International Development Infrastructure Commission

Recommendations Report

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Executive summary

The International Development Secretary established the International Development Infrastructure Commission (the Commission) in August 2019 with a mandate to make recommendations on boosting private capital investment into sustainable infrastructure.¹

The infrastructure investment required far outstrips the current levels being achieved, particularly in low- and middle-income countries. Estimates put the overall need at US\$90 trillion over the period 2016-2030, with the majority for developing and emerging countries. Existing sources of investment and that available from national public budgets are not nearly enough, with further mobilisation of private capital being held back by a range of factors.

The problem is real, current and binding on our ability to deliver economic growth and reduce poverty whilst also responding to the challenges of climate change. Increasing the flow of private investment into infrastructure is critical. And historically low interest rates in developed markets mean the long-term yields available from infrastructure assets in non-traditional markets present a significant opportunity. With its commitment to international development, and having global expertise, experience and capital, the UK is well placed to respond to the challenges.

Having conducted a range of stakeholder discussions and considered existing activities, the Commission has made recommendations for what more the UK Government can do to both increase the pipeline of investible and sustainable infrastructure projects, and to encourage and facilitate private investment into these projects. This report sets out three principal recommendations prioritised by the Commission in response to this challenge. Those recommendations are:

- 1. New UK Infrastructure Project Development Facility that works with host-country governments to bring sustainable and resilient projects to market for private financing based on high-level government-to-government agreement. The Facility would provide expertise and be backed by early stage funding to work with governments and developers to build the pipeline of investible infrastructure projects. This responds to the lack of investible project pipeline which remains a key bottleneck, and will enable a flexible, clearly branded UK response.
- 2. New UK offer on guarantees to mobilise private capital into infrastructure including the establishment of a new UK guarantee facility, specifically tailored to meet demand and to mitigate risks that currently constrain investment (including local currency investment). This reflects the significant potential that guarantees have to support the deployment of private sector capital and the scope for a new facility to expand the provision of flexible, accessible guarantees.
- 3. New UK structures to strengthen the market for institutional investment into infrastructure these structures would facilitate flows of institutional investment into infrastructure projects in developing countries. Specific investment mechanisms would need to be designed in close consultation with investors but could include, for example, participations in a listed infrastructure fund; debt securities issued through the securitisation of a pool of infrastructure assets; or the issuance of project bonds through a London-based platform.

The Commission believes that these principal recommendations should be supported by activities to strengthen the UK Government's approach through **leveraging its influence to increase the**

¹ <u>https://www.gov.uk/government/news/international-development-secretary-to-boost-infrastructure-in-the-poorest-countries-with-uk-aid/</u>

effectiveness of existing international initiatives and achieving a more joined-up cross-Government and industry approach from the UK.

The Commission further recommends the establishment of a UK sponsoring entity to provide strong and unified coordination and promotion of these activities. There is also a need to link project development activities more closely with investment and investor mobilisation – as is proposed here in linking all three principal recommendations. The focus should be on sustainable and resilient infrastructure in relevant sectors agreed with partner countries, which should include both low- and middle-income countries where the UK Government has good relationships, there is openness to private investment and an opportunity to make significant progress at pace.

In terms of scale, it is proposed that the Project Development Facility should aim to be working on developing around 25 projects across five countries within three years of the Facility being up and running. This may require funding in the order of £300 million over those three years with the intention that this will unlock project investment value an order of magnitude higher. This is highly ambitious but responds to the scale of the challenge identified. For Recommendations 2 and 3, the intention would be to make a material difference to the flow of private capital into infrastructure projects in developing countries.

The impact of these recommendations will need to be seen over the crucial coming ten year period, with the ultimate objective being a significant increase in private capital invested into infrastructure and the emergence of infrastructure as an asset class.

Background

- 1.1 Investing in sustainable and resilient infrastructure is fundamental to tackling the two central challenges facing the global community this century: increasing economic growth while reducing poverty; and effectively responding to climate change. Achieving the Sustainable Development Goals and meeting the goals of the Paris Agreement on climate require investment on an unprecedented scale. The UK has a significant role to play in this: it has played a leading role to date in the development of innovative global approaches and is also home to world-class expertise across both infrastructure services and financial services.
- 1.2 The next ten years are crucial. One estimate suggests an investment need of about US\$90 trillion in infrastructure over the period 2016-2030.² According to a World Bank estimate, achieving the infrastructure-related Sustainable Development Goals alone in low- and middle-income countries will require an average additional spending of US\$1.5-2.7 trillion per year.³ Ensuring that this infrastructure is sustainable economically, socially and environmentally, will be a critical determinant of future growth and prosperity. This period is also crucial to tackling climate change: unless we make a decisive shift, by 2030 we will pass the point by which we can keep the global average temperature rise below 1.5°C.⁴ It will be particularly important for infrastructure development to respond to the challenges of urbanisation, with cities already accounting for more than 70% of global CO₂ emissions and the urban population expected to reach two thirds of the world's total by 2050.⁵
- **1.3 However, public finances are constrained**. Where investment impacts on public borrowing there is a need to ensure that debt levels are sustainable. The investment gap cannot be met just with domestic public finance and aid. A significant increase in the provision of private finance is urgently needed, as is the capacity to ensure its provision is appropriate and affordable.
- 1.4 There is significant potential to scale up private investment in infrastructure. Historically low interest rates in developed markets mean that investors are looking beyond traditional markets for greater yield and stable, predictable returns. The long-term nature of infrastructure assets and the inflation resilient nature of their returns make them a good match for investors with long-term predictable liabilities such as pension funds and life insurers. But the supply of investible projects has been too slow to meet this demand, for a variety of reasons including lack of domestic project development expertise and broader business environment weaknesses.
- 1.5 The Commission has developed and prioritised a set of recommendations against this background in response to the Terms of Reference set by the International Development Secretary.⁶ This report does not attempt to provide a comprehensive analysis of the infrastructure financing challenge. Rather, it sets out three principal recommendations that the Commission has prioritised, based on the Commissioners' experience, discussions and deliberations. Those deliberations have been informed by stakeholder engagement, a review of the relevant literature and a consideration of existing initiatives. Some relevant background considerations are set out below on each of the following four key areas:

² New Climate Economy, 2016, *The Sustainable Infrastructure Imperative*

³ IDA, 2019, An Overview "Ten Years to 2030: Growth, People, Resilience"

⁴ IPCC, 2018, Summary for Policymakers

⁵ New Climate Economy, 2016, *The Sustainable Infrastructure Imperative*

⁶ The Commission's terms of reference are set out at Annex 1, with further details on the Commission set out in Annex 3.

developing a pipeline of investible projects; mobilising private capital flows; UK strengths in infrastructure and infrastructure financing; and sustainability and resilience. Further justification is also set out in the sections of this report that focus on each of the three principal recommendations.

Developing a pipeline of investible projects

- 1.6 Numerous stakeholders and sources cite the lack of a pipeline of investible projects as the key bottleneck in attracting private capital to meet the infrastructure gap and this has been a conclusion of years of work on this topic under the auspices of the G20. For example, the Business 20 (B20) Taskforce on infrastructure finds that: "the investment gap in infrastructure is not the result of a shortage of capital. Real long-term interest rates are low, there is ample supply of long-term finance, interest by the private sector is high, and the benefits are obvious...The main challenge is to find bankable and investment-ready projects."⁷
- 1.7 Frequently cited barriers to developing a pipeline of investible projects include:
 - Challenges in strategic infrastructure planning: institutions can lack the bandwidth to organise or prioritise infrastructure planning, with the longer-term timelines involved in such planning also often at odds with shorter-term political imperatives.
 - Limited experience in government to identify and develop investible projects: civil servants (and development professionals) may have limited experience of which projects are likely to work as well-structured transactions that can attract reputable investors, or of the requirements for a project to attract finance (or of new technologies that can improve delivery and reduce costs). It is not easy to attract and retain individuals with the skills required to develop investible projects in challenging contexts: they are expensive and generally have more lucrative career options in wealthier countries and/or directly in the private sector.
 - Long/challenging process to develop projects to investible stage: when suitable projects are identified, the path from concept to closed deal is often a long and difficult one, raising project costs and the risks faced by investors, and reducing the project's returns.
 - Un-investible utilities and state-owned enterprises: energy and water utilities in many low-income countries suffer from chronic poor financial performance resulting from under-pricing, excessive losses and bill collection failure. The ultimate causes of these problems are often political and intractable, leaving utilities unable to attract private finance.
 - Wider business environment: early stage investors in infrastructure (including developers and corporates) remain deterred by the risks and weaknesses (both real and perceived) in the wider business environment in many markets.
- 1.8 As a result of these challenges, an estimated 10-30% (depending on the sector) of global infrastructure projects with private sector participation in low- and middle-income countries originate as unsolicited proposals (USPs) (where a private sector entity submits a proposal

⁷ B20 Taskforce, 2017, B20 Financing Growth and Infrastructure Policy Paper: Investing in Resilient, Future-oriented Growth

without an explicit request from a government to do so).⁸ USPs have the potential to lead to successful projects with public benefits, but they also create risks including poor value for money, patronage and lack of transparency. In this context, the need for support that increases investment in sustainable infrastructure that delivers economic and social benefits for its users is clear.

1.9 These high-level barriers continue to be cited by investors and other stakeholders, despite a range of initiatives that have been established by donors and the international community (some of which are further noted below and in Annex 2). At the same time, feedback also highlighted the regard with which UK expertise and experience – both public and private sector – is held internationally. Through its discussions the Commission has prioritised options for how the UK could add to efforts focused on specific project development, rather than focusing on some of the more upstream or cross-cutting activities that are needed to address the above, which nevertheless remain key.

Support to develop specific projects (project preparation)

- 1.10 Project preparation is expensive (3%–10% of total project costs⁹) and risky in that many projects do not end up being developed. A range of project preparation facilities (PPFs) exist that provide technical and/or financial support to project owners or concessionaires. Facilities also exist that support governments and utilities to prepare projects, most of them hosted by multilateral development banks (MDBs), for example the World Bank-hosted Global Infrastructure Facility, the Asian Development Bank Asia Pacific Project Preparation Facility and the New Partnership for Africa's Development Infrastructure Project Preparation Facility. Annex 2 summarises these and related initiatives.
- 1.11 However, studies and investors report ongoing challenges with the operation and approach of many facilities, meaning that too few PPFs are seen as genuinely effective.¹⁰ In addition, the scale of need for support for project preparation outstrips that provided by existing PPFs. This highlights that flexible and responsive support (both expertise and finance) for early stage project development remains a key need. Existing PPFs provide a wealth of experience and expertise to draw on in designing effective support in this challenging area.
- 1.12 A number of facilities work directly with project developers, including by providing funding to developers directly and/or by investing in projects alongside them as co-developers. These include those within the Private Infrastructure Development Group (PIDG, of which the UK is the majority donor) InfraCo Asia and InfraCo Africa, which develop projects specifically in low-income and fragile states, can support from the earliest stage of concept through to and beyond financial close and are able to take on a greater level of risk than many PPFs. Further examples are listed in Annex 2 such as the International Finance Corporation's (IFC's) InfraVentures and Africa50. Through CDC, the UK is also investing in sector-specific private

⁸ Neves, P. & Kim, D.J., 2017, World Bank Blogs: Managing unsolicited proposals in infrastructure: 5 key questions for governments

⁹ Practitioner view, but also see, e.g., Global Infrastructure Basel, 2014, Unleashing private capital for sustainable infrastructure greenfield projects.

¹⁰ ODI argue that the persistence of barriers to enacting public-private partnerships suggests that the quality of technical assistance and project preparation needs to improve. They also quote an EDHEC study for the G20 in 2017 which reported that only half of investors surveyed felt that MDB project preparation facilities had added value (ODI, 2018, *Private infrastructure financing in developing countries*). See also: Adam Smith International, 2014, *G20 Working Group: Assessment of the effectiveness of project preparation facilities in Asia;* and Cambridge Economic Policy Associates, 2012, *Infrastructure Consortium for Africa: Assessment of the effectiveness of project preparation facilities in Africa.*

developer platforms (e.g. Globeleq) and greenfield investment funds (e.g. Meridiam Infrastructure Africa Fund) that can deploy the substantive capital and sector expertise required to take on early stage activity and risk. Stakeholder discussions confirmed the importance of mobilising such platform developers, both including but also going beyond renewable power generation, that can bring significant balance sheets and sector credibility into challenging markets.

1.13 Whilst efforts are being made to improve the effectiveness of project development support including via PPFs and through development finance institutions (DFIs) supporting or co-investing alongside private developers, investors and practitioners continue to cite the lack of investible project pipeline as a key constraint and argue for more effective, commercially-oriented support and funding, provided through on-the-ground expertise. The Commission's first principal recommendation is directed at what the UK could further do to address this gap for early stage project development support. This also considers any need for further technical assistance and capacity building, as below.

Support to address gaps in the enabling environment (technical assistance)

- 1.14 Decades of very mixed outcomes from reform efforts are testament to the difficulty of realising the development of accountable, capable and transparent institutions and stable policies, laws and regulations (including covering public-private partnerships (PPPs)) in relation to functioning infrastructure sectors. Despite the difficulties, a continued focus on better state institutions, including publicly-owned utilities, and on political, legal and regulatory reform is required. Efforts to improve the broad governance of infrastructure require public funding. This is an area where private investors particularly rely on activism and funding of development banks and bilateral donors to make progress.
- 1.15 Partner governments need short and long-term support to develop viable infrastructure projects that can be taken to market. Providing the necessary sectoral, project focused and regulatory expertise, particularly alongside project development support for priority sectors, can draw on the strong background that the UK has in these areas (law, regulation, policy, PPPs) and support governments to attract private financing for project delivery. The UK has successful existing programmes focused on flexible, tailored technical assistance in some countries, but the need for this type of support outstrips the UK's current programming.
- 1.16 Positive examples cited by stakeholders of innovations that have enabled investment to be mobilised at scale include the introduction of replicable documentation and frameworks such as auctions. Examples include power purchase agreements (PPAs) for renewable energy (solar) in India and South Africa, and the IFC 'Scaling Solar' initiative. Opportunities may exist to build on such approaches, not just in other areas of renewable energy but in other sustainable infrastructure sectors.

Training and capacity building of government officials to develop, regulate, procure and manage projects involving private finance (capacity building)

- 1.17 Sources indicate that a lack of experience in specific areas of infrastructure investment and project development in partner countries prevents effective and independent development and delivery of investible infrastructure projects.¹¹
- 1.18 The Commission's view is that the UK's world-class academic institutions and private sector expertise should be better drawn upon to deliver training and development.
- 1.19 Several existing initiatives focus on the development and training of civil servants and private sector stakeholders to boost skills and expertise available in country, for example the Africa Infrastructure Fellowship Program and the African Legal Support Facility in particular. Much of the training and development available through existing initiatives provides a broad-brush introduction to project development and the essential aspects required to mobilise investment, such as procurement and legal skills. However, many of the common bottlenecks to successfully developing investible projects are overlooked in traditional training delivery options. Additionally, there is currently no joined-up delivery mechanism for the various UK academic training focused on infrastructure development.

Mobilising private capital flows

- 1.20 As referenced above, it has been estimated that additional infrastructure spending of US\$1.5-2.7 trillion per year is required in low- and middle-income countries. Public sector resources alone will be unable to meet this need, and global aid flows are estimated to remain at between US\$140-150 billion per year. Private capital needs to be mobilised at scale if the financing gap is to be closed.
- 1.21 In principle, there would appear to be strong drivers for private investment including from institutional investors into infrastructure. These include that there is significant capital in the global economy looking for investment opportunities;¹² that yields on traditional assets in developed economies are at historic lows; and that key characteristics of infrastructure assets predictable, long-term, inflation-protected returns should be appealing to institutional investors such as pension funds and insurers, and to local sources of capital seeking matched currency returns.
- 1.22 However, while there are flows of private finance into infrastructure in developing countries, the volume remains well below the level needed to close the gap.¹³ Further, it has (naturally) been concentrated in the most commercially attractive sectors and geographies, which may not be aligned with development priorities.
- 1.23 A key constraint on the investment of private capital into developing country infrastructure is the lack of investible projects, as discussed above under 'Developing a pipeline of investible projects'. But this is not the whole story. In particular, investors remain put off by the

¹¹ The African Development Bank notes the human-capital challenges found in African governments across the breadth of project preparation, including the skills required to set up laws, regulations and institutions for specific projects (African Development Bank, 2018, *African Economic Outlook 2018*).

¹² The Blended Finance Taskforce estimates that institutional investors represent over US\$200 trillion of assets under management (Blended Finance Taskforce, January 2018, *Better Finance, Better World*).

¹³ According to one estimate, US\$1.5 trillion of private finance flowed into infrastructure in developing countries in the period 2008-2017 (ODI, 2018, *Private infrastructure financing in developing countries*).

complexity of some of the additional risks associated with infrastructure investment in developing countries, such as political, regulatory and macroeconomic risks, even where good progress has been made in achieving investible infrastructure assets, for example in telecoms or power generation. Further constraints that investors face include a lack of data and track records of risk-adjusted returns for potential target firms, sectors and countries; and fragmented markets that suffer from a lack of liquidity, making it difficult to access investments at scale with a reliable exit strategy.

- 1.24 This emphasises the role of MDBs and DFIs in using their resources both concessional and non-concessional to create more attractive investment opportunities for private capital. And the MDBs and DFIs have indeed been active in this area, mobilising an estimated US\$157 billion in development finance interventions during 2012-2017.¹⁴ (Annex 2 lists a number of existing initiatives that support the mobilisation of private capital.)
- 1.25 However, as referenced above, the mobilisation of private finance into developing countries to date falls far short of what is required to meet the financing gap greater efforts are required. Relatedly, current estimates suggest that the overall mobilisation ratio of MDB financing is less than 1:1.¹⁵
- 1.26 Capital managed and facilitated in the UK could play a leading role in addressing the financing shortfall, without sacrificing fiduciary responsibilities, including financial returns. And the deployment of local pools of capital will also be an important part of the solution. The goal is the establishment of infrastructure in developing countries as an asset class in its own right, making investing in this area a normal part of the consideration for investors seeking portfolio diversification, and quantifiable, bench-marked risk-adjusted returns.
- 1.27 The Commission makes two principal recommendations that are specifically targeted at mobilising private capital flows: Recommendation 2 (on guarantees) and Recommendation 3 (on new structures to facilitate institutional investments). These are set out in more detail further on in this report.

UK strengths in infrastructure and infrastructure financing

- 1.28 The UK has a range of financial instruments, programmes, and policy levers to support the finance and delivery of infrastructure in low- and middle-income countries. A selection of key initiatives are included in Annex 2.
- 1.29 The UK's asset management industry is the second largest in the world, managing around £9 trillion of assets,¹⁶ and the London market is by far the largest for listed infrastructure companies. The UK Government has therefore stepped up its engagement with the City to help mobilise institutional investors. The UK is also a globally recognised provider of high-quality and innovative infrastructure services (e.g. planning, engineering, legal and environmental advisory services).

¹⁴ OECD, 2019, *Amounts mobilised from the private sector by development finance interventions*. The figure quoted here is not limited to mobilisation for infrastructure.

¹⁵ Blended Finance Taskforce, 2018, *Better Finance, Better World*. Page 66 refers to current estimates that suggest that overall MDB financing in 2016 achieved a 0.8:1 mobilisation ratio.

¹⁶ The Investment Association, 2018, Asset Management in the UK 2017-2018

- 1.30 The Secretary of State for International Development is a Governor of the World Bank Group, the largest source of development finance globally, and of a number of Regional Development Banks. The UK has been the largest donor to recent International Development Association¹⁷ and African Development Fund¹⁸ replenishments. As a leading shareholder, the UK has shaped a number of the World Bank Group and the African Development Bank's key reforms on scaling up finance, efficiency and effectiveness.
- 1.31 Further, the UK, through the Department for International Development (DFID) and civil society engagement, has a long history of working to design and develop infrastructure in ways that ensure poor people can access appropriate, affordable services and that poor people are safeguarded during construction. Recently DFID established a research and advice service to support DFID and the UK Government in increasing the scale and quality of disability inclusive programming, and to meet minimum standards on disability inclusion. At the same time, DFID engages with the multilateral development organisations to ensure that their programmes are able to support the poorest and most marginalised groups. The UK's Independent Commission on Aid Impact and other scrutiny bodies take a keen interest in infrastructure design and delivery.
- 1.32 More generally, the UK, with HM Treasury and DFID, has comprehensive tools and strategies to work with developing countries (and the international system) to help them manage their debt and fiscal positions, understanding the importance of analysing pricing and negotiating PPPs that are consistent with robust fiscal paths and affordability for users and tax payers.
- 1.33 CDC is the UK's DFI and DFID's principal mechanism for bringing new private investment into developing countries, with an infrastructure investment portfolio valued at £1.2 billion. PIDG is a multi-donor programme that provides early stage project development, long term debt, and guarantees and technical assistance to infrastructure projects in Africa and Asia. The UK has provided the largest financial support to PIDG, providing £800 million of the £1.1 billion of equity from 2002-2018.
- 1.34 Through the Global Infrastructure Programme, the UK's Infrastructure and Projects Authority aims to adapt and disseminate UK infrastructure methodologies to encourage development of sustainable infrastructure programmes and more effective government delivery internationally. Also, the Global Future Cities programme will provide technical assistance to support city development; and the China Infrastructure Programme brings together international and Chinese expertise to increase the sustainability, quality and commercial viability of infrastructure in developing countries in Africa and Asia. And the Department for Business, Energy and Industrial Strategy invests in low carbon infrastructure projects in low-and middle-income countries including through the UK Climate Investments programme and the Sustainable Infrastructure Programme Latin America.
- 1.35 The UK has further infrastructure programmes across a range of sectors. These range from aiming to meet human development objectives for the poorest, such as providing clean drinking water through DFID's £111 million Water, Sanitation and Hygiene Results Programme, to those programmes designed to release binding constraints to growth. These include large-scale energy generation and transport and developing opportunities for new

¹⁷ This is the part of the World Bank that provides support to the world's poorest countries.

¹⁸ This is the concessional window of the African Development Bank, which contributes to poverty reduction and social and economic development in the least developed African countries.

infrastructure investment, such as DFID's £265 million Pakistan Economic Corridors Programme.

1.36 Given the UK's commitment to international development activity, the importance of the infrastructure financing challenge and the specific need to mobilise more private capital as has been repeatedly set out, the Commission sees it as important that the UK increases both its attention and its visible activities in addressing this problem, in continuing to lead internationally.

Sustainability and resilience

- 1.37 The UK Government has a strong track record of climate and environmental leadership, which includes the UK Climate Change Act and the Green Finance Strategy. The City has also demonstrated strong support for this agenda, including through the launch of the Green Finance Initiative in January 2016. The Commission is clear that its recommendations as set out in the following sections must apply to investment in infrastructure that is sustainable and resilient. This might include focusing on specific infrastructure sectors which can contribute most to sustainability and/or where the UK has a particular value-add and specialism. The specific focus should be considered in discussion with partner countries.
- 1.38 Sustainable infrastructure investments have been encouraged by the development of guidance such as, for example, the Green Investment Principles produced by the UK-China Green Finance Task Force, as well as the UN's Principles for Responsible Investment. Investments should be consistent with the ambitions of the Paris Climate Change Agreement and support the ambition in countries' Nationally Determined Contributions.
- 1.39 Social considerations include ensuring that infrastructure is designed with the poor and marginalised in mind and that the services provided are affordable and accessible for such groups, including people with disabilities. It is also essential that the programmes and partners involved have adequate safeguarding systems and capacity to implement them.
- 1.40 A focus of efforts to improve resilience has been to ensure that risks are better understood and mitigated. The Task Force on Climate-related Financial Disclosure has driven forward standards for disclosing climate risk in investments. Better understanding of risks should drive better planning, design and operation of infrastructure.
- 1.41 The UK has a set of infrastructure institutions which have evolved as part of its deep experience of PPPs and the use of private finance to support infrastructure provision. These are an important part of the UK offer on infrastructure. In addition to the Infrastructure and Projects Authority the Government has also established a National Infrastructure Commission (NIC) to provide independent, strategic thinking, analysis and advice to address the UK's long-term infrastructure needs. Having completed the first National Infrastructure Assessment in 2018 the NIC is now examining the resilience of the UK's infrastructure to consider what action is needed to ensure that it is resilient to future changes, such as climate change.

Recommendation 1: New UK Infrastructure Project Development Facility

Justification

- 2.1 The lack of a pipeline of investible projects is a key bottleneck in attracting private capital to close the infrastructure gap. In many developing countries, governments have limited capacity to carry out the activities needed to create investible projects. Facilities do exist that support governments and utilities to prepare projects, however, consistent feedback from many stakeholders is that more support on project development is needed to increase the numbers of projects that get to financial close and incorporate private sector capital.
- 2.2 A number of stakeholders made clear the regard with which UK expertise and experience is seen in developing and emerging markets and the desire of countries and projects to be able to access it quickly to support their economic and infrastructure development. A clearly branded UK-managed bilateral project development facility would have the advantage of being flexible enough to respond to such requests as well as other UK development priorities.
- 2.3 There is also a need to link project development activities more closely with investment and investor mobilisation activities as is proposed here in linking all three principal recommendations to support the ultimate goal of greater levels of institutional finance being mobilised into infrastructure, and the development of infrastructure as an asset class.

Recommendations

- 2.4 The Commission recommends that the UK Government set up a new UK Infrastructure Project Development Facility that works in partnership with host-country governments to bring sustainable and resilient projects to market for private financing
- 2.5 The Facility would be a UK Government-owned (or controlled) entity providing funding and expertise for project development to crowd-in private capital into infrastructure development. Further work will be needed to determine the details of how a new UK project development facility should be designed and delivered in order to achieve this objective. However, the following important points should be borne in mind in the design of the Facility:
 - The Facility should be based on high-level government-to-government agreements with mutual commitments, including as partner governments play a central role in creating the enabling legislation and regulatory policy that allows the development of major infrastructure.¹⁹ The Facility should work efficiently with targeted governments that are committed to private sector engagement in the infrastructure sector and which can act as catalysts and demonstrators of success to other countries.
 - The Facility should draw on deep UK expertise in developing and structuring projects that involve private capital.

¹⁹ A high degree of ongoing political commitment is needed that can survive political cycles. The extent of government commitment will often determine the extent of PPP opportunities open to it as well as scale and the speed at which projects are executed. Cambridge Economic Policy Associates, 2015, *Mobilising Finance for Infrastructure: A Study for the Department For International Development*

- The Facility should be focused on developing sustainable and resilient infrastructure in relevant sectors, in line with the Paris Agreement, and be prioritised to facilitate and stimulate sustainable economic and social development.
- The Facility should engage with and take account of development organisations or existing initiatives working on similar objectives. The Facility should also build on lessons learned from existing MDB project preparation initiatives.
- The Facility should have an initial ambition to work with around five partner countries to develop a pipeline of 5-10 projects in each. Funding for the Facility could be in the order of £300 million over the first three years, aiming to achieve a doubling of that level over the following three years, to cover project development costs as set out below. This level of funding for project development will aim to unlock project investment value an order of magnitude higher.
- The Facility should have a commercial ethos towards project development, where funds would be returnable where successful financial close is reached, with the potential for different recovery regimes for middle-income vs low-income countries reflecting affordability considerations. This would enable recycling of funds to develop further projects and expand the country focus. It is acknowledged that some projects supported might not reach financial close and so funds would not be returned.
- 2.6 The following types of support would be offered:

A) Support to develop specific projects (project preparation)

- The Facility would provide access to expert advisers (drawing on, but not limited to, UK expertise) to work alongside partner governments to transparently develop priority projects to bring to market.
- The focus of the Facility would be on early stage project development, encompassing: identifying and screening projects using data-driven approaches; technical, economic, financial, social and other feasibility studies; high standards of environmental, social and affordability impact assessment; investment appraisal; risk analysis; and project structuring, preparing transaction documentation, and managing a competitive transaction process.
- The Facility would use a small team of in-house expertise with the necessary skills to engage expert technical, legal and financial advisors as required. To the extent that project developer expertise is required, this could be contracted in, with the terms of such engagement to be determined (e.g. regarding that developer's eligibility to subsequently bid).
- Sole-sourced projects could also be supported where they meet pre-agreed criteria. In this case financial and/or technical support could be offered to the company contracted by the domestic government to develop the project, to be returned on financial close.
- The Facility would develop leading expertise in the planning, design and delivery needed to ensure resilient and sustainable projects. This requires attention to issues beyond the design of the physical asset itself including its operation and management as part of an

overall infrastructure system, and the availability and use of better data to support decision making.²⁰

- There would be a preference for the partner government to cover part of the cost of project development to ensure their buy-in during the project development phase.
- Where there is a strong development case, projects could be provided with some form of blended finance to support affordability for end users and/or the government.
- Support may also be made available in the form of guarantees in the project development phase see Recommendation 2.

B) Support to address gaps in the enabling environment (technical assistance)

- The Facility would provide expert advisers to work with partner governments to support implementation of legal, regulatory, or institutional reforms identified as key barriers in the realisation of specific projects and programmes. It is envisaged that this would be funded by a non-returnable grant.
- This could be undertaken alongside or through other (scaled-up) deal-focused capacity building programmes, noting the often challenging political, economic and capacity-related contexts in which such enabling reforms need to be considered.

C) Training and capacity building of government officials to develop, regulate, procure and manage projects involving private finance (capacity building)

- Training and capacity building would be provided on a demand-basis alongside the project-specific activities described above, with the aim of reducing the need for external support in the medium/long-term. Potential modalities for (scaled up) delivery should include:
 - i) experts embedded in government ministries and agencies to train staff to develop investible projects; and
 - ii) focused training courses in-country and in the UK, in conjunction with world-class UK institutions, tailored to country needs with the aims as above.
- The design of capacity building activities provided by the Facility should build on DFID's experience of both successful and unsuccessful capacity building efforts.
- In support of this, the UK should also consider scaling up existing initiatives, such as the Africa Infrastructure Fellowship Program or the African Legal Support Facility.

Added value over existing initiatives

2.7 As noted in the background, there are a number of existing PPFs and the UK also funds project preparation and development activities through PIDG. The new Facility will build upon the experience and knowledge in these existing facilities and engage with them with the aim of achieving optimal outcomes. The Facility should be complementary to PIDG and CDC, as set out below.

²⁰ World Bank, 2019, *Lifelines: The Resilient Infrastructure Opportunity*

- 2.8 There should be additional value in the UK establishing a focused and flexible bilateral approach, through this Facility, that works with (and potentially through) governments, with the mission of developing and financing infrastructure from the earliest stages, that promotes sustainable and inclusive growth, meets the Paris Commitments and crowds-in private financing.
- 2.9 The UK Infrastructure Project Development Facility would aim to have the advantage over existing initiatives by bringing together all the following features:
 - This Facility would be UK managed and designed to move at pace, allowing it to be nimble and respond flexibly, including to UK development priorities.
 - Whereas CDC and PIDG mainly support private project developers, this Facility will mainly work with governments to develop projects to bring them to market.
 - Whereas the UK's current support to PIDG is focused on the lowest-income countries, this Facility would have a broader mandate to scale-up global investment and therefore be able to work in middle-income countries that are eligible to receive official development assistance as well as low-income countries.
 - This Facility (when linked with Recommendations 2 and 3) would mobilise finance for sustainable and resilient infrastructure using a toolkit of project development support, funding support and guarantees over the full project cycle.
 - This Facility would create synergies across the full UK offer including across government departments, broader UK aid programming and UK industry and institutions, for which there is strong demand.

Recommendation 2: New UK offer on guarantees to mobilise private capital investment into infrastructure

Justification

- 3.1 A key constraint to the greater flow of private capital investment into infrastructure in developing countries is the mismatch between investor risk appetite and (perceived) risk levels of available investment opportunities. Guarantees mitigate risk, so making investments more appealing for investors, and can be precisely targeted on those risks that are difficult or impossible for the private sector to manage.
- 3.2 In addition, issuing guarantees can be an efficient use of the financial resources of guarantee providers. They do not have to be funded upfront, and so can deliver impact for zero upfront outlay, with only the possibility of future costs, should they be called. (And historical default rates on guarantees issued by MDBs and DFIs are in any case generally low.)
- 3.3 The significant potential that guarantees have to support the deployment of private sector capital is illustrated by the fact that between 2012 and 2015 guarantees were MDBs' and DFIs' most effective leveraging instruments, achieving 44% of all private capital mobilisation (US\$36 billion of US\$81 billion)²¹ despite representing only 5% of development finance commitments.²²

Recommendations

- 3.4 The Commission recommends that the UK Government should support better access to a wider range of guarantee instruments by investors into sustainable, resilient infrastructure projects in developing countries.
- 3.5 There are two principal ways in which this could be achieved:
 - (A) the establishment of a new UK guarantee²³ facility, specifically tailored to meet demand; and
 - (B) the UK working with key MDBs and DFIs to support efforts to make existing guarantee facilities more flexible and responsive, so as to better meet demand and increase takeup.
- 3.6 The Commission's recommendation is that the UK Government pursue both (A) and (B), prioritising (A) in particular. Establishing a new, flexible, bilateral facility would fill a gap in the UK's toolkit and could have a significant impact. And the UK Government should scale up its work with key multilateral institutions on their efforts to mobilise private sector investment through the provision of guarantees.

²¹ Benn, J. et al., 2017, Amounts Mobilised from the Private Sector by Official Development Finance Interventions (OECD Development Co-operation Working Paper 36)

²² Lee, C. et al., 2018, Guaranteeing the Goals: Adapting Public Sector Guarantees to Unlock Blended Financing for the U.N. Sustainable Development Goals

²³ The facility should not be limited to only being able to provide guarantees – it should also be able to provide risk mitigation more generally, which could include, for example, the provision of first loss capital.

- 3.7 Further work will be needed to determine the details of how a new UK guarantee facility should be designed and delivered in order to provide risk mitigation in a way that most effectively supports the mobilisation of private sector capital. However, the following important points should be borne in mind in the design of the facility:
 - the design of the facility should make full use of the experience of existing guarantee providers, in particular the MDBs;
 - the facility should have a strong focus on resilient and sustainable infrastructure, allowing it to develop deep expertise in this area, facilitating rapid negotiation, preparation, and issuing of guarantees;
 - the facility should be able to take a broad approach to the nature of the risks it is able to address (for example, in terms of sector and geography), and be flexible on the pricing of its products (although acknowledging that a more aggressive approach to risk than that traditionally adopted by other providers of guarantee facilities is likely to lead to higher default rates);
 - the facility should be able to target very specific risks, but should be able to cover a wide range of risks, across financing for both greenfield and brownfield assets, and for early stage development, including in innovative ways;
 - more specifically, the facility should be able to address (among others) counterparty risk (including guaranteeing specific obligations of counterparties, e.g. a local utility that is an obligor under a PPA), risks associated with local currency financing (including issuing local currency guarantees, and being able to address currency conversion, exchange rate, and transfer risks), and risks preventing the provision of longer tenor lending; and
 - the facility should be able to issue guarantees on both a project and a portfolio basis (the latter should include being able to support an infrastructure-based asset-backed securitisation or investment vehicle).
- 3.8 The first bullet point above is of particular importance, and should take into account strengths of existing guarantee providers, as well as lessons learned. For example, there is a 'halo' effect associated with MDBs obligors are particularly reluctant to default on MDB obligations, and MDBs benefit from preferred creditor status. A new UK facility could seek to leverage this to mutual advantage by, for example, guaranteeing assets on MDB balance sheets, in partnership with institutional investors, allowing MDBs to recycle the capital released to originate new assets.²⁴
- 3.9 In terms of delivery, a new UK guarantee facility could either issue guarantees directly from the UK Government's balance sheet,²⁵ or through a separate vehicle capitalised by the UK Government.²⁶

²⁴ The African Development Bank's 'Room2Run' initiative is an example of this sort of arrangement.

²⁵ Comparable to the way in which UK Export Finance works.

²⁶ Comparable to the way in which GuarantCo works, which is capitalised by funding provided through PIDG.

Added value over existing initiatives

- 3.10 There are already a number of multilateral and bilateral guarantee providers whose activities make a material contribution to the mobilisation of private sector capital, including into infrastructure in developing countries (see Annex 2 for more details). There are significant differences across the range of existing providers, and so it is not possible to generalise as to how a new UK guarantee facility would add value compared with existing offers. However, two broad points can be made here:
 - firstly, there is significant need for further private financing of infrastructure, and guarantee facilities have a proven track record in mobilising private capital as such, a new UK facility adds value over existing initiatives by expanding accessible, flexible, guarantee capacity; and
 - secondly, by taking advantage of the experience of other facilities, a new UK facility has the opportunity to learn from and seek to improve on aspects of the design and delivery modalities of existing facilities.
- 3.11 On the first point, the additional infrastructure spending required in low- and middle-income countries is in the range of US\$1.5-2.7 trillion annually, as referenced above. And yet over the period 2012-2015, total private capital mobilisation by the MDBs and DFIs amounted to only US\$81 billion (as referenced in paragraph 3.3 above). Of the financing gap, only a proportion is likely to be suitable for private capital but even a small fraction would still be a multiple of the amount mobilised by MDBs and DFIs on an annual basis. Much more mobilisation is needed, and as referenced above, guarantees have proved themselves as MDBs' and DFIs' most effective mobilisation tools.
- 3.12 On the second point, there are a number of areas in which a new UK facility could seek to optimise the use of guarantees to mobilise private sector capital, including the following:
 - There is a perception among private investors that at least some existing guarantee providers struggle to meet investor requirements on factors such as cost, simplicity of products and broad risk coverage, on-demand payment, and expeditious time of negotiation and preparation. As such, access to guarantee instruments can be burdensome and costly for the private sector. A new UK guarantee facility would aim to address these perceptions, increasing the accessibility and utility of guarantees for private investors.
 - The way in which MDBs treat guarantees including through adopting a 'loan-equivalency' approach has an impact on the efficiency with which guarantees use the banks' financial resources. A new UK guarantee facility would allow for a more efficient use of financial resources, either through the UK Government issuing guarantees directly from its balance sheet or through capitalising a new vehicle to make guarantees directly.
 - The mobilisation of local currency, and the development of local capital markets and enhanced access to international capital markets, can make a significant contribution to supporting investment into infrastructure projects. However, there is currently limited

availability of local currency guarantees.²⁷ A new UK guarantee facility would expand the availability of local currency guarantees.

• Guarantees are most often used in middle-income emerging markets, much less in lowerincome economies. And their use has been concentrated in a small number of sectors, in particular energy, and banking and financial services. A new UK guarantee facility would have the potential to expand the availability of guarantees across geographies and sectors. This would particularly be the case for a facility which issued guarantees directly from the UK balance sheet – without the need to maintain a high credit rating independently of the UK's sovereign rating, it would be less constrained on the risks it could take.

²⁷ There are, however, some existing providers of local currency guarantees, including GuarantCo, a PIDG company.

Recommendation 3: New UK structures to strengthen the market for institutional investment into infrastructure

Justification

- 4.1 In Africa and in developing countries more broadly, infrastructure capital is largely restricted to commercial bank loans and private equity funds from the private sector, and financing from DFIs, MDBs and governments from the public sector. But there is a huge unmet need for infrastructure investment in developing countries, and such investments have the potential to deliver good returns over the long-term.
- 4.2 Traditionally, institutional investors' allocations to infrastructure even in developed economies have been small. However, many institutional investors are actively seeking higher returns than are available in developed economies in the current prolonged low-yield environment. A number of institutional investors (including insurers and pension funds) are considering whether to increase their allocation into infrastructure which potentially matches their long-term obligations.
- 4.3 An investment mechanism that connects institutional investors with these types of investments, in particular, investments into brownfield assets, which are more likely to meet investors' criteria, could tap into and exploit this trend, and would also allow commercial banks and private equity funds (and potentially MDBs and DFIs) to exit their investments and recycle the released capital into new projects. This could make a significant contribution to increasing the flow of private sector capital into sustainable and resilient infrastructure in developing countries.
- 4.4 For capital markets to work well and deploy capital where it can be used most efficiently, investors need to have access to data that allows them to price risk and determine their asset allocations, and that supports the development of benchmarks and indices. Investors will not invest if they are not able to understand the risks.
- 4.5 Financial structures that connect institutional investors with infrastructure projects in developing countries can have a strong demonstration effect; can build investors' familiarity with these markets; and can contribute to the availability of data which allows investors to assess and price risk appropriately.

Recommendations

- 4.6 The Commission recommends that the UK Government should support the establishment of new structures to mobilise institutional investment into sustainable and resilient infrastructure projects in developing countries.
- 4.7 Such structures will seek to provide new opportunities that will stimulate flows of institutional investment into infrastructure. They will need to be carefully designed and precisely targeted in order to achieve this. Close consultation with key stakeholders in particular key investors such as insurers, as both providers and investors, and pension funds with an interest in infrastructure during the design process will be essential to ensure that the structures respond accurately to demand, and it will be important to recognise that different types of investors have different requirements.

- 4.8 Key design questions that the UK Government will need to resolve through stakeholder consultation include the following: (i) the type of investment mechanism, e.g. participations in a listed infrastructure fund; debt securities issued through the securitisation of a pool of infrastructure assets; or the issuance of project bonds through a London-based platform; (ii) where in the capital structure to make investments in underlying assets, e.g. senior debt, junior/mezzanine debt; or equity; (iii) the scope of any guarantee (political and regulatory risk, currency risk, convertibility risk, counterparty credit risk etc.) or other risk mitigation supporting the structure; and (iv) any geographic and/or sector focus.
- 4.9 Three specific approaches (non-exhaustive) that are proposed to be explored are: (i) securitising commercial bank and/or MDB/DFI assets with the objective of facilitating investment by institutional investors and building their familiarity with the asset class; (ii) a platform that enables a wider pool of debt investors to invest in project bonds or loans, including for greenfield assets; and (iii) a facility that supports institutional investment into local currency project finance.
- 4.10 The preferred delivery option would depend on the nature of a particular structure, and would need to respond to consultation feedback. Combining consultation with encouraging a number of key investors to provide some anchor funding could be a powerful way of ensuring that this is achieved. Accordingly, the Commission recommends that an advisory council of banks, pension funds, insurers, asset managers and other relevant market participants should be convened to provide design input and (ideally) commitments to provide initial investment through suitable structures.
- 4.11 The UK Government should also help improve the availability of data to inform investment decisions by supporting the better coordination and sharing of data on infrastructure projects in developing countries. Possible options could include supporting the work of the Global Emerging Markets Risk Database Consortium (GEMS) initiative,²⁸ and/or working with one of the mainstream commercial data providers. Efforts in this space should draw on UK academic, as well as industry, expertise.

Added value over existing initiatives

- 4.12 There are already a number of initiatives that seek to bring private sector capital including from institutional investors into infrastructure investment in developing countries (see Annex 2 for more details).
- 4.13 These existing initiatives have experienced mixed success. Factors that have proved particularly challenging include:
 - the constraint that a limited pipeline of investible projects puts on the timely deployment of capital;
 - relatedly, the length of time required to originate and prepare new greenfield projects, bringing them to financial close;

²⁸ GEMS has established a default and loss database for the emerging markets business of MDBs and DFIs. It pools data on credit default rates from customers funded by the contributing MDBs and DFIs, their rating migration and the recovery rates of defaulted projects. It is currently hosted by the European Investment Bank.

- reconciling greenfield investment opportunities with institutional investors' investment criteria; and
- more generally, reconciling the mismatch between the infrastructure investment opportunities available in emerging markets and the risk appetite of most institutional investors, and whether (and how) to use public sector risk mitigation in order to stimulate investment from the private sector in a sustainable way.
- 4.14 To ensure that new structures are as effective as possible in mobilising institutional investment, and in order to learn from and improve on existing initiatives, it is important that (as for Recommendation 2 on guarantees) design and delivery are informed by an investor-led consultation process.
- 4.15 Note that in relation to the fourth bullet point above the question of the use of public sector risk mitigation new structures established to facilitate institutional investment into sustainable and resilient infrastructure could be explicitly supported by guarantees (or other risk mitigation, such as the provision of first loss capital) under a new UK guarantee facility, as proposed in Recommendation 2 above.
- 4.16 As for existing initiatives, the success of these proposed new structures will depend on there being an adequate supply of investible projects. By facilitating investment, these structures should have a 'pull' effect on this pipeline but they could also support the recycling of infrastructure assets from MDBs and DFIs to institutional investors, of which there has to date been only a limited amount. Recycling assets in this way frees up MDB/DFI capital which can then be used to originate further infrastructure assets, thereby making the most of MDBs' and DFIs' strong origination capabilities.
- 4.17 Currently MDBs and DFIs do not typically operate this sort of 'originate to distribute' approach, and moving towards this at any scale would require significant operational and financial changes.²⁹ But as referenced above, the volumes of private capital currently being mobilised into investment in developing countries fall far below the amounts required to meet the infrastructure financing gap. A business-as-usual approach will not come close to delivering the levels of investment needed to achieve the Sustainable Development Goals.
- 4.18 On data, it is clear that while existing initiatives in this space show promise, there is more work to be done on collecting and disseminating the data necessary to support the development of an investible asset class. Building on and looking to exploit potential synergies between existing initiatives (including the UK Government's planned Emerging Markets Infrastructure Platform), rather than setting up something new, is likely to be the more effective approach.

²⁹ Note, however, that there are a number of existing initiatives that transfer some risk from MDBs/DFIs to private sector investors, for example the African Development Bank's 'Room2Run' initiative, and the IFC's MCPP (both referenced in Annex 2).

Supporting activities

- 5.1 The Commission believes that these three principal recommendations should be complemented by two important supporting activities, to strengthen the UK Government's approach on this agenda, as follows:
 - Applying the UK's convening power and influence to target key existing institutions to unblock constraints to capital flows into infrastructure. The UK should continue to use its influence to support efforts by key partner MDBs and DFIs to mobilise private finance for sustainable and resilient infrastructure.
 - Adopting a more joined-up UK Government-industry approach on infrastructure project development and financing. All three principal recommendations require a strengthening, deepening and operationalising of the links between UK Ministries, industry and academic institutions, as part of making the UK a more effective and strategic player in infrastructure development globally.
- 5.2 As set out in the background sections, given its role in the development landscape the UK is very well placed to continue influencing and improving the approach of existing, related, international initiatives. A number of these are referenced in the background and the specific recommendations sections above. It is necessary to combine new bilateral efforts alongside learning from, and sharpening of, multilateral efforts to achieve scale and impact globally.
- 5.3 It is also clear that where the UK (Government but also private sector) is operating on this agenda internationally, it should simplify and improve the visibility of these efforts. Relevant UK Government programming can also be better coordinated. This is an area where other developed and donor countries have achieved a more powerfully communicated approach. It is for the UK Government to take forward the specifics of how best to achieve this aim.

Geographies and sectors

- 6.1 The Commission notes that the needs of lower-income and middle-income countries are different and, therefore, the UK Government may wish to vary the formulation of its offer to support the specific challenges in partner countries.
- 6.2 The Commission proposes an initial focus on countries where the UK Government has a strong footprint and good relationships, and there is openness to private investment. This could include more developed, middle-income countries with more established private markets and capacity to deliver projects, as well as low-income countries with whom the UK has a strong relationship.
- 6.3 The Commission understands that less developed economies and sectors will be able to absorb less aid resource and are likely to take a longer time to yield success than more developed countries. In determining the sectoral and geographical focus of the Commission's proposed recommendations, the UK Government will have to balance the need to yield results in a reasonable timeframe against the ambition to support those areas most in need of assistance.
- 6.4 In order to establish credibility and build the in-depth expertise needed to accelerate progress, some activities in particular, those of the proposed Project Development Facility will need to develop focus sectors. Focal sectors should be agreed with partner countries, and in doing so we hope to see close collaboration with the UK Government on identifying market failures in the infrastructure value chain. The Commission suggests that activity to support sustainable and resilient infrastructure could focus on, but not be limited to, the following sectors: energy systems, urban development, transport, telecoms, waste and water. Climate and environment concerns should feature strongly in project selection.

Delivery and measures of success

- 7.1 In order to support delivery of its principal recommendations, the Commission further recommends the establishment of a sponsoring entity to provide strong and unified coordination, and promotion, of all the activities recommended in this report. This should aim to be a focal point for the range of UK Government work on increasing infrastructure investment, with clear accountability and responsibility. The Commission is agnostic on the approach taken to develop the sponsoring entity and does not have a fixed view on the entity's legal structure; the UK Government should determine the appropriate structure for this.
- 7.2 On the assumption that the UK Government chooses to take forward the recommendations made by the Commission, there will need to be clear objectives for the scale of spend in the coming years. It is proposed that the Project Development Facility (Recommendation 1) should aim to within three years of the Facility being up and running be working on developing around 25 projects across five countries. This may require funding in the order of £300 million over that three-year period, with the intention that this will unlock project investment an order of magnitude higher. The Facility should then aim to double this scale of activity, and investment mobilised, in the second three-year period.
- 7.3 This number of projects is ambitious and would require faster delivery than many existing PPFs.³⁰ This ambition will be subject to revision in line with key variables including the countries with which the Facility will initially partner.
- 7.4 In terms of scale for Recommendations 2 and 3, the intention would be to make a material difference to the flow of private capital into infrastructure projects in developing countries. This scale of this ambition should be quantified going forward as the recommendations are further developed in consultation with key stakeholders (in particular investors).
- 7.5 The Commission suggests that a clear results framework is developed for the initiatives implementing the recommendations. Results measurement indicators should represent each stage of the project development life cycle, as well as measuring the provision of guarantees and investment mobilised. These indicators should also reflect the long timelines expected between infrastructure project inception and operation.
- 7.6 Indicators could include, but should not be limited to, the following:
 - number of UK Government project preparation activities completed (e.g. feasibility studies supported);
 - number of UK Government supported infrastructure projects that reach financial/commercial close;
 - number of UK Government supported projects;
 - amount of private capital mobilised through UK Government activity;

³⁰ A recent report finds that it can take anything from five to ten years, depending on the jurisdiction, to move from project identification to financial close (Nassiry et al., 2017, *Finding the pipeline: project preparation for sustainable development*). For example, whilst the Global Infrastructure Facility, which started operations in 2015, has 77 projects underway, the majority of these are at the definition stage. Further, the Asia Pacific Project Preparation Facility which started operations in 2016 currently has 13 advisory projects underway and the EBRD Infrastructure Project Preparation Facility which started operations in 2015, has 8 advisory projects underway.

- number of institutional investors financing UK Government supported projects and amount of finance mobilised from these institutional investors, and within this the number of new investors;
- number of risk mitigation instruments issued (including guarantees);
- value of risk mitigation instruments issued; and
- number of new financing vehicles created and their uptake.

Next steps

8.1 The Commission proposes the following next steps in relation to these recommendations:

- 8.1.1 the development of initial high-level partnerships on sustainable and resilient infrastructure development with several priority countries to shape the development of the recommendations included here, focused initially on taking forward Recommendation 1;
- 8.1.2 further scoping work to determine the details of how a new UK guarantee facility should be designed and delivered in order to provide risk mitigation in a way that most effectively supports the mobilisation of private sector capital;
- 8.1.3 in support of Recommendation 3, further engagement with institutional investors and other relevant market participants with a view to establishing membership of, and the terms of reference for, an advisory council; and
- 8.1.4 further investigation of the appropriate approach to creating a sponsoring entity for sustainable and resilient infrastructure to take forward the recommendations.

Annex 1: Terms of reference for International Development Infrastructure Commission

International Development Infrastructure Commission

Terms of Reference

Background

The International Development Infrastructure Commission will advise the Secretary of State for International Development on his ambitions to significantly scale up the UK's role in financing and developing infrastructure that promotes inclusive growth while meeting the Paris Commitments.

The infrastructure gap is large and growing. The UN Conference on Trade and Development estimates that to meet the Global Goals an investment gap in developing countries of around US\$2.5 trillion³¹ per year needs to be filled, including infrastructure needs. Total official development assistance donated by governments will not be enough, and currently stands at US\$140 billion annually. To bridge the gap, we need more private investment, and we need more pioneering projects that can deliver transformative and affordable infrastructure at scale.

The World Bank estimates that 940 million people live without electricity and 663 million lack improved sources of drinking water. Weak transport links also significantly limit growth, for example in Africa it is estimated this leads to a 30-40% increase to the cost of goods. On the challenge of achieving sustainability and resilience, including in relation to climate, the IPCC has warned we are on track for a 3-4 degree increase in global temperatures, far exceeding the 1.5 degree target under the Paris agreement.³² This is particularly acute in cities, where growth of poor communities far outstrips supply of basic services, congested infrastructure limits economic growth and pollution levels are heightened through use of inefficient technologies.

To mobilise private sector investment, we need to draw more strongly on what the UK has to offer. As the home to the City of London, we need to develop innovative investment products that appeal to a wider range of investors and incentivise investment in high impact, sustainable and resilient infrastructure. We should also build on the success of Masala Bonds to use listed products to mobilise greater investment in local currency. Since 2014 Masala Bonds have raised the equivalent of over US\$7 billion on the London Stock Exchange, establishing the market as a crucial source of financing for Indian infrastructure.³³

At the same time, strong infrastructure regulation, planning and delivery mechanisms are needed to attract private investment and enable new infrastructure projects that are investible and meet the needs of developing countries.

Mandate

The Commission will focus on how to incentivise investment needed to facilitate infrastructure that enables growth, is more inclusive, lower carbon and better value for money.

³¹ This figure is from 2014 (UNCTAD, 2014, *World Investment Report 2014*). Note also that cost estimates provided by the World Bank and UN studies are not strictly comparable because of differences in methodology.

³² IPCC, 2018, Summary for Policymakers

³³ London Stock Exchange Group plc, 2018, Annual Report

The Commission will provide recommendations on how DFID, the UK Government and the City of London can mobilise more institutional investment into infrastructure in developing countries. This will include opportunities for the UK to provide more technical support, stimulate the supply of well-designed investible projects and make greater use of innovative finance mechanisms.

The Commission will also look to build on earlier work such as the Green Finance Task Force and the Task Force on Climate-related Financial Disclosures.

An initial report will be issued by December 2019. Further follow up work will be agreed by the Secretary of State following delivery of the initial report and recommendations.

Composition

The Commission will be formed of a small group of individuals, comprising high level experts from the UK, Africa and Asia in infrastructure delivery, infrastructure regulation, finance and sustainability.

Key Questions

The Commission will consider the existing landscape of work on infrastructure in developing countries and assess the additional value add that can be brought by the UK.

The key questions for the Commission to consider will include:

- 1. Existing institutions and regulations in place to facilitate investment in infrastructure
- 2. Opportunities for new instruments to incentivise investment in infrastructure, such as new investment platforms, new products and new ways to share risk
- 3. Demand for UK expertise on planning and delivery of new infrastructure projects that are well designed and investible in developing countries
- 4. Strategic fit with existing UK Government work with governments on the enabling environment, climate finance, regulation and policy reform

Areas of Focus

The work will focus on three cross-cutting areas. This will include:

- i. scaling up financing and delivery for under-invested sectors such as water, transport or renewable energy
- i. investing and developing in better planned infrastructure, for example on cities or resilience (including climate)
- ii. embedding green finance and green financial regulations

Кеу	Existing Institutions and	New Investment Instruments	Demand for UK Expertise on Planning	Strategic Fit with UK Government Work
Questions	Regulations		and Delivery	
Cross- Cutting Areas	 Scaling up key sectors such as water, transportation and energy Supporting better planned infrastructure, such as for cities or resilience Embedding green finance 			

Deliverable

The Deliverable will be a report providing strategic recommendations to the Secretary of State for International Development on:

- 1. Key gaps in the support for infrastructure planning, financing and delivery to support higher impact, lower carbon international infrastructure
- 2. Mechanisms such as new investment instruments or better links with the City, the UK Government and UK enterprise to address these gaps
- 3. Potential for new UK strategic partnerships in Africa and Asia

Annex 2: Existing initiatives

A2.1 Existing initiatives on project preparation, technical assistance and capacity-building (illustrative and non-exhaustive)³⁴

Support to develop specific projects (with the private sector as counterpart)

- Within PIDG, InfraCo Asia and InfraCo Africa invest in infrastructure projects at an early stage, targeting projects in low-income and fragile states. Through other facilities, PIDG can provide follow-on debt finance, local currency guarantees, technical assistance, viability gap funding and links to capital markets to crowd in institutional investors.
- Through CDC, the UK is investing in and/or establishing independent development platforms including: **Globeleq**, a developer, owner and operator of independent power plants in sub-Saharan Africa; **Ayana Renewable Power**, which develops utility scale solar and wind generation projects across the poorest states in India; **Gridworks**, a new company dedicated to developing and investing in transmission, distribution and off-grid electricity infrastructure.
- **InfraVentures**, run by the IFC, offers early stage risk capital and project development support, and in return, has the right to a financial stake in the project at financial close and in most cases the right to arrange financing.
- Africa50 develops infrastructure projects across Africa, with a focus on energy, transport, ICT and midstream gas sectors. It offers project development and project finance.

Support to develop specific projects (with the government as counterpart)

- DFID's **Nigeria Infrastructure Advisory Facility** (NIAF) supports the Nigerian Government on reforms of the Nigerian power sector, providing technical assistance and capacity building.
- DFID's Accelerating Infrastructure and Investment in Nepal programme provides technical advice to the Investment Board of Nepal. This also provides capacity building.
- DFID's **Cities and Infrastructure for Growth** programme provides technical assistance to governments for more productive cities and infrastructure in three countries at present but is expanding to work in up to eight countries. The UK has announced a new **UK Centre for Cities and Infrastructure** designed to further address policy challenges and link countries with UK and international expertise.
- **Global Infrastructure Facility**, hosted by the World Bank, is a partnership among governments, MDBs, private sector investors, and financiers to collaborate on preparing, structuring, and implementing complex projects.
- Asia Pacific Project Preparation Facility (A3PF), managed by the Asian Development Bank, provides project preparation support, capacity-related assistance and ongoing project performance assistance.
- **NEPAD Infrastructure Project Preparation Facility** (NEPAD–IPPF), managed by the African Development Bank, provides project preparation, capacity building and support to enabling environment reforms for regional infrastructure development.
- **EBRD Infrastructure Project Preparation Facility** (EBRD-IPPF) provides technical assistance on project preparation, policy support and institutional strengthening, working in EBRD countries of operation.

³⁴ Project preparation initiatives in many cases include technical assistance and capacity building support, therefore overlap of activities occurs across the three types of initiatives set out.

- **Project Preparation Facilities Network** was formed, with African Development Bank support, to improve collaboration and inter-facility learning across Africa.
- PIDG's **DevCo** provides governments with access to advisory support to structure new deals and facilitate greater private sector investment in infrastructure.

Support to address gaps in the enabling environment (technical assistance)

- **Public-Private Infrastructure Advisory Facility** is managed by the World Bank and works with national and sub-national governments, regulators, PPP units and utilities to attract private sector participation and investment into infrastructure in emerging markets.
- **Construction Sector Transparency Initiative (CoST)** works with government, industry and civil society to promote the disclosure, validation and interpretation of data from infrastructure projects, thereby improving transparency and accountability in public infrastructure.
- African Legal Support Facility, hosted by the African Development Bank, provides technical assistance and access to capacity building to over 20 African countries in negotiation of complex commercial transactions, creditor litigation and other related sovereign transactions.
- **DFID's Ethiopia Investment Advisory Facility** provides public investment management advice to the Ethiopian Government to support the realisation of savings and efficiency improvements for the Government.
- Support for policy, legal and regulatory reform, institution-building and public utility reform has long been part of the mandate of the MDBs. The World Bank Group has recently stepped up efforts under their 'Maximising Finance for Development' approach which sees the IFC, MIGA and the World Bank working more closely together to "establish the enabling conditions to facilitate private activity".

Training and capacity building of government officials to develop, regulate, procure and manage projects involving private finance (capacity building)

Capacity building is often delivered in conjunction with technical assistance, as noted in the relevant existing initiatives above. In addition to these, the following initiatives provide capacity building on infrastructure:

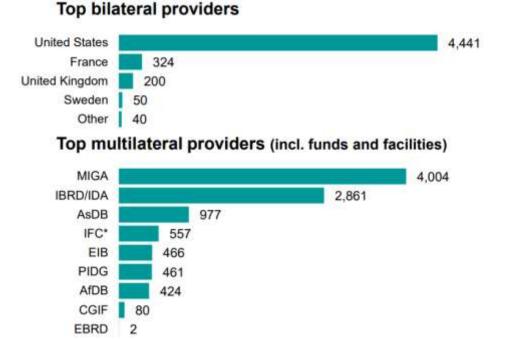
- The Africa Infrastructure Fellowship Program aims to help governments across Africa build infrastructure procurement capabilities within their civil services, through the provision of tailored education and training for civil servants responsible for infrastructure procurement and delivery to drive much needed reforms and increase private sector participation.
- The **Global Infrastructure Hub** has a mandate from the G20 to grow the global pipeline of quality, investible infrastructure projects, by facilitating knowledge sharing, highlighting reform opportunities and connecting the private and public sectors to improve the functioning of infrastructure markets.
- The **Royal Academy of Engineering: Africa Catalyst** provides capacity building of professional engineering institutes and aims to strengthen professional engineering bodies in sub-Saharan Africa so that they can effectively promote the profession, share best practice and increase local engineering capacity, to help drive development.
- The **Royal Academy of Engineering: Higher Education Partnerships** in sub-Saharan Africa works with the higher education system in sub-Saharan Africa to produce engineers with the skills and knowledge required to meet the needs of industry, tackle local challenges,

address the engineering skills shortage in sub-Saharan Africa, and to showcase engineering's role in driving economic development in the region.

• The **Royal Academy of Engineering: Africa Prize for Engineering Innovation** encourages ambitious and talented sub-Saharan African engineers from all disciplines to apply their skills to develop scalable solutions to local challenges, highlighting the importance of engineering as an enabler of improved quality of life and economic development.

A2.2 Existing initiatives on guarantees

The top existing bilateral and multilateral providers of guarantees that support the mobilisation of private finance are set out in the charts below, which show the amount mobilised from the private sector by guarantees from each provider in 2017 in US\$ millions (not exclusively focused on infrastructure).



Source: OECD, 2019, Amounts mobilised from the private sector by development finance interventions. MIGA is the World Bank Group's Multilateral Investment Guarantee Agency; IBRD/IDA is the World Bank Group's International Bank for Reconstruction and Development / International Development Association; AsDB is the Asian Development Bank; IFC is the World Bank Group's International Finance Corporation; EIB is the European Investment Bank; PIDG is the Private Infrastructure Development Group; AfDB is the African Development Bank; CGIF is the Credit Guarantee and Investment Facility; EBRD is the European Bank for Reconstruction and Development.

A2.3 Existing initiatives on mobilisation of institutional investment (illustrative and nonexhaustive, not exclusively focused on infrastructure)

Debt-focused initiatives

- African Local Currency Bond Fund: the ALCBF provides anchor investment and technical assistance for primary bond issuances by non-sovereign entities, with the objective of facilitating local currency corporate bond market development. Committed capital provided by a range of DFIs and social impact investors.
- **Bayfront**: Bayfront Infrastructure Capital, a special purpose vehicle sponsored by Clifford Capital, launched Asia's first infrastructure project finance securitisation, with an issue size of US\$458 million, in July 2018. Bayfront Infrastructure Management was established in November 2019, with the objective of creating a new investible asset class to facilitate the mobilisation of private institutional capital into the infrastructure financing market.
- **Emerging Africa Infrastructure Fund**: EAIF, a member of PIDG, is a public-private partnership providing long-term debt finance for construction and development of private infrastructure in sub-Saharan Africa. It is funded by the governments that provide its equity (including the UK), and raises debt capital from public and private sources (including institutional investors).
- IFC Managed Co-Lending Portfolio Program: MCPP leverages IFC's origination capacity to source opportunities for third-party investors to co-lend alongside the IFC. Of the total raised to date for MCPP, US\$2 billion has been targeted exclusively toward emerging market infrastructure investments through MCPP Infrastructure. There is a first loss tranche, with the risk shared between the IFC and the Swedish International Development Cooperation Agency.
- ILX: ILX is setting up a US\$1 billion emerging markets focused private credit fund that will invest in a diversified portfolio of loan participations originated and structured by bilateral and multilateral DFIs.
- **Room2Run**: African Development Bank (AfDB) risk-transfer initiative. The first Room2Run transaction (announced in 2018) was a synthetic securitisation that transferred the risk embedded in US\$1 billion of non-sovereign loans made by the AfDB to a group of investors (including private investors). A new transaction (in 2018) involved Lloyd's underwriters providing a counter-guarantee to the Africa Trade Insurance Agency on a portfolio of financial institution loans issued by the AfDB. The transaction covered 22% of the AfDB's US\$2.3 billion portfolio of non-sovereign operations in Africa, with Lloyd's providing a US\$500 million counter-guarantee.

Equity-focused initiatives

- **Climate Finance Partnership**: the CFP will be a private markets fund investing in climaterelated infrastructure in emerging markets. CFP will aim to leverage US\$100 million in concessionary capital to mobilise at least an additional US\$400 million in institutional capital commitments.
- **Climate Investor One**: a blended finance facility delivering renewable energy infrastructure projects in emerging markets. Employs a mixture of public and private sector funding, as well as commitments from DFIs.
- **Copenhagen Infrastructure Partners New Markets Fund I**: US\$1 billion fund which will primarily invest in greenfield renewable energy infrastructure projects in Asia and Latin

America, as well as certain countries in Eastern Europe. Reached financial close in November 2019 with commitments from a range of institutional investors.

- **Danish Climate Investment Fund**: uses blended finance to attract institutional capital to investments in low carbon and climate-resilient projects in developing countries. Invests in equity and mezzanine debt.
- **Green Growth Equity Fund**: the GGEF is a joint UK-India fund, specifically designed to promote sustainable energy projects. The two countries have invested over £240 million of anchor capital into the fund, which is expected to raise up to £500 million from institutional investors.
- Global Climate Partnership Fund: uses public funding to leverage private capital in order to mitigate climate change and drive sustainable growth in developing and emerging markets. Mainly invests through local financial institutions, but also directly.
- Global Energy Efficiency and Renewable Energy Fund: GEEREF is a fund-of-funds which invests in private equity funds which focus on renewable energy and energy efficiency projects in emerging markets. It leverages public sector funds to catalyse private sector investment into clean energy projects, with €222 million total funds under management.
- **IFC AMC Global Infrastructure Fund**: a US\$1.2 billion fund which makes equity and equity-related infrastructure investments in companies focused on power, transportation, water, telecommunications, oil and gas midstream and downstream sectors.
- Meridiam Infrastructure Africa Fund: €546 million fund with investments from both DFIs and institutional investors, that makes long-term equity investments in infrastructure projects across Africa.
- UK Climate Investments: a £200 million fund set up by the UK Government to invest in equity on commercial terms in low carbon infrastructure projects in Africa and Asia, in order to de-risk those projects and so mobilise investments into them from private sector investors.

Annex 3: International Development Infrastructure Commission

- A3.1 On 28 August 2019 the Secretary of State, Alok Sharma, announced the establishment of the International Development Infrastructure Commission to advise him on how DFID can step up its support to enable greater levels of investment into green, sustainable infrastructure, leading to more jobs, better access to basic services and opportunities for businesses and create the UK's future trading partners. The Commission was established in response to the recognition that an extra US\$2.5 trillion is needed every year to end poverty in developing countries and the UK must mobilise private sector investment to overcome this challenge.
- A3.2 The Commission consists of ten UK and international experts from across industry and government with experience of how to help make private sector investment in infrastructure in developing countries easier and more attractive. The Commission's work has been supported by a secretariat consisting of DFID staff. The Terms of Reference for the Commission are set out in Annex 1.
- A3.3 The Chair of the Commission is Gregory Hodkinson, who has forty years' experience in civil infrastructure and transportation projects and was previously Chairman at the global infrastructure firm Arup. The other Commissioners are Mark Hoban, Chairman of Flood Re; Jennifer Musisi, Harvard Kennedy School and former Executive Director of Kampala Capital City Authority; Adebayo Ogunlesi, Chairman of Global Infrastructure Partners; Kathie Painter, with a strong infrastructure background within industry companies and banking; Julia Prescot, Partner at Meridiam Infrastructure; Nikhil Rathi, Chief Executive Officer of the London Stock Exchange plc; Jo da Silva, Director of International Development at Arup; Subhash Thakrar, former Partner at Blackstone Franks; and Richard Threlfall, Global Head of Infrastructure at KPMG.
- A3.4 The Commissioners met four times, on 30 September 2019, 22 October 2019, 25 November 2019 and 16 December 2019 and over that period developed and prioritised a set of recommendations in response to the Commission's Terms of Reference.
- A3.5 The Commission's work has been informed by consultation with a wide range of relevant stakeholders. These have included MDBs and DFIs; development practitioners including research institutes and development agencies; international project developers; international commercial banks; fund managers; institutional investors; and academics. The consultations were supported by a review of the relevant literature and a consideration of existing initiatives. Consistent themes emerging from the feedback from the consultation process have been reflected in the body of the report in particular, in the three principal recommendations as appropriate.
- A3.6 The Commissioners' deliberations covered a wide range of topics that are relevant to the development and financing of infrastructure in developing countries. However, the Commissioners have concluded that this report will be of most value if it sets out a short list of recommendations focused on the highest priority areas. The fact that a topic has not been addressed in the Commission's recommendations does not therefore mean that the Commissioners concluded it is of no value, but rather that the Commissioners consider that the three principal recommendations set out here on project development, guarantees, and mobilising private finance are of higher priority.