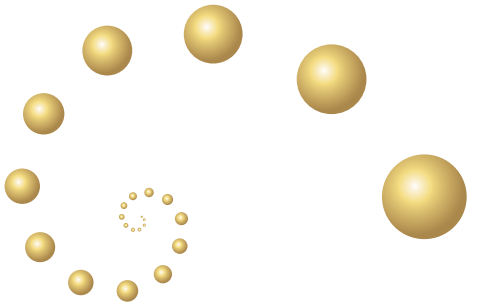
WHITE PAPER

Frontiers in sustainable infrastructure investment 2019



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Now is the time

At the recent G20 summit in Buenos Aires, the OECD, UN Environment and World Bank Group released the report *Financing Climate Futures: Rethinking Infrastructure* arguing that investing in infrastructure is not only vital to the sustainability of the planet, it has the capacity to drive economic growth.

The paper warned that "We are losing time though — if we want to deliver we need to move much faster and achieve a systemic shift of trillions of dollars in green investment."

There is circa USD 70 trillion of assets managed by institutional investors, including pension funds, insurers and sovereign wealth funds. Pension funds alone have circa USD 20-21 trillion of assets, with the top three hundred pension funds in the world managing around USD 15.7 trillion. But despite the seeming abundance of capital, not enough is flowing to infrastructure, let alone to infrastructure in frontier markets and marginalised communities.

This White Paper argues that the core issue preventing progress is 'access,' not 'availability'. We propose solutions with the objective of opening up a flow of sustainable capital at scale.

Now is the time

The challenge is too big for government alone

The OECD and World Bank estimate that USD 6.9 trillion investment a year is required up to 2030 to meet climate and development objectives but that current spending on infrastructure is only around USD 3.4-4.4 trillion.

While governments have a major role to play in filling this infrastructure gap, they are themselves often fiscally constrained as they deal with a raft of day-to-day challenges including meeting the costs of ageing populations, health and education. The nature of our global civil society is that some governments are in a better fiscal position than others and the areas that need the most investment in infrastructure – frontier markets and marginalised communities – are often also the ones whose governments are most fiscally challenged.

The OECD and World Bank argue, and we agree, that "mobilising public and private resources across the financial spectrum is an essential part of generating the trillions of dollars needed for sustainable infrastructure", in so doing enabling a more resilient relationship between our existence and planetary conditions. Government cannot meet this challenge alone.

Investors have a major role to play

Whilst not enough to meet future challenges, institutional investors already invest in infrastructure. Depending on the definition of infrastructure there is over USD 2.5 trillion currently privately invested. Finance industry analyst Preqin estimates that unlisted infrastructure assets under management reached USD 418bn as at June 2017, and the Global Listed Infrastructure Organisation (GLIO) represents $2 trillion market capitalisation for listed infrastructure assets.

The reasons that investors are attracted to infrastructure include:

- attractive long term net total returns
- predictable cash-flows generally linked to inflation
- diversification across regions and infrastructure related sub-sectors

According to Preqin, as at June 2017 unlisted infrastructure investors held USD 150bn of dry powder – that is, money that has been committed to invest in infrastructure that has not yet found a home.

If infrastructure is an attractive investment, and investors hold dry powder to invest, why is there such a gap between what the OECD and World Bank predicts is needed and current investment?

Building "investment canals"

The idea that capital flows in a similar way to water was first presented by Walter Bagehot in his book Lombard Street in 1873 when he stated, "Thus (English) capital runs as surely and instantly where it is most wanted, and where there is most to be made of it, as water runs to find its level".

Canals have been used across time for irrigation, supporting the establishment of stable societies. The establishment of the Bridgewater Canal in 1761 between Worsley and Manchester resulted in the price of coal halving, leading to what is termed Canal Mania where canals were built across Britain.

We believe there is a need to create "investment canals" that will open up a flow of capital into infrastructure. Without interventions 'elephants in the room' will continue to prevent the flow of capital. Investment canals will not however build themselves but need to be supported by both governments and investors. Governments and investors both need to change. We note the current impediments:

1. Governments have at times preferred to own and manage infrastructure instead of private investors. This has included assets such as ports and airports where the private sector actively invests. Where governments have brought in private investment it has often been through Public Private Partnership contractual arrangements. It can be argued these contractual arrangements have at times institutionalised conflict, rather than partnership between private investors and governments. PPP structures have been suitable in some developed markets but are not ideally suited to markets that do not have depth of professionals necessary to create competitive tension in tender processes.

2. Infrastructure investors have been reluctant to invest at scale in frontier markets and marginalised communities. In some cases investment policies explicitly restrict investments that are not considered investment grade. No matter what improvements are made in frontier markets these kinds of restrictions limit the flow of private investment into frontier markets. They are also based on generic assumptions of frontier markets that don't reflect the reality in individual countries. The quite natural preference that infrastructure investors have to seek investments in the best assets in the best markets does not provide a platform for universal investment in infrastructure. One positive is the significant growth of green / sustainability bonds, but we would note that bonds are of primary focus for existing businesses and there is therefore a need for new ventures to support the growth of this market.

Whilst there are many different impediments, there is a need to prioritise building partnerships between governments, communities and institutional investors.

Infrastructure is being disrupted by technology

In order to offer solutions to the "elephants in the room" we need to recognize how infrastructure is changing. From our own experiences of catching planes, trains, using electricity and water we may believe that infrastructure is the domain of big organizations.

Today we stand at a watershed moment where technology is disrupting infrastructure service delivery models. There are many examples, including energy and water.

Energy: Coal has often been promoted as a cheap energy for frontier markets that can address poverty. But it requires massive investments in coal mining, power generation and power grids. Coal has historically been well suited to delivering power to cities but is hugely expensive for the marginal unit of energy delivered to a rural community – requiring the establishment of grid connections before energy can flow. Evidence from recent in heat waves in Australia also demonstrates that coal-fired power stations are themselves subject to tripping in extreme heat, leading to blackouts. What we are seeing with the combination of battery storage and solar is the capacity to deliver flexible distributed energy at scale. This is enabling a new generation of infrastructure that doesn't require billions of dollar to establish.

Water: Topped by the Angel of the Waters, New York's iconic Bethesda Fountain in Central Park was built to celebrate the completion of the Croton Aqueduct in 1842. Bringing fresh water to New York's growing population literally transformed people's lives. The importance of water and sanitation systems was recognized during the International Decade of Clean Water (1980-1991) that achieved huge results in child mortality bringing clean water to an extra 1.2 billion people. Technology is now enabling small scale investment in water infrastructure that recognizes the scarcity of water resources. Examples include smart water systems that enable recycled water to be used for a variety of purposes including flushing toilets.

As technology disrupts society, the idea of infrastructure also needs to be liberated so that more precise definitions of asset classes can emerge and a more nuanced type of capital is made available. Whilst the needs of communities will collectively require billions of dollars to fulfil, this may be through thousands of individual projects as the potential for small scale infrastructure becomes reality.

Now is the time for solutions

Albert Einstein is attributed as saying that the definition of insanity is to do the same thing over and over and expect different results.

The conversation on the importance of infrastructure to economic growth, resilience and sustainability is clearly resembling Groundhog Day.

It is time to think differently. The urgency of addressing climate change and meeting the Sustainable Development Goals demands it.

This White Paper offers a number of pathways that we believe can open up a flow of sustainable capital into infrastructure to deliver economic growth and resilient communities, addressing climate change and delivering the Sustainable Development Goals.

Our solutions are summarized as:

1. Align interests by creating infrastructure businesses owned by government and investors

2. Create partnerships between stakeholders, governments and investors to invest in small scale community infrastructure

3. Build culture for infrastructure businesses through Integrated Reporting

4. Promote a vision for Universal Infrastructure Coverage

1. Align interests by creating infrastructure businesses owned by government and investors

We propose that governments and investors jointly create infrastructure businesses.

A challenge with infrastructure projects is how to capture the spill-over benefits that result from financing, building and operating an individual project. Currently individual project managers, and individual financing institutions, take away knowledge from a project which is utilized in their own professional life and assists in the next project that is delivered.

Infrastructure businesses, as opposed to construction projects, offer the opportunity to build long-term and sustainable regional capabilities. The benefit of building an infrastructure business is that once the governance, capital structure and management are in place, the business has the capacity to deliver many projects over time.

Infrastructure businesses can also support the development of local capital markets.

International organizations such as IMF, World Bank and the OECD have recognized that development of local capital markets, by fostering financial development and financial integration, promotes economic growth through improving the efficiency of capital allocation and allowing for better risk sharing. Equity markets are where institutional investors already allocate the bulk of their capital. The investment models and systems of asset owners have been built around utilizing equity markets as the principal mechanism to allocate capital.

The idea of governments and investors acting as co-investors is not a new one.

A recent example is Mighty River Power, the New Zealand government owned hydro- electricity that was partially privatised in 2013. Now known as Mercury Energy, the NZX listed company remains majority owned by the New Zealand Government, with institutional investors and individual New Zealanders making up the share registry. The benefit of public listing has been to provide a high degree of transparency around operations with Mercury utilising the International Integrated Reporting Framework <IR> to disclose its sustainable business practice. As a listed company Mercury has invested in new initiatives including its smart metering business Metrix (enabling customers to manage their energy through data) and Mercury Solar that is building the firm's expertise in battery and off-grid solutions.

We are seeing the rapid development of infrastructure bond markets. In some cases concessional loans are available through a range of agencies. The ability to access concessional loans has the potential to open up a flow of new capital into infrastructure. But to maximise the potential for investment there is a need to ensure there is a matching growth of infrastructure businesses.

2. Create partnerships between stakeholders, governments and investors to invest in small scale community infrastructure

It is important to value community infrastructure that provides the mechanism to connect and support society. We face a very uncertain future. In coming decades communities will have to manage many challenges including the real impacts of climate change, social exclusion, uncertain economic opportunities and aging populations. Weakened communities are less resilient, more economically dependent on government and less able to support individuals in times of need.

There is a need to address the current 'business as usual' approach by local government and investors. In the case of local government, traditional business planning is concerned with whether or not a city or local authority has the financial and human resources to implement the ideas and ambitions contained within its city plans. If an idea can be resourced then it becomes a project, if it can't then typically it remains an unrealized and unfulfilled 'paper ambition'.

Opening up new sources of capital investment is critical in supporting governments to switch from a business planning process that is constrained by financial resources to one which enables lead authority / agencies to proactively address the urgent needs of communities. The greatest challenge facing cities is not in imagining the solution but in how we bring a solution to life. This requires an entrepreneurial approach to aligning the 'paper ambition', people and capital required to create 'the project'.

Through a process of municipal venture capitalization, community futures investments can be created that enable institutional investors to invest in community projects by aggregating projects into larger packaged investments that meet institutional investors needs in terms of size, liquidity and cost. By using financial services techniques such as credit enhancement and securitization, it is possible to deliver to investors the products that they need in order to meet the needs of their beneficiaries whilst at the same time delivering communities the investments that are needed to catalyse positive environmental, social and economic outcomes.

Our vision is, through multi-partner approaches and innovations in local urban governance, to open up investment in areas where the finance sector, or government budgets may be constraining opportunities. In essence the nature of cities requires a more fiscally devolved, inclusive and deliberative form of decision making and delivery.

3. Build culture for infrastructure businesses through Integrated Reporting

In the modern world, companies are subject to constant disruption. A key to success is the ability to scan the horizon, in order to understand the challenges that a project or company must deal with in the future. Critical to this, is the ability to build dialogues, relationships, and alliances — all of which require time and patience. The ability to identify opportunities largely depends on interaction and collaboration with key stakeholders.

For a company, there is upside in working strategically with key stakeholders, and downside in ignoring or working against the same stakeholders. We would argue that the level of scrutiny, accountability and transparency that infrastructure is subject to will only increase in future. Thus – infrastructure companies that are to succeed in the long run must be serious and strategic about how they engage key stakeholders.

Any infrastructure business will inevitably involve and affect at least three parties: government, investor and society (a city, a region, a community). The sustainability and longevity of the business depends on how well it meets, and is perceived to meet, the needs of these parties.

A culture that embraces stakeholder engagement, transparency and human capital is a critical component in building the relationships and the trust that will support robust, long-term infrastructure businesses. How do you establish the right culture? Through having quality directors and executive management who can ensure that infrastructure businesses are managed according to the highest corporate governance and sustainability standards. Furthermore, an infrastructure business needs to equip itself with knowledge and expertise in order to positively manage social and environmental outcomes from the project through all its phases.

The expectation of holistic and integrated reporting from companies is now well planted in the minds of a growing number of investors and will, if anything, only become more pronounced. Equally, listing requirements at a growing number of stock exchanges are being shaped by a view that sustainability and "societal purpose" need to be reflected in a company's governance, strategy and practices.

In order to attract long-term investment, infrastructure businesses need to be aware of and strive to adhere to emerging best practices for company reporting which goes beyond traditional financial reporting.

4. Promote a vision for Universal Infrastructure Coverage

In simple terms if we fail to provide universal infrastructure coverage for communities across the globe, then we will fail to deliver the Sustainable Development Goals and addressing climate change.

Despite the acknowledged importance of infrastructure, we have yet to translate the urgent need to invest into common language.

The World Health Organisation defines universal health coverage "as ensuring that all people have access to needed health services (including prevention, promotion, treatment, rehabilitation and palliation) of sufficient quality to be effective whilst also ensuring that the use of these services does not expose the user to financial hardship".

Health experts acknowledge however that universal health coverage can't be delivered without infrastructure.

When it comes to describing the challenge before us, we often resort to describing the required infrastructure gap in monetary terms. Whilst understanding how much money is required to be invested is certainly relevant, because numbers are so large they can be seen to be meaningless.

Establishing a vision for Universal Infrastructure Coverage recognizes that the disruption that is occurring in infrastructure is reducing the capital cost that is required to deliver outcomes. Energy is an example. No longer is expensive investment required to generate energy with the combination of solar and battery technology making micro-grids not only feasible but preferable.

We believe there is a need for an ambitious program to define and activate the concept of Universal Infrastructure Coverage.

Actions, not just words

Many, many words have been written about why investment in infrastructure is important to address the challenges of climate change. Without infrastructure investment we know that many of the Sustainable Development Goals will simply be aspirational.

The four proposals in this White Paper are aimed at catalysing new conversations that are not limited by the decisions of the past.

To take forward the ideas proposed in this White Paper we propose the creation of a mechanism that brings together a community of practitioners and stakeholders that are aligned around the ambition and urgency to flow capital into infrastructure across the globe.

We propose the establishment of an independent special purpose initiative that would take forward the ideas in this paper with a focus on driving and facilitating investment into infrastructure.

Such an initiative would need to be independent of government and investors, but supported by them. It would need to be able to identify where impediments are restricting the flow of investment. Impediments may be big or small. In the case of off shore wind investments for instance the lack of a regulatory structure can prevent investment, even where there are willing private investors and governments prepared to support projects.

This White Paper will form the basis of discussion at Infrastructure Investment Frontiers, a special event to be held on Thursday 6 June 2019 at the Royal Automobile Club (RAC), Pall Mall, London, UK. A White Paper will be publicly launched following the Forum that incorporates comments from forum participants and stakeholders.

In preparation for Infrastructure Investment Frontiers we will be holding small forums to receive feedback on the paper, and to propose further options for change.

Comments on this paper can be sent to Michael Marais: mm@blended.capital

Contributors

Paul Clements-Hunt has been central to break-through developments in responsible investment over the last 25 years. While Head of the UN Environment Program Finance Initiative (UNEP FI) his team conceived and delivered the Principles for Responsible Investment (2005), the Principles for Sustainable Insurance (2011); and the Natural Capital Declaration (2012). Paul was a PRI Board member for six years and with his UNEP FI team created the term ESG, ensuring that social issues were central to responsible investment. Paul established The Blended Capital Group, a private equity firm focused on delivering health, wealth, education and environmental impacts for off the grid communities in Sub-Saharan Africa. In 2011-2012, he supported Former UK Prime Minister Gordon Brown in his work on financial stability and sustainability for the UNSG and continues to regularly consult to the UN Secretary General's office. Paul is director of FenElpi Partners Ltd.

Stuart Kay works across the built environment and responsible real estate investment/ asset management sectors, and has become known as a leader in the pioneering and development of new directions for these areas in Asia Pacific. He is co-founder and Chief Sustainability Officer at GreenPlace Assets based in Tokyo, Japan. His previous roles include acting as a Director at KPMG, Chief Executive Officer (and Co-Founder) of Project Group Asia, and Director at Cushman and Wakefield. Stuart is a member of the Asia Pacific Real Estate Association (APREA) Sustainability and ESG Roundtable, a Founding Member and Board Member of Sport and Sustainability International (SandSI), and sits on the GRESB Infrastructure Working Advisory Committee for Airports.

Dr Ingo Kumic is an experienced program director and city partnerships broker operating at the intersection of urban governance, city and community development, and strategic investment. He has worked across Europe, the Middle East, and Asia-Pacific. In that time he's held numerous senior positions delivering urban outcomes with partners such as the United Nations Global Compact, European Commission, Greater London Authority, Cross River Partnership, International Energy Agency, NSW State Government, and Ningbo Ancient Town Redevelopment Authority. Ingo's focus is on helping cities implement the UN's Sustainable Development Goals through the use of multi-partnered implementation facilities (IFSUDs).

Valborg Lie is a Responsible Investment (RI) specialist with 14 years' experience working at policy, strategy and implementation levels for or with asset owners such as pension funds and Sovereign Wealth Funds. From 2005 to 2013 Valborg was Head of RI with the Asset Management Team at the Norwegian Ministry of Finance, which oversees the management of the Norwegian Government Pension Fund Global. Valborg now runs Borg Consulting, facilitating dialogue and providing training in RI practices and ESG integration along the investment chain. In 2017 she coordinated a research project that maps RI best practices globally and included interviews with 18 pension funds across 13 markets, alongside 11 industry experts. Valborg is a member of Liontrust's Sustainable Advisory Committee and a Director of FenElpi Partners.

Gordon Noble was formerly the Director of Investments and Economy at the Association of Superannuation Funds of Australia and worked for the UN backed Principles for Responsible Investment in its initial stages. He was responsible for founding the Responsible Investment Academy with the Responsible Investment Association Australasia, an online training platform that is now the PRI Academy. Gordon's roles have included Managing Director for Inflection Point Capital Management, a boutique sustainable investment fund, various roles in the labour movement in both Australia and the United Kingdom. He is director of FenElpi Partners Ltd and Principal of Strategy61, an Australian management consulting firm. He is director of FenElpi Partners Ltd.

Michael Marais is a green finance professional with experience in project management, capital raising, administration and client relationship management. Michael has organised many successful investor events including putting together the Johannesburg-Bangkok Blueprint that served as a Cities Climate Finance Leadership Alliance (CCFLA) publication on Climate Day in Paris at CoP21. After obtaining degrees in Genetics, Wildlife Management, and Conservation Biology, Michael began his career in the South African Marine Environmental sector, where he worked for nearly 4 years on projects such as Ballast Water Treatment, an offshore coal facility, and various environmental economics projects.

Bill Petreski is founder and director of Strategy Sixty-One (Strategy61), a boutique management consulting and investment advisory firm that works closely with clients in the public and private sectors providing business planning, strategy and risk management, digital transformation and investment advice. Bill was previously Director of Innovation and Digital Solutions at KPMG where he managed projects in strategy, change management, innovation and digital transformation within government agencies and large corporates and Principal Advisor, Innovation and Technology at the Australian Industry Group (Ai Group), a peak industry association that represents the interests of more than 60,000 businesses where he led market development and economic research, public policy advocacy and corporate and government engagement.

Marco Tenconi is an Analyst for The Blended Capital group. He holds a first class honours degree in history from the University of Cambridge and an MSc in Environment, Politics and Development from SOAS, university of London. He supports TBCG projects focusing on low carbon infrastructure and sustainable agriculture through research and communications work.

Charlie Garner is a senior analyst for the Blended Capital Group, focussing on private equity research, database management and due diligence. He holds a first-class honours degree in environmental science and is finalising his masters in carbon management from the University of Edinburgh. His postgraduate research focuses on modelling physical climate change risk in pension funds through an integrated assessment approach with Moody's Analytics.