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5th GIB Summit

"When would we know our financial system is working?"

Financing the Transition: Sustainable Infrastructure in Cities

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Basel, Switzerland

Z/Yen Group Limited
90 Basinghall Street
London EC2V 5AY
United Kingdom
tel: +44 (20) 7562-9562





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Financing the Transition: Sustainable Infrastructure in Cities



Financing the Transition:
Sustainable Infrastructure in Cities



- ◆ A Long Finance & WWF report
- ◆ Published in March 2015
- ◆ Following six months of research
- ◆ Full report available online - <http://www.longfinance.net/If-research.html?id=915>



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Challenges facing cities

- ◆ Rising urban population
 - Expected 75% of world population of projected 9.6 billion people to live in cities by 2050
- ◆ Increasing infrastructure needs
 - Upgrading existing vs. building new infrastructure
- ◆ Global infrastructure investment need is huge
 - e.g. between USD 57 trillion (S&P) and 82 trillion by 2030 (OECD)
- ◆ Significant environmental impact
 - Cities account for about 75% of global CO2 emissions
- ◆ How to finance and deliver the required urban infrastructure sustainably?



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Research objectives & approach

- ◆ Provide an overview of financing instruments commonly used to finance infrastructure
- ◆ Assess their potential to support sustainable infrastructure development
- ◆ Focus on energy efficiency and renewable energy projects
- ◆ Methodology
 - Desk research
 - 20 semi-structured interviews
 - >180 responses to an online questionnaire
 - A webinar to discuss preliminary findings



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Interviews

Sector	Interviewees
Public – cities	Cape Town, Western Cape (South Africa) Chicago (USA) Gothenburg (Sweden) Pune (India) Sao Paulo (Brazil) Vancouver (Canada)
Finance – multilateral	Asian Development Bank (ADB) European Bank for Reconstruction and Development (EBRD) European Investment Bank (EIB)
Finance – private, investors, advisors	Allianz SE, Allianz CP Inderst Advisory Standard & Poor's GreenCape
Private other – infrastructure, technology	Siemens
CSOs, networks & initiatives	C40 Cities Development Initiative Asia (CDIA) Global Infrastructure Basel (GIB) ICLEI



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Sustainable infrastructure

- ◆ Defining sustainable infrastructure - infrastructure assets or projects that
 - reduce the environmental impact of urban infrastructure (e.g. energy efficiency or renewable energy projects);
 - improve the ability of such infrastructure to cope with the consequences of climate change;
 - help to protect biodiversity and ecosystem services;
 - enable the integration of nature-based assets into urban development.
- ◆ Challenges
 - Conventional vs. sustainable infrastructure
 - Unique vs. common issues facing cities
 - New vs. common financing approaches & instruments



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Sources of finance

- ◆ Governments - local, provincial, national
- ◆ Financial services e.g. commercial banks, specialist funds
- ◆ International financial institutions, regional and national development banks, export credit agencies
- ◆ Institutional investors - pension funds, insurance companies, sovereign wealth funds
- ◆ Capital markets - e.g. traded debt and equities
- ◆ Other - corporate finance, angel investors, community



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Finding #1

Some financing instruments have higher potential to enable investment in sustainable infrastructure



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Financing instruments with potential for sustainable infrastructure

Type	Instruments
Public	Public private partnerships (PPPs) Tax incentives Land value capture mechanisms Building rights and permits Grants and subsidies
Debt	Loans (incl. concessional loans or loans blended with grants) Special purpose bonds (e.g. green city bonds) Targeted guarantees and credit enhancement Debt refinancing mechanisms (e.g. asset-backed securities, forfeiting)
Equity	Listed infrastructure equity Infrastructure funds Thematic/targeted private equity structures and funds Equity-funded direct investments (SPVs and JVs)



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Finding #2

The lack of investable projects seems to be the main issue preventing sustainable infrastructure investment at scale rather than the lack of finance



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Overcoming barriers to investability

Barriers

- ◆ Lack of robust funding streams
- ◆ Lack of expertise and market capacity
- ◆ Lack of scale
- ◆ Lack of balanced risk-returns

Possible solutions

- ◆ Quantifying & monetizing sustainability impact
- ◆ Demonstration & capacity building
- ◆ Project aggregation
- ◆ Project prioritisation & preparation
- ◆ Sound governance



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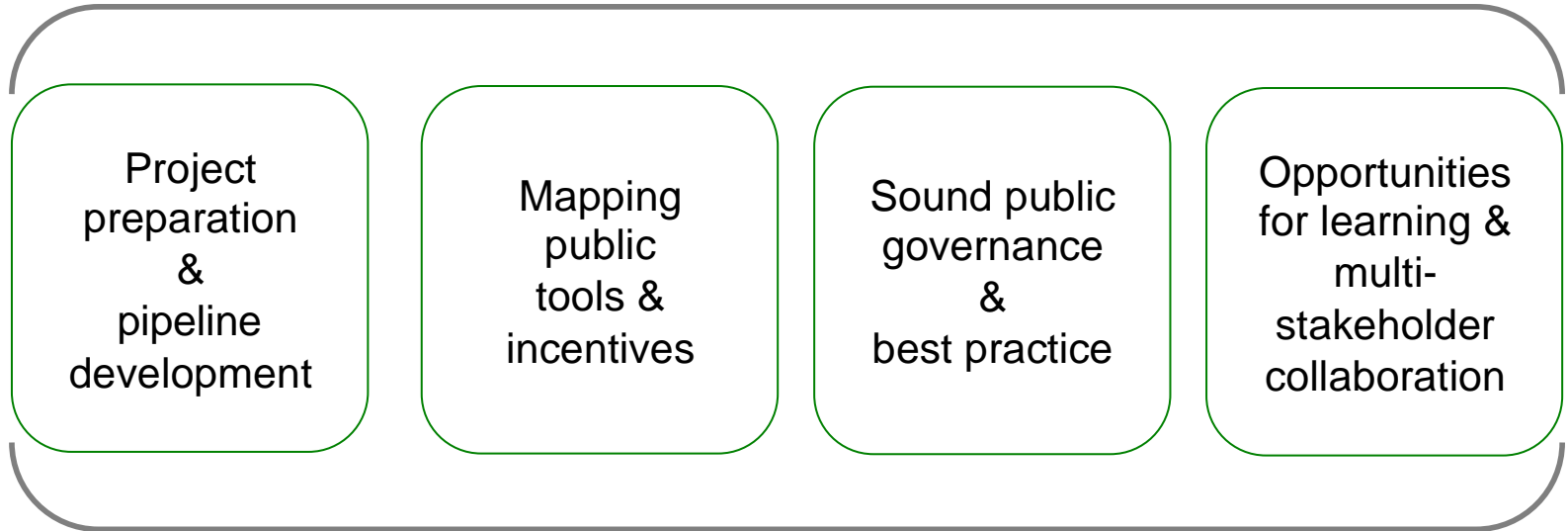
Finding #3

Cities can develop an attractive investment proposition in sustainable infrastructure based on a ‘product & marketing approach’



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A 'product & marketing' approach



Delivering sustainable urban infrastructure



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Early signs of city innovation

- ◆ Tying low-carbon requirements to planning application processes and tax incentives
 - E.g. Vancouver (Canada), Pune (India)
- ◆ Leveraging economies of scale
 - E.g. GreenCape (South Africa), Solar Energy Corporation (India)
- ◆ Capturing increases in land value
 - E.g. CEPACs, Sao Paulo (Brazil) or Crossrail, Greater London Authority (UK)
- ◆ Green bonds – improving transparency and disclosure
 - E.g. Gothenburg (Sweden)



Wealth of initiatives & resources

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Research & data	Best practice, innovation & policy	Finance & sustainable infrastructure
Africa Infrastructure Knowledge Programme (AIKP)	C40 Cities Climate Leadership Group	Cities Development Initiative for Asia (CDIA)
Global Commission on the Economy & Climate – New Climate Economy	Cities Alliance	Energy Efficiency Finance Institutions Group (EEFIG)
LSE Cities	Compact of Mayors	Global Fund for Cities Development (FMDV)
New Cities Foundation	ICLEI	Global Infrastructure Basel (GIB)
World Bank’s Urbanization Knowledge Partnership	Metropolis	ICLEI’s Solutions Gateway
WRI Ross Centre for Sustainable Cities	United Cities and Local Governments (UCLG)	SDI’s Urban Poor Fund International
	WBCSD’s Urban Infrastructure Initiative	World Bank’s Low-Carbon Liveable Cities Initiatives
	WWF’s Earth Hour City Challenge	



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Recommendations

1. Guidance on what sustainability means for infrastructure (incl. how to measure impact)
2. Framework to guide cities in the process of identifying and mapping relevant public sector tools, incentives and financing instruments
3. Global database of sustainable infrastructure projects and financing structures
4. Recognition for innovation and best practice



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More information

- ◆ About the research project - <http://www.longfinance.net/lf-research.html?id=915>
- ◆ Report available online - http://www.longfinance.net/images/reports/pdf/Financing_the_transition_March2015.pdf
- ◆ Comments on the report welcome! Contact: chiara_vongunten@zyen.com

THANK YOU!