility of investment projects by simply filling and submitting a project form.

Other tools such as the Global Infrastructure Facility, currently piloting the Project Readiness Assessment Tool [26] and SOURCE (a MDB led and financed online infrastructure project management software)[27] address information asymmetries to achieve infrastructure investment data transparency supporting expansion of platforms such as the Private Participation in Infrastructure Database and the Global Infrastructure Hub and invest in growing the technical expertise that is required to increase the implementation of infrastructure as asset class, by enlarging

[26] The Project Readiness Assessment Tool (PRA) is a standardize tool created by the Global Infrastructure Facility (GIF) that provides governments with a snapshot in time assessment that identifies information gaps and recommends action to client governments. Its currently being piloted in Brazil, Ghana and Namibia.

[27] SOURCE is an online infrastructure project preparation and data management software, led and funded by MDBs. The SOURCE software provides governments and MDBs with: 1. a structured approach for infrastructure project data across the project cycle, including technical capacity to connect databases and platforms and integrate project preparation-related knowledge products, 2. a trusted, secured collector and repository of government and MDB project data, with servers under United Nations jurisdiction to address increasing data sovereignty and data security concerns, and 3. guidance and capacity support, particularly for government project teams, for specific "best practices" or quality standards, as well as data management and project management tools.

knowledgeable staff within MDBs and within public sector agencies in countries. Moreover, MDBs should share with the private sector their pooled data on credit performance (observed defaults and recoveries). This database, called Global Emerging Markets (GEM), is currently only accessible to MDBs.

Transparency on default experience could significantly improve private investors' confidence in the asset class, allowing them to better assess infrastructures risk and calibrate internal risk models, possibly used in a regulatory context, allowing for better capital allocation and risk-sensitivity in pricing. Making GEMs data more widely available should also build transparency and confidence in Emerging Markets exposures amongst all stakeholders, including rating agencies. This should help support more lending both by MDBs and private sector banks in these regions.

One of the main barriers to increasing private investment is the lack of consistent and transparent data bases to facilitate public sector and investors optimal decision making. The B20 members support the ongoing efforts done by MDBs; however, more resources are needed to accelerate the work that MDBs need to do with governments to standardize projects and create bankability conditions and engage investors. There is a need to improve coordination among the valuable resources that already exist but have not reached important stakeholders, especially in developing economies. For example, the 2018 participation channel for B20 members informs that 37 percent of respondents are not aware of the existence of the GIH[28]. Thus, there is a need to improve visibility and advocacy to increase demand for high quality information.

The "Infrastructure Data Initiative" is a joint project by the OECD, GI Hub, the EIB (and a group of MDBs), and the Long-Term Infrastructure Investors Association (LTIIA). It was launched to address the issue of defining and describing infrastructure as an asset class through data collection and improving the availability of infrastructure investment data. The project aims to create a centralized and publicly available repository on historical long-term data on infrastructure at an asset level. Such improved availability of asset level infrastructure data is also a key element to setting quality standards for infrastructure projects, assessing the sustainability (environmental, social and governance) performance of investments as well as allowing for the benchmarking and comparison of assets in terms of quality aspects. B20 support of this initiative could help to further private sector involvement in closing the information gap. The referenced OECD report provides actionable items that could be undertaken to help address the dearth of high-quality information that describes infrastructure investment characteristics[29].

- **Grow the technical expertise that is required to increase the implementation of infrastructure as asset class.**

G20 leaders must call for performance assessment and standard metrics to "mark-to-market" infrastructure assets (a valuation framework including a pre-established calendar for assessing implementation performance) that would greatly increase institutional investors' involvement.

G20 leaders must increase support for MDBs to increase the visibility of the infrastructure as an asset class topic in specialized media through articles written by

[28] IFG Participation Channel, Results for 2018 B20 members.

[29] OECD (2017), Breaking Silos: Actions to Develop Infrastructure as an Asset Class and Address the Information Gap. http://www.oecd.org/daf/fin/private-pensions/Breaking-Silos%20-Actions-to%20Develop-Infrastructure-as-an-Asset-Class-and-Address-the-Information-Gap.pdf

experts. Moreover, G20 leaders must support knowledge creation in universities and research institutes that can complement the advocacy work that is mostly carried out by MDBs and the GIH and create stakeholder networks that can connect investors, governments and experts through supporting global events where the topic of infrastructure as an asset class is discussed.

- **Ensure that support by MDBs is provided where actually needed and crowding-out of private investment is avoided.**

While the role of MDBs is key in supporting particular projects that would otherwise not receive private financing, it is equally key that appropriate policies are put in place to ensure that MDBs engage in projects where support is indeed needed and any cases where MDBs "compete" with private investors should be avoided.

TOPIC 2: INCREASE THE IMPACT OF PUBLIC PRIVATE PARTNERSHIPS (PPPs)

The global PPP market is evolving and complex. Due to its public component it is highly dependent on various factors including governments' investment priorities, budgets, national approach to local and international infrastructure investors. The expansion of PPPs is linked to the development of regulatory and institutional frameworks, financial instruments, investment environment, involvement of local governments and project delivery capacity. Western Europe – excluding the Nordic countries - is the most mature region in terms of PPPs and it has taken advantage of them for several years with the United Kingdom leading the way[30]. A healthy infrastructure financing has translated into high scores on quality of infrastructure and development, and therefore, a decreasing demand for investment. Other countries such as Canada and Australia have greatly benefited from this investment mechanism for many years and their steps have been followed by countries like the United States, Brazil and India, among others[31].

Previous B20 meetings

B20 has previously discussed PPP within more general recommendations, for example:

- During Russia 2013 B20 meeting, the task force committed to explore ways to improve the design of PPP arrangements[32].
- The Australia B20 meetings recommended specific policies to improve infrastructure pipelines and specifically mentions the need to revert weak preparation capabilities. Also, PPP are part of the Key Performance Indicators to measure progress[33].
- Turkey 2015 task force, identifies the infrastructure as an asset class bottlenecks and proposes detailed recommendations for improving the infrastructure investment ecosystem with the inclusion of PPP as a main topic[34].
- In Germany B20, PPP are mentioned within the Policy action 1.1 Developing and Promoting Bankable/Investable and Investment-Ready Infrastructure Project Pipelines[35].

Context

- PPPs are a tool for financing infrastructure projects that work well when conditions exist, i.e. project makes economic sense; there is a clear and efficient process to select a partner; there is appropriate risk transfer between the government and the partner; and there is a revenue stream to provide appropriate risk-adjusted returns.
- Not all projects can meet these conditions and thus not all projects are well suited for PPPs. Given this scenario, B20 members would like to explore best practices that will make this G20 agenda more impactful.

[30] Understanding Public Private Partnerships. Overview/Fact Pack McKinsey & Company. February 2017
[31] Ibid.
[32] B20 under the Russian Presidency: Achievements and Challenges, 2013.
[33] B20 Infrastructure & Investment Task force Policy Summary, Australia 2014
[34] B20 Infrastructure & Investment Task force Policy Paper, Turkey 2015
[35] B20 Financing Growth & Infrastructure Policy Paper. Investing in Resilient, Future-oriented Growth Boosting Infrastructure Investment and Balancing Financial Regulation. Germany 2017

- Governments consider PPPs to deliver one or more fundamental benefits to generate significant value for money such as: new sources of financing, improved risk allocation and increased efficiency and project completion.
- In 2016, around USD 60 billion were invested in PPP, 57 percent down from 2010 peak of USD 140 billion, while the main growth PPP cycle of 8 percent occurred from 2011 to 2015.
- Even in economies that make strong use of them, PPPs make up only 5-10 percent of overall investment in economic infrastructure and PPPs account for an average of 7.5 percent of infrastructure investment in major developing countries[36].
- There are currently around 1,300 PPP. A 34 percent of those projects are in Latin America and Western Europe accounts for 16 percent. Transport projects have the largest share of the current pipeline adding to 80 percent and Europe dominates in social infrastructure, with around 140 social infrastructure projects in pipeline out of 306 worldwide[37].
- Nevertheless, with 74 percent of countries starting to enable and support PPPs, the global market for PPPs remains full of opportunities and challenges[38].

RECOMMENDATION 2: G20 LEADERS MUST DEVELOP A CLEAR ROLE FOR PPPS, IMPLEMENT COMPETITIVE PROCUREMENT MECHANISMS AND PROMOTE EXECUTIONAL EXCELLENCE TO SUCCESSFULLY IMPLEMENT PPP AND INCREASE THEIR IMPACT.

POLICY ACTIONS

2.1: Develop a clear role and a competitive governance framework for PPP.

2.2: Promote PPP executional excellence

Policy Action 2.1: Develop a clear role and a competitive governance framework for PPP.

PPPs deliver fundamental benefits for infrastructure development as discussed above. However, failure is often driven by a lack of understanding of the critical risks and challenges inherent in a PPP deal. It is also important to highlight that the selection of Public-Private Partnerships should be grounded in Value for Money: The decision to invest should be based on a whole of government perspective and be separate from how to procure and finance the project. There should be no institutional, procedural or accounting bias either in favour of or against PPPs.

- Investors face insufficient transparency on procurement processes and partner selection and thus misallocation of risk between government and private sector
- A lack of a clear vision and comprehensive framework increases the various risks associated with PPPs: Revenue risks, englobing fixed annual payments or demand

[36] Bridging Global Infrastructure Gaps. McKinsey Global Institute. June 2016
[37] Understanding Public-Private Partnerships. McKinsey & Company, 2017
[38] Understanding Public Private Partnerships. Overview/Fact Pack McKinsey & Company. February 2017

linked payments; Finance risks, related to capital structuring, guarantees for debt, pre-emptive purchase options and state funding for some of the project; Construction risks, that can be cost overruns or time overruns; Operational and maintenance risks, englobing unexpected operational and maintenance costs

- Partnerships often fail to leverage the full capabilities and expertise of their various members. This is most common in partnerships whose mission or objectives are unclear, or the ones that do not carefully define the specific contributions expected from each partner
- A weak vision of PPPs limits focusses on quality and sustainability which generates social discontent around PPPs and erodes the legitimacy of the framework.
- Budgetary and accounting issues should be adapted to the special condition of long term investments. The nowadays regulation, based in an annual analysis, causes non- justified damages to companies' balance sheets and to government National Accounts, because they do not consider the long-term character of the investment.

- **Develop a clear role for PPPs.**

G20 leaders must take further actions to define a clear role for PPP in reducing the infrastructure gap by creating a robust and transparent pipeline of suitable PPP projects, implement adequate legal and institutional frameworks.

G20 leaders must commit to define a clear role for this type of investment and define a suitable pipeline that should result for an exhaustive value for money analysis to achieve success when implementing PPPs. To this end, adequate legal regulations must ensure that stakeholders keep project risk low and guarantee expected returns. Within PPPs that involve intertemporal commitments, governance is crucial to align crossed interests and communicate continuity message to investors. A transparent process and consistent approach drive Canada's success. An independent economic assessment of Canadian PPPs over a ten-year period has determined the projects saved governments nearly $10 billion, generated $7.5 billion in taxes and $32 billion in income for workers. They have created more than half a million jobs and contributed $48.2 billion to GDP[39].

- **Implement a competitive governance framework for PPP.**

G20 leaders must foster a competitive governance framework for PPP to facilitate project transparency and thus market creation. A fair competition is the key to achieve better results in infrastructure, and a competitive public procurement system accrues social and economic benefits [40]. Clear regulation and monitoring by competition authorities is thus vital because of market's susceptibility to various violations such as corruption, including bribery and kickbacks or cronyism. A competitive governance system should consider value for money, with a special attention to innovation and sustainability. Infrastructural tenders should include CRS activities, know-how transfer and – most of all- maintenance in order to be truly fair and sustainable, rewarding quality and transparency. By aligning governance to the stakeholder's objectives and selling the benefits of collaboration, the overall result

[39] A transparent procurement process and consistent approach drive Canada's success. InterVISTAS Consulting Inc. Prepared for the Canadian Council for Public-Private Partnerships, 2014

[40] OECD (2012) Recommendation of the Council on Principles for Public Governance of Public-Private Partnerships, OECD Publishing, Paris,

can be more valuable than cost savings alone.

Policy Action 2.2: **Promote PPP executional excellence**

Executional excellence should be a focus of G20 leaders. Project delivery has historically been very poor – most projects experience over-runs >50 percent and nearly 25 percent are more than a year late. PPPs face several challenges related to execution:

- Delays in land acquisition and approvals.
- Lack of collaboration and inappropriate tendering stifling innovation and design to value.
- Maintenance backlog increasing total cost of ownership.
- Insufficient pricing and demand management.
- Lean techniques and modularization in their infancy.
- Insufficient oversight and coordination during construction resulting in delays and claims.
- Construction sector held back by lack of education, fragmentation, overregulation, lack of innovation, informality.
- **Adopt PPP models considering financial, practical and political outcomes.**

We recommend to G20 leaders define the adequate PPP models with the outcome determined by financial, practical and political considerations and design robust business plans with attractive and stable risk allocation.

The UK Audit Office found a reduction of 70 percent of project budget overrun counts and 65 percent reduction in project schedule overruns deploying a PPP model.[41] Moreover, an Australian study of 54 projects showed that only 1 percent went over budget; they also beat the schedule on average by 3 percent, while traditional approaches were on average 24 percent late. What these experiences have in common is that they operate in systems where executional excellence is promoted. Decision making on which PPP model to implement is of paramount importance. For each potential PPP project, there are usually multiple options, with the outcome determined by financial, practical and political considerations

Exhibit 5 | Features of PPP models[42]

PPP Contracts	Management contracts	Operating concessions (service concessions)	Construction concessions
Description	■ Allows private sector skills to be brought into service design and delivery, operational control, labor management and equipment procurement. However, the public sector retains the ownership of facility and equipment	■ The grantor controls or regulates what services the operator must provide using the assets, to whom, and at what price, and also controls any significant residual interest in the assets at the end of the term	■ In this form of PPP, the government defines and grants specific rights to an entity (usually a private company) to build and operate a facility for a fixed period of time

[41] The rising advantage of public-private partnerships. McKinsey & Company, June 2017
[42] Understanding Public Private Partnerships. Overview/Fact Pack | McKinsey & Company. February 2017

PPP Contracts	Management contracts	Operating concessions (service concessions)	Construction concessions
Pros	■ Can be implemented in a short time ■ Least complex of all PPP models ■ In some countries, politically and socially more acceptable for certain projects (such as water projects and strategic projects like ports and airports)	■ Can be implemented in a short time ■ Significant private investment possible under longer term agreements	■ Private sector bears a significant share of the risks ■ High level of private investment ■ Potential for efficiency gains in all phases of project development and implementation and technological innovation is high
Cons	■ Efficiency gains may be limited and little incentive for the private sector to invest ■ Almost all risks are borne by the public sector ■ Applicable mainly to existing infrastructure assets	■ Has little incentive for the private sector to invest, particularly if the lease period is short ■ Generally used for existing infrastructure assets. ■ Considerable regulatory oversight may be required	■ Highly complex to implement and administer ■ Difficult to implement in an untested PPP market. ■ May have underlying fiscal costs to the government. ■ Negotiation between parties and finally making a project deal may require long time. ■ May require close regulatory oversight ■ Contingent liabilities on government in the medium and long term

- **Increase project delivery efficiency through adoption of best practices.**

G20 leaders must incentivize the creation of tools to increase project delivery efficiency. Executional excellence is linked to controlling and feedback, for example, effective feedback processes on the system and project levels, linking performance to incentives and remedial processes as appropriate. In the UK, Treasury monitors overall PPP objectives with other bodies to assess efficiency, and satisfaction. NAO and partnership UK regularly review project performance and publish on lessons learnt and case studies.

Moreover, governments can make crucial differences and attract investors by decreasing time to permitting and land-acquisition processes. Delivery also requires managing contractors by using state-of-the-art procurement. Overall, best practices should involve: strong value assurance process; adequate owner team concept, design, and engineering optimization; seamless permitting and land acquisition; effective procurement, tendering, and contracting; advanced procurement with synergies captured across projects; rigorous execution and contract management; well-planned commissioning and ramp-up; well-defined approach to projects in distress. Best practices can reduce cost by 40 percent[43].

[43] Bridging Global Infrastructure Gaps. McKinsey Global Institute. June 2016

TOPIC 3: NARROW THE AFFORDABLE HOUSING GAP

Decent housing is one of the major challenges that G20 leaders face and a major opportunity for the private sector. The idea of affordable housing varies across cities, but there is a common understanding that it relates to the financial component (affordability threshold means households should allocate less of 30 percent income to housing), a quality standard (meaning the socially accepted minimum viable requisite, such as floor space and amenities) and a definition of income threshold (the income groups that are eligible to assistance, could be defined, for example as those that earn less than 80 percent of the median)[44]. Addressing the affordability gap requires multiple collaborations, among national and local jurisdictions and among public and private efforts. Thus, taking from the comprehensive study by McKinsey Global Institute, *A blueprint for addressing the global affordable housing challenge* we propose three policy actions that aim at reverting the current affordable housing gap.

Context

- By 2025, the affordable housing gap could affect 440 million households, or one-third of the global urban population[45.]
- The affordable housing problem is global, cross-cutting cities in both developed and emerging economies. More than two thirds of the gap are concentrated within the top 100 large cities such as New York City, London, Mumbai and Dhaka.
- Unaffordable housing disproportionately affects the poor—almost two-thirds of urban households without access to affordable housing are living in slums.
- Estimates show that 330 million urban households around the world live in substandard housing or are financially stretched by housing costs. Some 200 million households in the developing world live in slums; in the United States, the European Union, Japan, and Australia, more than 60 million households are financially stretched by housing costs[46].
- Building affordable housing could be a USD 9 trillion to 11 trillion global construction opportunity. About 75 percent of the construction opportunity would be replacement of substandard housing, mostly in developing economies.
- The largest construction opportunities in affordable housing for new units to match the increase in low income households by 2025 would be in China, Russia, India, Brazil, and Nigeria.[47]
- Access to quality housing leads to multiple social benefits and creates a virtuous circle for development: leads to higher education achievement and reduces the negative impacts on learning; improves health due to access to water and sanitation, also avoids the spreading of diseases; if well placed and planned, leads to better work opportunities, promotes societal mix and diversity and reduces crime rates, improving safety among neighborhoods and revitalizing communities.

[44] A blueprint for addressing the global affordable housing challenge, McKinsey Global Institute 2014
[45] A blueprint for addressing the global affordable housing challenge, McKinsey Global Institute 2014
[46] A blueprint for addressing the global affordable housing challenge, McKinsey Global Institute 2014
[47] Ibid.

RECOMMENDATION 3: G20 LEADERS MUST SET POLICY TARGETS, INCREASE RESOURCE EFFICIENCY AND EXPAND FINANCIAL ACCESS FOR DEVELOPERS AND BUYERS TO NARROW THE AFFORDABLE HOUSING GAP.

POLICY ACTIONS

3.1: Define affordability thresholds and promote a ladder vision for housing development.

3.2: Expand financing to reduce costs for home buyers and developers, while supporting a healthy rental market. G20 leaders must implement financing policies that expand the market for housing through providing adequate instruments for developers and home buyers.

Policy Action 3.1: Define affordability thresholds and promote a ladder vision for housing development.

G20 leaders must decide on the policy goals of the affordable housing initiative to translate into realistic and sustainable goals. Targeting is a fundamental aspect of stakeholder signaling, meaning the message that government sends to citizens and the private sector. Both actors need to find that policy is predictable, since housing policy requires long term decisions that have important externalities across urban life. Leaders face several challenges in terms of policy planning:

- Housing projects that are designed far from local need risk to fail. While national government involvement is key to achieve priority, planning and resources, housing projects risk to generate poor results if local needs are not represented using household level data and local community consensus.
- Several affordable housing projects have failed in every major city because of their incapacity to integrate upper income and lower income households. This vision left lower income families aside and far from jobs, and services, affecting their access to economic and social development and not solving for the poverty problem. The capacity of mixing different economic groups is necessary for sustainable and vibrant housing markets.
- Housing projects targeted for lower income households often entail higher risks of dilapidations and value loss due to weak asset management practices and poor choice of location. Reverting this tendency requires to find well located places to develop housing projects and create efficient maintenance mechanisms.
- Imposing high standards for housing projects entails the risk of excluding poor households from to more expensive solutions. Innovative solutions that do not include a housing ladder concept can fail to integrate lower income people into housing facilities.

To address the present challenges, G20 leaders should advance:

- **Define aspirations and targets at all government levels that frame the affordable housing policy.**

G20 leaders must define housing aspirations and targets for their and other countries. The housing project pipeline needs to be directed by the national government as well as the standardization efforts across provincial and local governments. However, the local levels have a crucial role to play because they are close to community needs and manage important information that can make successful projects.

- Policy planning must set important priorities, for example to be affordable housing must not consume so much of the household budget that there is not enough left to pay for other essential items such as food or health care; also, a standard for what constitutes minimum socially acceptable housing such as floor area, basic amenities, adequate heating, plumbing, and electrical systems, distance to school, hospitals and jobs must be considered.
- Moreover, policy goals should include restoring existing infrastructure and developing new, to avoid common policy mistakes such as unattractive initiatives in the outskirts of the city where residents are far from job opportunities or building beyond the reach projects for low income families. The ladder approach implies to allow for a flow of solutions that increases housing upward mobility, including rental options.
- **Increase resource efficiency.**

G20 leaders should consider further action to make housing affordable. First, leaders should increase the availability of land that is well located for developing housing projects that create economic development. Although many leaders face a lack of available space for housing development, the benefits of urban density require decision makers to optimize the use of land, especially in well placed parcels. Land can be freed by government planning even in the most populated cities.Evidence suggests that improving land management, improving capital productivity, streamlining operation and maintenance and promoting financial access and development can almost entirely bridge the housing affordability for segments of the population earning above 50 to 80 percent of median income, while additional subsidies are required to assist lower income population[48].

Exhibit 6 | Unlocking land supply. Source: A blueprint for addressing the global affordable housing challenge, McKinsey Global Institute 2014.

Land often constitutes the most important and the costliest component of housing, as it can exceed 40 percent of property prices and explain 80 percent of property cost. Finding land that is well located for developing housing projects is crucial to create economic development and generate virtuous cycles through investment. Land supply can increase by different strategies:

Adopt smart, public transportation-oriented development, to allow for labor mobility and joint infrastructure and housing development. In the New Territories of Hong Kong housing development was done around infrastructure investment: 43 percent of residents and 56 percent of jobs are within 500m of railway or metro station.

Release public land, following the examples of TOKI housing agency from Turkey or Chinese government selling developing rights to private sector, capturing resources for new housing development.

Unlock idle land through tax incentives and regulatory policy to discourage speculation.

Allow land pooling, that creates opportunities for land assembly and readjustment were owners pool their land in exchange for greater infrastructure investment and higher density

Implement land registration systems to formalize titles and create markets. UN Habitat estimated that around 70 percent of land in developing economies is unregistered which prevents transactions to

[48] A blueprint for addressing the global affordable housing challenge, McKinsey Global Institute 2014.

occur.
Adopt inclusionary planning, adjusting land used per unit to accommodate more residents specially in high transit areas on a block by block basis, where infrastructure can support it. This mechanism increases supply across incomes and liberates older residences for lower income households, as has been planned in South Korea.

Second, leaders must promote policies that support industrial approaches to construction. Proven technologies and improved purchasing capacity can lower construction costs by 30 percent. However, construction costs are often a bottleneck for making affordable housing investments. This is in part because projects are rarely pooled together, that regulatory conditions hinder cost reduction and that standardization is often not advanced. Finally, the implementation of operations and maintenance cost reduction initiatives is crucial. Energy saving materials promote energy efficiency, such as insulation, suitable windows and efficient HVAC systems. Analysis suggests that these measures are present in US and UK projects providing ways to cut costs by 20-30 percent and a 2:1 return on investment. Streamlining economies of scale for demanded repair services through pooled asset management initiatives as done by the UK social housing buying consortia which achieved a 25 percent saving across operation and maintenance services.

Policy Action 3.2: Expand financing to reduce costs for home buyers and developers, while supporting a healthy rental market. G20 leaders must implement financing policies that expand the market for housing through providing adequate instruments for developers and home buyers.

Financing for affordable housing faces several challenges:

- Access to finance is a challenge in developing economies where financial systems are not as well developed and many low-income citizens are "unbanked" and work informally
- Affordable housing entails higher financial cost because of its associated risks. Underwriting costs and contractual expenses can make housing unavailable for lower income families. Policy measures can make financing available for purchasers and builders, for example, guaranteeing occupancy and streamlining permitting
- Mortgage issuance of $300 billion to $400 billion per year could be needed by 2025 to fund purchases of new affordable housing (not including the financing required to redevelop current substandard units). This would be equivalent to about 7 percent of global new mortgage origination volume in 2025[49.]
- Restrictive rent price control schemes have often been introduced but have subsequently been phased out due to major challenges, including widespread abuse, limited mobility of renters, and depressed investment in rental properties

To improve access to finance and to development finance, government initiatives should focus on:

- **Reduce the cost of financial access for residents.**

G20 leaders can positively impact the financial capacity of residents through three main policies suitable for emerging primary markets. First, by reducing loan origination costs and underwriting risk by improving assessment methods to qualify

[49] A blueprint for addressing the global affordable housing challenge, McKinsey Global Institute 2014.

borrowers, introducing standardized property valuation methods and mortgage-guarantee schemes. Second, by reducing the cost of funding mortgages, establishing liquidity facilities, expanding capital market funding through covered mortgage bonds or mortgage-backed securities and increasing the use of core deposits. Third, governments can leverage collective savings to reduce rates, launching a housing provident fund, and offering contractual saving schemes.

However, care should be taken to ensure that the increase in residents' financial capacity is not achieved at any price. Debtor protection is a fundamental issue. Therefore, a responsible funding approach must be promoted. From this perspective, the way loans are structured is crucial. A cash-flow lending approach (i.e. based on LTI ratios) should be preferred to a pure asset based one (i.e. based exclusively on LTV) which is pawn broking.

In terms of long term financing, schemes need to rely on stable macroeconomic environments that can contain inflation. Meanwhile, inflation adjusted schemes should be promoted.

- **Support developer financing.**

G20 leaders must support developer financing in several ways since the equity and debt for land and construction financial cost before units are sold accounts for 5-10 percent of total cost of housing development: first, by reducing development risks and capital cost. For example, in Brazil, the housing agency buys developments and then sells them to residents. In South African Cosmo City housing initiative, the developer payed for the land after the units were sold. Moreover, guarantee developer loans, can provide more direct access to resources, as done in the UK. Finally, subsidized interest rates are the most direct contribution from governments but also costly initiatives. This is done through tax exemption bonds or as done by the US, through the Loan Income Housing Tax Credit Program.

- **Generate appropriate rental options as an alternative to ownership.**

G20 leaders should foster rental or leasing options that can be an alternative solution to lower income households which are unable to secure down payments or sustain a flow of income to afford higher monthly fees. Thus, rentals can provide flexibility to residents in reducing transaction costs to move for better facilities and easier mobility for the job market.

Among rental regulations three main initiatives are recommended. First, less restrictive controls were successfully in Germany were rent price increase is limited to 20 percent over a three-year period. Also, an alternative policy options are direct subsidies provision, as offered by The Netherlands or Voucher systems as in the US. Finally, shared ownership schemes allow residents to buy property in small amounts (rent to own model) or buy only the structure of the residence and lease the land, eliminating the cost of land (often in the hands of land trust).

TOPIC 4: PROMOTE A SOLID FINANCIAL FRAMEWORK TO STRENGTHEN INFRASTRUCTURE FINANCING AND LONG-TERM GROWTH

Financial markets are in constant evolution and require regulations that provide a stable environment for incentivizing growth and investments. As the Financial Stability Board (FSB) states in the 2013 Report to G20 Finance Ministers and Central Bank Governors, "The most important contribution of financial regulatory reforms to long-term investment finance is to promote a safer, sounder and therefore more resilient financial system". It is critical for any policy framework to recognize the different means of structuring infrastructure investments and the different risk-return profiles of the assets to ensure the proper alignment of interests. Today, financial regulation is on the spotlight as the global economy is leaving the consequences of the 2008 financial crisis behind and new technologies and players are arising. Financial institutions and FinTech's, are trying to find their place in the market while regulatory bodies work to decrease risks without endangering growth and investments. Several challenges such as the risks and opportunities of digitalization and the need to generate coordination of national or regional regulatory implementation need to be addressed.

Improved framework conditions and a forward-looking financial regulation that balances the impacts of Basel III are needed to boost resilient and future-oriented infrastructure investment. As highlighted in the B20- "Business at OECD" work[50] on tackling the productivity challenge, it is critical to have an integrated approach, harmonising policies aimed at economic growth, strengthening productivity and stability.

Finally, the financial system must be committed to environmentally and socially responsible principles (ESG) as promoted by the United Nations. Sustainable finance must be encouraged to channel investments toward long-term and resilient infrastructures that reflect climate challenges and close social and economic gaps while ensuring sustainable growth and shared prosperity. As mentioned earlier, the infrastructure investment gap is even greater considering climate and sustainability challenges. Given the long-term "lock-in" effect of infrastructure, finance should be shifted towards climate-adapted and sustainable infrastructure as rapidly as possible.

Previous B20 meetings

The question of how the financial system can best contribute to sustainable growth has been at the core of the G20 agenda for many years. In both Australia 2014[51] and Turkey 2015[52] the Foreign Direct Investment task force recommended working towards greater consistency and harmonisation of regulation; to support greater promotion and protection of cross-border investment and greater transparency and harmony towards taxation. In this area, we are also building on the work of previous energy related B20 Task Forces, which have consistently called for action on this issue. For example:

- The Australia 2014 task force recommended working towards greater promotion and protection of cross-border investment including by developing a non-binding

[50] B20-BIAC, 2018 – B20 Argentina and "Business at OECD" (BIAC), The Productivity Challenge In Financing Inclusive and Sustainable Growth, June 2018.
[51] B20 Infrastructure & Investment Task force Policy Summary, Australia 2014.
[52] B20 Infrastructure & Investment Task force Policy Paper, Turkey 2015.

International Model Investment Treaty and promoting broader adoption of existing international standards.[53]

- The Turkey 2015 task force recommended committing to international investment principles related to foreign FDI by strengthening the international investment framework, adopting the OECD Code of Liberalization of Capital Movements and subscribe to the OECD Declaration on International Investment and Multinational Enterprises and promoting greater transparency and harmony in taxation and incentives related to FDI.[54]
- The China 2016 task force recommended the G20 to work on an open and resilient financial system, to enhance the monitoring of financial regulation implementation to avoid unintended consequences, to foster financial inclusion, to promote tax certainty, to scale up green financing and to promote infrastructure investment.
- The Germany 2017 task force recommended designing growth-enhancing financial regulation by promoting evidence-based standard setting, strengthening financial regulatory coherence and facilitating digitalization of finance. In Baden-Baden the G20 Finance Minister and Central Bank Governors reaffirmed their commitment to international economic cooperation and the overall goal of achieving "strong, sustainable, balanced and inclusive growth, while enhancing economic and financial resilience." [55]

Moreover, this year´s G20 Communique by the Ministers of Finance and Central Bank Presidents in Argentina endorsed the document a "Roadmap towards infrastructure as an asset class". The Roadmap promotes regulations and frameworks that enable "well-functioning markets for infrastructure financing, protect investors and ensure the efficiency, transparency, stability, promote integrity and anti-corruption, while minimizing unnecessary regulatory burden" [56] . The G20 Finance March 2018 Communiqué stated also that it remained committed to the full, timely and consistent implementation and finalization of the financial system's reforms and their evaluation to help identify and address any material unintended consequences and ensure that the reforms accomplish their objectives.

Context

- Financial institutions and regulators have been trying to strengthen the financial markets since the 2008 crisis. Basel III was the regulatory answer that demanded higher capital requirements, lower leverage and higher liquidity to financial institutions.
- The expectation is that now that the Basel III package is nearing completion, there will be a common field for all players and regulators should be able to focus on the monitoring and supervision of the framework.[57]
- At present, Basel III is facing many challenges from the industry incumbents and from new players, such as FinTech's, and cryptocurrencies.

[53] B20 Infrastructure & Investment Task force Policy Summary, Australia 2014.

[54] B20 Infrastructure & Investment task force Policy Paper, Turkey 2015.

[55] B20 Financing Growth & Infrastructure Policy Paper. Investing in Resilient, Future-oriented Growth Boosting Infrastructure Investment and Balancing Financial Regulation. Germany 2017.

[56] Overview of Argentina's G20 Presidency 2018.

[57] FSB, A new era for the FSB: from policy development to dynamic implementation, 2018

- Regulators and industry incumbents are both disrupted by technological change and both need to understand how the industry, the activities and the clients are going to change.
- Therefore, and considering the time and efforts of updating the new policy, the B20 calls for a careful analysis of the current and future regulation to ensure that new measures encourage global stability and shared growth through incentivizing private investments in infrastructure.
- B20 subscribes to the call of the Global Financial Markets Association (GFMA) in April 2018[58] to agree to principles to design regulatory cooperation arrangements to develop consistent regulatory regimes and supervisory practices that are: (I) Forward-looking; (ii) Enhance cross-border investment and market integrity; (iii) Supportive of similar outcomes; (iv) Predictable; (v) Transparent; (vi) Evidence-based; (vii) Proportionate; (viii) Enhance market certainty; (ix) Strengthen supervisory coordination; and (x) Supportive of conflict mitigation.

RECOMMENDATION 4: ENSURE FINANCIAL REGULATION THAT FOSTERS GROWTH, STABILITY AND INVESTMENTS IN INFRASTRUCTURE.

POLICY ACTIONS

4.1: Enhance cross-border financial regulation consistency. G20 leaders must promote regulatory consistency to reduce compliance arbitrage costs by ensuring a proper dialogue with stakeholders in the implementation phase

4.2: Encourage sustainable development financing. The development of quality infrastructure investment financing goes hand in hand with the development of a financial system best serving sustainable development. Such a "sustainable financial system" would be long-term oriented and would include green loans, bonds, structured products, funds, benchmarks, indices

Policy Action 4.1: Enhance cross-border financial regulation consistency. G20 leaders must promote regulatory consistency to reduce compliance arbitrage costs by ensuring a proper dialogue with stakeholders in the implementation phase:

- A poll conducted by the International Federation of Accountants and BIAC (Business Industry Advisory Committee for the OECD) to more than 250 executives from around the world suggest that different regulations costs businesses more than USD 780 billion. The burden translates in different barriers to financial institutions' international growth[59], impacting liquidity of Emerging Market debt, as well as bank lending to corporates and specialized lending.
- The IFC estimates that the benefits of the G20 reform exceed its costs. Nevertheless, the reform could produce cross-border adverse spillover effects to emerging and developing economies that are not required to implement this type of reforms themselves, but are affected by their implementation in other markets.[60]

[58] GFMA, Principles for Achieving Consistent Regulatory Regimes and Supervisory Practices, 2018

[59] IFAC-OECD – Regulatory Divergence, 2018.

[60] Cross-Border Spillover Effects of the G20 Financial Regulatory Reforms, January 2018, IFC

- Infrastructure investments risk perception in OECD countries has increased due to regulatory changes and increased political risks, "Recent political developments were the most frequently mentioned destabilizing circumstances that have the potential to affect financial performance of even mature infrastructure assets in Europe."[61]
- With Basel III policy standards nearing completion, regulatory institutions are changing their focus to the evaluation of the regulation's impact. The acknowledgement of maturing technological disruption embodied in successful FinTech's, blockchain technology and cryptocurrencies may require future regulatory revisions
- **Increase pre- and post-implementation analyses to understand the impact of financial regulation in stability, growth and infrastructure investment.**

Pre- and post-implementation analyses are key to understand the impact of regulation in infrastructure investment. As regulation is becoming more complex, the IFC states that "the potential for spill over impacts demand stronger home-host coordination, impose a higher supervisory burden, and require a stronger role for the international community to monitor and evaluate the impacts. The findings also emphasize the need for regulatory consistency within and between jurisdictions to ensure a levelled playing field."[62]

As the post-crisis policy reform agenda is close to an end, the Financial Stability Board is leading the post-implementation evaluation of the consequences of these reforms in the global economy, with a specific call for understanding the effects in infrastructure investment[63]. The B20 supports this analysis and recommends that it addresses:

- The need to extend the framework to pre-implementation analysis of the future possible impacts, as post-implementation is too late to prevent unintended consequences.
- The pre-implementation analysis should include stakeholders and should also include testing against worst case scenarios/crisis situations, to ensure that frameworks work when most needed.
- The importance of detailing general policy goals into clearly measurable Key KPIs.
- The Emerging Market angle should be looked at in particular, given specific vulnerabilities of those markets.
- The proportionality of implementation.
- The financial system resilience and the prevention of procyclicality
- The orderly functioning of markets while simultaneously avoiding the distortion of market pricing and market efficiency
- The cost and availability of financing and the availability of financial products to individuals and businesses

[61] SUMMARY, Policy Dialogue to Develop, Infrastructure as an Asset Class, 18 October 2017, OECD

[62] Cross-Border Spillover Effects of the G20 Financial Regulatory Reforms, January 2018, IFC

[63] The FSB Survey on financing and regulation over the life cycle of infrastructure projects was launched in March 2018.

- Promote collaboration among public and private stakeholders to reduce the cost of diverging financial regulation with a special attention to infrastructure investment.

G20 leaders must foster collaboration between the private and public sectors, regulators and practitioners and new and incumbent players to reduce the cost of diverging financial regulations. Special attention should be given to infrastructure investment experts to join the table as well as public sector leaders running infrastructure agencies to add insights.

Regulatory divergence not only has a high cost for the financial industry[64] but also for the global economy. Country fragmentation adds rigidity to a market that has become global and where barriers are becoming less evident.

Policy Action 4.2: Encourage sustainable development financing. The development of quality infrastructure investment financing goes hand in hand with the development of a financial system best serving sustainable development. Such a "sustainable financial system" would be long-term oriented and would include green loans, bonds, structured products, funds, benchmarks, indices etc.

B20 Germany was focused on green only. The G20 should now ask for expanding the definition from green to sustainable and create the right incentives to foster these financing, through financial regulation notably. The G20 should ask for specific favorable regulatory treatment fostering long-term finance such as a Green supporting factor or similar.

Monitor progress of FSB task force on Climate-related Financial Disclosure (TCFD) and further initiatives linked to the Paris Agreement (notably by engaging G20 members to make their main financial centers join the UN network of financial centers for sustainability initiative) should also be part of G20 priorities.

- **Financial regulation should support long-term investment contributing to a greener and cleaner economy**

The G20 should ensure that regulation does not discourage long-term investment and should take steps to investigate the prudential treatment of long-term assets and make changes where capital requirements are unnecessarily high.

In the European Union a specific “infrastructure supporting factor” has been introduced for insurers in Solvency 2 and is proposed for banks in the proposed revised CRR. The German B20 recommended introducing it in regulation at international level. This would also help to establish infrastructure, globally, as a specific and distinct asset class. This supporting factor would also be applied to securitization of infrastructure financing.

A more favorable treatment should be granted to green infrastructure to facilitate the rerouting of private finance into green finance.

However, prior to this specific comment it is important to stress that the B20 must commit itself to ensuring that what is financed as "green" is really "green". It is essential for furthering the hope that this leverage will be properly used to improve the fate of the planet.

- **Mobilizing the world’s financial centers is essential to make progress on climate change and sustainable development.**

[64] FSB, A new era for the FSB: from policy development to dynamic implementation, 2018

Financial centers compete to attract and generate business; however sustainable finance is not a zero-sum game and the potential for cooperation (dialogue, knowledge-sharing) is considerable, not least to grow the overall global market. Therefore, we recommend the G20 to encourage its members to adhere to the UN initiative aiming at accelerating financial centers action on sustainable development, notably by helping their financial centers through public-private partnerships.

On all these topics, the G20 should build on the recent report of the EU High-Level Expert Group on Sustainable Finance entitled "Financing a Sustainable European Economy" and the following European Action Plan.

ANNEX I: LIST OF ABBREVIATIONS

BIAC	Business and Industry Advisory Committee
ECIAS	Export Credit Insurance Agencies
GDP	Gross Domestic Product
GEM	Global Emerging Markets
GFMA	Global Financial Markets Association
GIH	Global Infrastructure Hub
FSB	Financial Stability Board
ICT	Information and Communication Technology
LTIIA	Long-Term Infrastructure Investors Association
MDBs	Multilateral Development Banks
MIGA	Multilateral Investment Guarantee Agency
OECD	Organization for Economic Cooperation and Development
SDGs	Sustainable Development Goals
TCFD	Climate-related Financial Disclosure

ANNEX II: SCHEDULE OF TASK FORCE EXCHANGES

#	Date	Location	Theme
1	March 21st	Teleconference	Inception Document and Participation Chanel Results
2	April 19th	Washington	1st Policy Paper Draft Discussion
3	May 28th	Paris	2nd Policy Paper Draft Discussion
4	July 19th	Teleconference	3rd Policy Paper Draft Discussion
5	October 4th& 5th	Buenos Aires	B20 Summit, 1st advocacy meeting

ANNEX III: TASK FORCE MEMBERSHIP LIST

COORDINATION GROUP

Name	Company/Organization	Country	Deputy
Chair			
Eduardo Elsztain	Grupo IRSA – Banco Hipotecario	ARGENTINA	Mario Blejer
Co-Chairs			
José Manuel González Páramo	BBVA	ESPAÑA	María Llorente Derks
Fernando Lago	CÁMARA ARGENTINA DE LA CONSTRUCCIÓN	ARGENTINA	
Zhang Hongli	ICBC	CHINA	
Timothy Adams	INSTITUTE OF INTERNATIONAL FINANCE	INTERNATIONAL	Hung Tran
John Denton	INTERNATIONAL CHAMBER OF COMERCE (ICC) - CORRS CHAMBERS WESTGARTH	AUSTRALIA	Nikolaus Schultze
José Luis Enrique Cristofani	SANTANDER RÍO	SPAIN	Juan Alfredo Cerruti
B20 Sherpa			
Fernando Landa	BUSINESS 20	INTERNATIONAL	Paula Ini
Knowledge Partner			
Mauricio Janauskas	MCKINSEY & COMPANY	UNITED STATES	
Patricio Ruiz Yanzi	MCKINSEY & COMPANY	UNITED STATES	
Mariana Lef	MCKINSEY & COMPANY	UNITED STATES	
Network Partner			
Hung Tran	INSTITUTE OF INTERNATIONAL FINANCE (IIF)	INTERNATIONAL	
Members			
Ezequiel Herszage	BANCO HIPOTECARIO	ARGENTINA	
Sonja Gibbs	INSTITUTE OF INTERNATIONAL FINANCE (IIF)	INTERNATIONAL	
George Brady	INSTITUTE OF INTERNATIONAL FINANCE (IIF)	UNITED STATES	
Celso Nozema	INSTITUTE OF INTERNATIONAL FINANCE (IIF)	INTERNATIONAL	
Fernando García Díaz	UNIÓN INDUSTRIAL ARGENTINA (UIA)	ARGENTINA	

TASK FORCE MEMBERS

Name	Company/Organization	Country	Deputy
Enric Pérez	ABERTIS INFRAESTRUCTURAS	SPAIN	
Valeria Tamburo	ACINDAR	ARGENTINA	
Norberto Carlos Peruzzotti	ADEBA	ARGENTINA	Cristina Ehbrecht
Christian Gabriel Lisandrini	ADOBE CONSTRUCCIONES S.R.L.	ARGENTINA	
George Sebulela	AFRICAN ENTREPRENEURS COUNCIL	SOUTH AFRICA	Sello Rasethaba
Thomas Leonardi	AIG	UNITED STATES	Anthony Zobl
Carlos Alfaro	ALFARO ABOGADOS	ARGENTINA	
Dirk Kempthorne	AMERICAN COUNCIL OF LIFE INSURERS	UNITED STATES	Leonard Bradley (Brad) Smith
Vineet Mittal	AVAADA	INDIA	
Ramiro Sosa Navarro	BANCO DE LA PROVINCIA DE CÓRDOBA	ARGENTINA	
Juan Ignacio Napoli	BANCO DE VALORES S.A.	ARGENTINA	
Peter Greiff	BANCO SANTANDER	SPAIN	
Mari Pangestu	BANK BTPN	INDONESIA	
Zhang Dongning Zhang	BANK OF BEIJING CO., LTD.	CHINA	Nie Guangxin
Xiao Qing	BANK OF COMMUNICATIONS	CHINA	
Carlos Bascou	BASCO	CHILE	
Gonzalo Verdomar Weiss	BBVA FRANCÉS	SPAIN	
Pablo Torretta	BECCAR VARELA	ARGENTINA	Augusto Vechio
Agustina Tiscornia	BICE	ARGENTINA	
Jean Lemierre	BNP PARIBAS	FRANCE	Veronique Ormezzano
Carlos Alberto Arecco	BOLSA DE COMERCIO DE BAHIA BLANCA	ARGENTINA	
Manuel Tagle	BOLSA DE COMERCIO DE CORDOBA	ARGENTINA	Raul Hermida
Julio Calzada	BOLSA DE COMERCIO DE ROSARIO	ARGENTINA	Alfredo Sese
Carlos Mundín	BTU	ARGENTINA	
Marcela Analía Prone	CAC	ARGENTINA	
Bernardo Martin Arecco	CAMARA ARGENTINA DE COMERCIO Y SERVICIOS - JOVEN	ARGENTINA	
Sergio Torretti	CAMARA CHILENA DE LA CONSTRUCCION	CHILE	
Liliana Lazzarano	CÁMARA DE COMERCIO ARGENTINO-BRITANICA	UNITED KINGDOM	
Alejandro Juan Bennazar	CAMARA INMOBILIARIA ARGENTINA	ARGENTINA	Claudio Roberto Vodánovich
Zang Jianjun	CEFC CHINA ENERGY COMPANY LIMITED	CHINA	Zhao Runlong
Zhang Xiaoxu	CEFC CHINA ENERGY COMPANY LIMITED	CHINA	
Yan Luo	CHINA CAMC ENGINEERING CO.,LTD	CHINA	Wei Shen

Liyan Zhao	CHINA COUNCIL FOR THE PROMOTION L OF INTERNATIONAL TRADE	CHINA	Wenqi Lu
Jie Su	CHINA EXPORT & CREDIT INSURANCE CORPORATION	CHINA	Zhi Zhang
Fangyu Liu	CHINA INVESTMENT CORPORATION	CHINA	Zhiyu Xu
Chun Zhang	CHINA MACHINERY ENGINEERING CORPORATION	CHINA	Zhixin Yin
Wang Lei	CHINA NATIONAL CHEMICAL ENGINEERING GROUP CORPORATION	CHINA	Wang Yitong
Ren Hongbin	CHINA NATIONAL MACHINERY INDUSTRY CORPORATION (SINOMACH)	CHINA	Liu Jingzhen
Wu Shaosong	CHINA RAILWAY CONSTRUCTION CORPORATION (INTERNATIONAL) LIMITED	CHINA	Guan Wenlong
Xiaodong Zhao	CHINA RAILWAY SIGNAL COMMUNICATION CO., LTD	CHINA	
Gan Wang	CHINA TAIPING INSURANCE GROUP LTD	CHINA	Wei Li
Guo Weihua	CHINA UNITED ENGINEERING LIMITED CORPORATION	CHINA	Shen Ruihong
Jorge Mas	CICA	ARGENTINA	Roger Fiszelson
Charles Johnston	CITIBANK	UNITED STATES	Ricardo Dessy
José Augusto Fernandes	CNI	BRAZIL	
Jacqueline Stella Maubre	COHEN SA	ARGENTINA	
Jorge Enrique Revello	COMITÉ MIXTO EMPRESARIO ARGENTINO - JAPONES	JAPAN	
M. Angeles Asenjo	CONFEDERACIÓN NACIONAL DE LA CONSTRUCCIÓN (CNC)	SPAIN	
Amitabh Srivastava	CONFEDERATION OF INDIAN INDUSTRY	INDIA	
Juan Bautista Pacella	CONSTRUCTORA DOS ARROYOS S.A.	ARGENTINA	
Martin Eurnekian	CORPORACION AMERICA	ARGENTINA	
Cosse Stephane	COVEA	FRANCE	
Jean Louis Bancel	CRÉDIT COOPÉRATIF	FRANCE	Luc Boscaro
Daniel Taras	DEUTSCHE GESELLSCHAFT FÜR INTERNATIONALE ZUSAMMENARBEIT (GIZ) GMBH	GERMANY	Philipp Kruschel
Andrzej Malinowski	EMPLOYERS OF POLAND (PRACODAWCY RZECZYPOSPOLITEJ POLSKIEJ)	POLAND	Janusz Pietkiewicz
Oleg Preksin	EURASIAN ECONOMIC COOPERATION ORGANIZATION	EUROPE	
Grenke Wolfgang	EUROCHAMBRES	EUROPE	
Fabian Gomez	EY	UNITED KINGDOM	
Marie-Noelle Loewe	FEDERATION BANCAIRE FRANÃ§AISE	FRANCE	
Stormy-Annika Mildner	FEDERATION OF GERMAN INDUSTRIES (BDI)	GERMANY	Lea Spörcke
Chang-Soo Huh	FEDERATION OF KOREAN INDUSTRIES	SOUTH KOREA	
Marchand Jean-Louis	FIEC- EUROPEAN CONSTRUCTION INDUSTRY FEDERATION	EUROPE	Gaubert Marchand
Diego Elespe	FIX (AFFILIATED FITCH RATINGS)	ARGENTINA	
Christian Pierotti	FRENCH INSURANCE FEDERATION	FRANCE	Emilie Giraud

Liana Guadalupe Luro	GEMA- GRUPO EMPRESARIAL DE MUJERES ARGENTINAS	ARGENTINA	
Diego Angelino	GIZ-EMSD_EMERGING MARKETS SUSTAINABILITY DIALOGUES	GERMANY	
Gregory Bird	GLOBAL COALITION FOR EFFICIENT LOGISTICS	SWITZERLAND	John Liewellyn
Michaela Koller	GLOBAL FEDERATION OF INSURANCE ASSOCIATIONS (GFIA)	INTERNATIONAL	Cristina Mihai
Robert Milliner	GLOBAL INFRASTRUCTURE HUB LTD	INTERNATIONAL	
Matias Rotella	GOLDMAN SACHS	UNITED STATES	Mateo Ugas
Alejandro G. Asenjo	GRUPO ASEGURADOR LA SEGUNDA	ARGENTINA	
Juan Carlos Mosquera	GRUPO ASEGURADOR LA SEGUNDA	ARGENTINA	
Lucia Roggio	GRUPO ROGGIO	ARGENTINA	
Alejandro Simon	GRUPO SANCOR SEGUROS	ARGENTINA	Andrea Aidelman
Leonardo Madcur	GRUPO WERTHEIN	ARGENTINA	
Lucas Gallitto	GSMA	ARGENTINA	Alfredo Vitas
Moreno Diaz Carlos	HOLCIM ARGENTINA	ARGENTINA	
Stewart James	HSBC PLC	UNITED KINGDOM	Gaston Corral
Celia Roldan Santias	IBERDROLA	SPAIN	Carlos Gasco
Chris Southworth	ICC UNITED KINGDOM	INTERNATIONAL	
Richard Petty	IFAC	INTERNATIONAL	Amir Ghandar
Hongli Zhang	INDUSTRIAL AND COMMERCIAL BANK OF CHINA，ICBC	CHINA	
Jones Olav	INSURANCE EUROPE	EUROPE	Cristina Mihai
José Luis Manzano	INTEGRA CAPITAL	ARGENTINA	Nicolás Mallo Huergo
Maria Cecilia Ramirez	INTER-AMERICAN DEVELOPMENT BANK	INTERNATIONAL	
Shaun Tarbuck	INTERNATIONAL COOPERATIVE & MUTUAL INSURANCE FEDERATION	INTERNATIONAL	Faye Lageu
Richard Petty	INTERNATIONAL FEDERATION OF ACCOUNTANTS	INTERNATIONAL	Amir Ghandar
Oshani Perera	INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT (IISD)	INTERNATIONAL	David Uzsoki
Hugo Patrick Doyle	INTESA SANPAOLO	ITALY	
Kazuhisa Yumikura	JAPAN BANK FOR INTERNATIONAL COOPERATION	JAPAN	
Nonkululeko Nyembezi	JOHANNESBURG STOCK EXCHANGE	SOUTH AFRICA	
Clara Chediack	JOSE J. CHEDIACK S.A.I.C.A	ARGENTINA	
Jacob Frenkel	JPMORGAN CHASE	UNITED STATES	Martin Marron
Jennifer Xia	JUEZHA (SHANGHAI) COMMERCIAL AND INTERNATIONAL TRADE CO,.LTD	CHINA	John Zha
Yasukiyo Horiuchi	KEIDANREN (JAPAN BUSINESS FEDERATION)	JAPAN	
Rodrigo Araujo	KORN FERRY	UNITED STATES	

Sanchez Mariano	KPMG	NETHERLANDS	Ramiro Isaac
Shailesh Pathak	L&T INFRASTRUCTURE DEVELOPMENT PROJECTS LTD	INDIA	Esther Malini Victor
Gianluca Riccio	LLOYDS BANKING GROUP AND BUSINESS AT OECD (BIAC)	UNITED KINGDOM	Toby Bateman
Eugene Zhuchenko	LONG TERM INFRASTRUCTURE INVESTORS ASSOCIATION	FRANCE	Camille André
Javier Etcheverry Boneo	MARVAL, O'FARRELL & MAIRAL	ARGENTINA	
Fabrice Demarigny	MAZARS	FRANCE	
Dorothée Pineau	MEDEF	FRANCE	
Recaredo Arias	MEXICAN ASSOCIATION OF INSURANCE INSTITUTIONS (AMIS)	MEXICO	
Fernando Lopez Iervasi	MICROSOFT	UNITED STATES	
Maria de los Angeles Milicic	MILICIC SA	ARGENTINA	
Ariel Arrieta	NXTP LABS	LATAM	Ariel Arrieta
Andre Laboul	OECD	INTERNATIONAL	Raffaele Della Croce
Alexander Malaket	OPUS ADVISORY SERVICES INTERNATIONAL INC.	CANADA	
Nicklas Jonow	PACIFIC CONSULTING GROUP (ASIA) LTD	HONG KONG	
Hugo Dragonetti	PANEDILE	ARGENTINA	Lucia Dragonetti
Francisco Paolini	PAOLINI HNOS. S.A.	ARGENTINA	
Li Ren	REN	CHINA	
Guadalupe Ribeiro	RIBEIRO S.A.	ARGENTINA	
Mo Rahee	ROYAL INSTITUTION OF CHARTERED SURVEYORS	UNITED KINGDOM	
Anton Bazulev	RUSAL	RUSSIAN FEDERATION	Artem Asatur
Kirill Dmitriev	RUSSIAN DIRECT INVESTMENT FUND	RUSSIAN FEDERATION	Konstantin Zubanov
Sergey Mytenkov	RUSSIAN UNION OF INDUSTRIALISTS AND ENTREPRENEURS	RUSSIAN FEDERATION	Andrei Shelepov
Esteban Marino	SCHENKER ARGENTINA S.A.	LATAM	
Daniel Fraga	SCOR	ARGENTINA	
Maximo Spinedi	SIEMENS	GERMANY	
Ursula Radeke-Pietsch	SIEMENS GAMESA	SPAIN	
Jaen Roniel Velazquez	SIEMENS HEALTHINEERS	MEXICO	
Dossarps Christophe	SIF - SOURCE	SWITZERLAND	Piron Vincent
Evaristo Pinheiro	SINICON	BRAZIL	Havila Oliveira
Tomás Palazón	SOCIEDAD RURAL ARGENTINA	ARGENTINA	Guido Raimundi
Lucas Claria	SPOSITO & ASOCIADOS	ARGENTINA	
Vasuki Shastry	STANDARD CHARTERED BANK	UNITED KINGDOM	Richard Chenga-Reddy

Tomohiro Yamazaki	SUMITOMO MITSUI FINANCIAL GROUP	JAPAN	Emi Otsuka
Jerome Jean Haegeli	SWISS RE	SWITZERLAND	Patrick Saner
Carlos Bacher	TECHINT ENGINEERING & CONSTRUCTION	ARGENTINA	Federico Barroetaveña
Fernando Carlos Moreno	TECHINT GROUP	ARGENTINA	Maria Doria
Enrique Medina Malo	TELEFÓNICA SA	SPAIN	Andrea Fabra Fernandez
Jimena Canda	THE DOW CHEMICAL COMPANY	UNITED STATES	Lisa Schroeter
Chris Cummings	THE INVESTMENT ASSOCATION	UNITED KINGDOM	Richard Normington
Miles Celic	THECITYUK	UNITED KINGDOM	
Leabua Mthimkulu	TRANSNET SOC LTD	SOUTH AFRICA	
Cesare Trevisani	TREVI GROUP	ITALY	Nobile Marica
Hasan Turunc	TURKISH INDUSTRY & BUSINESS ASSOCIATION	TURKEY	
Axel Weber	UBS GROUP AG	SWITZERLAND	Thomas Pohl
Horacio Díaz Hermelo	UNIÓN INDUSTRIAL ARGENTINA	ARGENTINA	Gabriel Vienni
Alejandro Hansen	VISA	UNITED STATES	
Andrey Kostin	VTB BANK JSC	RUSSIAN FEDERATION	Igor Andryushchenko
Ntombifuthi “Futhi” Mtoba	WDB TRUST	SOUTH AFRICA	
Gonzalo Ketelhohn	WILLIS TOWERS WATSON	ARGENTINA	Diego Nepomneschi
Chris De Noose	WORLD SAVINGS AND RETAIL BANKING INSTITUTE	INTERNATIONAL	