



E3G

How to Finance China's Low Carbon Pathway

A summary of E3G Policy Paper
'China's Low Carbon Finance
and Investment Pathway'

Amal-Lee Amin, Shin Wei Ng and Ingrid Holmes

July 2014

China's Investment Trilemma

Following decades of rapid economic growth, China is in the process of restructuring its economy to make future growth more sustainable in social, economic and environmental ways. Broadly this is leading China to prioritise the following three objectives for:

- > Increasing scale and pace of investments to sustain economic growth;
- > Greater economic efficiency in allocation of public resources and a greater role for the private sector;
- > Promoting investments in cleaner and low carbon technologies, to urgently tackle local pollution as well as for a lower carbon path of development.

Reconciling and balancing these three key objectives presents a complex policy agenda for Chinese decision-makers. E3G's policy paper identifies this as China's investment trilemma which will require integrated thinking and policy-making across a range of currently unrelated policy agendas. At the same time, there are potential synergies and opportunities of undertaking financial reform alongside financing the transition to a cleaner and lower carbon development path. Some of the major challenges are identified here and a number of potential actions explored for maximising synergies and opportunities.

Potential Financing Gap

According to research commissioned, China will potentially confront a huge financing gap for delivering the scale of investment required for a cleaner and low carbon economy. Modelling by the Energy Research Institute (ERI) identifies that under a 2-degree global scenario, the financing required for decarbonising China's energy sector, including for energy efficiency within the industrial, buildings and transportation sectors, will be as much as \$453 billion per annum in 2030.¹ As the annual average climate finance expenditure was \$87.6 billion between 2008 and 2012, the financing gap is estimated as large as \$370 billion by 2030.² This gap could be lower given that many relevant investments are likely to be financed through other sources of finance, most notably as relates to China's Green Credit Policy and Guidelines. Yet, without attention towards this, the financing gap is likely to be significant and will constrain China's ability for delivering outcomes that are required to tackle the investment trilemma.

1 Jiang Kejun, China's Investment Pathway to 2030, Energy Research Institute (ERI), Annex A

2 Chen Bo et al., China's Climate Finance and Investment Gap, Central University of Finance and Economy (CUFE), Annex B

Financing China's low carbon pathway to 2030

Avoiding this financing gap and achieving the level of investment at the pace and efficiency that is required to reduce pollution and decarbonise the Chinese economy will involve continued integration of cleaner and low carbon investment objectives across the economy. Strong cross-departmental dialogue will need to bring together currently differing policy agendas relating to the evolving green credit policy and guidelines and the emerging focus on climate finance. Integration of these, and focus on creating strong monitoring, evaluation and compliances mechanisms will help create greater transparency and certainty for investors. Similarly, policy and regulatory incentives for creating a level playing field for cleaner and low carbon investments may need to be combined with targeted use of public green or climate finance through public-private partnerships that effectively share risk as necessary to attract private capital at scale. At the same time there will be a need to provide micro-credit, venture capital and equity finance for small and medium sized enterprises (SMEs) which can be important drivers of innovation required for delivering local business solutions for cleaner technology and the financial services, particularly energy efficiency.

Managing risks to mobilise private investors

A major element of the low carbon financing and investment challenge is managing risk. Moving towards cleaner and low carbon infrastructure requires investors to shift resources away from more traditional financing approaches towards newer and unfamiliar business models that require significant upfront capital. As the private sector prices such risks into the cost of capital this could, if not managed effectively, run counter to the government's objective for greater economic efficiency of the economy. This underscores the importance for the government to address risks that it is best placed to do so, notably policy and market-related risks. These can be reduced by measures to increase transparency, coherency and certainty of policy, regulatory and financing incentives. The large-scale, novel and capital intensive nature of low carbon investment also denotes a need for ensuring public finance, whether green or climate, is used in a smart³ and targeted way to help overcome a range of other risks that commercial investors may be unwilling to bear, for example as relates to first-of-a-kind investments.

Innovative financing mechanisms and instruments

China has started to experiment with innovative measures for mobilising finance for low carbon investments. Most noteworthy are those related to China's Green Credit

3 Amal-Lee Amin et al., Designing smart green incentive schemes: role of development finance institutions, E3G, March 2014. Available: http://www.e3g.org/docs/E3G_Designing_smart_green_finance_incentive_schemes_FINAL.pdf

Policy and Guidelines and the experience of China's Clean Development Mechanism Fund (CDM Fund), which is developing a track record in using concessional resources for mobilising investors into low carbon projects. China is also rolling out a number of pilot emissions trading schemes. These are potentially important vehicles for 'greening' China's investment. However, at their current scale they are unlikely to be sufficient for meeting the potential financing gap.

As revenues levied from the CDM wind down, the future of the CDM Fund is uncertain. However, it provides a valuable model to build on, and could be expanded and enhanced to play a more critical role in leveraging private investment. One source of new revenues for the CDM Fund could come from the auctioning of Chinese emissions trading permits. Banks that are championing green credit, for example the China Industrial Bank (CIB) and the Shanghai Pudong Development Bank (SPDC), would benefit from being able to deploy a wider range of financial instruments such as equity, guarantees and insurance. As leaders of financial innovation these institutions can demonstrate the viability and opportunities of new financial instruments in use green or climate finance for effectively targeting risks and mobilising scaled up low carbon investment.

Opportunities of financial reform

The on-going financial reform process also presents an opportunity for aligning China's green and low carbon policy and financing initiatives with broader economic governance. Both the Chinese government and the commercial sector need to have a clear understanding of how the financial reform process will impact on investment risks, including policy and market risks. The structure of the financial sector will also influence how risks are priced and best managed. Creating greater transparency and certainty over financial regulation will open up the sector for new sources of finance from the private sector, including private equity and corporate bonds, and work to reduce the cost of capital. This can also increase the role of non-lending financial products, such as equity and corporate bonds, key objectives of the financial reform process.

All of this will be necessary financial instruments for delivering the scale of finance that is required. Similarly, opening up the financial sector to allow the private sector to establish small and medium banks, will help finance the SMEs that will be required to develop local markets for cleaner businesses, as well as to provide the services that will be required for increasing energy efficiency of consumers.

At the same time, the Green Credit Guidelines focus on measures for increasing monitoring, evaluation and compliance of green credit will also create greater transparency and certainty for green related investments. Ensuring climate finance is effectively integrated with the green credit policy would provide coherency. Furthermore,

as the government focuses on establishing a robust and independent judicial system this will further increase the confidence of private investors. Reforms such as moving budgetary control of local courts from local governments to provincial governments should therefore be implemented in parallel with the push for new public-private cooperation models in China.⁴

Key questions for further discussion

The E3G policy paper and supporting analysis have identified several key areas for further discussion as China's proceeds to tackle the investment trilemma.

1) Framing risks within the financial reform agenda

- > In moving to commercial based decisions, a key question is how the underlying sector (i.e. power, transport) policy frameworks can be aligned to incentivise greater levels of private sector investment?
- > What is the most appropriate combination of policy, regulatory and public financing measures for mobilising cleaner and low carbon investment in different sectors?
- > How should relatively more scarce public resources be used most strategically to incentivise cleaner and low carbon investments?

2) Optimising the role of public finance through financial institution champions

- > Which institutions – public and private – can champion and drive financial innovation and demonstrate effective use of new instruments?
- > How to share lessons and replicate good practise of leaders in green and low carbon financing, i.e. the CDM Fund, the CIB and the SPDB?
- > How can green and low carbon investment objectives be integrated into the State Owned Banks and Enterprises?

3) Driving implementation of green and low carbon finance at the local level

- > How is the financing agenda playing out within the low carbon pilot cities and provinces?

4 John Wager Givens, *Fleshing out the Third Plenum: The Direction of China's Legal Reform*, China Brief, Vol 14, Issue 6, 21 March 2014. Available: http://www.jamestown.org/uploads/media/China_Brief_Vol_14_Issue_6_-_Copy__3_.pdf

- > What could be done to drive use of innovative financing instruments, including for financing SMEs, and appropriate reporting and screening procedures at the local level?
- > What is the role for local green funds or banks and/or public-private partnerships for financing green and low carbon investments?

4) Building on the success of the green credit policy and guidelines

- > How can the existing Green Credit Policy and Guidelines be extended from the current focus on bank lenders non-bank lenders such as providers of equity or corporate bonds?
- > How can robust environmental impact assessment, compliance and enforcement measures be enhanced?
- > What are the practical challenges and benefits of providing open and systemic disclosure of information?

5) Integration between ‘green’ and ‘climate’ financing agendas

- > What would be required to develop a common terminology and definitions between green and climate finance?
- > How can dialogue on green, climate and carbon market finance between different ministries and relevant stakeholders, including the private sector, be enhanced?

6) Encouraging financial innovation

- > What can be the role of new financial products to increase green finance?
- > What could be the potential for green savings and what would be necessary to increase the confidence of savers in green investment products?
- > Can the newly proposed Super-Agency for financial regulation, which aims to coordinate monetary and financial supervisory policies and regulates new financial products, promote new green savings?

China Platform for dialogue on financing a low carbon economy

A new China Platform for Low Carbon Finance and Investment could be established to increase dialogue on the key issues and questions identified here. This should be a multi-stakeholder platform that includes representation from the government, including NDRC, MEP, Ministry of Finance, PBoC and CBRC, policy and commercial banks, the providers of equity/project sponsors and institutional investors. It should also involve project developers, including SOEs, private utilities, merchant investors, municipalities, and the State Grid.

Such a Platform would present a valuable opportunity for capturing and sharing the learning that is now being generated through the green credit policy and guidelines process, the practical investment experiences of the CDM Fund and banks, such as the CIB and SPDB, leading on green finance and investments. It would foster dialogue that builds a more coherent approach between green finance, climate finance as well as lessons emerging from the carbon market pilots.

The Platform could also provide an on-going opportunity for engagement with international experts that are thinking through how to finance a smooth transition to green and low carbon economies. The success of the evolving Sustainable Banking Network demonstrates how valuable Chinese leadership on green finance is to other emerging economies. The Platform could therefore also allow China's lessons and good practise to be shared with other economies, including Central Bankers and financial regulators of OECD countries.

About E3G

E3G is an independent, non-profit European organisation operating in the public interest to accelerate the global transition to sustainable development.

E3G builds cross-sectoral coalitions to achieve carefully defined outcomes, chosen for their capacity to leverage change.

E3G works closely with like-minded partners in government, politics, business, civil society, science, the media, public interest foundations and elsewhere.

More information is available at www.e3g.org



E3G

E3G (Third Generation Environmentalism)

47 Great Guildford Street, London SE1 0ES

Tel: +44 (0)20 7593 2020

Fax: +44 (0)20 7633 9032

www.e3g.org

© E3G 2014

This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 2.0 License. You are free to:

- Copy, distribute, display, and perform the work.
- Make derivative works.

Under the following conditions:

- You must attribute the work in the manner specified by the author or licensor.
- You may not use this work for commercial purposes.
- If you alter, transform, or build upon this work, you may distribute the resulting work only under a license identical to this one.
- For any reuse or distribution, you must make clear to others the license terms of this work.
- Any of these conditions can be waived if you get permission from the copyright holder.

Your fair use and other rights are in no way affected by the above.

