



Global Infrastructure Basel

**4th GIB Summit
21-22 May 2014**

Report

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Further information

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1 Introduction

The 4th Global Infrastructure Basel Summit took place from 21-22 May 2014 in the Congress Center Basel, Switzerland. More than 350 participants from over 40 countries and in excess of 100 cities took part in three strategic plenaries, two policy roundtables, ten workshops and four investment forums, where 30 sustainable infrastructure projects were presented to investors. In addition, 17 projects were presented in poster format. The total investment sought by the projects was approximately USD 6 billion.

2 Executive Summary

The need for sustainable infrastructure has never been greater. By 2050, the amount of people living in cities will have doubled to 7 billion, and 75% of the infrastructure required by that time does not yet exist. To meet the economic, environmental and social challenges caused by this influx in population, there needs to be an estimated annual global investment of USD 5 trillion in sustainable infrastructure. However, there is still a funding gap of about USD 1.2 trillion every year.

This infrastructure-financing deficit is not due to the lack of money available. The problem is mostly caused by a lack of well-structured, bankable projects; regulatory and political instability that decrease investor confidence; and the lack of capacity on behalf of governments, city leaders and project sponsors. Jaime Caruana, General Manager and CEO, Bank for International Settlements, additionally underlined that in order to increase investment in a sustainable way, we need an efficient, resilient, robust, global integrated financial system, supported by appropriate global regulation.

Speakers highlighted the key roles cities will play in ensuring safe and sustainable livelihoods in the future. Urban infrastructure has, and will continue to have, a major impact on economic development, the preservation of the environment and the provision of social well-being throughout the world. The rapid urban growth in emerging economies will require the most investment to ensure that they can develop sustainably, but there is also a real need to create a more resilient and climate-friendly infrastructure in cities of the developed world. Put simply: without sustainable infrastructure, there can be no sustainable livelihoods.

Governments and multilateral financing institutions cannot bridge the infrastructure gap on their own. There needs to be much more engagement from the private sector and an increased under-

standing of not just the financial benefits sustainable infrastructure projects can bring, but also the social and environmental added-value impacts that such projects offer.

Investment in sustainable infrastructure has the potential to produce quality and stable cash flows with lower risk. But investors are still hesitant to enter this sector. How can this issue be resolved? Participants agreed that sustainable credit ratings, based on in-depth scientific tools, which can identify a portfolio of bankable projects, whose development has been assessed could lead to the creation of a homogenous sustainable infrastructure asset class that will attract investors and help to bridge the infrastructure gap. In order to make this a reality, governments, financing institutions and regulators must work closely together to ensure that the framework exists to facilitate the much needed private sector investment.

With these challenges in mind, the 4th GIB Summit set the course for future action with its theme **Mainstreaming Sustainability in Infrastructure Financing and Investment**. Discussions at the GIB Summit were structured into six streams, which took the form of plenaries, roundtables, workshops and investment forums:

- Setting the Course – plenaries with decision makers from governments, global financial markets and leading advisers
- Closing Gaps – removing the bottleneck of greenfield projects through early-stage financing
- Creating Opportunities – sustainable infrastructure as an asset class
- De-Risking – sustainable infrastructure grading and credit rating
- Implementing Innovation – spurring sustainable infrastructure development with new approaches
- Project Exchange – investment forums bringing investors and developers together

To allow the reader to follow these discussions, this report has been structured using the same six streams.

3 Financing Infrastructure Projects in Cities – Avoiding Traps and Achieving Sustainability: An Interactive Workshop

Prior to the opening plenary session, Professor John Macomber, Senior Lecturer of Harvard Business School and André Schneider, GIB Vice Chairman and member of the Institute of Technology and Public Policy EPFL, led an interactive participant-centred workshop to discuss key issues, best practices and useful tools and gradings for financing sustainable infrastructure. The workshop used the Harvard Business School case study method to maximize audience participation. Discussions took place in small groups which then reported back to the other participants.

Professor Macomber began by focusing on two analysis techniques that help ensure optimal infrastructure investment choices are made: Value for Money and the GIB Grading. With these in mind, participants were asked to examine two different projects: the Ottawa Confederation Line, a light rail system in Ottawa, Canada, and TransMilenio, a bus rapid transit expansion in Bogota, Colombia.



Professor John Macomber

As regards Value for Money, a comparison has to be made between specific components of a publicly sourced and operated project versus a public-private partnership (PPP). Total operating costs, a public sector comparator, competitive neutrality, risks and consequences must all be considered to conclude which project offers the best value for money.

Taking the Canadian project first, participants were asked to consider the value for money and the risks of this project if it were to take the form of a PPP. Mark Gerber of Bombardier Transportation argued that the ridership risk would be the greatest – how many people will use the line and how much are they willing to pay for it? Typically, the private sector does not carry out such assessments and the risk is shifted to the local authority.

Irving Mintzer, Chief Strategist at the Potomac Energy Fund, suggested that the major risk would be the construction risk, resulting from the potential need to extend the construction period beyond the original deadline and thereby increase overall costs. He felt that this risk should be shared between the contractor and the government. Cristiana Fragola, Europe Regional Director of the C40 Climate Leadership Group, added that sustaining the financing cost would be a major concern once the project is active. She thought teaming up with a development bank or a national bank to obtain subsidies would be key to offsetting this risk.

André Schneider then introduced the GIB Grading system by explaining that it is a qualitative rather than a quantitative analysis. He shared the three guiding principles for sustainable infrastructure: 1) it must be sustainable environmentally, economically, socially and legally; 2) it should involve all important stakeholders and treat them equally; and 3) it should be safe and affordable for all users.

Focusing on the parameters contained in the GIB Grading for Sustainable Infrastructure, participants were asked to analyse both projects before deciding which one they should invest in. There were mixed views amongst the



Group discussions during the interactive workshop

group. Some argued that the challenges in Bogota could also be opportunities. Others felt that the uncertainty of the extent the Bogota project would result in social benefits made the Canadian project more attractive. Andreas Georgoulas, Research Director at the Zofnass Programme for Sustainable Infrastructure, Harvard Graduate School of Design, added that knowing the financials of both projects would be essential in order to make a conclusive investment decision.

Wrapping up the workshop, Professor Macomber made three points: PPPs need a source of repayment, the public authority needs the capability to negotiate and execute the project, and there needs to be good intent on behalf of all parties. Tools like Value for Money analysis and the GIB Grading help thoughtful cities, careful investors and diligent product companies identify the best projects, create value and capture it.

4 Setting the Course

41 Plenary 1: Investing in Sustainable Infrastructure – A Global Challenge

Guy Morin, Mayor of Basel and Co-Chair of C40 Sustainable Infrastructure Financing Network, welcomed the participants of the 4th GIB Summit by stressing the need for a massive push in sustainable infrastructure financing. He went on to emphasise that such infrastructure allows households to opt for sustainable lifestyles, offers sustainability choices for management and business development, and results in new, sustainable jobs and economic growth.



Guy Morin, Mayor of Basel

Daniel Wiener, GIB Chairman, highlighted that the challenge to guarantee the livelihoods of 10 billion people in the future must be met by marrying social and environment goals with financial profita-

bility. He was pleased to announce that GIB, with the help of several collaborators, is well on course to creating a sustainable infrastructure credit rating that will further enhance the GIB Grading thereby increase investors' confidence in infrastructure projects assessed using this method.

Bruno Oberle, Head of the Swiss Federal Office for the Environment, told the audience that the need for long-term resource efficiency and sustainability is setting the framework for the economy in all forms of development. Sustainability is perceived to make projects more complicated and expensive, which is true if you think with a short-term perspective. But if we want to truly benefit from sustainable infrastructure, we must think more about the medium- and long-term benefits. How will this need and expense be funded? Through robust financing and the help of the "polluter pays" principle.

"Business as usual" is a thing of the past, according to Barbara Kux, Board Member of Henkel and Total and Member of the Sustainable Development Solutions Network (SDSN) Leadership Council. The world is changing: political upheaval, natural disasters, resource depletion and financial crises are common global challenges. In her view, companies must adapt to these challenges and have a clear vision to explore growth opportunities through open source, distributive and collaborative networks to deliver better, faster and greener products on a global scale.

The Head of Sustainability at Boston Consulting Group, Holger Rubel, underlined the key role that smart cities will play in maintaining a sustainable future. He outlined that the share of the world's

population living in cities will rise from 50 to over 70% by 2050. It is therefore vital that cities focus on long-term sustainability measures, in particular ICT-based innovative technologies.



Jaime Caruana, General Manager,
Bank for International Settlements

Jaime Caruana stated that in order to make sustainable infrastructure projects more attractive to investors, we must develop an infrastructure asset class that is homogenous, based on predictable pipelines of bankable projects, and that makes appropriate use of financial innovation to meet investors' needs.

To the question: "How do you reconcile this need for homogeneity with the hard reality that infrastructure projects are different, financing requirements are different, and it is important to

distinguish between different sectors and different economies? Mr Caruana responded: "It is not easy, indeed, but efforts have been started to help reconcile some of these aspects. And yes, business can also play a role in achieving this goal."

The magnitude of the infrastructure projects needed across the world makes it clear that governments and multilateral financing cannot address the infrastructure gap alone. Keiko Honda, Executive Vice President of the Multilateral Investment Guarantee Agency (MIGA), shared how MIGA is engaging the private sector to help solve this issue, but stressed that more efforts are needed in this regard. In her view, the infrastructure gap can be closed by increasing efficiency in operations and maintenance in order to maximize capacity.

42 Plenary 2: Creating Good Livelihoods

The second plenary session focused on the funding of visionary projects for liveable cities and how to translate ideas into reality with the help of investors.

How can we enable citizens to live a good life? It's important to look at this from the citizens' perspective, according to Michael Kuhndt, Director of the Collaborating Center on Sustainable Consumption and Production (CSCP). Through their actions, people can make infrastructure sustainable or unsustainable. There must be an investment in infrastructure but also at the societal level to ensure people understand how to use sustainable infrastructure.

The Executive Mayor of Tshwane, Kgosietso Ramokgopa, emphasised that rapid urban growth in South Africa is putting increasing pressure on the available resources. He talked about various projects that seek to 1) tackle the huge rural – urban migration in his city and 2) create sustainable livelihoods for its citizens. When implementing low carbon initiatives in the developing world, developers must address the immediate challenges first: financing, unemployment, de-risking and generating new income streams.

China faces a huge challenge to ensure its cities are able to cope with the continuing rapid urban growth in the country. The urgent need for Shanghai to improve its infrastructure and reduce its energy consumption was highlighted by Pei Xiao, Vice Chairman of the Shanghai Municipal Commission of City Development and Management. He described the legislation and projects, which include the construction of highways, railways and green buildings, to ensure the rapid expansion of the city occurs in a sustainable way. Xiaowen Li, the Division Chief of the Statistic Department of the China Banking Regulatory Commission (CBRC) suggested that green credits will help emerging markets to develop their sustainable infrastructure and informed the audience that CBRC is working to develop a permanent mechanism for green credit exchange on the international level.

Investors from both the private and public sectors are attracted by the infrastructure sector because of its long-term fixed assets, but they have to be convinced that there is a real investment opportunity. Teresa O’Flynn, Director of BlackRock, stressed the need for projects to have a clear financial model, show how the cash flows are broken down, and define the investment in the context of a language that makes sense to institutional investors. If developers start with these strong economic arguments in mind, and then add the sustainability element to the conversation, they will be able to offer a powerful investment package.



Teresa O’Flynn, Director, BlackRock

43 Plenary 3: Climate Action, Sustainable Development Goals and Sustainable Energy for all: The Role of Finance for Infrastructure and Making our Planet a Safe Place to Live

The future of our planet is in our cities’ hands. Gino Van Begin, GIB Board Member, and Secretary General of ICLEI opened the final plenary session by emphasising the major role cities will play in

shaping our sustainable future. In order to make our planet a safe and sustainable place to live, cities must concentrate on radically reducing their CO₂ emissions; creating sustainable infrastructure to tackle poverty and provide access to basic amenities; and producing enough renewable energy to meet the increasing demands of urban populations.

With these in mind, Ambassador Michael Gerber, Special Representative for Global Sustainable Development, Swiss Federal Department of Foreign Affairs, outlined that changes need to occur at the societal level. The provision of housing, water, communication systems, public health, regulated utilities and energy efficient public transport are all major priorities for city leaders. Capacity building to strengthen their ability to develop viable, sustainable infrastructure projects with sound technical and financial structures will be key to the success of this future development.

Executive Mayor Mpho Parks Tau of Johannesburg took his city as an example to elaborate on projects that will help to tackle the challenges of rapid urban growth in the future. He mentioned how they will use wastewater to produce energy, introduce green technology in buses, a project for which GIB is currently producing a bankability study, and create solar social housing within the city. He believes that new sustainable technology is well placed to tackle the current challenges of inequality, unemployment, and poverty.



Diana Jensen,
Director of Renewable Energy Finance, OPIC

Lack of funding is not the major obstacle to such projects, as Diana Jensen, Director of Renewable Energy Finance, Overseas Private Investment Corporation (OPIC), pointed out. The global problem we all face is how to bring project managers and investors together, particularly in developing economies, to realise sustainable infrastructure projects.

According to Alex Zhang, Managing Director of Eco-Forum Global, the current platform for sustainable development, based on social equality, environmental protection and economic growth, is no longer sufficient. He shared how a new concept, eco-civilisation, currently under development in China and based on specific human needs, may be the answer. Thomas Vellacott, CEO of WWF Switzerland, brought the session to a close by emphasising the link between finance, infrastructure and climate change. He cautioned that cities, particularly those in developing countries and coastal areas, will be particularly affected by the negative effects of climate change. It is vital for national and local governments to share responsibility for the resulting costs and damage caused by these changes.

5 Closing Gaps

51 Eliminating the Bottleneck of Greenfield Infrastructure Investments

Kicking off the first workshop, Nick Beglinger, GIB board member, President of Swisscleantech and CEO of the Foundation for Global Sustainability, pointed to the distinct lack of sustainable infrastructure projects despite the huge amount of funding available. The discussions brought together representatives from both the public and private sector to focus specifically on early-stage project development and the barriers preventing sustainable infrastructure from being realised.

Giridhar Srinivasan, Senior Operations Officer, IFC, World Bank Group, began by explaining a common problem faced by greenfield projects: developers cannot move forward without financial means, but lenders do not want to provide money to underdeveloped, poorly structured projects. He suggested using venture capital as a means to provide early-stage finance to sustainable infrastructure projects.



Giridhar Srinivasan (IFC) answering questions at the first workshop

The Inter-American Development Bank (IADB)

has infrastructure funds for both the public and private sectors in renewable energy, water and sanitation and integration, as pointed out by Gaston Astesiano, Senior Advisor, IADB. The bank cannot currently invest in the equity of projects, but will change their byelaws to enable venture capital style investments in sustainable infrastructure.

Rafaella di Sipio, Energy and Infrastructure Manager, Prelios SGR, stated that it is important to remember that, even if venture financing is obtained, regulatory frameworks can still cause complications and delays. Developers must be careful to obtain specific agreements with local and national governments to ensure venture solutions can be implemented. Governments must create the framework for investments in the infrastructure sector to ensure such projects can go ahead.

Taking a different angle to the bottleneck issue, Kostis Tselenis, Head of Investment at Quadia Impact Finance, highlighted the potential for early-stage investment in small scale infrastructure projects. Private investors want to have exposure in the infrastructure sector, but the size of projects often dissuades them. To facilitate investment, international organisations and institutional investors need to take the up-front risks during the pre-development phase in order to offer something with a lower risk profile to private investors.

Bas Oomens, Project Manager at Pöyry Energy AG, argued for further investment in renewable energy sources, specifically geothermal energy. Having said this, there are other forms of energy and different solutions in different regions. Governments must create the framework for investments in the renewable energy sector to attract private investors.

52 Multiplying Investments through Improved City Creditworthiness

Gino van Begin moderated this workshop on how cities can improve their creditworthiness in order to obtain more private sector investment in sustainable infrastructure. Expert economists shared and debated their ideas before taking a series of questions from the audience.

In order to close the current annual infrastructure gap, which stands at over USD 1 trillion, cities must enhance their creditworthiness significantly to attract investors. Joshua Gallo, Programme Leader of Sub-National Technical Assistance, shared how his employer, the Public-Private Infrastructure Advisory Facility (PPIAF), is helping 300 cities to do just that. Through the PPIAF's City Creditworthiness Initiative, a series of capacity building measures will help cities to structure creditworthy financing transactions for infrastructure, leading to low carbon and climate resilient development.

James Alexander, Director of Finance and Economics, C40 Climate Leadership Group, underlined the financing challenges for sustainable infrastructure faced by cities: how to turn ideas into projects; funding feasibility studies; sources of finance; understanding investor needs; and reducing financing costs. By using peer-to-peer exchange through the C40 network of 67 megacities, mayors and city leaders are able to exchange best practices and work together to increase their creditworthiness and increase infrastructure investment.



Gino van Begin, James Alexander and Sean Kidney

In Asia, the Cities Development Initiative for Asia (CDIA) is helping cities to bridge the gap between their development plans and the implementation of their infrastructure investments. Yu Zhang, China Program Specialist of the CDIA, described how the Initiative supports the identification and development of urban investment projects and links them with potential financiers. In doing so, it helps

cities to improve the technical and financial quality of projects and prepare responsible, pro-poor and gender sensitive infrastructure.

Sean Kidney, CEO of Climate Bonds Initiative, shared how green city bonds can be issued by cities, subnational governments and city entities such as utility companies to attract investors. Providing an investment product which has the same risk and yield characteristics of other bonds, but where the proceeds go to qualifying green investments, will prove irresistible to institutional investors concerned about climate change. Given that bonds are re-financing tools, developers will be able to use bank lending and equity to fund early-stage infrastructure development and then re-finance using low interest green city bonds, thereby easing the bottleneck of early-stage financing.

53 Financing Sustainable Urbanisation, Resilience and Adaptation

This workshop was moderated by Gino van Begin and covered various aspects of how sustainability can be implemented in the city-wide context. Rapid urbanisation, poverty and an increase in our energy consumption levels imply that we need to rethink our infrastructure – it needs to be innovative, resource-efficient and more inclusive.

Adrian Rimmer, CEO of The Gold Standard Foundation (GSF), started off by explaining how GSF was created to define, demonstrate and drive best practice in climate and development finance on behalf of civil society. By creating a set of rules and processes and then certifying activities against them, GSF can ensure that carbon credits have integrity and also deliver wider social and environmental objectives. He went on to argue how a more specialised, more local approach to carbon markets can revolutionise public policy and the way sustainable infrastructure is invested in. Different markets have different needs; it is not enough to focus on the quantitative aspect of carbon mitigation – on the contrary, it is important to demonstrate the impact of these changes by focusing on their wider benefits for the local economy. Transition to sustainable infrastructure needs to be tailor-made for these economies and take into consideration their specific needs.



Adrian Rimmer, CEO, The Gold Standard Foundation

Iván Hutter, General Manager Public Lighting of General Electric, focused on the private sector and how it can help to ensure sustainable development in cities. He presented GE's Solid State Lighting (SSL) project, and spoke of the various advantages brought about by converting streetlights to LED lighting. Innovative projects such as SSL are essential and have great potential to provide attractive yields if placed in performance-based contracts. However, they do face significant difficulties such as lack of visibility and insufficient funding. Awareness-raising and de-risking are essential in order to attract investors to such innovative projects.

Siegfried Wu , Vice President of Tongji University in Shanghai shared his concern that China is rapidly losing its ancient village culture in favor of larger cities like Shanghai. The country is faced with the biggest urbanisation movement in human history. He spoke of the “four Ps” of every sustainable endeavor: precondition, perspective, people and project. These are the elements that we must bear in mind at all times in order to make cities sustainable and keep investments flowing in an environmentally conscious way.

6 Implementing Innovation

61 Sustainable Transportation Initiatives

A central theme of this year's summit was how to stimulate sustainable infrastructure development using new innovations. During this workshop, participants debated the benefits sustainable transportation initiatives can bring to the table.

Michael Replogle, Founder and Managing Director for Policy, Institute for Transportation and Development Policy, spoke about a paradigm shift from the previous “predict and provide” approach to transport infrastructure towards a new, more efficient way of managing the growing transport demand: AVOID unnecessary infrastructure, SHIFT travel to more efficient modes, and IMPROVE the efficiency of remaining transportation through methods such as cleaner fuels and increased route efficiency.

In order to cope with rapid urban growth, particularly in cities with limited budgets, Bus Rapid Transit (BRT) systems provide a cost-effective, flexible solution that can be implemented quickly. However, there needs to be a full array of integrated transport infrastructure investments in order to make sustainable urbanisation effective. Mohammed El Halaissi, Vice President and Head of Finance, Municipality of Agadir, showcased how a proposed BRT system in his city will tackle the problems of rapid urban growth whilst significantly reducing greenhouse gas emissions.

Marco Grossmann, Project Developer at GIB, showcased the goals and approaches of the GIB Bankability Study with reference to the green technology transport project highlighted by Executive Mayor of Johannesburg, Mpho Parks Tau, during his plenary speech. Marco Grossmann demonstrated how applying the GIB Grading to mitigate risk and showcase the project's sustainability has the potential to lower borrowing rates and increase investor confidence.

Wrapping up this session, Amy Kenyon, Program Officer at the Ford Foundation, stressed that global goals for economic development and climate resilience will not be sustained without addressing inequality in access and opportunity within cities. If we can develop projects that advance sustainability and inclusion, we will achieve more robust economic growth while mitigating against climate change and helping to achieve global goals for poverty alleviation. How do we increase investment in pro-poor transportation infrastructure? Through technical assistance and public capacity building to create a project pipeline, and by using rating systems, standardisation and investment platforms.

62 Creating Jobs through Sustainable Infrastructure and Education

When developing sustainable infrastructure, one important element is often overlooked: education. Hans-Peter Egler, the recently appointed CEO of the Global Infrastructure Basel Foundation, moderated this roundtable discussion in which Andrea Pizziconi, Principal of The Christie Company, took Africa as an example to highlight the great potential for investors to make money in the education sector.

Explosive population growth and a growing middle class require significant social infrastructure in order to sustain Africa's GDP growth. These social infrastructure needs provide investors with a new sector that offers long-term, stable, cash-generating investments: education. Universities provide stable, uncorrelated and secure cash flows. Demand for universities is increasing rapidly due to increased enrolment in primary and secondary education throughout the continent.

Nevertheless, Africa currently lacks the capacity to take advantage of and apply infrastructure funds. Despite the demand for higher education, governments are unable to provide university places for their citizens. They are faced with a difficult situation – there can be no education without infrastructure, and no infrastructure without education. Africa Integras, which is managed by The Christie Company, invests early-risk capital to develop master-planned university communities using a public-private partnership strategy with a build-operate-transfer financing structure.

Andrea Pizziconi argued that Africa is the next big global opportunity. Investment in the African education sector goes hand in hand with job creation: jobs will be created during the construction process, jobs will be created when the universities are built, and further jobs will be created by the

graduates, who are more likely to set up their own businesses requiring staff. Increased numbers of graduates will also result in lower unemployment levels because they are more likely to get a job than uneducated citizens. Furthermore, graduates are likely to earn more taxable income, which would have the knock on effect of increasing government income tax yields.

63 Innovative Infrastructure Finance

This workshop focused on sharing best practices for funding infrastructure projects in an innovative way. Daniel Magallon, CEO of the Basel Agency for Sustainable Energy (BASE), moderated the discussions which touched upon subjects such as enhancing investments in sustainable infrastructure and the barriers and risks of developing municipal/national infrastructure investments.

Martin Hiller, CEO of the Renewable Energy and Energy Efficiency Partnership (REEEP), stressed that millions of people throughout the world are suffering because they do not have access to necessary technology or energy resources. In Bangalore, India, many immigrants live in slums where electricity is difficult to come by. SELCO Solar, a company boasting a USD 4 million turnover and a client base of 180,000 households, produces solar panels that are affordable for people living in these slums. This has contributed significantly to the improvement of the inhabitants' lives and some have even turned this opportunity into small business ventures, for example by charging electric batteries during the day and renting them out during the night. The goals of sustainable infrastructure move forward, even with micro-business projects such as these.

Giles Dickson, Vice President of Environmental Policies and Global Advocacy at Alstom, outlined that public-private partnerships (PPPs) have certain significant advantages, such as the existence of a single contract that provides clear incentives for private actors, effective risk-sharing between private and public investors, and the possibility to implement more projects in less time. However, there are also limits to the PPP model: contracts are long and inflexible, it does not make projects more profitable, it needs to be carefully structured and involves a long and costly tendering process. Besides, the PPP model cannot be universally applied, since different



Giles Dickson, President of Environmental Policies and Global Advocacy at Alstom

sectors, not to mention different economies and markets, have different needs and face different risks. One key factor that will determine the effectiveness of a PPP is risk management; it is essential to limit political, capacity and commercial risks, so as to enhance the projects' credit-worthiness.

Luise Neumann-Cosel, Board Member of BürgerEnergie Berlin eG, put forward that, in order to increase investment in sustainable infrastructure, we should focus on those who have the highest interest in it: citizens. In Germany, private individuals make up 40% of the total investments in the renewable energy sector. There is huge potential to build cooperatives through which citizens can become investors in the renewable energy market in Germany and elsewhere. To ensure the success of such initiatives, there is a need for judicial frameworks that enable citizen-driven projects, a willingness of local authorities to cooperate with citizens, and conscious consumers interested in sustainable investment options.

7 Creating Opportunities

71 Global and Regional Infrastructure Funds – Financing Transformation

When it comes to financing infrastructure transformation, the City of London is leading the way for others to follow. Matthew Pencharz, Senior Advisor on Environment and Energy to the Mayor of London, explained the challenges of rapid urban growth in developed world cities, with their extensive planning regulations and intricate political systems, set against the framework of significant CO₂ reduction targets.

There needs to be a significant change in the way capital funding is raised in order to finance major infrastructure projects. The London Green Fund targets sustainable infrastructure projects that fail to be fully commercially viable and provides the necessary loans and equity to encourage investors to fund them.

Obstacles to infrastructure investment in the Western Balkans were the focus of the presentation given by Nebojsa Arsenijevic, Balkans Renewable Energy Program Manager, International Finance Corporation. Political barriers include prohibitive regulatory and legal frameworks and lack of institutional capacity. Developers often lack the technical and financial capacity to complete infrastructure projects and don't always carry out proper market assessments. Furthermore, local banks lack capacity and experience to fund large-scale projects. The IFC is tackling these issues through a series of capacity building initiatives and Infraventure funding to support projects in the development phase and help mitigate political risk to encourage private sector financing.

Focusing on the urgent demands for sustainable infrastructure in emerging economies, Priya Basu, Manager, The World Bank, underscored the intermediation challenge of bringing the supply of funds to where the infrastructure demands are. The global financial crisis, and the resulting withdrawal of many banks from developing markets, has increased the magnitude of this task. Governments have a key role to play in identifying, preparing and managing projects that can attract the private sector. In order to do this, there must be more predictable pricing tariff structures, a more credible regulatory environment and dispute resolution frameworks and standardisation of contracts to build investor certainty.

Bringing the workshop to a close, Adam Nicolopoulos, CEO of ADN Capital Ventures, highlighted that institutional investors are attracted to infrastructure assets because of their quality cash flows, stability and predictability. But such assets do not obtain these characteristics until they become an operating asset. By supporting the early-stage development of sustainable infrastructure projects, and thereby decreasing risk, multilateral development banks can act as facilitators to attract institutional investors to the table.

72 Sustainable Procurement for Infrastructure – Criteria for Measuring and Monitoring Impact

The procurement and implementation of materials and technology lie at the heart of sustainable infrastructure projects. But how can these be effectively measured and monitored? Under the guidance of Daniel Wiener, participants at this workshop discussed the suitability of performance based contracts (PBCs) as both a monitoring tool, as well as a means for increasing the efficiency and sustainability of infrastructure projects.

Laura Turley, Research Officer at the International Institute for Sustainable Development, focused on the benefits that performance based specifications can bring to public procurers. The use of such specifications in public procurement creates more focus on results over inputs, encourages the private sector to be innovative and cost-effective, and drives new patterns of ownership. Nevertheless, challenges do exist. Translating performance into tenders, the need for increased trust between the public and private sectors,



Laura Turley,
International Institute for Sustainable Development

and the lack of capacity of public procurers will need attention as PBCs develop in the future.

For Philip Juneau, Global Marketing and Business Development Manager at ABB Management Services Ltd., the benefits of performance based contracts are: better value, better performance and lower costs over the entire lifecycle of a project. There may be a need for more initial investment, but this will result in increased savings over the long term. He emphasised the importance of choosing the right contractors and building a lasting relationship to ensure performance objectives are met throughout the entire duration of a contract.

Miguel Sanz, Director of Susi Energy Efficiency Fund, cited various energy efficiency projects to confirm that PBCs improve the sustainability impacts of a project. However, he also pointed out that measuring and monitoring such contracts is complex and there must be clear objectives and evaluation criteria. Changing the focus slightly, Christian Hald-Mortensen, Head of the Climate Change Section at the Danish Ministry of the Environment, spoke about the significance of the water market in the economies of developing countries, and how fixing water leakages will allow cities to provide more water to citizens for less cost. Leak reduction requires expertise, resources and a skilled approach. Using a PBC can help projects to be carried out properly by comparing contractors' performance against a certain pre-defined baseline.

73 Catalysing Institutional Investment in Climate-Resilient Infrastructure

Adam Nicolopoulos began this workshop by pointing out the clear disconnect between the demand for capital from governmental agencies, developers and contractors on the one hand, and the providers of capital on the other. There are approximately 8,000 institutional investors worldwide, but



Adam Nicolopoulos, CEO of ADN Capital Ventures

only about 300 that are dedicated to infrastructure. We need to better understand the needs of such investors in order to attract them to the infrastructure sector.

Irving Mintzer shared the results of research conducted into the concerns of institutional investors relating to sustainable infrastructure. Their first concern is regulatory uncertainty; they need to be sure that contracts for sustainable infrastruc-

ture financing will continue to stand if political leadership in a country changes. Another concern relates to normal business risks that are exaggerated by investment into exotic environments such as developing countries. Institutional investors are looking for a stable, secure environment that will make returns to support their members. They therefore want to back investments framed in an asset class they are familiar with.

Umaru Farouk Aminu, Head of the Research and Corporate Strategy Department at the Nigerian National Pensions Commission (NPC), highlighted the infrastructure deficit in Nigeria, especially in the energy and power sectors. Nevertheless, there is not yet any uptake in infrastructure assets and bonds because the financial instruments are not yet available and the financial sector still needs to develop its capacity. The rapid growth of Nigeria's national pension system means that money from this pension fund is available to support infrastructure development. Umaru Farouk Aminu stressed the importance of NPC and the national government working together with regulatory agencies in the country to allow the national pension fund to finance infrastructure projects.

Stefan Benkert, Director of Transaction Services at PwC, suggested that the financing source for infrastructure will increasingly transition from bank debt to institutional investors, but governments and project sponsors need to better understand the prerequisites needed for this market to take root. Fiscal constraints and confusion between governments and sponsors regarding how to best access funding are hindering investment decisions. Moreover, many infrastructure projects are being delayed, especially in emerging markets, due to land acquisition, revenue and operating risks, political and regulatory risks, and value proposition. To combat these issues, governments and project sponsors need to improve the political, legal and financial environment, build transaction capacity, and infuse leading practices into every phase of the lifecycle of their investments.

Yin Hong, Deputy Director, Industrial and Commercial Bank of China (ICBC), outlined how ICBC has strived to support economic and social development whilst also protecting the environment and natural resources and sponsoring public activities. She talked about ICBC's practice of using green credits and shared how the bank has developed a green credit policy for 61 different industries, including detailed entry and exit criteria. Christian Häuselmann, Co-Founder of the Global Cleantech Cluster Association, explained how the Swisscleantech association 1) works closely with politicians to build frameworks that incentivise entrepreneurs and investors to invest more in sustainability, and 2) builds connections for entrepreneurs in the same industry worldwide. He showcased how the Global Cleantech Cluster Association has brought together 10,000 together in its cluster network, and suggested how such clusters could be developed in the infrastructure sector to share risk and attract investors.

8 De-Risking

81 Enabling Long-Term Investments through Smart Financial Regulation

When we talk about financial regulation today, we focus on the Basel Accords, which drive how banks originate and uphold capital. Timothy Hassett, Director Sustainable Finance, WWF, began this roundtable discussion by asserting that the Basel Accords are not designed to deal with the realities of today's business environment. He suggested creating a new asset class for long-term sustainable transactions, which should be made more liquid and less capital intensive to attract more investment. The inclusion of environmental and social sustainability issues should be mandated by the Accords to assure the correct risk-return relationship and ratings are identified on underlying transactions.

Kern Alexander, Chair for Law and Finance, University of Zurich, illustrated the stronger relationship and commitment between bank supervisors and risk officers that has resulted from the Basel Accords. He felt that the Basel Accords don't need amending, but there is a need for a better policy dialogue between environmental ministries, finance ministers and bank supervisors to determine the overall objectives of sustainable finance.



Timothy Hassett, Director Sustainable Finance, WWF

Werner Weihs-Raabl, Head of Group Infrastructure Finance, Erste Group, expanded the discussion by suggesting that banks should finance projects in two stages: a construction and an operation stage. In order to attract more investors, the financing should become transferable as soon as the construction phase has finished. This will require a global financial structure, coordinated by international regulators, to define how construction phase risks should be taken by lenders. Smaller infrastructure projects should also be bundled to attract investor interest.

Philip Turner, Deputy Head of Monetary and Economic Department, Bank for International Settlements, reiterated the basic need for a viable banking system that complies with the Basel Accords. Banks need to create products that are attractive to capital markets. Once projects have been completed, they need to generate bonds that have high credit ratings. There are three prerequisites to achieving this: 1) jurisdictions where contracts and commitments are enforced; 2) local currency debt

markets and 3) homogenous investment and standardisation of contracts and projects to make them reliable. In this regard, regulators must be careful not to create fake quality liquid assets.

Speakers agreed that future discussions should focus on developing standardised infrastructure bonds that international investors can buy. Infrastructure projects should comprise the two, clearly defined phases mentioned above in order to bring in new investors and non-bank financial players into the second phase, and this can only be achieved through simpler project structures and ensuring that there is enough cash flow. The G20 should address environmental and social risk and how it relates to financial sector risk. In doing so, finance ministers must accept and recognise the linkages between environmental and social risk with macro-economic growth over the long term.

82 Sustainable Credit Ratings for Infrastructure

This workshop was introduced and moderated by André Schneider and focused on valorising and reducing risks as well as promoting the advantages of sustainable infrastructure.

Julia Prescott, Chief Strategy Officer of Meridiam in Luxembourg, emphasised how Meridiam targets investments in public infrastructure that deliver an added value to the community, typically in the form of public-private partnerships. Environmental, social and governance (ESG) criteria are at the heart of its investment and asset management process and it has developed an in-depth ESG risk assessment to analyse the sustainability, environmental and social risks throughout the investment process. She concluded by saying that green credit ratings are a great idea, and Meridiam supports their development, but warned that they might not result in specific reductions in actual cost. At present, it is better to put sustainability and green credentials through an organisation instead of looking at sustainability on a case-by-case basis.

Yiting Sun, Program Manager for the Beijing Office of the WWF, discussed the various sources of sustainable infrastructure funding, such as the government and commercial banks, and presented China's Green Credit Guidelines, which show banks how to integrate sustainability thinking into their lending cycle. He noted the importance of credit rating as a factor for investment decisions, and that it is necessary to integrate sustainability questions into the current credit rating system.



Daniel Wiener, GIB Chairman

Daniel Wiener, GIB Chairman, emphasised that sustainability can be used to de-risk sustainable infrastructure projects and reduce borrowing rates. He also expanded on the sustainable credit rating which he mentioned during the opening plenary, stating that GIB is working together with

Swiss Re, The Gold Standard Foundation, The Blended Capital Group, and Finance for Resilience (FiRe), where the initiative was first presented. The rating will communicate efficiently and effectively the competitive advantages of sustainable infrastructure, namely, reduced energy costs, lower exposure to climatic risk and higher public acceptance.

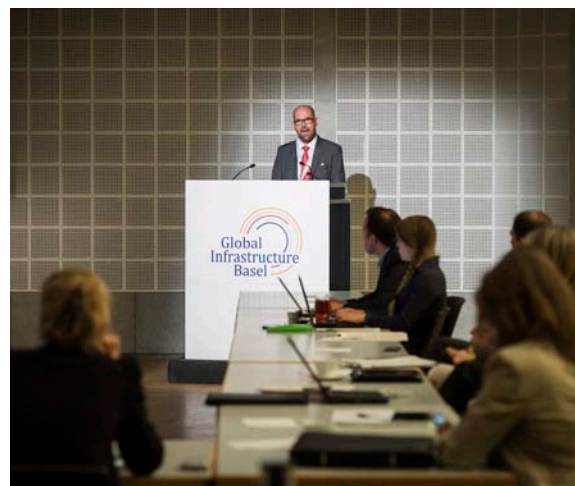
Fadi Khalil, Head of Project Finance and Syndications for the Jordan Kuwait Bank, noted that although green credit ratings are very important in Jordan, local lenders are still afraid of investing in infrastructure projects because of their desire for 100% secured financing. He outlined that Jordan is suffering from having to import huge amounts of oil and gas from abroad: in 2012 the country spent 20% of its GDP on fuel imports. To tackle this energy issue, the Jordanian Government has set record incentives for investors in renewable energy projects, including tax exemptions, direct offtake agreements, power purchase agreements, and government guarantees. From his viewpoint as a lender, a green credit rating will 1) support investment decisions by adding credibility to a project, 2) save time for due diligence, 3) attract foreign investors and 4) result in lenders requesting less security.

83 Green Bonds Frameworks and Sustainability Grading

Green bonds are playing an increasingly large role in sustainable infrastructure funding. They ensure secure income, inflation protection, and risk minimisation, thus becoming very popular with investors. But what does the future hold for them? Participants in this workshop, moderated by Scott Harder, GIB Board Member and CEO of The Environmental Financial Group, Inc., discussed the advantages and pitfalls that must be avoided in order to ensure their continued success.

Mats Olausson, Senior Advisor for Sustainable Products at SEB Bank, presented the history of green bonds, which link environmental and financial risks and are designed to encourage sustainable investments. He explained the advantages they have over normal bonds: less risk and more profit. The green bond market is new, but expanding rapidly. He added, however, that the green bond framework needs regula-

tion - the only way green bonds will work is through transparency, disclosure and integrity. During the following discussion, it was pointed out that there is not yet a single, universally applicable, green bond framework. However, there is great interest among investors for projects of high environmental val-



Mats Olausson, SEB Bank

ue; investors wish to make a difference in the environment whilst making money as well. Green bonds provide them with the possibility to do so.

Katharina Serafimova, Head of Finance Sector Engagement for WWF in Zurich, pointed out that green bonds tend to provide investors with better risk management. They are necessary, because they can trigger a change towards a sustainable economy and offer a chance to increase green capital allocation. This being a relatively new concept, it is necessary to create an investment track record, develop standards, allow for third-party verification, and improve the attractiveness of the green bonds by creating incentives such as tax exemptions. Investors need more information, more benefits, and a clearer understanding of the associated benefits apart from just money. The green bond market is at a tipping point, and it is necessary to push it in the right direction, by avoiding the dangers of greenwashing and lack of transparency, and creating solid standards leading to high-impact investments.

Andreas Georgoulis spoke about the five criteria that need to be taken into account for green bonds to succeed: quality of life; resource allocation; the natural world; climate and risk; and leadership. In his view, in addition to the five criteria, there also need to be more rules, guidelines and benchmarking if green bonds are to work effectively. The ENVISION rating system aims to provide investors with a free and easy to use online information tool.

During the ensuing discussion, the speakers were asked about the future of green bonds. Mats Olausson replied that this will be determined by the investors, and noted that the green bond market needs to maintain its transparency and flexibility in order to adapt and learn from potential mistakes. Katharina Serafimova hopes that green bonds will achieve a more credible standard and become more mainstream, while Andreas Georgoulis expressed the hope that the financial markets will accept slightly smaller financial returns in exchange for the opportunity to do more good. It is necessary to integrate environmental, social and corporate benefits in order to attract investors and guarantee the success of green bonds.

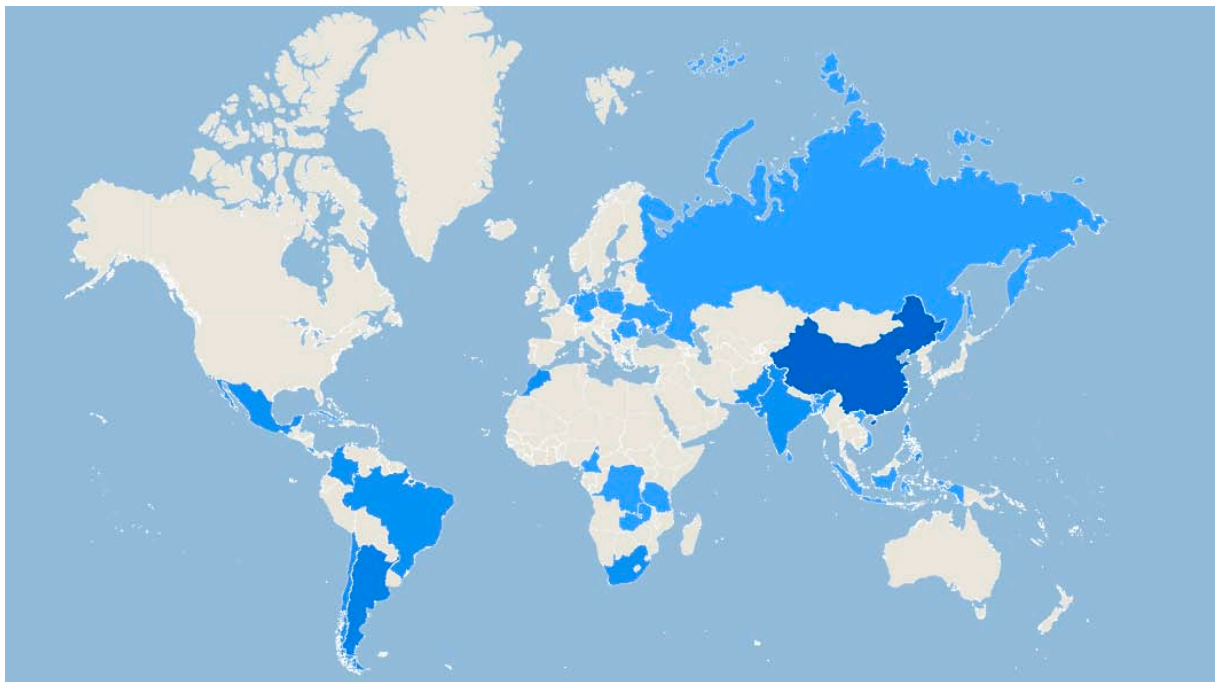
9 Project Exchange

A total number of 30 infrastructure projects from around the world were presented to investors during 4 investment forums at this year's summit. A further 17 projects were presented in poster format. For detailed information on the projects, please visit the GIB Project Finder: <http://grading.gib-foundation.org/database>.

10 New Developments at Global Infrastructure Basel

101 The whole world at your fingertips – GIB Project Finder

Finding a suitable infrastructure project to invest in has never been easier. The all-new GIB Project Finder allows investors to see the entire range of GIB graded sustainable infrastructure projects at a glance.



Using a colour code, the interactive map shows the locations and density of projects in specific areas. Those interested in taking a closer look can simply zoom in on a specific country and then use a series of filters to find exactly what they are looking for. Search options include the region, sector, stage of development, required investment, total investment and the projects per year.

If a suitable project is found, the user can access a project overview containing the results of the GIB Grading assessment and the most important facts and figures. This can then be shared easily with others by using the dedicated link that appears at the bottom of the overview.

102 The GIB Matchmaking Platform

Networking and finding suitable business partners and investors are essential to the success of any sustainable infrastructure project. With this in mind, the GIB team was happy to introduce a new tool at this year's summit: the business matchmaking platform.

When registering for the summit, every attendee received an e-mail giving him or her access to an individualised profile, which they could update manually or synchronise with their LinkedIn profiles. Perhaps the greatest advantage of the platform was the ability to arrange bilateral meetings before, during and even after the summit. Participants were therefore still able to make connections up to one week after the summit had finished.

A total of 190 participants used the matchmaking platform and 202 bilateral meetings were scheduled during the summit this year – a clear indication of its success and confirmation that the platform should continue to feature in future summits.

103 Together is better: GIB signs MoU with Tshwane

Also at this year's summit, Tshwane, which contains the capital city of South Africa Pretoria, and the Global Infrastructure Basel Foundation decided to deepen their ongoing relationship and officially sign a Memorandum of Understanding. Hans-Peter Egler presided over this momentous occasion.

It was with great joy that Executive Mayor Kgosientso Ramokgopa and Daniel Wiener signed their co-operation agreement. The aim of the partnership will be to jointly develop sustainable infrastructure projects so that they become investment-ready. GIB will support sustainable infrastructure investments for the City of Tshwane with its expertise and the GIB Sustainable Infrastructure Grading.



Executive Mayor Kgosientso Ramokgopa and Daniel Wiener,
GIB Chairman

“It is through groundbreaking, innovative partnerships such as this one that we will accelerate our transition to a green economy that creates a maximum number of jobs through sustainable infrastructure” said Executive Mayor Kgosientso Ramokgopa. “I’m very pleased that our already long-term relationship becomes official today”, stated Daniel Wiener, “I’m looking forward to future successful and sustainable infrastructure projects in Tshwane.”

104 The future is Golden: GIB signs MoU with The Gold Standard Foundation

GIB was also pleased to announce its signing of a Memorandum of Understanding with The Gold Standard Foundation (GSF), which operates The Gold Standard, a certification standard that develops best practice tools for the environment market. The new partnership will see GIB and GSF working together to develop and use their sustainable rating systems, certifications and frameworks. In particular, GSF will play an active role in developing the GIB sustainable credit rating system, which will further enhance the GIB Grading.



Daniel Wiener, GIB Chairman, and Adrian Rimmer,
CEO, The Gold Standard Foundation

11 Detailed Programme

111 Wednesday, 21 May 2014: GIB Summit Day One

08:00	On-going	Summit Registration, Foyer, 2nd Floor
08:00	08:30	Welcome Coffee
08:30	11:00	<p>Interactive Workshop with Harvard Business School Case Study Method ROOM: "SINGAPORE"</p> <p>Financing Infrastructure Projects in Cities - Avoiding Traps and Achieving Sustainability <i>This interactive participant-centred session will use the Harvard Business School case study method to discuss key issues, best practices and useful tools and gradings for financing sustainable infrastructure.</i></p> <p>Presenters:</p> <ul style="list-style-type: none"> • Prof. John Macomber, Senior Lecturer of Business Administration, Harvard Business School, Boston • André Schneider, Vice Chairman, Global Infrastructure Basel and Member of the Institute of Technology and Public Policy EPFL, Lausanne
11:00	11:15	Short Break
11:15	12:45	<p>Plenary 1: Investing in Sustainable Infrastructure - A Global Challenge ROOM: "MONTREAL"</p> <p>Welcome:</p> <ul style="list-style-type: none"> • Mayor Guy Morin, Mayor of the City of Basel and Co-Chair, C40 Sustainable Infrastructure Financing Network • Daniel Wiener, Chairman, Global Infrastructure Basel (Moderator) <p>1.A - Investing in Sustainable Infrastructure - Why we Need a Massive Push</p> <ul style="list-style-type: none"> • Bruno Oberle, Head of the Swiss Federal Office for the Environment, Berne • Barbara Kux, Member of Board of Directors of Total and Henkel, Member of the Sustainable Development Solutions Network (SDSN) Leadership Council • Holger Rubel, Managing Director and Head of Sustainability, Boston Consulting Group, Frankfurt <p>1.B - Investing in Sustainable Infrastructure - How to Move from Millions to Trillions</p> <ul style="list-style-type: none"> • Jaime Caruana, General Manager and CEO, Bank for International Settlements, Basel • Keiko Honda, Executive Vice President, Multilateral Investment Guarantee Agency (MIGA), Washington D.C. • Yuki Yasui, Deputy Head, UNEP Finance Initiative, Geneva
12:45	14:00	Lunch Break

14:00	15:30	1) Eliminating the Bottleneck of Green-field Infrastructure Investments	2) Sustainable Transportation Initiatives	Investment Forum 1
		Closing Gaps	Implementing Innovation	GIB Project Exchange: Presentations of Sustainable Infrastructure Investment Projects
		<i>Is the bottleneck in early-stage project development due to a lack of information or a lack of financing?</i> <i>How can the cooperation between project preparation facilities be enhanced to empower the municipal project originators?</i>	<i>Balancing affordability and profitability in sustainable transportation projects – Innovative Financing Schemes</i> <i>How to model sustainable BRT projects?</i>	Moderator: Katharina Schneider-Roos, Head of Project Outreach and Partnerships, GIB Investment Concept Presentation: (tbc)
		Moderator: Nick Beglinger, Board Member GIB and President of Swiss-cleantech, Berne Speakers: Gaston Astesiano, Senior Advisor, Infrastructure and Environment Department, Inter-American Development Bank, Washington D.C. Bas Oomens, Project Manager Thermal Power Plants, Pöyry Energy AG, Zurich Giridhar Srinivasan, Senior Operations Officer, IFC, World Bank Group, Washington D.C. Kostis Tselenis, Head of Investment, Quadia Impact Finance, Geneva Raffaella Di Sipio, Energy and Infrastructure Manager, Prelios SGR, Milan	Moderator: Scott Harder, Board Member GIB, CEO, Environmental Financial Group, Inc., Chicago Speakers: Mohammed El Halaissi, Vice-President and Head of Finance, Municipality of Agadir Michael Replogle, Founder and Managing Director for Policy, Institute for Transportation and Development Policy, Washington D.C. Marco Grossmann, Project Developer, Global Infrastructure Basel (GIB) Amy Kenyon, Program Officer, The Ford Foundation, New York	Projects: China, Lanxi, Lanswitzerland (Zhiqiang WU, Tongji University) China, Xiaolan, Distributed Energy Systems PPP Project (Yu ZHANG, Cities Development Initiative for Asia CDIA) India, Kota, Drainage Master Plan (Mayor Ratna Jain, Mayor of the City of Kota) Indonesia, Riau, Waste to Energy Plant (Hans Pleuger, Intelligent Energy Consult) China, Dalian, Dalian Oriental Davos Project (Ruijie ZHANG, Dalian Wanying Investment Co. Ltd) Philippines, General Santos, Inte-

				grated Economic Development for Regional Trade (Meriam L. Buguis, City Economic Management and Cooperation Development Office)
				Sri Lanka, Matale, Town Development Project (Mayor Mohamed Hilmy, Mayor of the City of Matale)
15:30	16:00	Short Break		
16:00	17:30	3) Global and Regional Infrastructure Funds – Financing Transformation	4) Multiplying Investments through Improved City Creditworthiness	Investment Forum 2 ROOM: "RIO"
		Creating Opportunities	Closing Gaps	GIB Project Exchange: Presentations of Sustainable Infrastructure Investment Projects Moderator: Nick Beglinger, Board Member GIB and President of Swisscleantech Investment Concept Presentation: Kari Homanen, Senior Investment Manager, Nordic Environment Finance Corporation
		<i>The role of sustainability in infrastructure finance facilities of Development Banks and Institutional Investors</i> <i>Leveraging finance from multilateral funds and philanthropic capital with private capital</i>	<i>How can investing in creditworthiness leverage private sector financing for sustainable infrastructure?</i> <i>What measures and policies can cities adopt to improve their credit rating?</i>	Projects: Germany, Berlin, BürgerEnergie Berlin (Luise Neumann-Cosel, BürgerEnergie eG Berlin) Kosovo, Rahovec, Wind Park Zatric (Stefan Schneeberger, NEK Umwelttechnik AG) Netherlands, Zaltbommel, HD Clean Tunnel (Ton Hauzer, UC
		Moderator: Cristiana Fragola, Europe Regional Director, C40 Climate Leadership Group Speakers: Nebojsa Arsenijevic, Balkans Renewable Energy Program Manager, International Finance Corporation, Belgrade Priya Basu, Manager, Multilateral Trusteeship and Innovative Financ-	Moderator: Gino Van Begin, Board Member GIB and Secretary General of ICLEI Local Governments for Sustainability, Bonn Speakers: Joshua Gallo, Program Leader, Sub-National Technical Assistance, Public-Private Infrastructure Advisory Facility (PIIAF), Washington D.C.	

		<p>ing/Concessional Finance and Global Partnerships, The World Bank, Washington D.C.</p> <p>Adam Nicolopoulos, CEO, ADN Capital Ventures, San Francisco</p> <p>Matthew Pencharz, Senior Adviser – Environment and Energy to the Mayor, City of London</p>	<p>Yu ZHANG, China Program Specialist, Cities Development Initiative for Asia (CDIA), Beijing</p> <p>James Alexander, Director of Finance and Economics, C40 Cities Climate Leadership Group, London</p> <p>Sean Kidney, CEO, Climate Bonds Initiative, London</p>	<p>Technologies)</p> <p>Netherlands, Rotterdam, Integrated Energy-Infrastructure in and around the Port of Rotterdam (Nico van Doren and Wiert-Jan de Raaf, Port of Rotterdam)</p> <p>Romania, Dobrogea, Wind Power Plants Dobrogea (Oliver Zobernig, Global Energy Partners GmbH)</p> <p>Russia, St Petersburg, Liquid Biomethane Facility, GazEnergoStroy/Rika Biofuels (Gregory Krupnikov, Rika Biofuels)</p> <p>Serbia, Wind Power Plant (Oliver Zobernig, Global Energy Partners GmbH)</p> <p>Ukraine, Ivano-Frankovsk, Agroenergotechnology (Taras Vynohradnyk, Agroenergotechnology)</p>
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112 Thursday, 22 May 2014: GIB Summit Day Two

09:00	11:00	<p>Plenary 2: Creating Good Livelihoods ROOM: "MONTREAL"</p> <p>Moderator: André Schneider, Vice Chairman, GIB and Member of the Institute of Technology and Public Policy EPFL, Lausanne</p> <p>2.A - From Idea to Reality – Funding Visionary Projects for Liveable Cities</p> <ul style="list-style-type: none"> Executive Mayor Kgositso Ramokgopa, Executive Mayor of the City of Tshwane Pei XIAO, Vice Chairman, Shanghai Municipal Commission of City Development and Management, Shanghai Michael Kuhndt, Director, Collaborating Center on Sustainable Consumption and Production (CSCP), Wuppertal <p>2.B - Sustainable Infrastructure as an Asset Class – A New Avenue for Institutional Investors</p> <ul style="list-style-type: none"> Teresa O'Flynn, Director, Renewable Power, BlackRock, Dublin Xiaowen LI, Director, Division Chief of Statistic Department, China Banking Regulatory Commission, Beijing 		
11:00	11:30	Short Break		
11:30	13:00	<p>8) Catalysing Institutional Investment in Climate-Resilient Infrastructure</p> <p>Creating Opportunities</p> <p><i>How can sustainable infrastructure as an asset class attract pension funds as investors?</i></p> <p><i>What types of credit enhancements or risk mitigations are needed to create successful investment structures?</i></p>	<p>9) Green Bonds Frameworks and Sustainability Grading</p> <p>De-Risking</p> <p><i>Benchmarks for sustainability ratings in the bond market and in project finance</i></p> <p><i>The change theory of green bonds investments: What difference do they make for risk takers and risk allocation?</i></p>	<p>Investment Forum 4</p> <p>GIB Project Exchange: Presentations of Sustainable Infrastructure Investment Projects</p> <p>Moderator: Daniel Magallon, CEO, Basel Agency for Sustainable Energy</p> <p>Investment Concept Presentation: Giridhar Srinivasan, Senior Operations Officer, IFC, World Bank Group, Washington D.C.</p>

	<p>Moderator: Adam Nicolopoulos, CEO, ADN Capital Ventures, San Francisco</p> <p>Speakers: Irving Mintzer, Chief Strategist, Potomac Energy Fund, Frederick</p> <p>Umaru Farouk Aminu, Head, Research and Corporate Strategy Department, National Pensions Commission Nigeria, Abuja</p> <p>Hong YIN, Deputy Director, Industrial and Commercial Bank of China, Beijing</p> <p>Christian Häuselmann, Co-Founder, Global Cleantech Cluster Association (GCCA), San Diego</p> <p>Stefan Benkert, Director, Transaction Services, PricewaterhouseCoopers, Zurich</p>	<p>Moderator: Scott Harder, Board Member GIB, CEO, Environmental Financial Group, Inc., Chicago</p> <p>Speakers: Andreas Georgoulis, Zofnass Program for Sustainable Infrastructure, Harvard Graduate School of Design, Boston</p> <p>Katharina Serafimova, Head of Finance Sector Engagement, WWF, Zurich</p> <p>Mats Olausson, Senior Advisor, Sustainable Products, SEB Bank, Stockholm</p>	<p>Projects: Argentina, Buenos Aires, Natural Gas in Low Income Suburbs (Raúl Zavalía Lagos, Fundación Pro Vivienda Social)</p> <p>Argentina, Mayor Buratovich, Buenos Aires Province, Vientos del Secano Wind Farm (Vanessa Revelli, ABO WIND Energías Renovables S.A.)</p> <p>Brazil, Belo Horizonte, Nova Belo Horizonte (Marcello Faulhaber, Public Private Partnerships Director, City of Belo Horizonte)</p> <p>Brazil, Rio de Janeiro, Sustainable Community Program (Marcelo de Andrade, Pro Natura)</p> <p>China, Yucheng, Shandong Longli Agricultural Waste Complete Utilization Project (Shaobo CHENG, Shandong Longli Biology Technology Co. Ltd)</p> <p>Cuba, Cardenas, Agriculture Project (Lorenz Thomsen, Agrarian Consultant)</p> <p>Mexico, Hermosillo, Sustainable Urban Roads (Mayor Alejandro Artur López Caballero, Mayor of the City of Hermosillo)</p> <p>Mexico, La Paz, 1.3 MW Solar Power Project for Public Buildings</p>
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				(Lucía Frausto, Cómo Vamos La Paz)
13:00	14:15	Lunch Break		
14:15	15:45	10) Financing Sustainable Urbanization, Resilience and Adaptation ROOM: "SINGAPORE"	11) Innovative Infrastructure Finance ROOM: "SYDNEY"	12) Sustainable Credit Ratings for Infrastructure ROOM: "RIO"
		Closing Gaps	Implementing Innovation	De-Risking
		<i>How can investment decisions for urban infrastructure be improved by city-wide coordination and connection?</i> <i>How can international climate finance mechanisms be tapped to finance resilience?</i> <i>How can household, commercial and communal assets be created and leveraged by implementing and improving transit systems and stations in cities?</i>	<i>Which financing options exist for enhancing investments in sustainable infrastructure? (PPP, crowd-funding, guarantees, etc.)</i> <i>Where do gaps exist for financing instruments in the infrastructure sector?</i> <i>What are the barriers and risks of developing municipal/national infrastructure investments and how can they be tackled?</i>	<i>How can a green credit rating enhance the creditworthiness of an infrastructure project?</i> <i>How can green credit ratings lower the interest rates for debt finance of projects?</i>
		Moderator: Gino Van Begin, Board Member GIB and Secretary General of ICLEI Local Governments for Sustainability, Bonn Speakers: Adrian Rimmer, CEO, The Gold Standard, Geneva Iván Hutter, General Manager Public Lighting, General Electric Siegfried WU, Vice President, Tongji	Moderator: Daniel Magallon, CEO, Basel Agency for Sustainable Energy, Basel Speakers: Martin Hiller, CEO, Renewable Energy and Energy Efficiency Partnership (REEEP), Vienna Giles Dickson, Vice President Environmental Policies and Global Advocacy, Alstom, Paris	Moderator: André Schneider, Vice Chairman GIB and Member of the Institute of Technology and Public Policy EPFL, Lausanne Speakers: Yiting SUN, Program Manager, WWF Beijing Office, Beijing Chris Manser, CFA, Head Infrastructure Investments, Swiss Life, Zurich

		University, Shanghai	Luise Neumann-Cosel, Managing Board, BürgerEnergie eG Berlin, Berlin Said Mouline, Director, National Agency for the Development of Renewable Energy and Energy Efficiency (ADEERE), Rabat	Daniel Wiener, Chairman, GIB and CEO, ecos, Basel Julia Prescott, Chief Strategy Officer, Meridiam Infrastructure, Luxembourg Fadi Khalil, Head of Project Finance and Syndications, Jordan Kuwait Bank, Amman
15:45	16:00	Short Break		
16:00	17:30	<p>Plenary 3: Climate Action, Sustainable Development Goals and Sustainable Energy for All: The Role of Finance for Infrastructure and Making our Planet a Safe Place to Live</p> <p>ROOM: "MONTREAL"</p> <p>Moderator: Gino Van Begin, Board Member GIB and Secretary General of ICLEI Local Governments for Sustainability, Bonn</p> <p>Speakers:</p> <ul style="list-style-type: none"> Ambassador Michael Gerber, Special Representative for Global Sustainable Development, Swiss Federal Department of Foreign Affairs, Berne Executive Mayor Mpho Parks Tau, Executive Mayor of Johannesburg Mayor Ratna Jain, Mayor of the City of Kota, Rajasthan Diana Jensen, Director, Renewable Energy Finance, Overseas Private Investment Corporation (OPIC), Washington D.C. Alex ZHANG, Managing Director, Eco-Forum Global, Beijing Thomas Vellacott, CEO, WWF Switzerland, Zurich <p>Closing Remarks: Daniel Wiener, Chairman, GIB and CEO, ecos, Basel</p>		

